



Regional Park.....

Master/Concept Plan



Appendix D

Traffic Analysis

JUNE 2016

Kimley»Horn

Expect More. Experience Better.





TRAFFIC IMPACT ANALYSIS

New Regional Park
Gilbert, Arizona

Preliminary Park Site Buildout Findings and Recommendations

June 2016

Prepared for:



Prepared by:

Kimley»»Horn

The bullets below and associated figures and tables summarize the preliminary findings and recommendations from the traffic impact analysis of the new regional park. These findings and recommendations are under review by the Gilbert Traffic Engineer and are subject to change. A Final Report will be issued in the near future that includes the finalized findings and recommendations.

Trip Generation

- The new regional park is expected to generate approximately 8,000 daily trips on a typical weekday, with up to approximately 12,000 daily trips during a peak special event day such as on a weekend when there are multiple concurrent tournaments/events.
- The new regional park is expected to generate approximately 1,000 trips during the busiest hour on a typical weekday, with up to approximately 2,000 trips during the busiest hour on a peak special event day.

Trip Assignment

- Most traffic is expected to travel on Higley Rd to access the regional park.
- The busiest park entrance is expected to be the South Entrance on Ocotillo Rd, followed by the East Entrance on Higley Rd and then the North Entrance on Queen Creek Rd.

Traffic Capacity/Level of Service Analysis

- The Higley Road/Bridges Blvd intersection needs to be signalized now due to background traffic regardless of if the regional park is constructed or not.
- The following three intersections will need to be signalized when the regional park is constructed:
 - Queen Creek Rd/Lowes/Regional Park North Entrance
 - Higley Rd/Regional Park East Entrance (aka Driveway 1)
 - Ocotillo Rd/Regional Park South Entrance (aka Driveway 2)
- If the regional park is constructed in phases, the North Entrance and East Entrance will need to be signalized when the northern part of the park is constructed. The South Entrance will need to be signalized when the middle and southern parts of the park are constructed.
- All currently signalized intersections are expected to operate at acceptable levels of service (overall intersection LOS of D or better) for all analyzed buildout scenarios without needing improvements except for the Chandler Heights Rd/Higley Rd intersection in the 2030 Weekday PM peak hour.
- The Chandler Heights Rd/Higley Rd intersection can be mitigated to provide LOS of D in the 2030 Weekday PM peak hour by adding an eastbound exclusive right-turn lane. (Note: Adding an eastbound right-turn lane at Chandler Heights Rd/Higley Rd may seem a bit counter-intuitive as the regional park won't result in additional eastbound right-turning vehicles. The regional park increases the volume of many of the other movements at the intersection, raising the overall intersection delay to the point that LOS becomes E. The eastbound right-turn movement is a high-volume movement, so adding a right-turn lane improves operations enough that the overall intersection LOS becomes D. Other alternate mitigations instead of the eastbound right-turn lane could be considered, such as dual left-turn lanes or right-turn lanes on other approaches, but they would be more costly and not as effective at improving operations.)

Internal Park Roundabout Analysis

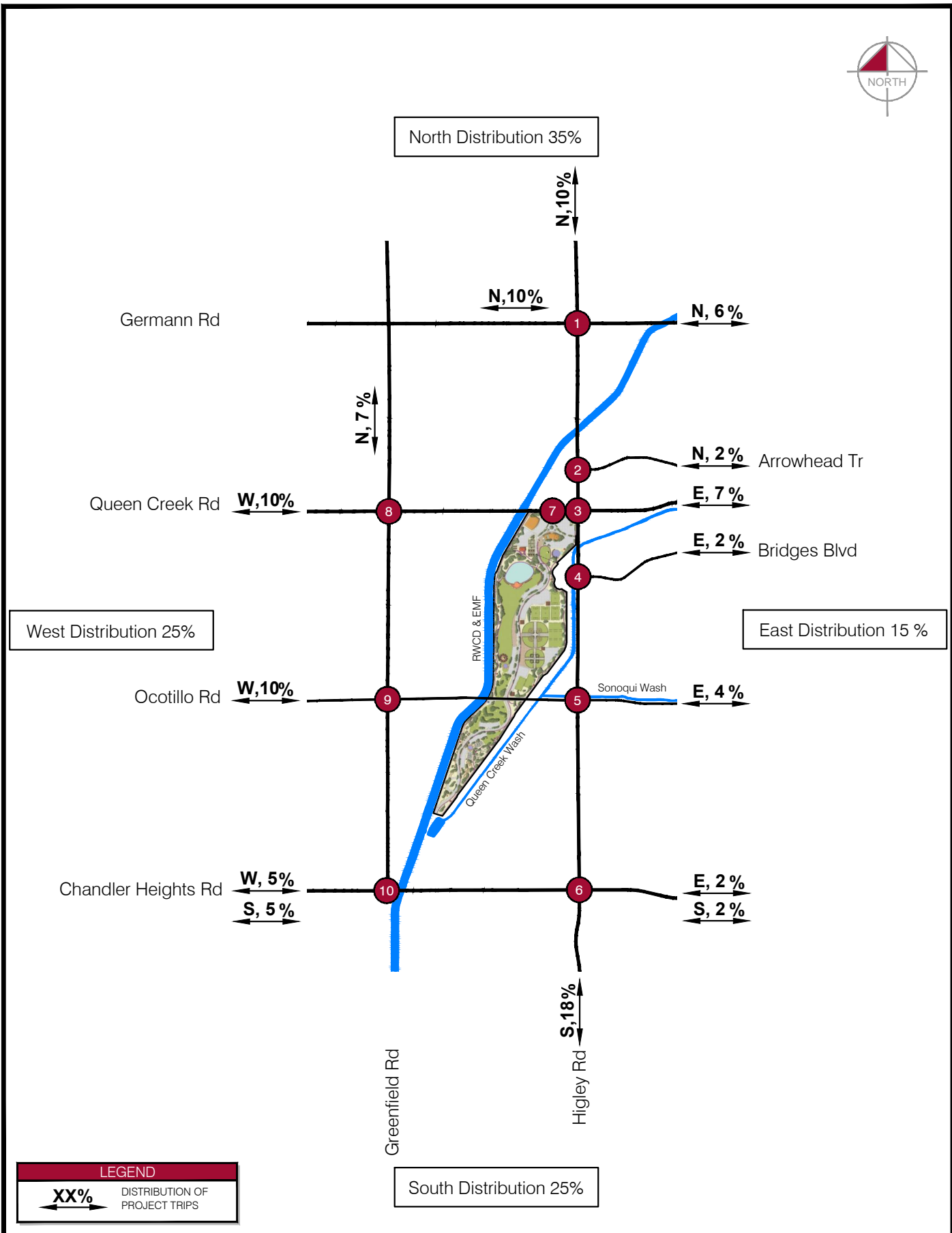
- The roundabout located within the northern end of the park is expected to operate at acceptable levels of service (overall intersection LOS of D or better) for all analyzed 2030 buildout scenarios.

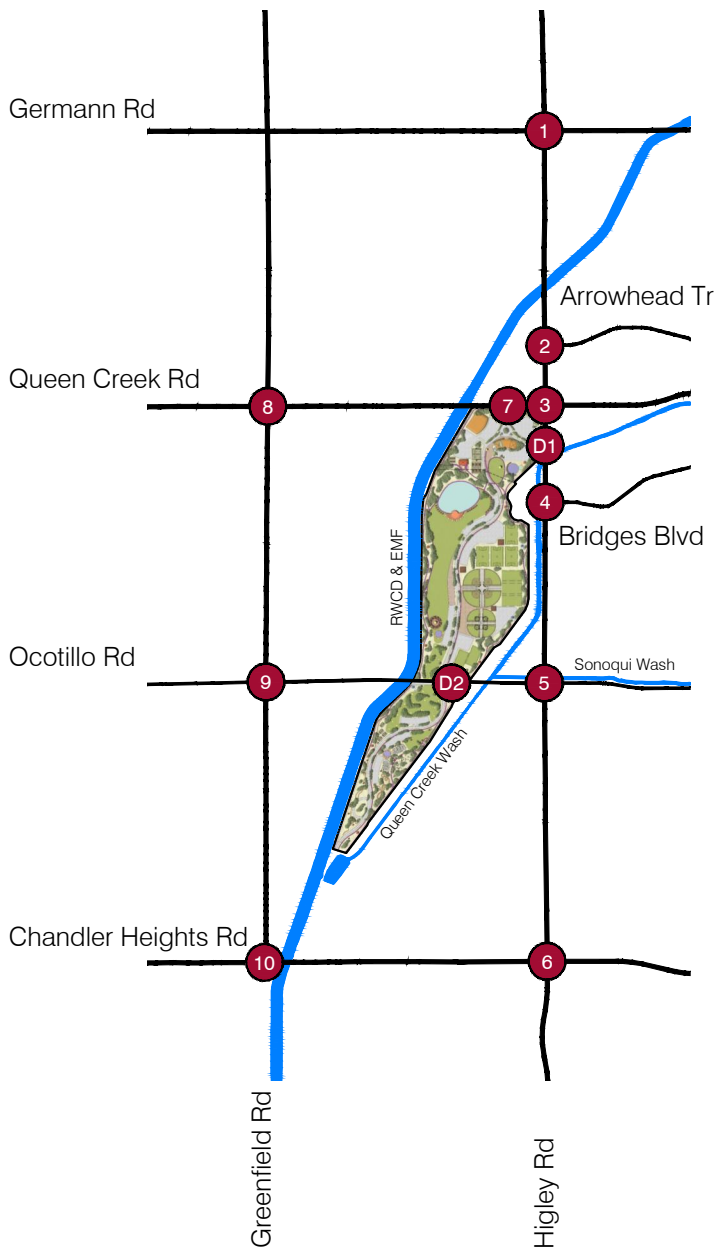
Parking

- The new regional park is expected to generate parking demand for approximately 2,500 spaces on a typical weekday, with up to approximately 3,700 spaces during a peak special event day such as on a weekend when there are multiple concurrent tournaments/events.
- The proposed parking supply is 4,125 spaces. Accounting for the projected parking demand, the regional park is expected to have 40% excess supply of parking spaces on a typical day and 10% excess supply of parking spaces on a peak special event day. Industry rule of thumb is that 15% excess supply (also termed 85% utilization) represents an effectively “full” condition as drivers have to drive around sometimes to find open parking spaces, resulting in inefficiencies in filling spaces.
- The parking in the northern portion of the park is expected to be approximately 95% utilized on both a typical day and a peak special event day.
- The parking in the central portion of the park is expected to be approximately 44% utilized on a typical day and approximately 93% utilized on a peak special event day.
- The parking in the southern portion of the park is expected to be approximately 39% utilized on a typical day and approximately 68% utilized on a peak special event day.

Associated Figures and Tables

- Figure 12 - Weekday and Saturday Trip Distribution
- Figure 13 - Weekday Traffic Assignment - Total
- Figure 14 - Saturday Traffic Assignment - Total
- Figure 15 - Saturday Tournament Traffic Assignment - Total
- Figure 16 - Weekday Traffic Assignment - In Only
- Figure 17 - Saturday Traffic Assignment - In Only
- Figure 18 - Saturday Tournament Traffic Assignment - In Only
- Figure 19 - Weekday Traffic Assignment - Out Only
- Figure 20 - Saturday Traffic Assignment - Out Only
- Figure 21 - Saturday Tournament Traffic Assignment - Out Only
- Parking Generation Calculations for a Typical Day
- Parking Generation Calculation for a Peak Special Event/Tournament Day
- Internal Roundabout Analysis - 2030 Scenarios
- Trip Generation
- 2030 Scenarios Level of Service Summary
- 2025 Scenarios Level of Service Summary
- 2020 Scenarios Level of Service Summary

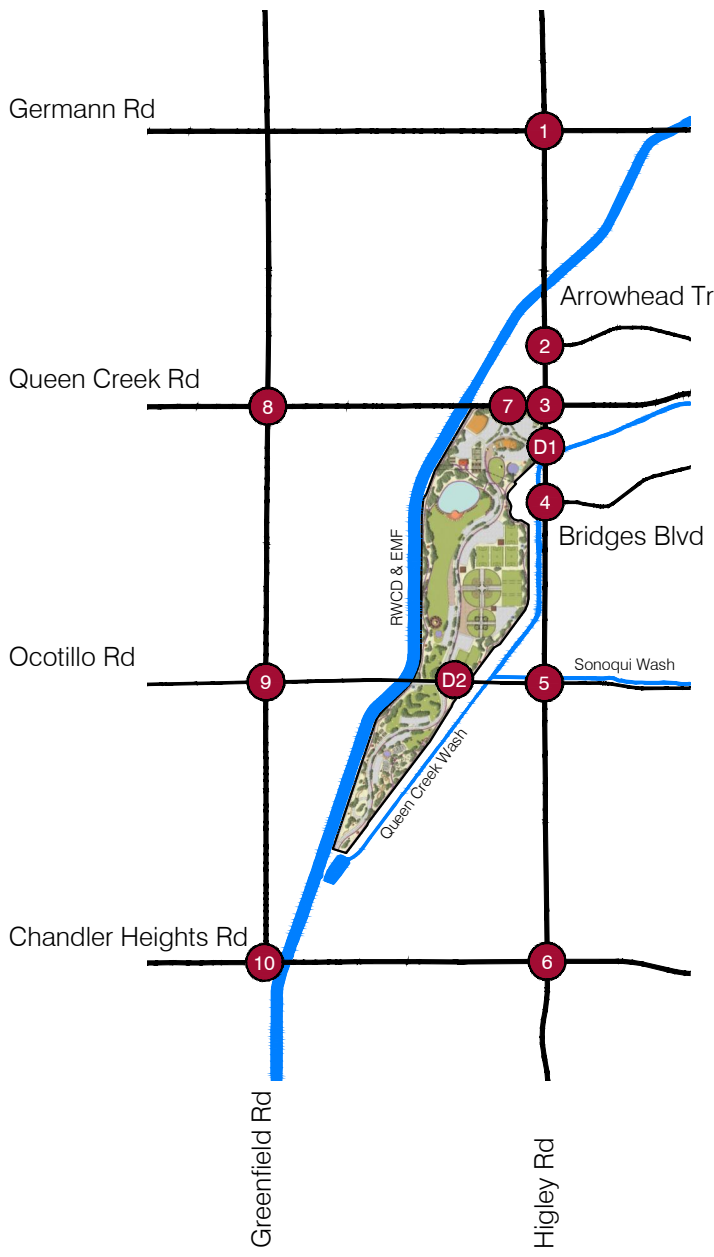




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|---|--|--|----|--|
| 1 | 43(43) ↓ 43(43) → | 26(26) ← 49(49) → 49(49) → 29(29) → | 7 | 2(2) ← 26(26) ← 1(1) → 40(40) → 46(46) → 79(79) → |
| 2 | 111(112) ↓ 9(9) ← | 127(128) → 10(10) → | 8 | 13(13) ↓ 17(17) ↓ 20(20) → 28(28) → |
| 3 | 16(17) ↓ 103(104) ↓ 63(64) → 16(16) → 1(1) → | 10(10) ← 20(21) ← 2(2) → 73(74) → 18(18) → | 9 | 31(32) → 35(35) → 49(49) → 26(26) → |
| 4 | 185(187) ↓ 5(5) ← | 5(5) → 4(4) → 176(177) → 4(4) → | 10 | 26(26) ↓ 23(23) → 20(20) → |
| 5 | 96(97) ↓ 82(83) ↓ 11(11) ↓ 100(101) → 9(9) → 48(48) → | 9(9) → 8(8) → 42(43) → 71(72) → | D1 | 64(65) ↓ 61(61) ↓ 25(25) → 130(131) → 112(113) → 68(69) → |
| 6 | 23(23) ↓ 88(88) ↓ 19(20) ↓ 20(20) → | 17(17) → 77(78) → | D2 | 65(66) ↓ 25(25) ↓ 106(106) ↓ 56(57) → 27(28) → 14(14) → 91(92) → 32(32) → 23(23) → 13(13) → 25(25) → 24(24) → |

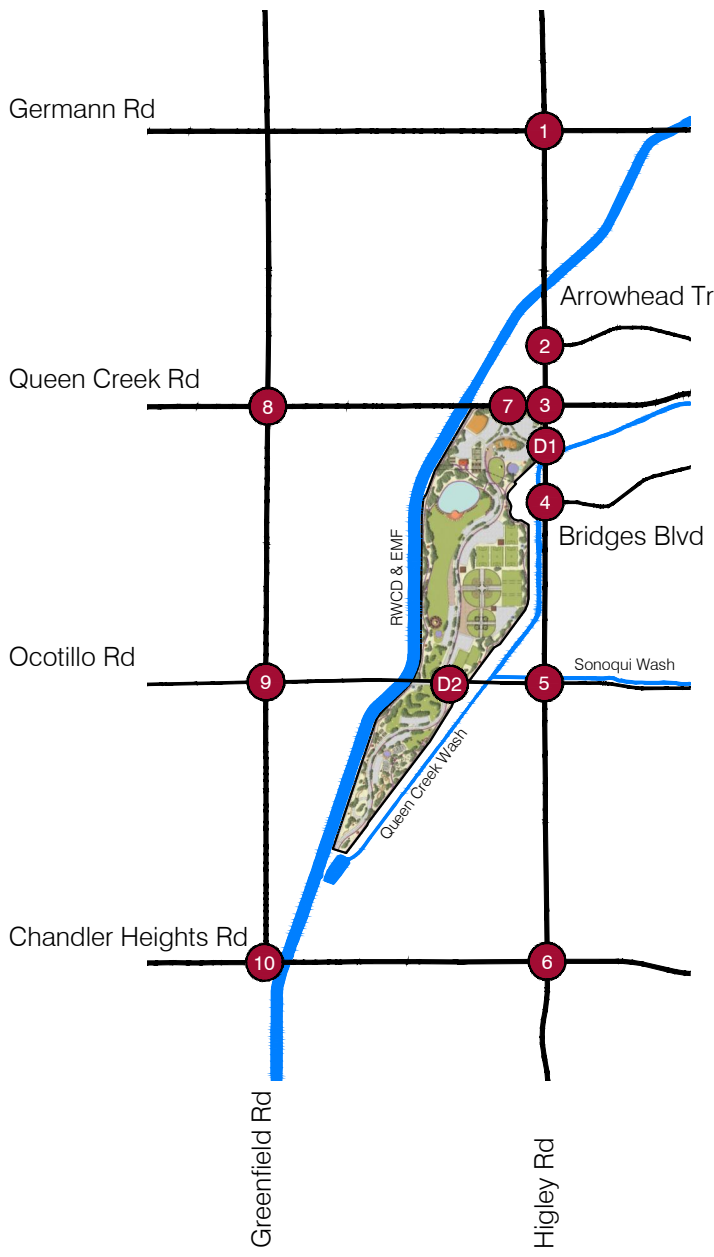
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← XX(XX) MD(PM) PEAK HOUR TRAFFIC VOLUMES



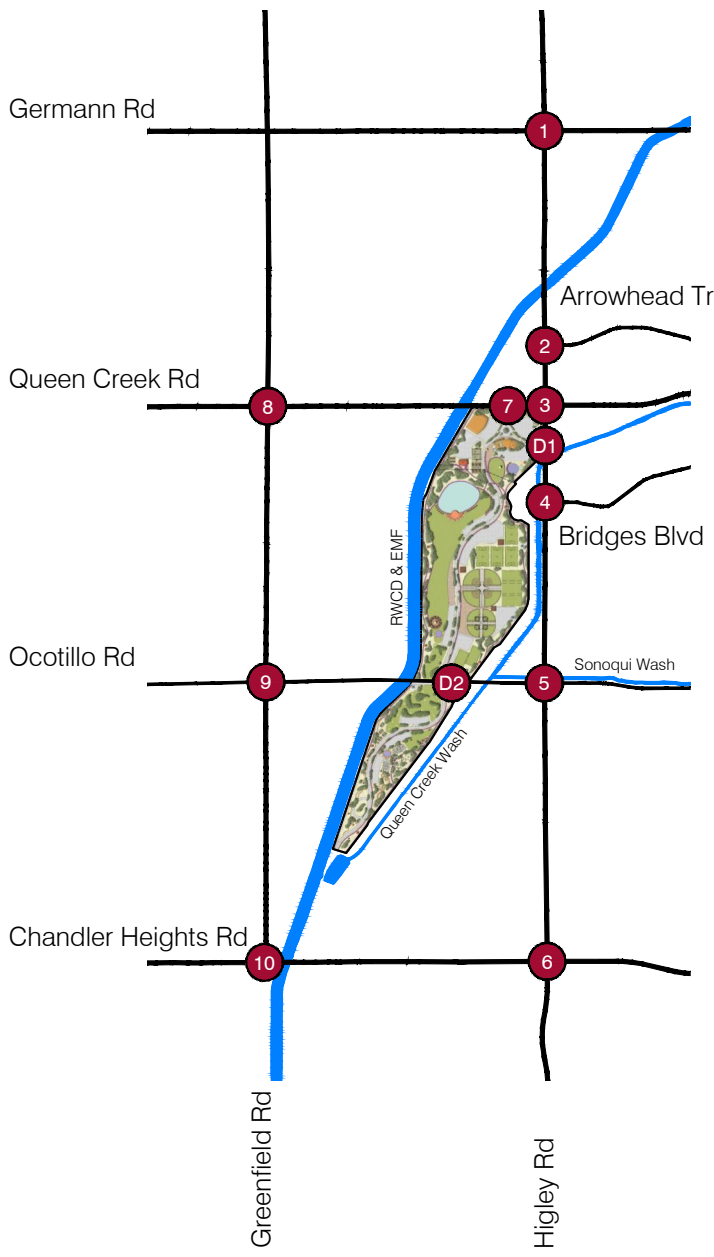
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| 1 | 59(74) ↓ 59(74) → | 35(44) ← 61(76) ↑ 61(76) ↓ 37(48) → | 7 | 2(3) ← 35(45) ← 57(72) → 97(123) → |
| 2 | 153(191) ↓ 159(197) ↑ 12(15) ← | 12(15) ← 18(22) ↓ 23(29) ↓ | 8 | 24(31) ← 35(44) ← 27(32) → 19(23) → |
| 3 | 22(29) ↓ 142(177) ↓ 78(99) → 19(25) → 2(2) → | 13(17) ← 28(35) ← 2(3) ← 94(114) ↑ 23(29) ↑ | 9 | 44(53) ← 45(55) ← 61(76) ← 33(41) ← 59(74) → 32(40) → |
| 4 | 238(297) ↓ 7(8) ← 6(8) ← 5(7) ← | 6(8) ← 5(7) ← 235(294) ↑ 6(7) ↑ | 10 | 33(41) ← 28(35) ← 32(40) → 27(34) → |
| 5 | 129(158) ↓ 101(128) ↓ 13(17) ↓ | 13(16) ← 11(13) ← 59(72) ↑ 97(124) ↑ | D1 | 67(112) ↓ 85(103) ↓ 31(39) → 160(202) → 153(196) ↑ 88(106) ↑ |
| 6 | 28(35) ↓ 110(137) ↓ 24(30) ↓ | 24(29) ← 106(132) ↑ 77(98) → 37(48) → 21(21) → | D2 | 80(102) ↓ 25(25) ↓ 130(165) ↓ 125(159) ← 39(49) ← 35(35) ← 21(21) ↑ 25(25) ↑ 36(36) ↑ |

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| 1 | 105(105) ← | 63(63) ↖ | 4(4) ↖ 66(66) ↖ |
| 2 | 272(272) ← | 21(21) ↖ | 30(30) ↖ 43(43) ↖ 62(62) ↖ |
| 3 | 42(42) ↖ 251(252) ↖ | 24(24) ← 49(49) ← | 73(74) ↖ 73(74) ↖ 105(105) ↖ 55(55) ↖ |
| 4 | 414(416) ↖ 12(12) ↖ | 12(12) ↖ 9(9) ↖ | 55(55) ↖ 50(50) ← |
| 5 | 219(220) ↖ 180(181) ↖ 24(24) ↖ | 24(24) ↖ 18(18) ↖ | 163(163) ↖ 141(141) ↖ |
| 6 | 50(50) ↖ 188(189) ↖ 42(42) ↖ | 42(42) ↖ | 143(144) ↖ 25(25) ↖ 232(233) ↖ 232(233) ↖ 69(70) ↖ 35(35) ↖ |
| 7 | 105(105) ↖ | 105(105) ↖ 63(63) ↖ | 101(101) ↖ 173(174) ↖ |
| 8 | 272(274) ↖ 21(21) ↖ | 61(62) ↖ 43(43) ↖ | 43(43) ↖ 30(30) ↖ |
| 9 | 139(139) ↖ 35(35) ↖ 3(3) ↖ | 4(4) ↖ 155(155) ↖ 39(39) ↖ | 105(105) ↖ 55(55) ↖ |
| 10 | 415(416) ↖ 9(9) ↖ | 415(416) ↖ 9(9) ↖ | 55(55) ↖ 50(50) ↖ |
| D1 | 99(100) ↖ 180(181) ↖ | 285(286) ↖ 142(142) ↖ | |
| D2 | 50(50) ↖ | 188(189) ↖ | 21(21) ↖ 25(25) ↖ 36(36) ↖ |

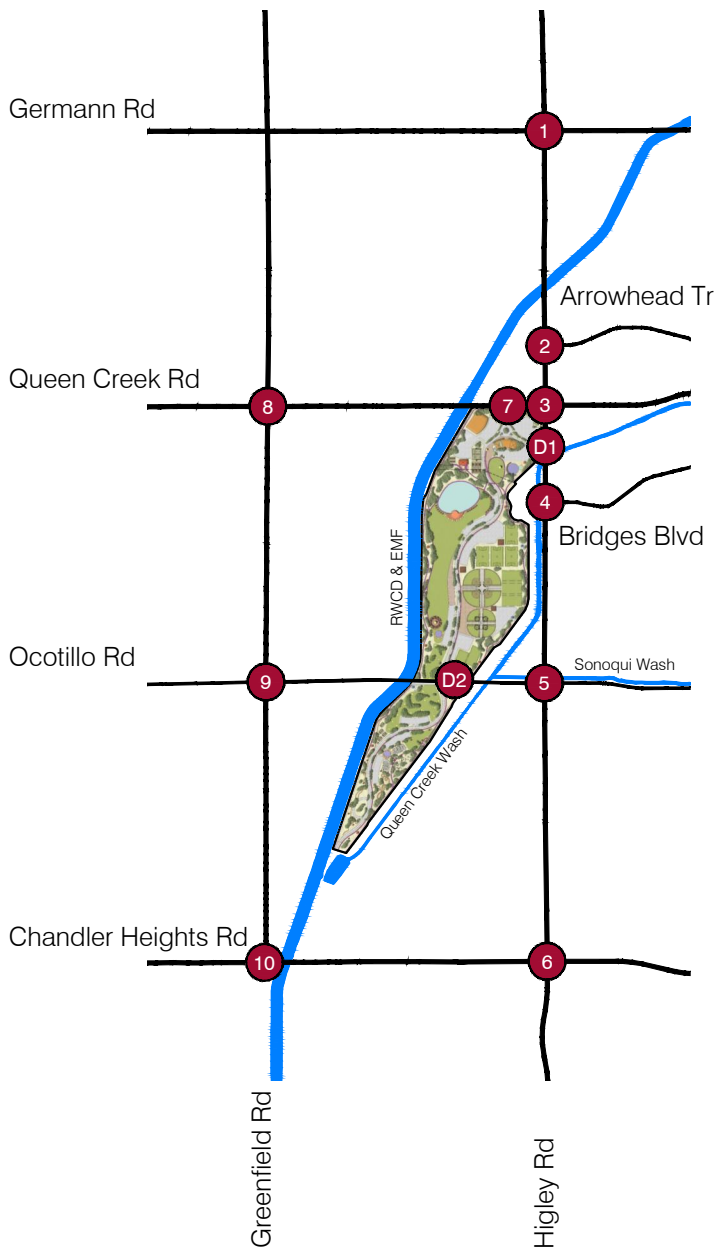
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| 3 | 16(17) ↓ 103(104) ↓ 10(10) ← 20(21) ← | 9 | 31(32) ↓ |
| | 1(1) → | | 43(43) → 23(23) ↗ |
| 4 | 61(61) ↓ 5(5) ↗ 4(4) ↗ 108(109) ↑ | 10 | 23(23) ↗ 20(20) → |
| 5 | 65(65) ↗ 9(9) ↗ 8(8) ↗ 42(43) ↑ 71(72) ↑ | D1 | 64(65) ↓ 61(61) ↓ 112(113) ↗ |
| | 27(28) → | | |
| 6 | 17(17) ↗ | D2 | 91(92) ↗ 23(23) ↗ |
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| | 77(78) ↑ | | |

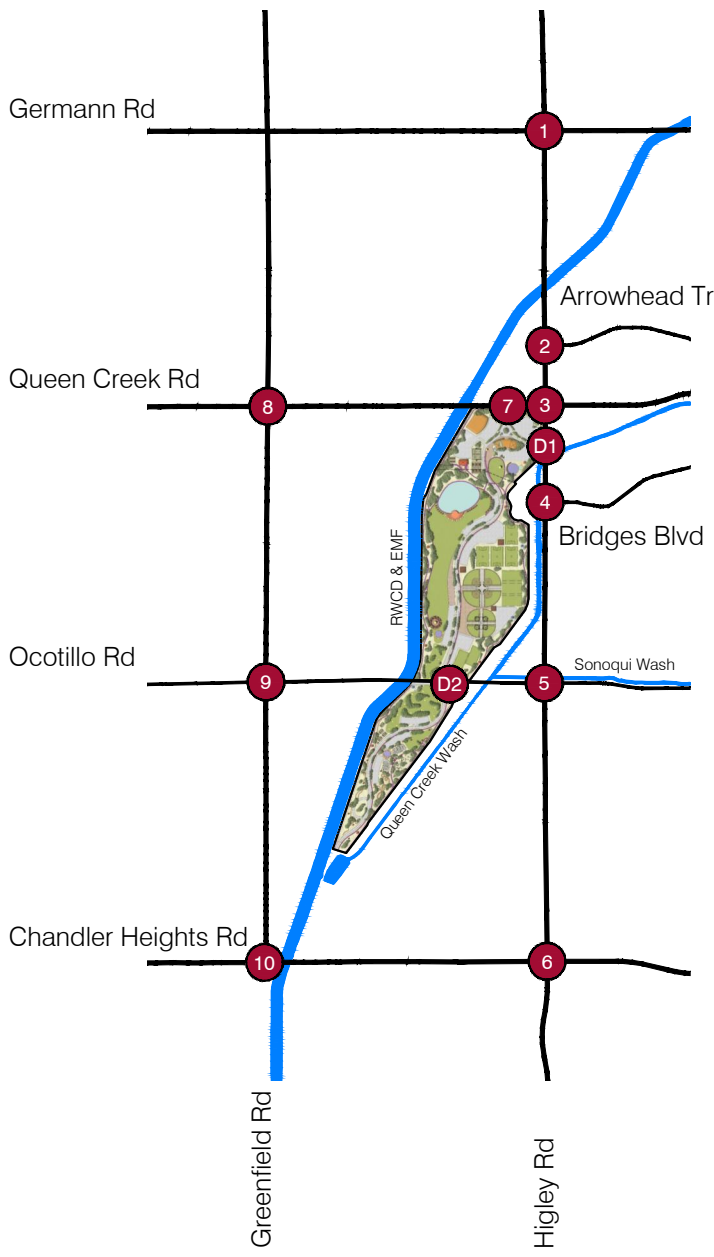
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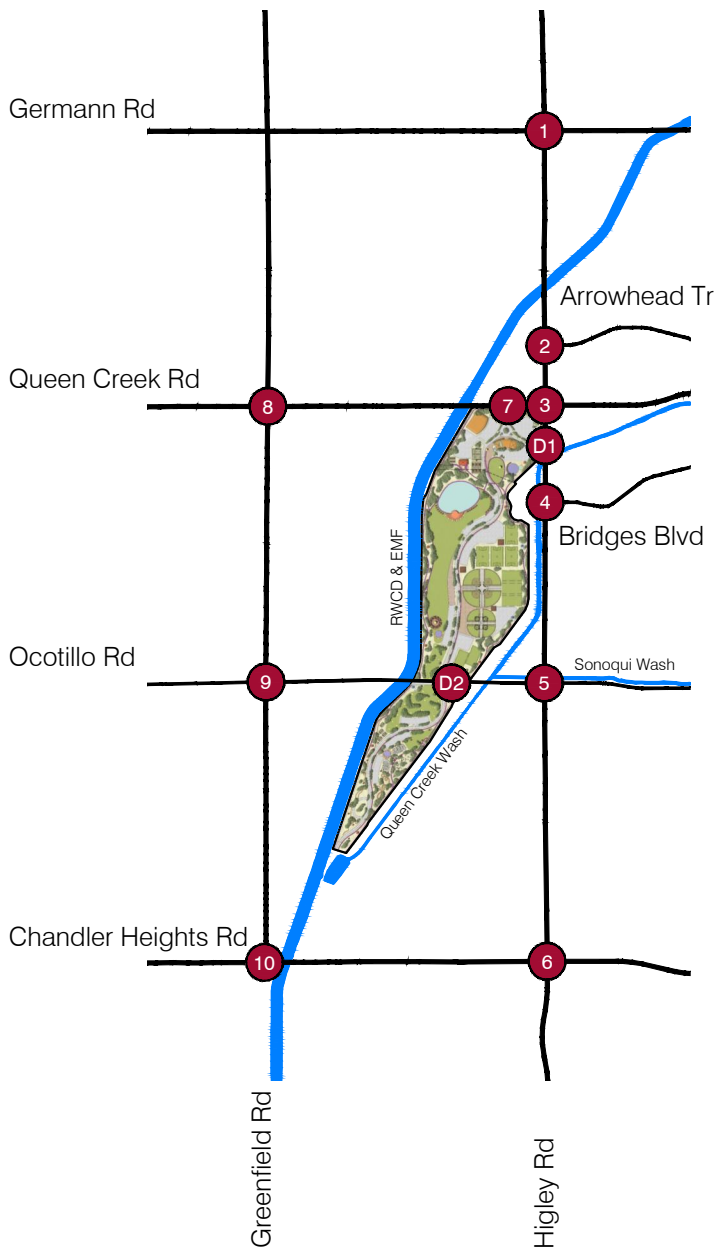
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| 3 | 22(29) ↓ 142(177) ↓ 13(17) ← 28(35) ← | 9 | 44(53) ↓ 59(74) → 32(40) ↗ |
| 4 | 85(103) ↓ 6(8) ↗ 5(7) ↗ 147(187) ↑ | 10 | 32(40) ↗ 27(34) → |
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| 10 | | 273(274) ↓ | |
| D1 | 89(100) ↑ 180(181) ↑ | | 285(286) ↑ |
| D2 | 188(189) ↑ | 143(144) ↑ 69(70) ↑ 21(21) ↑ | |

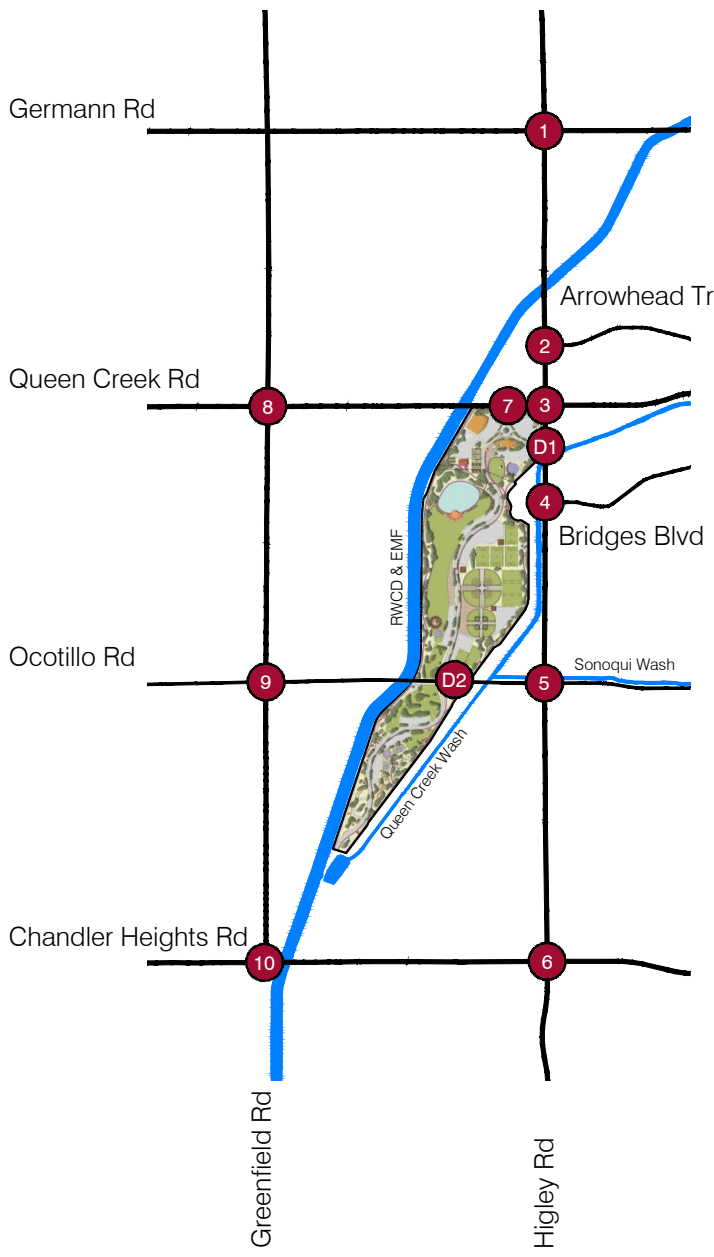
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| | 127(128) 10(10) | | ↶ 20(20) ↷ 28(28) 21(21) 14(15) |
| 3 | | 9 | |
| | 63(64) 16(16) | | ↶ 35(35) ↷ 49(49) ↶ 26(26) |
| 4 | | 10 | |
| | 124(125) 5(5) | | ↶ 26(26) ← 23(23) 68(69) 4(4) |
| 5 | | D1 | |
| | 32(32) 82(83) 11(11) | | 25(25) 130(131) 68(69) |
| 6 | | D2 | |
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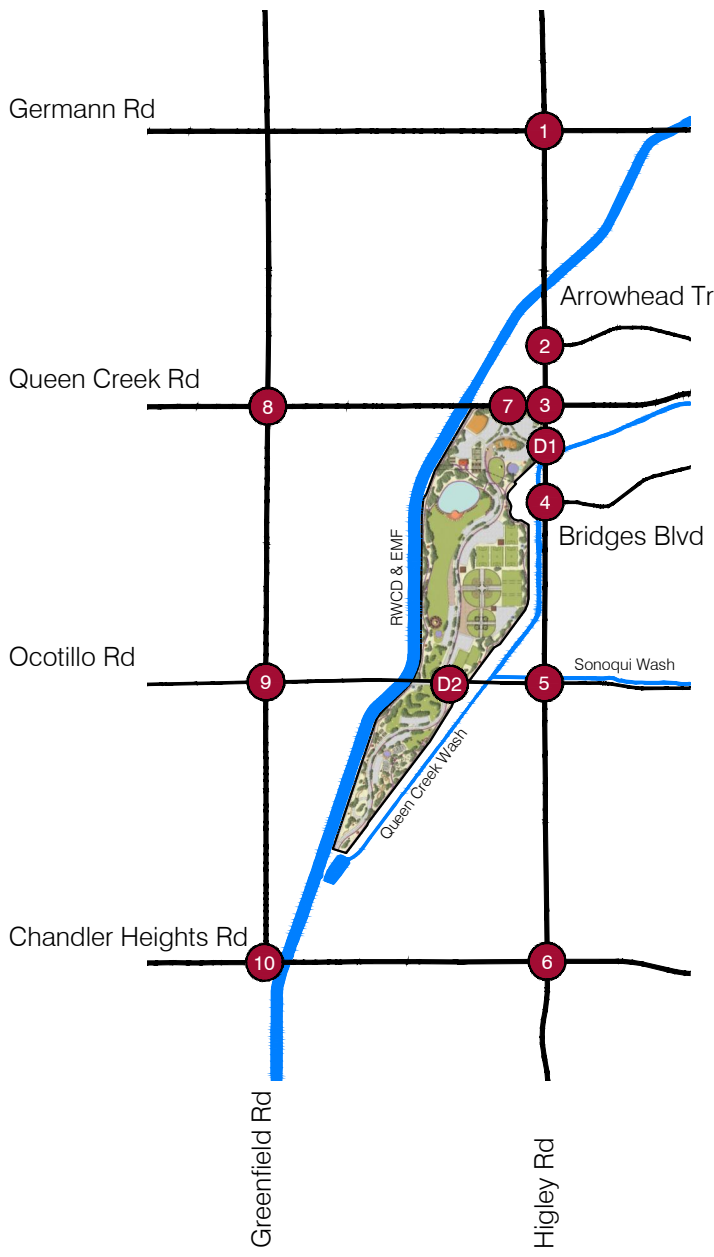
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| 1 | | 7 | |
| | 61(76) 61(76) 37(46) | | ← 2(3) 57(72) 97(123) |
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| 3 | | 9 | |
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| 3 | | 9 | ↖ 73(74) ↖ 105(105) ↖ 55(55) |
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| 4 | | 10 | ↖ 55(55) ← 50(50) |
| | ↖ 274(275) ↖ 12(12) ↑ 142(142) ↑ 9(9) | | |
| 5 | | D1 | → 55(56) → 285(287) → 142(142) |
| | ↖ 69(70) ↖ 180(181) ↖ 24(24) → 151(151) → 18(18) → 100(100) | | |
| 6 | | D2 | ↖ 143(144) ↖ 232(233) ← 69(70) ↖ 21(21) ↖ 36(36) |
| | ↖ 50(50) ↖ 189(189) ↖ 42(42) | | |

| LEGEND | |
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| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |

Gilbert New Regional Park
Parking Generation Calculations

Parking for Typical Day

| <i>Typical Parking Generation</i> | <i>Area</i> | <i>Required Spaces</i> | <i>No. of Fields/Courts</i> | <i>Parking Demand (spaces/field or court)</i> | <i>Sq. Ft.</i> | <i>Parking Demand (spaces/sq. ft.)</i> | <i>Source</i> |
|--------------------------------------|---------------|------------------------|-----------------------------|---|----------------|--|-----------------|
| Regional Park | Central/South | 100 | | | 95 acres | | Estimate |
| Baseball Fields | Central | 140 | 4 | 35 | | | Town of Gilbert |
| Softball Fields | Central | 140 | 4 | 35 | | | Town of Gilbert |
| Multi-Purpose Fields (Soccer Fields) | Central | 225 | 5 | 45 | | | Town of Gilbert |
| Pickleball Courts | North | 16 | 8 | 2 | | | Town of Gilbert |
| Soccer Fields | Central | 180 | 4 | 45 | | | Town of Gilbert |
| Tennis Courts | North | 12 | 6 | 2 | | | Town of Gilbert |
| Volleyball Courts | North | 12 | 6 | 2 | | | Town of Gilbert |
| Basketball Courts | South | 8 | 4 | 2 | | | Town of Gilbert |
| Skate Park | South | 20 | | | | | Estimate |
| Bike Park | South | 20 | | | | | Estimate |
| Ramadas | Central/South | 296 | | | | | Estimate |
| Splash Pad | North | 20 | | | | | Estimate |
| Playground | All | 40 | | | 3 total | | Estimate |
| Aquatic Center | North | 333 | | | 50000 | 1 space/150 sq ft | Town of Gilbert |
| Event Center | North | 467 | | | 70000 | 1 space/150 sq ft | Town of Gilbert |
| Recreation Center | North | 333 | | | 50000 | 1 space/150 sq ft | Town of Gilbert |
| Retail | North | 120 | | | 30000 | 1 space/250 sq ft | Town of Gilbert |

| | <i>Spaces</i> | <i>% of Total</i> |
|-------------------------------------|---------------|-------------------|
| Calculated Parking Demand (North) | 1327 | 53% |
| Calculated Parking Demand (Central) | 924 | 37% |
| Calculated Parking Demand (South) | 231 | 9% |
| Total Parking Demand | 2482 | 100% |
| Proposed Parking (North) | 1420 | 34% |
| Proposed Parking (Central) | 2105 | 51% |
| Proposed Parking (South) | 600 | 15% |
| Total Proposed Parking | 4125 | 100% |
| Excess Supply (spaces) (North) | 93 | 6% |
| Excess Supply (spaces) (Central) | 1181 | 72% |
| Excess Supply (spaces) (South) | 369 | 22% |
| Total Excess Supply (Spaces) | 1643 | 100% |
| Excess Supply (%) | 40% | |

Gilbert New Regional Park
Parking Generation Calculations

Parking for Peak Special Event/Tournament Day

| <i>Typical Parking Generation</i> | <i>Area</i> | <i>Required Spaces</i> | <i>No. of Fields/Courts</i> | <i>Parking Demand (spaces/field or court)</i> | <i>Sq. Ft.</i> | <i>Parking Demand (spaces/sq. ft.)</i> | <i>Source</i> |
|--|---------------|------------------------|-----------------------------|---|----------------|--|-----------------|
| Regional Park | Central/South | 100 | | | 95 acres | | Estimate |
| * Baseball Fields | Central | 400 | 4 | 100 | | | Estimate |
| * Softball Fields | Central | 400 | 4 | 100 | | | Estimate |
| * Multi-Purpose Fields (Soccer Fields) | Central | 500 | 5 | 100 | | | Estimate |
| Pickleball Courts | North | 16 | 8 | 2 | | | Town of Gilbert |
| * Soccer Fields | Central | 400 | 4 | 100 | | | Estimate |
| Tennis Courts | North | 12 | 6 | 2 | | | Town of Gilbert |
| Volleyball Courts | North | 12 | 6 | 2 | | | Town of Gilbert |
| Basketball Courts | South | 8 | 4 | 2 | | | Town of Gilbert |
| * Skate Park | South | 100 | | | | | Estimate |
| * Bike Park | South | 100 | | | | | Estimate |
| Ramadas | Central/South | 296 | | | | | Estimate |
| * Splash Pad | North | 40 | | | | | Estimate |
| * Playground | All | 80 | | | 3 total | | Estimate |
| Aquatic Center | North | 333 | | | 50000 | 1 space/150 sq ft | Town of Gilbert |
| Event Center | North | 467 | | | 70000 | 1 space/150 sq ft | Town of Gilbert |
| Recreation Center | North | 333 | | | 50000 | 1 space/150 sq ft | Town of Gilbert |
| Retail | North | 120 | | | 30000 | 1 space/250 sq ft | Town of Gilbert |

| | <i>Spaces</i> | <i>% of Total</i> |
|-------------------------------------|---------------|-------------------|
| Calculated Parking Demand (North) | 1360 | 37% |
| Calculated Parking Demand (Central) | 1953 | 53% |
| Calculated Parking Demand (South) | 405 | 11% |
| Total Parking Demand | 3717 | 100% |
| Proposed Parking (North) | 1420 | 34% |
| Proposed Parking (Central) | 2105 | 51% |
| Proposed Parking (South) | 600 | 15% |
| Total Proposed Parking | 4125 | 100% |
| Excess Supply (spaces) (North) | 60 | 15% |
| Excess Supply (spaces) (Central) | 152 | 37% |
| Excess Supply (spaces) (South) | 195 | 48% |
| Total Excess Supply (Spaces) | 408 | 100% |
| Excess Supply (%) | 10% | |

* indicates values increased from typical day values due to peak special event/tournament day

Gilbert New Regional Park Roundabout Delay & LOS

| <i>Scenario</i> | <i>Delay (s/veh)</i> | <i>LOS</i> | <i>v/c</i> |
|-----------------------------|--------------------------|------------|------------|
| 2030 Weekday PM | 6.20 | A | 0.19 |
| 2030 Saturday PM | 6.60 | A | 0.40 |
| 2030 Saturday Tournament MD | 7.80 | A | 0.58 |

Notes:

- Intersection delay & LOS reported using Sidra Intersection 6.0
- The Federal Highway Administration (FHWA) suggests a maximum v/c ratio for a roundabout of 0.85, above this value the operations of the roundabout deteriorates rapidly.

Source: Kimley-Horn and Associates, Inc., 2016.

Gilbert New Regional Park Roundabout 95th Percentile Queue Lengths (ft)

| <i>Scenario</i> | <i>Approach</i> | | |
|-----------------------------|-----------------|-----------|-----------|
| | <i>NE</i> | <i>NW</i> | <i>SB</i> |
| 2030 Weekday PM | 27 | 20 | 10 |
| 2030 Saturday PM | 82 | 56 | 22 |
| 2030 Saturday Tournament MD | 155 | 124 | 43 |

Notes:

- Intersection 95th percentile queues reported using Sidra Intersection 6.0.

Source: Kimley-Horn and Associates, Inc. 2016.

Trip Generation for Concept Vision 1

| Land Use | Land Use Code | Size | Units | Weekday | | | | | | | | | Saturday | | | | | | | | | Tournament (Saturday) | | | | | | | | |
|-------------------------------|---------------|--------|--------|--------------|--------------|------------|------------|--------------|------------|------------|--------------|--------------|------------|--------------|--------------|------------|--------------|---------------|--------------|--------------|--------------|-----------------------|--------------|--------------|--|--|--|--|--|--|
| | | | | Daily | MD Peak Hour | | | PM Peak Hour | | | Daily | MD Peak Hour | | | PM Peak Hour | | | Daily | MD Peak Hour | | | PM Peak Hour | | | | | | | | |
| | | | | | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | | In | Out | Total | | | | | | | | | |
| Baseball Field (Soccer) | 488 | 4 | Fields | 285 | 31 | 42 | 73 | 31 | 42 | 73 | 470 | 58 | 63 | 121 | 58 | 63 | 121 | 1,440 | 180 | 180 | 360 | 180 | 180 | 360 | | | | | | |
| Basketball Court (Tennis * 4) | 490 | 4 | Courts | 496 | 32 | 32 | 64 | 32 | 32 | 64 | 892 | 48 | 48 | 96 | 48 | 48 | 96 | 892 | 48 | 48 | 96 | 48 | 48 | 96 | | | | | | |
| Multi-Purpose Field (Soccer) | 488 | 5 | Fields | 357 | 39 | 53 | 92 | 39 | 53 | 92 | 587 | 73 | 79 | 152 | 73 | 79 | 152 | 1,800 | 225 | 225 | 450 | 225 | 225 | 450 | | | | | | |
| Pickleball Court (Tennis) | 490 | 8 | Courts | 248 | 16 | 15 | 31 | 16 | 15 | 31 | 445 | 24 | 24 | 48 | 24 | 24 | 48 | 445 | 24 | 24 | 48 | 24 | 24 | 48 | | | | | | |
| Soccer Field (Soccer) | 488 | 4 | Fields | 285 | 31 | 42 | 73 | 31 | 42 | 73 | 470 | 58 | 63 | 121 | 58 | 63 | 121 | 1,440 | 180 | 180 | 360 | 180 | 180 | 360 | | | | | | |
| Softball Field (Soccer) | 488 | 4 | Fields | 285 | 31 | 42 | 73 | 31 | 42 | 73 | 470 | 58 | 63 | 121 | 58 | 63 | 121 | 1,440 | 180 | 180 | 360 | 180 | 180 | 360 | | | | | | |
| Tennis Court (Tennis) | 490 | 6 | Courts | 186 | 12 | 11 | 23 | 12 | 11 | 23 | 334 | 18 | 18 | 36 | 18 | 18 | 36 | 334 | 18 | 18 | 36 | 18 | 18 | 36 | | | | | | |
| Volleyball Court (Tennis * 4) | 490 | 6 | Courts | 744 | 46 | 46 | 92 | 46 | 46 | 92 | 1,336 | 72 | 72 | 144 | 72 | 72 | 144 | 1,336 | 72 | 72 | 144 | 72 | 72 | 144 | | | | | | |
| Food Truck | - | 10 | Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 | 0 | 0 | 0 | 100 | 100 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| Aquatic Center | 495 | 50,000 | SF | 1,691 | 67 | 70 | 137 | 67 | 70 | 137 | 455 | 29 | 25 | 54 | 29 | 25 | 54 | 455 | 29 | 25 | 54 | 29 | 25 | 54 | | | | | | |
| Event Center | 460 | 70,000 | SF | 54 | 10 | 9 | 19 | 14 | 13 | 27 | 560 | 70 | 70 | 140 | 117 | 117 | 234 | 54 | 10 | 9 | 19 | 14 | 13 | 27 | | | | | | |
| Recreation Center | 495 | 50,000 | SF | 1,691 | 67 | 70 | 137 | 67 | 70 | 137 | 455 | 29 | 25 | 54 | 29 | 25 | 54 | 455 | 29 | 25 | 54 | 29 | 25 | 54 | | | | | | |
| Retail | 826 | 30,000 | SF | 1,330 | 36 | 45 | 81 | 36 | 45 | 81 | 1,261 | 36 | 45 | 81 | 36 | 45 | 81 | 1,261 | 36 | 45 | 81 | 36 | 45 | 81 | | | | | | |
| Regional Park | 417 | 95 | Acres | 434 | 9 | 10 | 19 | 9 | 10 | 19 | 537 | 15 | 17 | 32 | 15 | 17 | 32 | 537 | 15 | 17 | 32 | 15 | 17 | 32 | | | | | | |
| Total | | | | 8,086 | 427 | 487 | 914 | 431 | 491 | 922 | 8,672 | 588 | 612 | 1,200 | 735 | 759 | 1,494 | 11,889 | 1,046 | 1,048 | 2,094 | 1,050 | 1,052 | 2,102 | | | | | | |

Gilbert New Regional Park
Level of Service Summary

| Signalized Intersection | Intersection LOS/Delay | | | | | | | |
|--|-------------------------|-----------------------------------|-----------------------|---------------------------------|--------------------------|------------------------------------|-----------------------------------|---|
| | 2030 Background Weekday | 2030 Background Weekday Mitigated | 2030 Buildout Weekday | 2030 Buildout Weekday Mitigated | 2030 Background Saturday | 2030 Background Saturday Mitigated | 2030 Buildout Saturday Tournament | 2030 Buildout Saturday Tournament Mitigated |
| Greenfield Rd/Ocotillo Rd | | | | | | | | |
| MD Peak | C/21 | C/21 | C/21 | C/21 | C/23 | C/23 | C/33 | C/34 |
| PM Peak | C/30 | C/30 | C/33 | C/33 | C/25 | C/25 | C/34 | C/35 |
| Greenfield Rd/Queen Creek Rd | | | | | | | | |
| MD Peak | B/16 | B/16 | B/17 | B/17 | B/20 | B/20 | C/24 | C/23 |
| PM Peak | C/33 | C/33 | C/35 | C/35 | C/20 | C/20 | C/24 | C/24 |
| Higley Rd/Queen Creek Rd | | | | | | | | |
| MD Peak | C/30 | C/30 | C/31 | C/27 | C/30 | C/30 | C/27 | C/29 |
| PM Peak | C/33 | C/33 | D/37 | C/33 | C/29 | C/29 | C/30 | C/24 |
| Higley Rd/Ocotillo Rd | | | | | | | | |
| MD Peak | B/18 | B/18 | C/23 | C/25 | C/24 | C/24 | D/49 | D/49 |
| PM Peak | C/24 | C/24 | C/30 | C/29 | C/24 | C/24 | D/54 | D/54 |
| Chandler Heights Rd/Greenfield Rd | | | | | | | | |
| MD Peak | B/12 | B/12 | B/12 | B/12 | B/12 | B/12 | B/13 | B/13 |
| PM Peak | B/20 | B/20 | C/20 | B/19 | B/15 | B/15 | B/16 | B/16 |
| Chandler Heights Rd/Higley Rd | | | | | | | | |
| MD Peak | C/26 | C/26 | C/28 | C/27 | C/29 | C/29 | D/37 | C/35 |
| PM Peak | D/53 | D/53 | E/65 | D/45 | C/31 | C/31 | D/43 | D/41 |
| Higley Rd/Arrowhead Trail | | | | | | | | |
| MD Peak | A/10 | A/10 | A/10 | A/10 | A/9 | A/9 | A/9 | A/9 |
| PM Peak | A/8 | A/8 | A/9 | A/9 | B/12 | B/12 | B/12 | B/12 |
| Higley Rd/Germann Rd | | | | | | | | |
| MD Peak | C/30 | C/30 | C/32 | C/32 | C/34 | C/34 | D/42 | D/42 |
| PM Peak | D/52 | D/52 | D/55 | D/55 | D/35 | D/35 | D/44 | D/44 |

| Intersection | Worst Movement LOS/Delay (sec)/Queue Length (vehs) | | | | | | | |
|--|--|-----------------------------------|-----------------------|---------------------------------|--------------------------|------------------------------------|-----------------------------------|---|
| | 2030 Background Weekday | 2030 Background Weekday Mitigated | 2030 Buildout Weekday | 2030 Buildout Weekday Mitigated | 2030 Background Saturday | 2030 Background Saturday Mitigated | 2030 Buildout Saturday Tournament | 2030 Buildout Saturday Tournament Mitigated |
| Ocotillo Rd/Driveway 2 | | | | | | | | |
| MD Peak | - | - | SBL E/47/3.3 | A/9* | - | - | SBL F/>999/27.7 | B/13* |
| PM Peak | - | - | SBL F/322/8.9 | A/9* | - | - | SBL F/>999/27.9 | B/12* |
| Higley Rd/Bridges Blvd | | | | | | | | |
| MD Peak | WBL F/241/4.3 | A/9* | WBL F/>999/7.1 | B/14* | WBL F/>999/5.9 | B/16* | SBL F/366/23.7 | B/16* |
| PM Peak | SBL F/316/30.3 | C/26* | SBL F/503/37.5 | B/13* | WBL F/662/5.1 | B/13* | SBL F/211/15.7 | B/13* |
| Queen Creek Road/Lowes Driveway | | | | | | | | |
| MD Peak | SBL D/27/0.6 | SBL D/27/0.6 | NBL E/44/1.5 | A/7* | SBL D/31/0.5 | SBL D/31/0.5 | NBL F/257/7.8 | A/8* |
| PM Peak | SBL E/44/0.3 | SBL E/44/0.3 | NBL F/383/5.0 | A/4* | SBL C/25/0.3 | SBL C/25/0.3 | NBL F/189/6.9 | A/8* |
| Higley Rd/Driveway 1 | | | | | | | | |
| MD Peak | - | - | EBL F/67/1.2 | A/2* | - | - | EBL F/390/5.7 | B/18* |
| PM Peak | - | - | EBL F/>999/4.8 | B/11* | - | - | NBL F/156/14.3 | C/30* |

*represents the intersection is now signalized and the intersection LOS and delay are reported.

Gilbert New Regional Park
Level of Service Summary

| Signalized Intersection | Intersection LOS/Delay | | | | | | | |
|--|-------------------------|-----------------------------------|-----------------------|---------------------------------|--------------------------|------------------------------------|-----------------------------------|---|
| | 2025 Background Weekday | 2025 Background Weekday Mitigated | 2025 Buildout Weekday | 2025 Buildout Weekday Mitigated | 2025 Background Saturday | 2025 Background Saturday Mitigated | 2025 Buildout Saturday Tournament | 2025 Buildout Saturday Tournament Mitigated |
| Greenfield Rd/Ocotillo Rd | | | | | | | | |
| MD Peak | B/14 | B/14 | C/21 | C/21 | B/20 | B/20 | C/32 | C/33 |
| PM Peak | C/23 | C/23 | C/31 | C/31 | B/20 | B/20 | C/31 | C/33 |
| Greenfield Rd/Queen Creek Rd | | | | | | | | |
| MD Peak | B/15 | B/15 | B/17 | B/17 | B/19 | B/19 | C/24 | C/23 |
| PM Peak | C/33 | C/33 | C/35 | C/35 | C/20 | C/20 | C/23 | C/24 |
| Higley Rd/Queen Creek Rd | | | | | | | | |
| MD Peak | C/28 | C/28 | C/30 | C/30 | C/28 | C/28 | C/30 | C/32 |
| PM Peak | C/34 | C/34 | C/35 | C/34 | C/27 | C/27 | C/29 | C/24 |
| Higley Rd/Ocotillo Rd | | | | | | | | |
| MD Peak | B/17 | B/17 | C/23 | C/28 | B/20 | B/20 | D/52 | D/53 |
| PM Peak | B/15 | B/15 | C/33 | C/32 | C/21 | C/21 | D/55 | D/55 |
| Chandler Heights Rd/Greenfield Rd | | | | | | | | |
| MD Peak | B/13 | B/13 | B/12 | B/12 | B/12 | B/12 | B/13 | B/13 |
| PM Peak | B/19 | B/19 | B/20 | B/19 | B/15 | B/15 | B/16 | B/16 |
| Chandler Heights Rd/Higley Rd | | | | | | | | |
| MD Peak | C/25 | C/25 | C/27 | C/27 | C/27 | C/27 | C/34 | C/34 |
| PM Peak | D/46 | D/46 | D/52 | D/52 | C/29 | C/29 | D/39 | D/39 |
| Higley Rd/Arrowhead Trail | | | | | | | | |
| MD Peak | A/10 | A/10 | A/10 | A/10 | A/10 | A/10 | A/9 | A/9 |
| PM Peak | A/8 | A/8 | A/9 | A/9 | B/13 | B/12 | B/12 | B/12 |
| Higley Rd/Germann Rd | | | | | | | | |
| MD Peak | C/30 | C/30 | C/31 | C/31 | C/32 | C/32 | D/40 | D/40 |
| PM Peak | D/45 | D/45 | D/48 | D/48 | C/34 | C/34 | D/41 | D/41 |

| Intersection | Worst Movement LOS/Delay (sec)/Queue Length (vehs) | | | | | | | |
|--|--|-----------------------------------|-----------------------|---------------------------------|--------------------------|------------------------------------|-----------------------------------|---|
| | 2025 Background Weekday | 2025 Background Weekday Mitigated | 2025 Buildout Weekday | 2025 Buildout Weekday Mitigated | 2025 Background Saturday | 2025 Background Saturday Mitigated | 2025 Buildout Saturday Tournament | 2025 Buildout Saturday Tournament Mitigated |
| Ocotillo Rd/Driveway 2 | | | | | | | | |
| MD Peak | - | - | SBL E/43/3.1 | A/9* | - | - | SBL F/>999/26.7 | B/13* |
| PM Peak | - | - | SBL F/124/5.9 | A/8* | - | - | SBL F/>999/26.8 | B/12* |
| Higley Rd/Bridges Blvd | | | | | | | | |
| MD Peak | WBL F/241/4.3 | B/14* | WBL F/>999/7.1 | B/14* | WBL F/>999/5.9 | B/17* | SBL F/366/23.7 | B/16* |
| PM Peak | SBL F/316/30.3 | B/13* | SBL F/503/37.5 | B/13* | WBL F/662/5.1 | B/11* | SBL F/211/15.7 | B/13* |
| Queen Creek Road/Lowes Driveway | | | | | | | | |
| MD Peak | SBL D/27/0.6 | SBL D/27/0.6 | NBL E/44/1.5 | A/7* | SBL D/31/0.5 | SBL D/31/0.5 | NBL F/257/7.8 | A/8* |
| PM Peak | SBL E/44/0.3 | SBL E/44/0.3 | NBL F/383/5.0 | A/4* | SBL C/25/0.3 | SBL C/25/0.3 | NBL F/189/6.9 | A/8* |
| Higley Rd/Driveway 1 | | | | | | | | |
| MD Peak | - | - | EBL F/67/1.2 | A/2* | - | - | EBL F/54/2.1 | B/18* |
| PM Peak | - | - | EBL F/>999/4.8 | B/11* | - | - | EBL F/384/5.8 | C/30* |

*represents the intersection is now signalized and the intersection LOS and delay are reported.

Gilbert New Regional Park
Level of Service Summary

| Signalized Intersection | Intersection LOS/Delay | |
|--|------------------------|------------------------|
| | 2020 Buildout Weekday | 2020 Buildout Saturday |
| Greenfield Rd/Ocotillo Rd | | |
| MD Peak | B/11 | B/11 |
| PM Peak | B/13 | B/12 |
| Greenfield Rd/Queen Creek Rd | | |
| MD Peak | C/26 | C/31 |
| PM Peak | D/40 | C/34 |
| Higley Rd/Queen Creek Rd | | |
| MD Peak | C/29 | C/29 |
| PM Peak | D/38 | C/28 |
| Higley Rd/Ocotillo Rd | | |
| MD Peak | A/7 | A/8 |
| PM Peak | A/8 | A/8 |
| Chandler Heights Rd/Greenfield Rd | | |
| MD Peak | B/14 | B/15 |
| PM Peak | C/21 | B/19 |
| Chandler Heights Rd/Higley Rd | | |
| MD Peak | C/24 | C/26 |
| PM Peak | D/42 | C/28 |
| Higley Rd/Arrowhead Trail | | |
| MD Peak | A/6 | A/6 |
| PM Peak | A/8 | A/8 |
| Higley Rd/Germann Rd | | |
| MD Peak | C/26 | C/30 |
| PM Peak | D/38 | C/29 |

| Intersection | Worst Movement LOS/Delay (sec)/Queue | |
|--|--------------------------------------|------------------------|
| | 2020 Buildout Weekday | 2020 Buildout Saturday |
| Ocotillo Rd/Driveway 2 | | |
| MD Peak | - | - |
| PM Peak | - | - |
| Higley Rd/Bridges Blvd | | |
| MD Peak | WBL F/>999/6.2 | SBL F/183/17.7 |
| PM Peak | SBL F/485/37.0 | WBL F/>999/6.8 |
| Queen Creek Road/Lowes Driveway | | |
| MD Peak | NBL F/80/3.8 | NBL F/178/5.9 |
| PM Peak | NBL F/>999/10.6 | NBL F/205/7.0 |
| Higley Rd/Driveway 1 | | |
| MD Peak | EBL F/59/1.4 | EBL F/142/2.6 |
| PM Peak | EBL F/>999/5.5 | EBL F/1210/3.6 |



TRAFFIC IMPACT ANALYSIS

New Regional Park
Gilbert, Arizona

Background Conditions Draft Report

June 2016

Prepared for:



Prepared by:

Kimley»»Horn

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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This report documents a traffic impact study for the existing and future background conditions for a proposed 272-acre regional park facility at the southwest corner of the intersection of Queen Creek Road/Higley Road in Gilbert, Arizona. The site will include various sport, playground, and other park-related uses and is assumed to be built out by 2020.

1.2 REPORT PURPOSE AND OBJECTIVES

Kimley-Horn and Associates, Inc., has been retained by the Town of Gilbert to perform the existing and future background traffic impact study for the proposed development.

The purpose of this study is to address traffic and transportation impacts of the proposed development on surrounding streets and intersections. This traffic impact study was prepared based on criteria set forth by the Town of Gilbert's *Public Works and Engineering Standards*. The specific objectives of this study are:

- To determine existing and future background level of service (LOS) and delay for all existing intersections within the study area and recommend any capacity-related improvements; and
- To evaluate the need for future traffic signals.

1.3 EXISTING AND BACKGROUND ANALYSIS

The following is a bulleted list of the principal findings and recommendations of the existing and future background traffic analysis.

- All existing signalized study area intersections operate at LOS A-C during typical weekday and Saturday midday (MD) and afternoon (PM) peak hours.
- Most turning movements at existing unsignalized study area intersections operate at LOS A-C during typical weekday and Saturday MD and PM peak hours.
- All signalized study area intersections are projected to operate at LOS A-C during the PM peak hour of a typical weekday for the 2020, 2025, and 2030 background conditions with the exception of Higley Road/Germann Road (LOS D in 2020, 2025, and 2030), Higley Road/Queen Creek Road (LOS D in 2020), Higley Road/Chandler Heights Road (LOS D in 2020, 2025, and 2030), and Greenfield Road/Queen Creek Road (LOS D in 2020).
- All signalized study area intersections are projected to operate at LOS A-C during typical Saturday MD and PM peak hours for the 2020, 2025, and 2030 background conditions.
- Most turning movements at unsignalized study area intersections operate at LOS D-F for the 2020, 2025, and 2030 background conditions. Some turning movements report more than 300 second of delay.
- It is recommended that a traffic signal be installed at the intersection of Ocotillo Road/Greenfield Road in 2016 per the *Gilbert FY2016-2025 Capital Improvement Plan*.

- It is recommended that a traffic signal be installed at the intersection of Higley Road/Bridges Boulevard as existing delays are excessive.
- It is recommended that the unsignalized intersection of Queen Creek Road/Lowe's Driveway be monitored to determine if or when signalization becomes necessary.

2.0 PROPOSED DEVELOPMENT

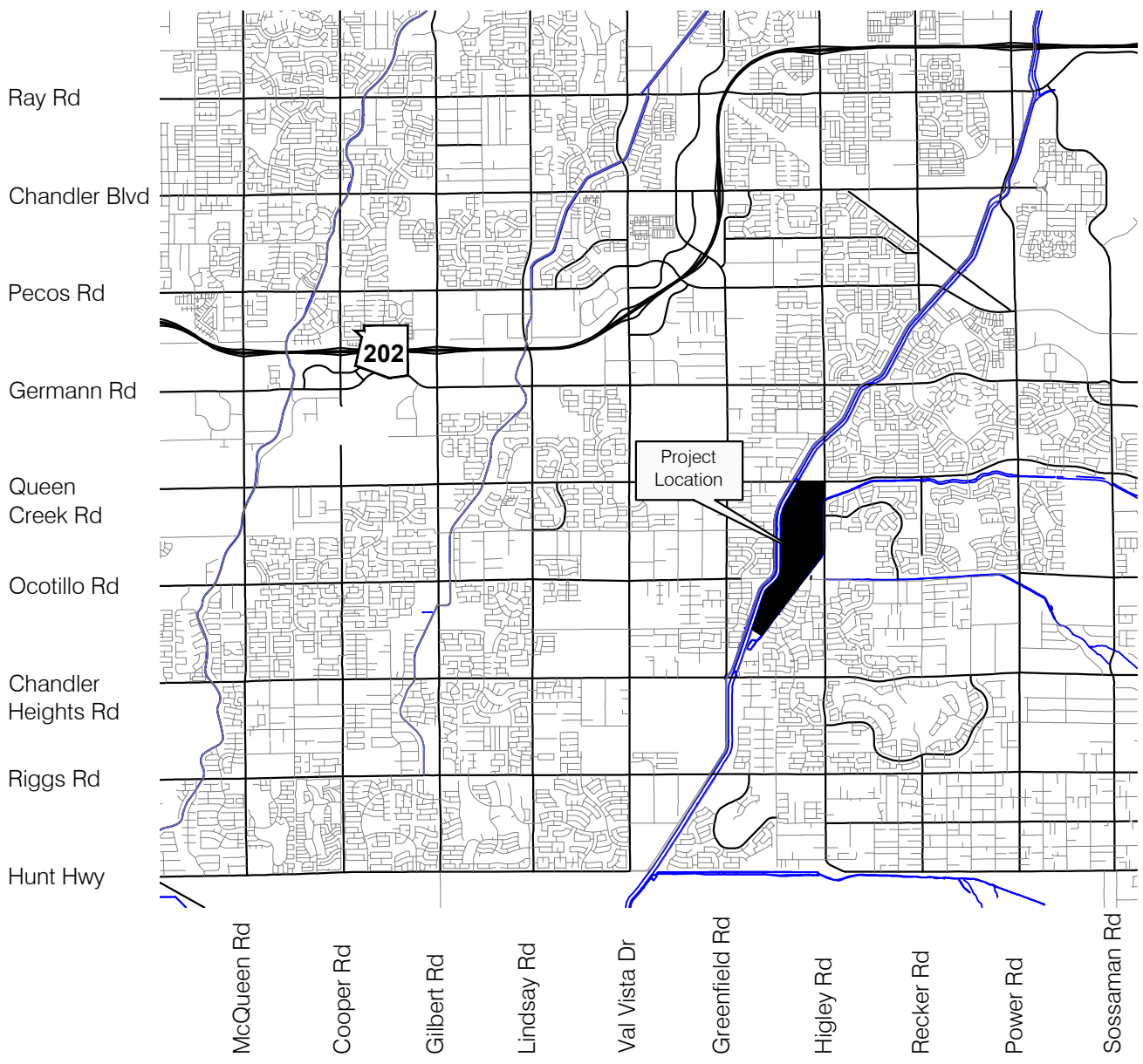
2.1 SITE LOCATION

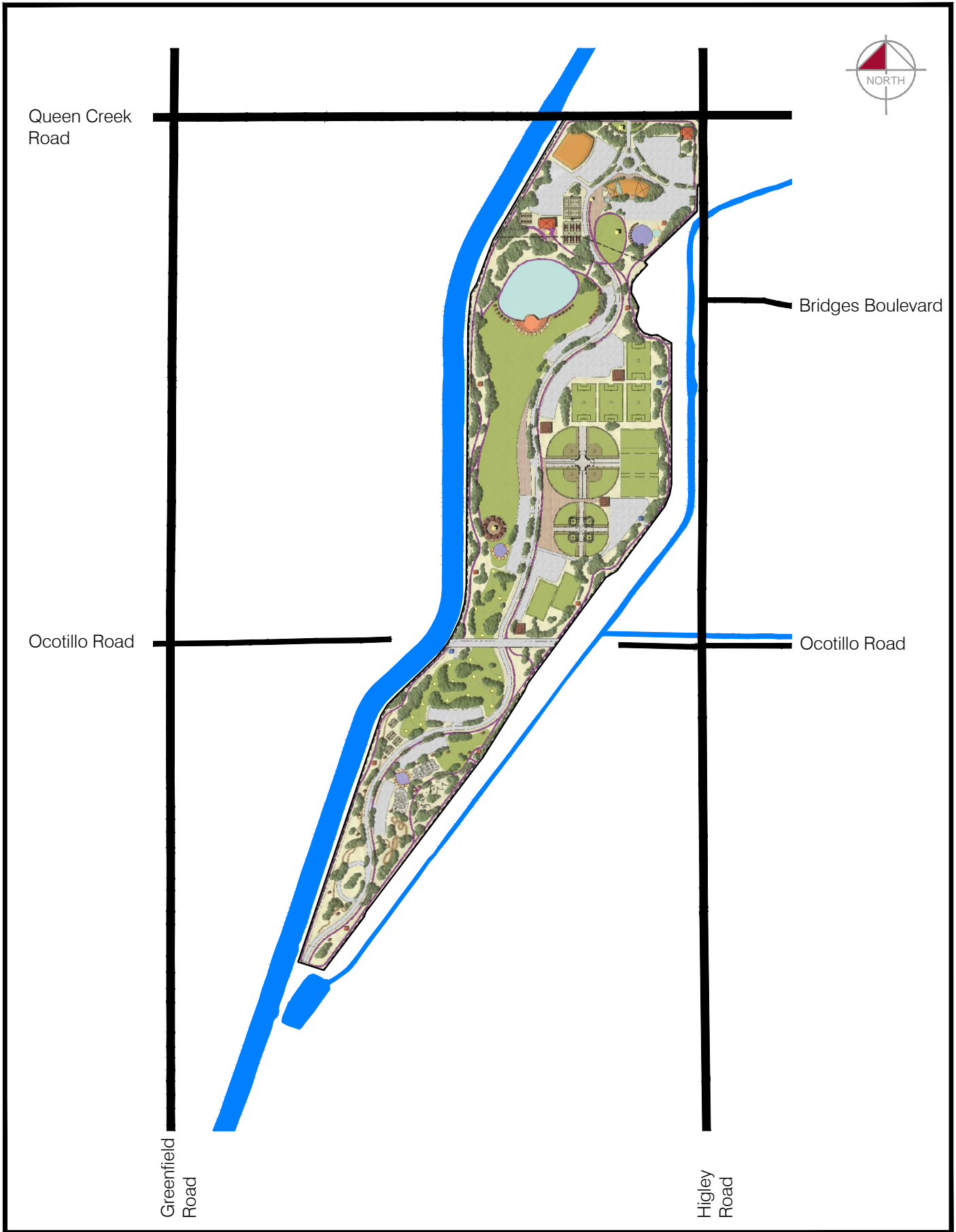
The proposed development, a 272-acre regional park facility, is located at the southwest corner of the intersection of Queen Creek Road/Higley Road in Gilbert, Arizona. The project location is shown in **Figure 1**.

Major streets adjacent to the development include Higley Road, Queen Creek Road, Greenfield Road and Chandler Heights Road. A generic site plan is illustrated in **Figure 2**. Details on proposed uses will be provided at a later date as this information becomes available.

2.2 SITE ACCESSIBILITY

The site will be accessed locally via Queen Creek Road, Higley Road, Greenfield Road, and Ocotillo Road. Regional access is expected to be provided by Loop 202 and by other arterial streets in the vicinity such as Germann Road, Riggs Road, Val Vista Drive, Chandler Heights Road, and Power Road.





3.0 STUDY AREA

3.1 STUDY AREA

The study area includes the following ten intersections surrounding the proposed development.

- Queen Creek Road/Higley Road
- Queen Creek Road/Greenfield Road
- Chandler Heights Road/Higley Road
- Chandler Heights Road/Greenfield Road
- Ocotillo Road/Higley Road
- Germann Road/Higley Road
- Arrowhead Trail/Higley Road
- Ocotillo Road/ Greenfield Road
- Higley Road/Bridges Boulevard
- Queen Creek Road/Lowe's Driveway

The site currently has three existing driveways for site access into the basin area. These access locations are used for maintenance and require gate access.

3.2 ADJACENT LAND USE

Commercial developments are located immediately north and east of the proposed development, on the northwest and southeast corners of Queen Creek Road/Higley Road. These developments consist of a home improvement store anchor, various smaller retail shops, offices, and restaurants.

Existing residential developments are located to the north, east, south, and west of the proposed development. Vacant land is also located directly east, on the northeast corner of Higley Road/Ocotillo Road.

The Roosevelt Water Conservation District (RWCD) Canal and the East Maricopa Floodway (EMF) are both located directly west of the basin and run north-south along the entire length of the proposed development. Queen Creek Wash also runs north-south along the eastern edge of the basin within the proposed development. Sonoqui Wash runs east-west along the north side of Ocotillo Road and connects with Queen Creek Wash within the project site.

4.0 EXISTING CONDITIONS

4.1 PHYSICAL CHARACTERISTICS

The existing roadway network within the study area includes the following roadways. The existing intersection lane use and traffic control is shown in **Figure 3**.

Higley Road currently extends north-south with three lanes in each direction with a raised center median. There are curb and gutter and dedicated bicycle lanes on both sides of the roadway, directly adjacent to the project site. The Town of Gilbert classifies Higley Road as a major arterial roadway and the posted speed limit is 45 miles per hour (mph) in both directions. Higley Road bridges the RWCD Canal and EMF north of Queen Creek Road.

Greenfield Road currently extends north-south with two lanes in each direction with a center two-way left-turn lane (TWLTL). There are curb and gutter and dedicated bicycle lanes on both sides of the roadway. The Town of Gilbert classifies Greenfield Road as a minor arterial roadway and the posted speed limit is 45 mph in both directions.

Queen Creek Road currently extends east-west with two lanes in each direction with the majority of the roadway containing a center TWLTL. There are curb and gutter and dedicated bicycle lanes on both sides of the roadway. The center TWLTL transitions into raised medians approaching most major signalized intersections, including the intersections with Higley Road and Greenfield Road. The Town of Gilbert classifies Queen Creek Road as a minor arterial roadway and the posted speed limit is 45 mph in both directions. Queen Creek Road bridges the RWCD Canal and EMF east of Germann Road.

Chandler Heights Road currently extends east-west with two lanes in each direction with a center TWLTL. There are curb and gutter and dedicated bicycle lanes on both sides of the roadway. The Town of Gilbert classifies Chandler Heights Road as a minor arterial roadway and the posted speed limit is 45 mph in both directions. Chandler Heights Road bridges the RWCD Canal and EMF east of Greenfield Road.

Germann Road currently extends east-west with three lanes in each direction with a raised center median. There are curb and gutter and dedicated bicycle lanes on both sides of the roadway. The Town of Gilbert classifies Germann Road as a major arterial roadway and a road of regional significance. The posted speed limit is 45 mph in both directions.

Ocotillo Road currently extends east-west and is not continuous through the project site between Greenfield Road and Higley Road. The road currently terminates approximately 1,500 ft east of Greenfield Road and approximately 750 ft west of Higley Road due to the RWCD Canal and EMF. Ocotillo Road contains two lanes in each direction with a center TWLTL east of Greenfield Road and one lane in each direction west of Greenfield Road. There is no curb or gutter west of Greenfield Road, but curb and gutter and dedicated bicycle lanes exist on both sides of Ocotillo Road east of Greenfield Road until the roadway ends just west of the RWCD Canal and EMF. East of the RWCD Canal and EMF, Ocotillo Road has two lanes in the westbound direction and one in the eastbound direction with a center TWLTL. This portion of Ocotillo Road has curb and gutter only on the southern portion of the roadway until the intersection with Higley Road, where curb and gutter on both sides of the roadway resumes. The

Town of Gilbert classifies Ocotillo Road as a minor arterial roadway and the posted speed limit is 45 mph in both directions.

Arrowhead Trail currently extends east-west with one lane in each direction. There are curb and gutter and dedicated bicycle lanes on both sides of the roadway. Arrowhead Trail services commercial retail stores west of Higley Road and provides access to residential areas east of Higley Road. The Town of Gilbert classifies Arrowhead Trail as a collector roadway and the posted speed limit is 25 mph in both directions.

Bridges Boulevard currently extends east-west with two lanes in each direction and a raised center median. There are curb and gutter and dedicated bicycle lanes on both sides of the roadway. The Town of Gilbert classifies Bridges Boulevard as a collector roadway and the posted speed limit is 30 mph in both directions.

The existing signalized intersections analyzed in this report are:

- Queen Creek Road/Higley Road
- Queen Creek Road/Greenfield Road
- Chandler Heights Road/Higley Road
- Chandler Heights Road/Greenfield Road
- Ocotillo Road/Higley Road
- Germann Road/Higley Road
- Arrowhead Trail/Higley Road

The existing unsignalized intersections analyzed in this report are:

- Higley Road/Bridges Boulevard (stop-controlled in the west direction)
- Queen Creek Road/Lowes Driveway (stop-controlled in the south direction)
- Ocotillo Road/Greenfield Road (all-way stop-controlled)

Existing signal phasing and timing information for all signalized intersections in the study area was provided by the Town of Gilbert.

4.2 TRAFFIC VOLUMES

Weekday turning movement counts were collected at ten study area intersections on Tuesday, January 12, 2016. Saturday turning movement counts were also collected at the same intersections on Saturday, January 9, 2016. The counts were performed between 11:00 AM and 1:00 PM and between 4:30 PM and 6:30 PM. The results of these counts are shown in **Figure 4** and **Figure 5**. A copy of the counts are attached in **Appendix A**.

2015 weekday daily traffic volumes along major roadways in the vicinity of the proposed development were obtained from the Town of Gilbert. Some of these counts were collected on Tuesday, March 24, 2015 and Wednesday, March 25, 2015. Others were taken from the *Gilbert Transportation Master Plan* (TMP). The average daily volume from these counts is shown in **Figure 4**. Daily Saturday traffic volume counts were collected on Saturday, January 9, 2016 at locations along Higley Road and Queen Creek

Road. The average daily volume from these Saturday counts is shown in **Figure 5**. A copy of the 2015 weekday, Gilbert TMP, and 2016 Saturday daily counts is attached in **Appendix B**.

4.3 LEVEL OF SERVICE

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections using Synchro 9 Analysis and Optimization Software. Typically, the methodology presented in the Transportation Research Board’s 2010 *Highway Capacity Manual* (HCM) (Special Report 209) is used to analyze intersection operations. However, the 2010 HCM methodology is not able to analyze signalized intersections with more than two barriers in the timing plan, which many of the Town of Gilbert’s traffic signals utilize. In these cases, Synchro 9 analysis methodology was used to analyze all signalized intersections.

HCM 2010 methodology was used to analyze the two-way stop controlled (TWSC) and all-way stop controlled (AWSC) intersections in the study area. Under the unsignalized analysis, the LOS for a TWSC intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a TWSC intersection is not defined for the intersection as a whole. LOS for a signalized or AWSC intersection is defined for the intersection as a whole. **Table 1** shows the definition of LOS for signalized and unsignalized intersections.

Table 1. Level of Service Definitions

| Level of Service | Signalized Intersection Average Total Delay (seconds/vehicle) | Unsignalized Intersection Average Total Delay (seconds/vehicle) |
|------------------|---|---|
| A | ≤10 | 10 |
| B | >10 and ≤20 | >10 and ≤15 |
| C | >20 and ≤35 | >15 and ≤25 |
| D | >35 and ≤55 | >25 and ≤35 |
| E | >55 and ≤80 | >35 and ≤50 |
| F | >80 | >50 |

Definitions provided from the HCM, Special Report 209, Transportation Research Board, 2010.

The LOS at the study area intersections was evaluated using the existing intersection geometry and control and the traffic volumes derived from the traffic counts collected on Tuesday, January 9, 2016, and Saturday, January 12, 2016, for the weekday and Saturday analyses, respectively. The results of this analysis are shown in **Table 2** through **Table 5**. Detailed LOS analysis reports for the existing conditions are supplied in **Appendix C**.

For purposes of this study, LOS A, B, and C are considered “acceptable”, LOS D is considered “of concern”, and LOS E and F are considered “poor” for individual movements at signalized intersections. For signalized intersections, an overall intersection LOS of D or better is considered “acceptable” and LOS E and F are considered “unacceptable”. For unsignalized intersections, an individual movement with LOS E or better or LOS F with a corresponding average delay less than 90 seconds per vehicle is considered “acceptable” while an individual movement with LOS F with a corresponding average delay greater than or equal to 90 seconds per vehicle is considered “unacceptable”.

Table 2. Existing Weekday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------|---|------------------|---------|
| | L | T | R | L | T | R | L | T | R | L | T | R | | |
| Higley Road and Germann Road | | | | | | | | | | | | | | |
| MD Peak | B 15 | B 19 | B 18 | B 19 | D 45 | D 49 | C 24 | C 28 | C 32 | | | | C 26 | |
| PM Peak | C 24 | D 37 | D 41 | C 26 | B 16 | C 27 | A 5 | D 50 | C 30 | | | | C 30 | |
| Higley Road and Arrowhead Trail | | | | | | | | | | | | | | |
| MD Peak | A 1 | A 3 | A 1 | B 11 | B 13 | A 8 | E 64 | B 17 | D 41 | B 14 | | | B 11 | |
| PM Peak | A 2 | A 3 | A 1 | B 17 | A 5 | A 1 | E 70 | B 18 | D 39 | B 16 | | | A 9 | |
| Higley Road and Queen Creek Road | | | | | | | | | | | | | | |
| MD Peak | D 43 | B 19 | A 1 | D 41 | B 13 | D 39 | D 44 | B 18 | C 27 | D 40 | B 11 | | | C 27 |
| PM Peak | D 50 | D 42 | B 15 | C 29 | B 19 | C 23 | D 37 | B 12 | C 34 | C 31 | A 6 | | | C 29 |
| Higley Road and Ocotillo Road | | | | | | | | | | | | | | |
| MD Peak | A 3 | A 6 | A 2 | A 4 | D 44 | D 39 | A 0 | D 47 | D 39 | A 6 | | | A 7 | |
| PM Peak | A 3 | A 7 | A 2 | A 3 | D 47 | D 38 | A 1 | D 45 | D 38 | A 9 | | | A 7 | |
| Higley Road and Chandler Heights Road | | | | | | | | | | | | | | |
| MD Peak | B 20 | C 22 | B 19 | B 19 | C 34 | C 24 | B 18 | B 20 | | | | | C 22 | |
| PM Peak | D 35 | C 24 | C 26 | C 26 | C 31 | C 30 | D 35 | C 26 | | | | | C 28 | |
| Greenfield Road and Queen Creek Road | | | | | | | | | | | | | | |
| MD Peak | C 31 | D 41 | C 33 | C 30 | A 2 | A 2 | A 3 | A 3 | | | | | B 14 | |
| PM Peak | C 26 | D 42 | D 50 | D 46 | B 14 | C 25 | B 18 | B 20 | | | | | C 31 | |
| Greenfield Road and Chandler Heights Road | | | | | | | | | | | | | | |
| MD Peak | - | | C 35 | - | A 8 | A 7 | A 7 | - | - | A 6 | | | B 12 | |
| PM Peak | - | | D 35 | - | A 6 | A 10 | B 11 | - | - | B 15 | | | B 18 | |

The signalized study area intersections currently operate at LOS A-C during a typical weekday. Individual movements with LOS D-F are bolded in the table above.

Table 3. Existing Saturday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS |
|--|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|---------|---------|------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| Higley Road and Germann Road | | | | | | | | | | | | | |
| MD Peak | C 20 | C 23 | C 23 | C 21 | C 32 | D 48 | C 22 | C 29 | C 33 | C 28 | | | |
| PM Peak | B 20 | C 24 | C 26 | C 24 | C 29 | D 50 | C 24 | C 30 | C 33 | C 29 | | | |
| Higley Road and Arrowhead Trail | | | | | | | | | | | | | |
| MD Peak | A 1 | A 3 | A 0 | B 13 | B 13 | A 8 | E 61 | B 19 | D 39 | B 14 | B 11 | | |
| PM Peak | A 1 | A 3 | A 0 | B 16 | B 15 | A 8 | F 104 | B 16 | D 40 | B 14 | B 13 | | |
| Higley Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | D 47 | B 19 | A 1 | D 38 | B 12 | D 38 | D 44 | B 16 | C 27 | D 40 | B 11 | C 26 | |
| PM Peak | D 45 | B 18 | A 1 | D 37 | A 10 | D 37 | D 46 | B 17 | C 28 | D 40 | A 9 | C 25 | |
| Higley Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | A 2 | A 6 | A 2 | A 5 | D 46 | D 40 | A 0 | D 47 | D 40 | A 7 | A 7 | | |
| PM Peak | A 3 | A 7 | A 2 | A 6 | D 44 | D 37 | A 1 | D 50 | D 38 | B 11 | A 9 | | |
| Higley Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | C 23 | C 23 | C 21 | C 20 | D 37 | C 24 | B 19 | B 20 | C 23 | | | | |
| PM Peak | C 25 | C 22 | C 21 | C 21 | D 43 | C 24 | B 19 | C 21 | C 24 | | | | |
| Greenfield Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | C 28 | D 39 | D 49 | C 33 | A 3 | A 4 | A 3 | A 4 | B 17 | | | | |
| PM Peak | C 26 | D 39 | D 47 | D 36 | A 2 | A 3 | A 3 | A 3 | B 18 | | | | |
| Greenfield Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | - | - | C 34 | - | A 8 | A 7 | A 7 | - | - | A 7 | B 12 | | |
| PM Peak | - | - | D 38 | - | A 7 | A 7 | A 9 | - | - | A 8 | B 14 | | |

The signalized study area intersections currently operate at LOS A-C during a typical Saturday. Individual movements with LOS D-F are bolded in the table above.

Table 4. Existing Weekday Level of Service and Delay: Unsignalized Intersections

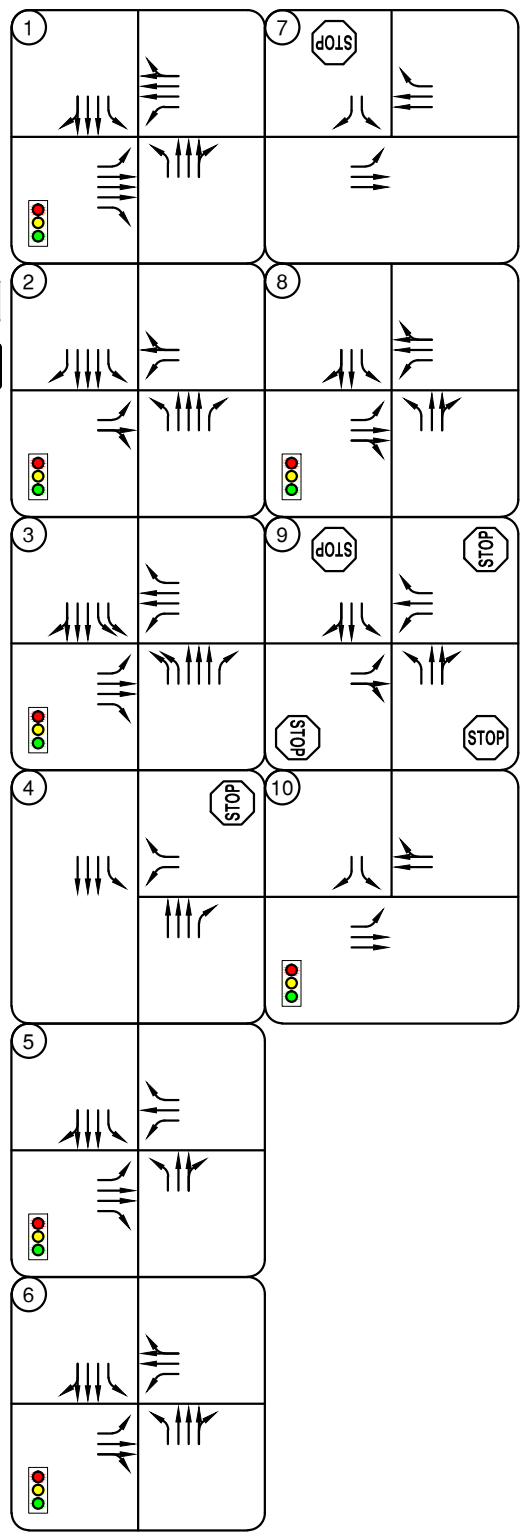
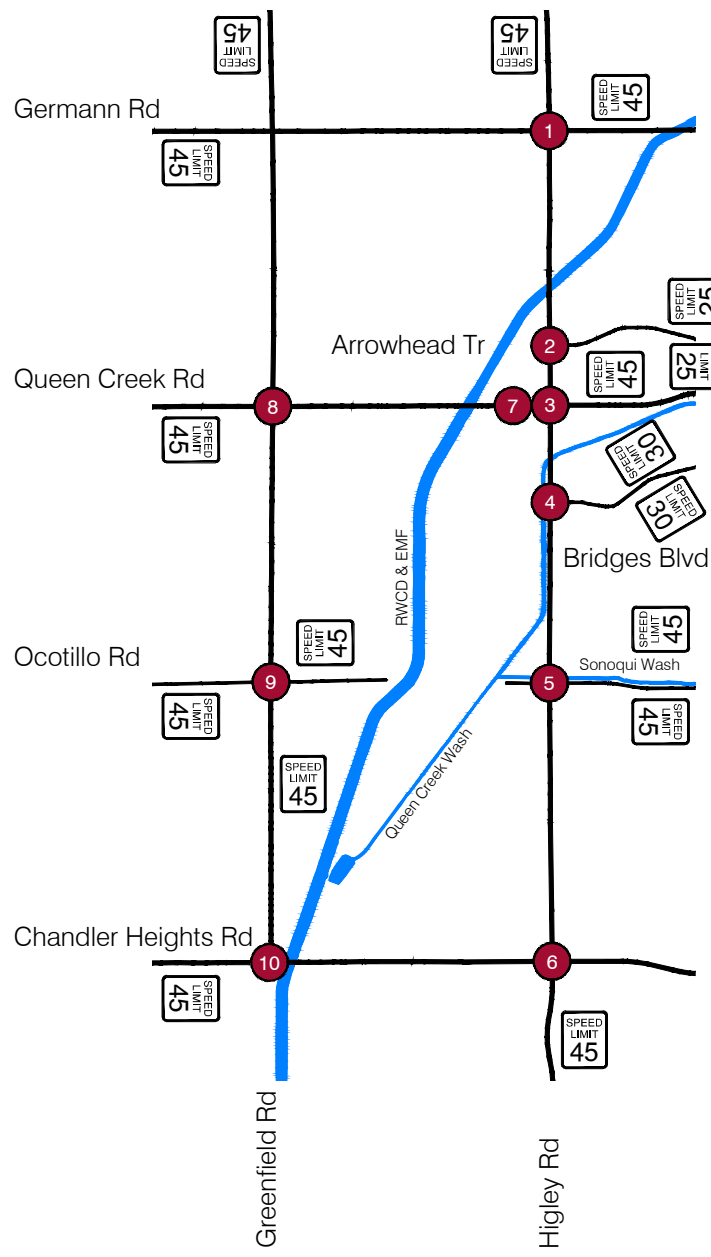
| Intersection | NB | | | SB | | | EB | | | WB | | |
|---|---------|---|---|-----------------------|---|---------|---------|---|---|------------------------|---|----|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Higley Road and Bridges Boulevard | | | | | | | | | | | | |
| MD Peak | - | - | - | B 14 | - | - | - | - | - | D 29 | B | 15 |
| PM Peak | - | - | - | D 28 | - | - | - | - | - | F 172 | C | 19 |
| Queen Creek Road and Lowe's Driveway | | | | | | | | | | | | |
| MD Peak | - | - | - | D 27 | - | B 11 | A 9 | - | - | - | - | - |
| PM Peak | - | - | - | E 43 | - | B 11 | A 10 | - | - | - | - | - |
| Greenfield Road and Ocotillo Road | | | | | | | | | | | | |
| MD Peak | B 11 | | | B 11 | | | A 10 | | | A 10 | | |
| PM Peak | B 12 | | | B 13 | | | B 12 | | | B 11 | | |

The turning movements for the unsignalized study area intersections currently operate at LOS A-C during a typical weekday with the exception of the westbound left movement and the southbound left movement at the intersection of Higley Road/Bridges Boulevard and the southbound left movement at the intersection of Queen Creek Road/Lowe's Driveway, which operate at LOS D-F. Individual movements with LOS D-F are bolded in **Table 4**. The delay for the westbound left movement at the intersection of Higley Road/Bridges Boulevard is considered unacceptable. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.

Table 5. Existing Saturday Level of Service and Delay: Unsignalized Intersections

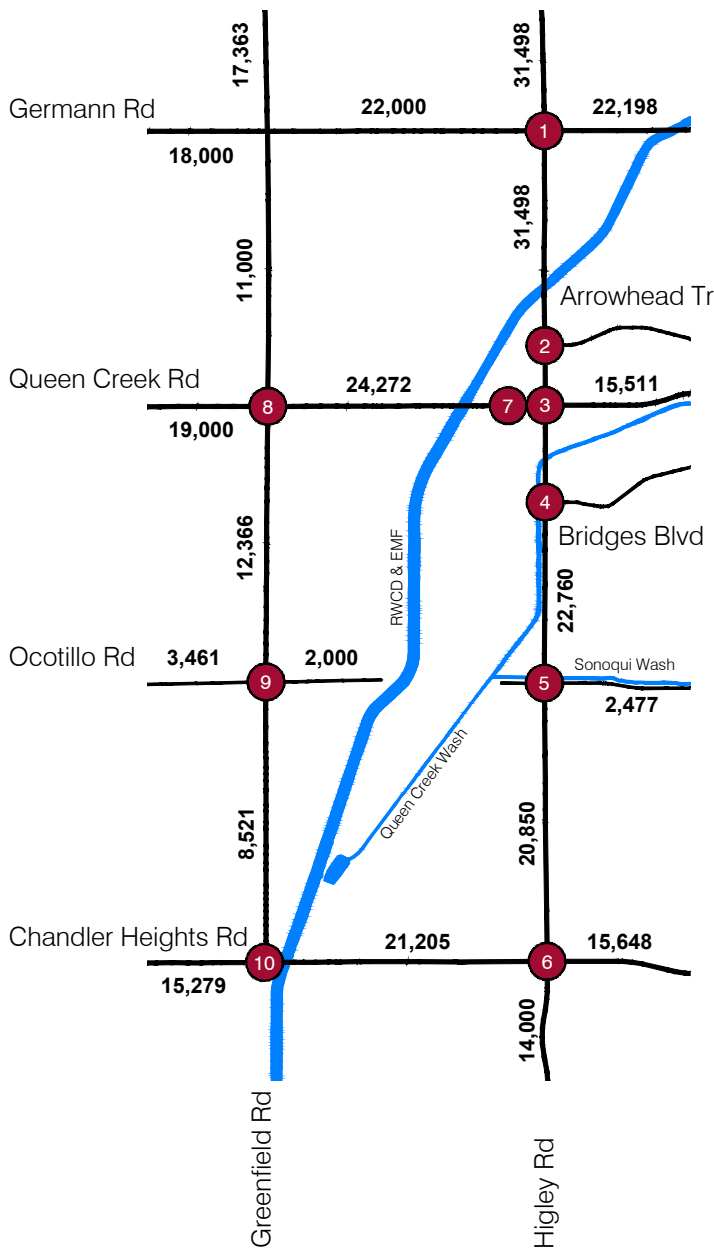
| Intersection | NB | | | SB | | | EB | | | WB | | |
|--|---------|---|---|----------------|---|---------|---------|---|---|----------------|---|---------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| <i>Higley Road and Bridges Boulevard</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | C 18 | - | - | - | - | - | E 49 | - | C 17 |
| PM Peak | - | - | - | C 16 | - | - | - | - | - | E 39 | - | C 15 |
| <i>Queen Creek Road and Lowe's Driveway</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 31 | - | B 11 | A 10 | - | - | - | - | - |
| PM Peak | - | - | - | C 25 | - | B 11 | A 9 | - | - | - | - | - |
| <i>Greenfield Road and Ocotillo Road</i> | | | | | | | | | | | | |
| MD Peak | B 11 | | | B 11 | | | B 11 | | | A 10 | | |
| PM Peak | B 11 | | | B 12 | | | B 11 | | | A 10 | | |

The turning movements for the unsignalized study area intersections currently operate at LOS A-C during a typical Saturday with the exception of the westbound left movement at the intersection of Higley Road/Bridges Boulevard and the southbound left movement at the intersection of Queen Creek Road/Lowe's Driveway, which operate at LOS D-F. Individual movements with LOS D-F are bolded in **Table 5**. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.



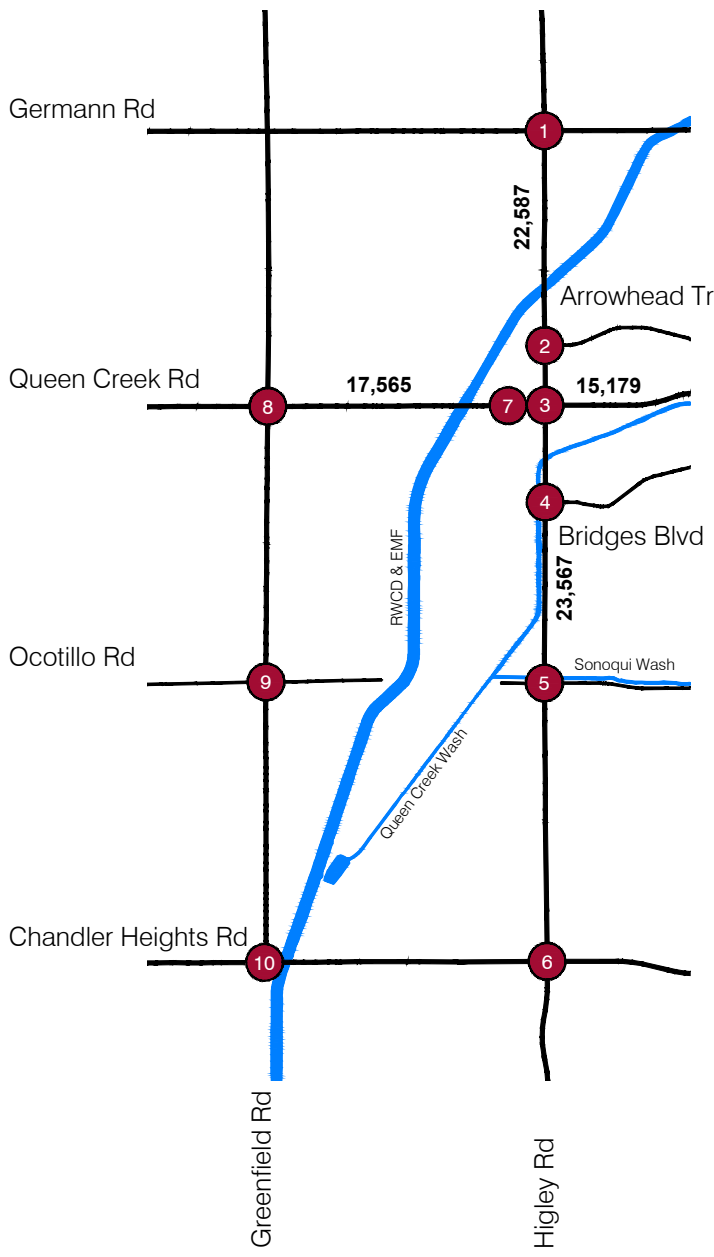
LEGEND

- LANE USE
- INTERSECTION CONTROL
- SPEED LIMIT



| | | |
|--|---|---|
| <p>1</p> <p>36(44) 574(857) 146(259)</p> <p>24(53) 326(739) 122(229)</p> | <p>148(200) 350(382) 66(138)</p> <p>143(179) 679(807) 74(89)</p> | <p>7</p> <p>32(36)</p> <p>23(12) 651(688)</p> |
| <p>2</p> <p>65(106) 548(862) 98(235)</p> <p>51(70) 10(25) 48(59)</p> | <p>131(137) 8(28) 21(31)</p> <p>24(48) 731(829) 27(51)</p> | <p>8</p> <p>30(28) 202(340) 105(240)</p> <p>35(51) 427(945) 75(122)</p> <p>63(47) 222(252) 51(75)</p> |
| <p>3</p> <p>61(93) 455(780) 156(189)</p> <p>56(104) 355(660) 186(467)</p> | <p>187(178) 392(394) 70(110)</p> <p>221(258) 602(650) 67(114)</p> | <p>9</p> <p>33(33) 201(302) 36(53)</p> <p>38(53) 26(45) 43(85)</p> <p>27(38) 187(195) 15(31)</p> |
| <p>4</p> <p>570(1074) 127(231)</p> <p>144(189)</p> | <p>22(16)</p> <p>707(898) 30(24)</p> | <p>10</p> <p>35(33) 206(364)</p> <p>24(35) 354(730)</p> |
| <p>5</p> <p>25(44) 552(884) 34(61)</p> <p>18(40) 1(3) 1(4)</p> | <p>41(50) 1(2) 35(38)</p> <p>1(3) 683(818) 35(69)</p> | |
| <p>6</p> <p>89(115) 353(675) 121(200)</p> <p>155(222) 308(504) 86(231)</p> | <p>162(122) 326(415) 107(149)</p> <p>119(137) 403(435) 56(71)</p> | |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |



| | |
|--|--|
| <p>1</p> <p>45(34) 615(672) 152(208)</p> <p>186(149) 443(389) 81(84)</p> <p>53(37) 438(419) 161(151)</p> <p>181(155) 796(704) 74(65)</p> | <p>7</p> <p>54(29)</p> <p>24(15) 668(603)</p> <p>74(41) 599(698)</p> |
| <p>2</p> <p>108(91) 640(629) 96(144)</p> <p>131(166) 11(17) 21(28)</p> <p>65(54) 11(13) 30(51)</p> <p>16(31) 853(676) 25(32)</p> | <p>8</p> <p>37(25) 235(300) 162(168)</p> <p>128(100) 553(459) 52(47)</p> <p>44(24) 516(500) 71(88)</p> <p>62(48) 234(255) 71(56)</p> |
| <p>3</p> <p>64(65) 553(647) 147(147)</p> <p>176(143) 424(357) 81(70)</p> <p>69(56) 320(367) 238(292)</p> <p>255(228) 646(669) 78(68)</p> | <p>9</p> <p>31(16) 201(267) 37(47)</p> <p>41(44) 25(24) 16(27)</p> <p>49(39) 23(29) 47(34)</p> <p>34(37) 216(195) 23(32)</p> |
| <p>4</p> <p>750(788) 165(138)</p> <p>169(137) 15(19)</p> <p>826(751) 21(43)</p> | <p>10</p> <p>29(41) 214(323)</p> <p>29(25) 360(415)</p> <p>227(211) 413(424)</p> |
| <p>5</p> <p>25(32) 658(718) 40(52)</p> <p>48(45) 2(2) 35(47)</p> <p>28(33) 1(1) 3(6)</p> <p>5(2) 775(701) 43(43)</p> | |
| <p>6</p> <p>105(113) 452(476) 145(158)</p> <p>124(112) 296(320) 122(101)</p> <p>207(242) 303(349) 105(140)</p> <p>127(134) 414(365) 57(65)</p> | |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |

5.0 BACKGROUND TRAFFIC FORECAST

5.1 SITE TRAFFIC FORECASTS

It is assumed that a Category 3 analysis will be required for the proposed development based on Section 5.5.5 of the Town of Gilbert's *Public Works and Engineering Standards*. Following these standards, in addition to the existing conditions analysis, a LOS analysis is required for the opening day conditions along with both five-year and ten-year horizons beyond full buildout of the development. To ensure that the estimate of the traffic impacts is the maximum that can be expected, it is assumed that the site will be 100 percent occupied upon buildout in 2020 and no analysis of any other buildout phases is required.

5.2 BACKGROUND TRAFFIC GROWTH

Existing average daily traffic (ADT) volumes and projected 2035 volumes from the Maricopa Association of Governments (MAG) regional traffic model were used to estimate annual growth rates for background traffic on each roadway segment within the study area. It is not reasonable to assume that the traffic growth will remain constant between the existing volume data and the 2035 regional traffic model projections. Instead, it is assumed that most of this growth will occur within the next five years, with a smaller portion occurring afterward. Because of this, average annual background traffic growth rates were calculated independently for each analysis time period (2015-2020, 2020-2025, and 2025-2030) and for each roadway segment. When calculating the growth rates, the majority of the traffic growth was applied to the 2020 analysis, with less growth being applied to the 2025 analysis, and still less growth during the 2030 analysis period.

Appendix D contains a summary of the ADT growth assumptions that were used to calculate the growth rate for each period as well as the calculated growth rates. It should be noted that some of the 2020 daily segment volumes are higher than the projected 2035 MAG volumes. Higher volumes were projected for these roadway segments due to the segment of Ocotillo Road between Greenfield Road and Higley Road not being scheduled for completion until sometime during the 2020-2025 period. Once this segment of Ocotillo Road is completed, it is anticipated that traffic patterns will change. Some of the traffic on the higher volume segments is expected to shift to utilize the new connection on Ocotillo Road, thereby resulting in negative growth rates from 2020-2025 on some roadway segments.

The resulting growth rates shown in **Appendix D** were applied to each movement at each study area intersection based on vehicle destination. This was done for each analysis year. The exceptions to this occur along Ocotillo Road, and at the intersections of Higley Road/Arrowhead Trail, Queen Creek Road/Lowe's Driveway, and Higley Road/Bridges Boulevard. Without the Ocotillo Road connection between Greenfield Road and Higley Road, no growth is expected on Ocotillo Road, so no growth was applied to turning movement volumes onto or off of Ocotillo Road in the year 2020. The east leg of the intersection of Higley Road/Arrowhead Trail leads to a residential neighborhood that is fully built-out and traffic is not expected to grow there. The west leg of the intersection of Higley Road/Arrowhead Trail and the north leg of the intersection of Queen Creek Road/Lowes Driveway lead to a commercial development. Developments of this kind generally attract a similar number of trips each day and the volume into and out of this development is not expected to change within the analysis periods, so no growth was applied to turning movement volumes into or out of this development. The intersection of Higley Road/Bridges Boulevard is expected to grow considerably in the near future. Because of this, the

westbound turning movements were grown using the projected origin growth rate, which is higher than the destination growth rates along Higley Road.

The calculated 2015-2020 average annual growth rates were applied to the existing turning movement counts to obtain background traffic volumes for the year 2020. The calculated 2020-2025 average annual growth rates were applied to the 2020 background volumes to obtain background traffic volumes for the year 2025. Similar steps were also taken to obtain background traffic volumes for the year 2030.

5.3 2020 BACKGROUND ANALYSIS RESULTS

The results of the 2020 background analysis are shown in **Table 6** through **Table 9** and **Figure 6** and **Figure 7**. Detailed LOS analysis reports for the 2020 background conditions are supplied in **Appendix E**.

According to the *Gilbert FY2016-2025 Capital Improvement Plan*, the intersection of Greenfield Road/Ocotillo Road is scheduled for signalization during the year 2016. For the year 2020 and all subsequent analyses, it is assumed that this intersection is signalized.

The 2020 Synchro model timings were optimized, assuming that the Town will periodically optimize signal timings as traffic volumes change over time.

Table 6. 2020 Weekday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------|---|-----------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| <i>Higley Road and Germann Road</i> | | | | | | | | | | | | | |
| MD Peak | C 21 | C 28 | C 27 | C 22 | C 27 | D 49 | C 23 | C 28 | C 33 | | | | C 30 |
| PM Peak | D 38 | D 39 | E 69 | C 29 | C 20 | D 38 | A 6 | E 59 | C 34 | | | | D 37 |
| <i>Higley Road and Arrowhead Trail</i> | | | | | | | | | | | | | |
| MD Peak | A 1 | A 4 | A 0 | B 10 | A 9 | A 4 | E 64 | B 17 | D 41 | B 14 | | | A 9 |
| PM Peak | A 3 | A 3 | A 1 | B 19 | A 4 | A 1 | E 70 | B 18 | D 39 | B 16 | | | A 8 |
| <i>Higley Road and Queen Creek Road</i> | | | | | | | | | | | | | |
| MD Peak | D 46 | C 20 | A 1 | D 46 | B 18 | C 34 | D 45 | B 16 | C 30 | D 38 | B 11 | | C 28 |
| PM Peak | D 55 | D 45 | B 17 | C 33 | C 33 | C 21 | D 39 | C 30 | D 52 | C 29 | A 8 | | D 35 |
| <i>Higley Road and Ocotillo Road</i> | | | | | | | | | | | | | |
| MD Peak | A 3 | A 7 | A 3 | A 6 | D 44 | D 39 | A 0 | D 47 | D 39 | B 11 | | | A 8 |
| PM Peak | A 3 | A 9 | A 8 | A 3 | D 47 | D 38 | A 0 | D 46 | D 38 | B 13 | | | A 8 |
| <i>Higley Road and Chandler Heights Road</i> | | | | | | | | | | | | | |
| MD Peak | C 25 | C 23 | C 23 | C 21 | D 46 | C 26 | C 26 | C 24 | | | | | C 25 |
| PM Peak | D 46 | C 24 | D 38 | C 32 | D 47 | D 54 | E 62 | C 30 | | | | | D 39 |
| <i>Greenfield Road and Queen Creek Road</i> | | | | | | | | | | | | | |
| MD Peak | C 29 | D 41 | D 39 | C 29 | A 3 | A 3 | A 3 | A 5 | | | | | B 16 |
| PM Peak | C 25 | D 50 | E 59 | D 48 | B 18 | C 30 | C 25 | C 24 | | | | | D 35 |
| <i>Greenfield Road and Ocotillo Road</i> | | | | | | | | | | | | | |
| MD Peak | A 7 | B 11 | A 7 | B 11 | C 25 | B 13 | C 24 | C 24 | A 2 | | | | B 12 |
| PM Peak | A 3 | A 6 | A 3 | A 6 | D 48 | C 27 | D 46 | D 41 | A 7 | | | | B 12 |
| <i>Greenfield Road and Chandler Heights Road</i> | | | | | | | | | | | | | |
| MD Peak | | - | D 36 | - | A 7 | A 7 | A 8 | - | - | A 6 | | | B 13 |
| PM Peak | | - | D 41 | - | A 6 | B 11 | B 13 | - | - | B 19 | | | C 21 |

Table 7. 2020 Saturday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|---------|---------|------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| Higley Road and Germann Road | | | | | | | | | | | | | |
| MD Peak | C 31 | C 28 | D 36 | C 24 | C 29 | D 40 | B 14 | C 31 | C 34 | | | C 30 | |
| PM Peak | C 30 | C 30 | D 43 | C 29 | C 24 | D 41 | B 15 | C 32 | C 34 | | | C 33 | |
| Higley Road and Arrowhead Trail | | | | | | | | | | | | | |
| MD Peak | A 1 | A 3 | A 0 | B 13 | B 10 | A 6 | E 61 | B 19 | D 39 | B 14 | | A 9 | |
| PM Peak | A 1 | A 4 | A 0 | B 17 | B 13 | A 6 | F 104 | B 16 | D 40 | B 14 | | B 13 | |
| Higley Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | D 42 | C 22 | A 2 | D 40 | B 18 | D 38 | D 45 | B 16 | C 31 | D 40 | B 12 | C 28 | |
| PM Peak | D 45 | C 21 | A 2 | D 41 | B 13 | C 34 | D 46 | B 16 | C 30 | D 37 | A 10 | C 26 | |
| Higley Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | A 3 | A 8 | A 5 | A 9 | D 45 | D 39 | A 0 | D 47 | D 40 | B 12 | | A 10 | |
| PM Peak | A 4 | B 10 | A 6 | A 10 | D 44 | D 36 | A 1 | D 50 | D 37 | B 12 | | B 12 | |
| Higley Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | C 35 | C 23 | C 28 | C 23 | D 47 | C 26 | C 28 | C 22 | | | | C 26 | |
| PM Peak | D 43 | C 22 | C 27 | C 24 | E 60 | C 26 | C 28 | C 23 | | | | C 28 | |
| Greenfield Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | C 25 | D 40 | D 54 | C 31 | A 9 | A 7 | A 6 | A 8 | | | | B 20 | |
| PM Peak | C 21 | D 45 | D 54 | C 34 | A 4 | A 6 | A 5 | A 6 | | | | C 21 | |
| Greenfield Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | A 4 | A 8 | A 4 | A 8 | B 11 | A 6 | B 11 | B 11 | A 4 | | | A 8 | |
| PM Peak | A 3 | A 5 | A 3 | A 4 | D 47 | C 27 | D 45 | D 42 | A 6 | | | A 9 | |
| Greenfield Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | | - | D 36 | - | A 8 | A 8 | A 8 | - | - | A 8 | | B 13 | |
| PM Peak | | - | D 43 | - | A 7 | A 8 | A 9 | - | - | A 9 | | B 16 | |

The signalized study area intersections operate at LOS A-C during a typical weekday in the 2020 background condition with the exception of Higley Road/Germann Road, Higley Road/Queen Creek Road, Higley Road/Chandler Heights Road, and Greenfield Road/Queen Creek Road, which operate at LOS D during the PM peak hour. Intersections and individual movements with LOS D-F are bolded in **Table 6**.

The signalized study area intersections operate at LOS A-C during a typical Saturday in the 2020 background condition. Individual movements with LOS D-F are bolded in **Table 7**.

Table 8. 2020 Weekday Level of Service and Delay: Unsignalized Intersections

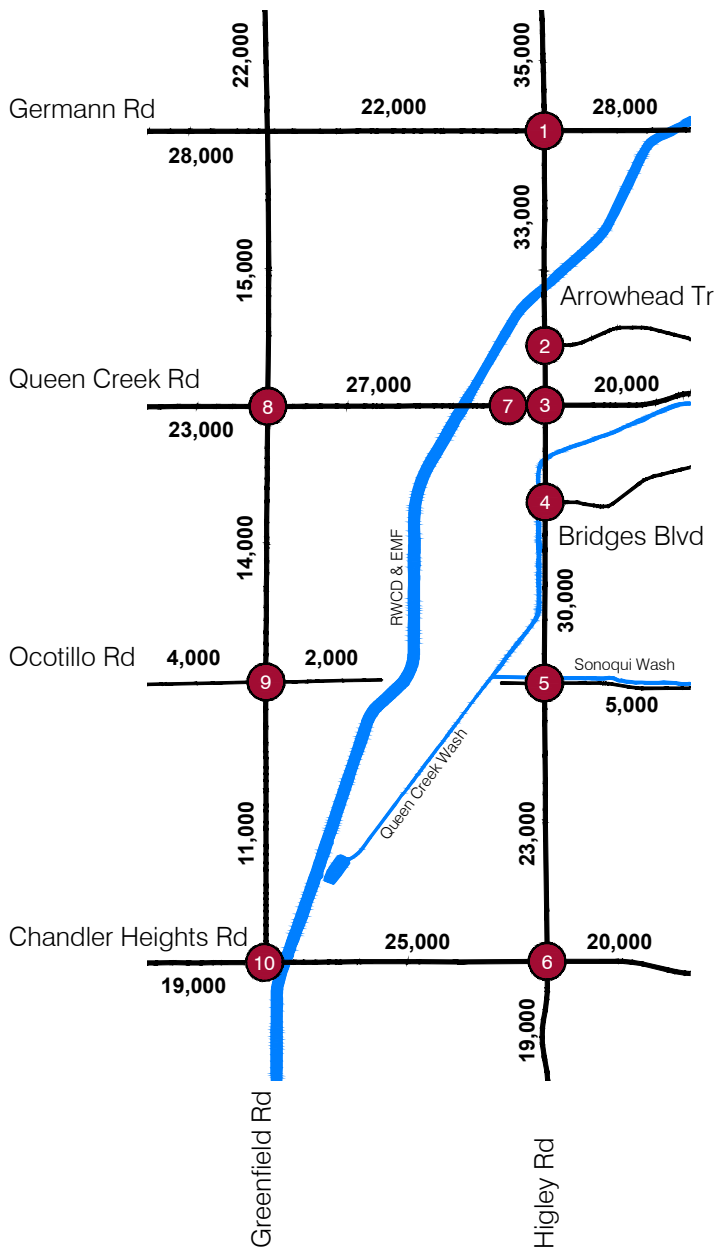
| Intersection | NB | | | SB | | | EB | | | WB | | |
|--|----|---|---|----------------------------|---|---------|---------|---|---|----------------------------|---|------------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| <i>Higley Road and Bridges Boulevard</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 29 | - | - | - | - | - | F >300 | - | D 33 |
| PM Peak | - | - | - | F >300 | - | - | - | - | - | F >300 | - | F 107 |
| <i>Queen Creek Road and Lowe's Driveway</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 31 | - | B 11 | A 10 | - | - | - | - | - |
| PM Peak | - | - | - | F 52 | - | B 12 | A 10 | - | - | - | - | - |

Most of the individual turning movements of the unsignalized study area intersections for a typical weekday operate at LOS D-F in the 2020 background condition. Individual movements with LOS D-F are bolded in **Table 8**. The delay for the westbound left, westbound right, and southbound left movements at the intersection of Higley Road/Bridges Boulevard are considered unacceptable. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.

Table 9. 2020 Saturday Level of Service and Delay: Unsignalized Intersections

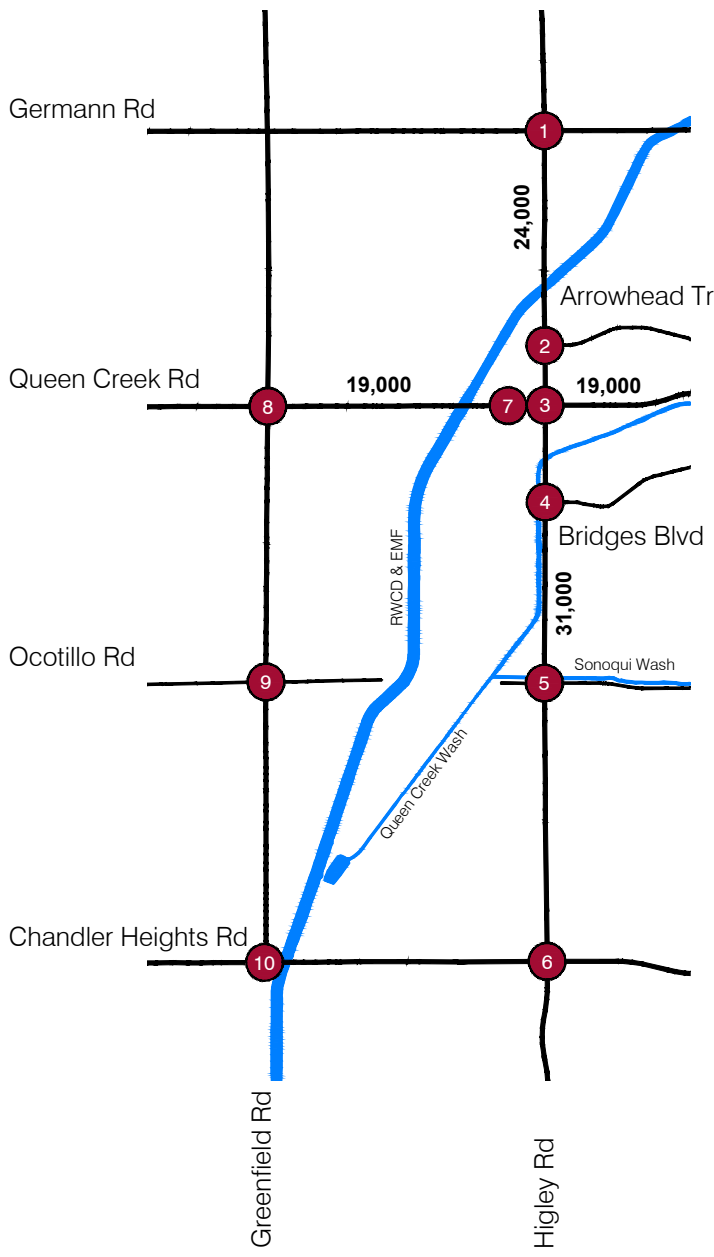
| Intersection | NB | | | SB | | | EB | | | WB | | |
|--|----|---|---|------------------------|---|---------|---------|---|---|----------------------------|---|-----------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| <i>Higley Road and Bridges Boulevard</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | F 106 | - | - | - | - | - | F 102 | - | F 66 |
| PM Peak | - | - | - | E 47 | - | - | - | - | - | F >300 | - | D 35 |
| <i>Queen Creek Road and Lowe's Driveway</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | E 36 | - | B 12 | A 10 | - | - | - | - | - |
| PM Peak | - | - | - | D 28 | - | B 11 | A 9 | - | - | - | - | - |

Most of the individual turning movements of the unsignalized study area intersections for a typical Saturday operate at LOS D-F in the 2020 background condition. Individual movements with LOS D-F are bolded in **Table 9**. The delay for the westbound left, westbound right, and southbound left movements at the intersection of Higley Road/Bridges Boulevard are considered unacceptable. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.



| | | | |
|---|---|----|--|
| 1 | <p>46(56) 612(914) 185(239)</p> <p>162(219) 445(485) 70(147)</p> | 7 | <p>32(36)</p> <p>23(12) 705(745)</p> |
| 2 | <p>26(58) 414(939) 130(244)</p> <p>182(227) 742(882) 94(126)</p> | 8 | <p>30(50) 615(1334)</p> <p>172(143) 602(670) 45(56)</p> |
| 3 | <p>65(106) 585(919) 98(235)</p> <p>131(137) 8(28) 21(31)</p> <p>51(70) 10(25) 48(59)</p> <p>24(48) 780(884) 27(51)</p> <p>48(70) 462(1023) 81(131)</p> <p>76(57) 303(344) 55(81)</p> | 9 | <p>36(34) 218(366) 114(260)</p> <p>35(45) 25(27) 15(26)</p> |
| 4 | <p>66(101) 595(1019) 195(237)</p> <p>199(190) 424(427) 91(144)</p> <p>60(111) 445(826) 243(610)</p> <p>239(279) 642(693) 84(143)</p> <p>745(1404) 254(463)</p> <p>288(378) 44(32)</p> <p>38(53) 26(45) 43(85)</p> <p>27(38) 201(210) 15(31)</p> | 10 | <p>33(33) 277(416) 36(53)</p> <p>282(319) 445(520)</p> <p>42(59) 245(432)</p> <p>33(48) 420(867)</p> |
| 5 | <p>25(44) 604(1076) 85(152)</p> <p>54(65) 1(2) 38(42)</p> <p>18(40) 1(3) 1(4)</p> <p>1(3) 893(1069) 87(97)</p> | | |
| 6 | <p>106(137) 479(916) 152(250)</p> <p>177(133) 387(493) 145(202)</p> <p>169(243) 386(631) 117(314)</p> <p>141(183) 441(476) 70(88)</p> | | |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |



| | |
|---|--|
| <p>1</p> <p>57(43) 656(717) 193(264)</p> <p>203(163) 563(494) 86(90)</p> <p>58(40) 556(532) 172(161)</p> <p>230(197) 870(770) 94(83)</p> | <p>7</p> <p>54(29)</p> <p>24(15) 723(653)</p> <p>74(41) 648(756)</p> |
| <p>2</p> <p>108(91) 683(671) 96(144)</p> <p>131(166) 11(17) 21(28)</p> <p>65(54) 11(13) 30(51)</p> <p>16(31) 910(721) 25(32)</p> | <p>8</p> <p>45(30) 253(323) 175(182)</p> <p>175(136) 670(556) 56(51)</p> <p>60(33) 559(541) 76(95)</p> <p>75(56) 319(348) 77(61)</p> |
| <p>3</p> <p>68(70) 723(715) 184(184)</p> <p>188(153) 459(386) 106(91)</p> <p>74(60) 401(460) 311(382)</p> <p>276(247) 689(607) 98(85)</p> | <p>9</p> <p>31(16) 277(368) 37(47)</p> <p>41(44) 25(24) 16(27)</p> <p>49(39) 23(29) 47(34)</p> <p>34(37) 233(210) 23(32)</p> |
| <p>4</p> <p>980(1030) 330(276)</p> <p>338(274) 30(38)</p> <p>28(33) 1(1) 3(6)</p> <p>5(2) 1013(916) 107(107)</p> | <p>10</p> <p>34(49) 254(384)</p> <p>312(290) 491(504)</p> <p>40(34) 428(493)</p> <p>1080(982) 42(86)</p> |
| <p>5</p> <p>25(32) 719(785) 100(130)</p> <p>63(59) 2(2) 38(51)</p> <p>226(265) 379(437) 143(190)</p> <p>151(159) 453(389) 71(69)</p> | <p>6</p> <p>136(122) 352(380) 166(137)</p> |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |

5.4 2025 BACKGROUND ANALYSIS RESULTS

The results of the 2025 analysis are shown in **Table 10** through **Table 13** and **Figure 8** and **Figure 9**. Detailed LOS analysis reports for the 2025 background conditions are supplied in **Appendix F**.

According to the *Gilbert FY2016-2025 Capital Improvement Plan*, Ocotillo Road is scheduled to be constructed between Higley Road and Greenfield Road as a five-lane minor arterial during the 2021-2025 timeframe. For the year 2025 and subsequent analyses, it is assumed Ocotillo Road connects between Higley Road and Greenfield Road.

The 2025 Synchro model timings were optimized, assuming that the Town will periodically optimize signal timings as traffic volumes change over time.

Table 10. 2025 Weekday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS |
|--|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------|---|-----------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| Higley Road and Germann Road | | | | | | | | | | | | | |
| MD Peak | C 23 | C 26 | C 31 | C 23 | C 24 | D 43 | B 17 | C 27 | C 34 | | | | C 30 |
| PM Peak | D 40 | D 38 | F 101 | C 28 | C 23 | E 63 | A 7 | D 55 | D 38 | | | | D 45 |
| Higley Road and Arrowhead Trail | | | | | | | | | | | | | |
| MD Peak | A 1 | A 4 | A 0 | B 12 | B 10 | A 5 | E 64 | B 17 | D 41 | B 14 | | | A 10 |
| PM Peak | A 3 | A 3 | A 1 | B 17 | A 4 | A 1 | E 70 | B 18 | D 39 | B 16 | | | A 8 |
| Higley Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | D 42 | C 20 | A 1 | D 45 | B 16 | C 33 | D 46 | B 16 | C 30 | D 37 | B 11 | | C 28 |
| PM Peak | D 55 | D 44 | B 15 | D 36 | C 29 | B 20 | D 40 | C 23 | D 52 | C 28 | A 6 | | C 34 |
| Higley Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | A 5 | A 10 | A 5 | A 8 | E 61 | D 42 | A 1 | D 38 | D 48 | A 1 | | | B 17 |
| PM Peak | A 6 | B 12 | C 22 | A 4 | D 55 | D 36 | A 9 | D 38 | D 53 | A 4 | | | B 15 |
| Higley Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | C 25 | C 23 | C 24 | C 22 | D 45 | C 27 | C 31 | C 22 | | | | | C 25 |
| PM Peak | D 41 | C 25 | D 44 | D 37 | D 48 | E 73 | E 79 | C 29 | | | | | D 46 |
| Greenfield Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | C 29 | D 41 | D 36 | C 27 | A 3 | A 3 | A 4 | A 6 | | | | | B 15 |
| PM Peak | C 25 | D 50 | E 56 | D 47 | B 18 | C 27 | B 19 | C 23 | | | | | C 33 |
| Greenfield Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | A 7 | A 4 | B 12 | B 11 | C 22 | C 26 | C 21 | C 22 | A 1 | | | | B 14 |
| PM Peak | B 13 | B 11 | B 18 | B 19 | C 27 | D 44 | C 21 | C 21 | A 0 | | | | C 23 |
| Greenfield Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | | - | D 41 | - | B 12 | A 7 | A 8 | - | - | A 6 | | | B 13 |
| PM Peak | | - | D 38 | - | A 6 | B 10 | B 12 | - | - | B 17 | | | B 19 |

Table 11. 2025 Saturday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|---------|-----------------------|-----------------------|---------|---------|---------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| Higley Road and Germann Road | | | | | | | | | | | | | |
| MD Peak | C 34 | C 30 | D 40 | C 25 | C 30 | D 41 | B 13 | C 33 | D 36 | | | C 32 | |
| PM Peak | C 32 | C 31 | D 47 | C 29 | C 25 | D 41 | B 14 | C 34 | D 36 | | | C 34 | |
| Higley Road and Arrowhead Trail | | | | | | | | | | | | | |
| MD Peak | A 1 | A 4 | A 0 | B 13 | A 10 | A 6 | E 61 | B 19 | D 39 | B 14 | A 10 | | |
| PM Peak | A 1 | A 4 | A 0 | B 16 | B 12 | A 5 | F 104 | B 16 | D 40 | B 14 | B 13 | | |
| Higley Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | D 43 | C 24 | A 6 | D 44 | B 16 | D 36 | D 46 | B 15 | C 30 | D 39 | B 11 | C 28 | |
| PM Peak | D 41 | C 25 | A 5 | D 42 | B 13 | C 32 | D 46 | B 16 | C 30 | D 36 | A 9 | C 27 | |
| Higley Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | A 8 | B 16 | B 15 | B 12 | E 66 | C 32 | A 1 | C 32 | D 43 | A 3 | B 20 | | |
| PM Peak | A 8 | B 15 | B 16 | B 13 | E 79 | D 37 | B 11 | C 32 | D 47 | A 4 | C 21 | | |
| Higley Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | C 35 | C 23 | C 31 | C 24 | D 46 | C 26 | C 34 | C 21 | | | C 27 | | |
| PM Peak | D 44 | C 22 | C 30 | C 26 | E 60 | C 27 | D 35 | C 22 | | | C 29 | | |
| Greenfield Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | C 25 | D 40 | D 52 | C 30 | A 8 | A 5 | A 6 | A 9 | | | B 19 | | |
| PM Peak | C 31 | D 43 | D 52 | C 33 | A 3 | A 4 | A 5 | A 7 | | | C 20 | | |
| Greenfield Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | B 11 | B 10 | B 11 | A 9 | C 34 | D 45 | C 31 | C 25 | A 2 | | | B 20 | |
| PM Peak | B 11 | A 9 | B 15 | B 15 | C 31 | D 41 | C 29 | C 33 | A 9 | | | B 20 | |
| Greenfield Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | - | | C 35 | - | A 8 | A 7 | A 8 | - | - | A 7 | B 12 | | |
| PM Peak | - | | D 40 | - | A 7 | A 8 | A 9 | - | - | A 9 | B 15 | | |

The signalized study area intersections operate at LOS A-C during a typical weekday in the 2025 background condition with the exception of Higley Road/Germann Road and Higley Road/Chandler Heights Road, which operate at LOS D during the PM peak hour. Intersections and individual movements with LOS D-F are bolded in **Table 10**.

The signalized study area intersections operate at LOS A-C during a typical Saturday in the 2025 background condition. Individual movements with LOS D-F are bolded in **Table 11**.

Table 12. 2025 Weekday Level of Service and Delay: Unsignalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | |
|--|----|---|---|----------------------------|---|---------|---------|---|---|----------------------------|---|-----------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| <i>Higley Road and Bridges Boulevard</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 25 | - | - | - | - | - | F 241 | - | D 30 |
| PM Peak | - | - | - | F >300 | - | - | - | - | - | F >300 | - | F 84 |
| <i>Queen Creek Road and Lowe's Driveway</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 27 | - | B 11 | A 9 | - | - | - | - | - |
| PM Peak | - | - | - | E 44 | - | B 11 | A 10 | - | - | - | - | - |

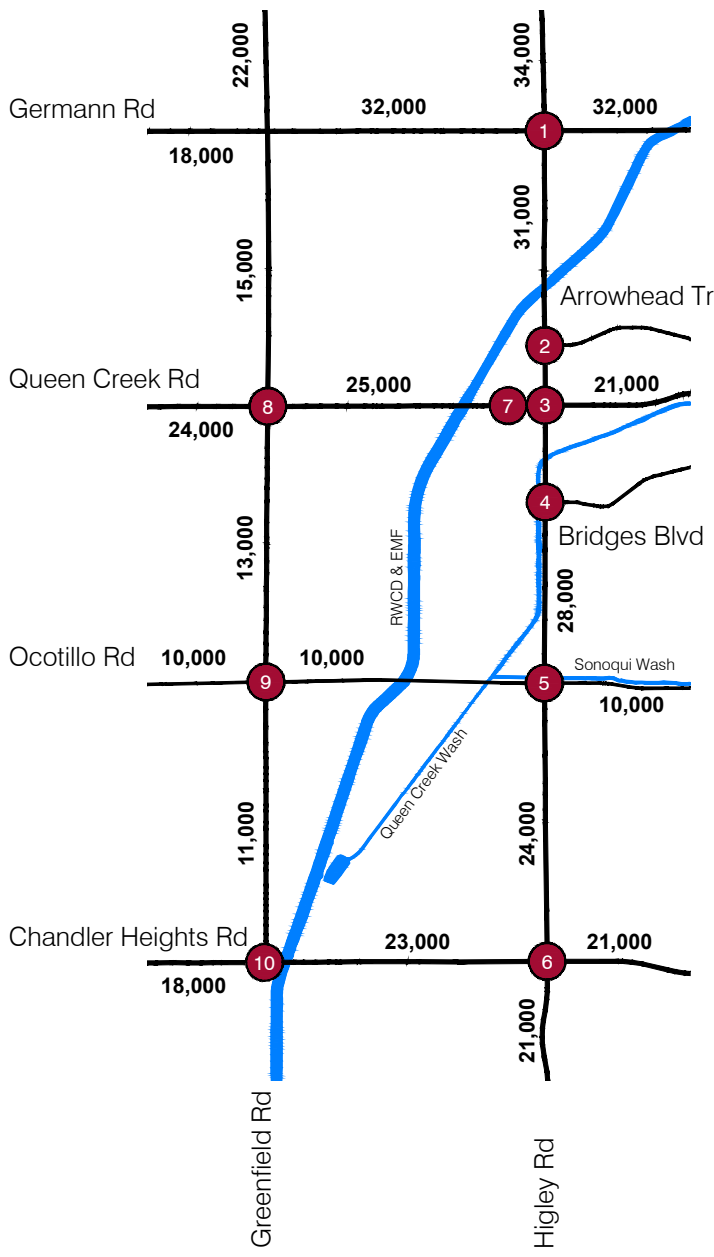
Most of the individual turning movements of the unsignalized study area intersections for a typical weekday operate at LOS D-F in the 2025 background condition. Individual movements with LOS D-F are bolded in **Table 12**. The delay for the westbound left and southbound left movements at the intersection of Higley Road/Bridges Boulevard are considered unacceptable. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.

Table 13. 2025 Saturday Level of Service and Delay: Unsignalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | |
|--|----|---|---|-----------------------|---|---------|---------|---|---|----------------------------|---|-----------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| <i>Higley Road and Bridges Boulevard</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | F 76 | - | - | - | - | - | F >999 | - | F 53 |
| PM Peak | - | - | - | E 37 | - | - | - | - | - | F >600 | - | D 30 |
| <i>Queen Creek Road and Lowe's Driveway</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 31 | - | B 11 | A 10 | - | - | - | - | - |
| PM Peak | - | - | - | C 25 | - | B 11 | A 9 | - | - | - | - | - |

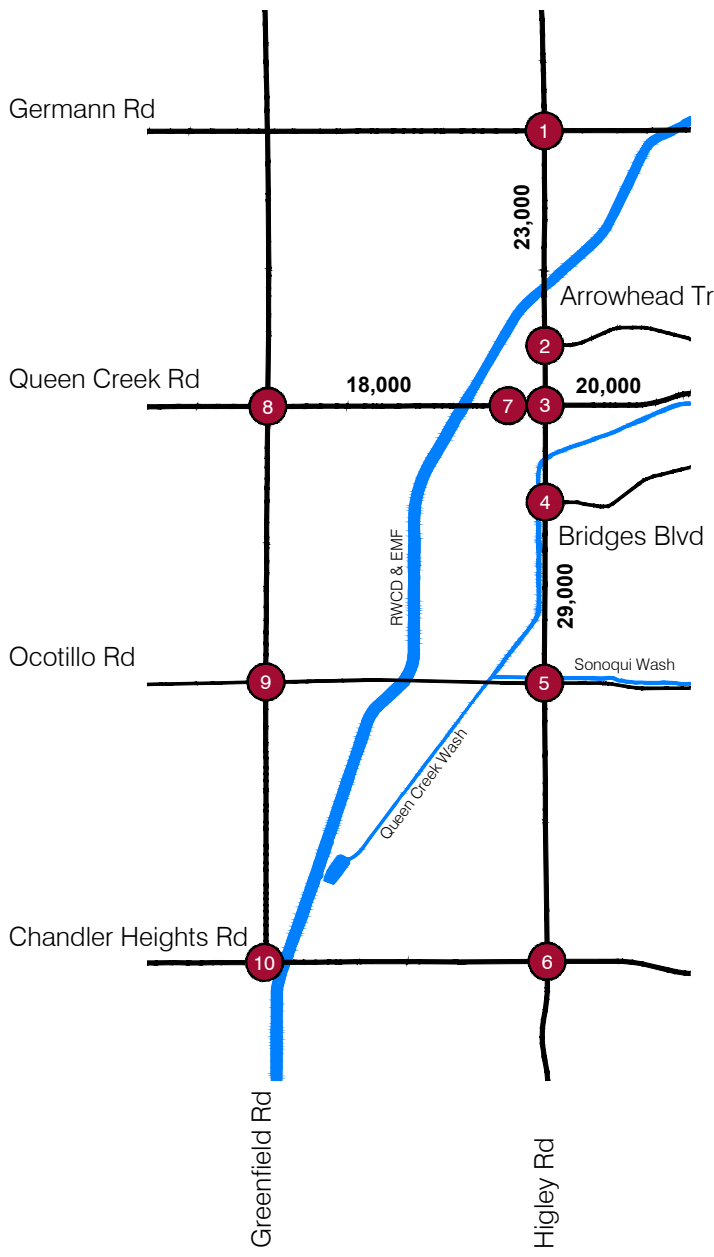
Most of the individual turning movements of the unsignalized study area intersections for a typical Saturday operate at LOS D-F in the 2025 background condition. Individual movements with LOS D-F are

bolded in **Table 13**. The delay for the westbound left movement at the intersection of Higley Road/Bridges Boulevard is considered unacceptable. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.



| | |
|--|--|
| <p>1</p> <p>53(64) 576(860) 211(376)</p> <p>157(213) 508(554) 66(138)</p> <p>25(56) 473(1073) 122(230)</p> <p>208(259) 720(856) 107(144)</p> | <p>7</p> <p>32(36)</p> <p>23(12) 654(691)</p> <p>30(50) 570(1237)</p> |
| <p>2</p> <p>65(106) 551(865) 98(235)</p> <p>131(137) 8(28) 21(31)</p> <p>51(70) 10(25) 48(59)</p> <p>24(48) 734(832) 27(51)</p> | <p>8</p> <p>38(36)</p> <p>172(143) 630(701) 42(52)</p> <p>48(70) 428(949) 75(121)</p> <p>79(60) 303(344) 51(75)</p> |
| <p>3</p> <p>61(94) 554(950) 205(249)</p> <p>187(179) 393(396) 85(134)</p> <p>56(104) 468(868) 226(568)</p> <p>222(259) 604(652) 88(150)</p> | <p>9</p> <p>100(145) 202(339) 208(291)</p> <p>12(7) 88(79) 15(11)</p> <p>55(99) 178(299) 63(110)</p> <p>94(104) 166(175) 82(155)</p> |
| <p>4</p> <p>694(1308) 254(463)</p> <p>288(378) 44(32)</p> <p>881(1094) 60(48)</p> | <p>10</p> <p>44(41) 225(396)</p> <p>33(48) 385(796)</p> <p>282(319) 421(492)</p> |
| <p>5</p> <p>182(287) 538(871) 130(249)</p> <p>25(36) 130(176) 22(26)</p> <p>67(62) 162(191) 16(69)</p> <p>25(46) 662(831) 114(164)</p> | <p>6</p> <p>97(126) 529(1011) 160(263)</p> <p>185(139) 355(452) 160(223)</p> <p>177(254) 406(663) 129(347)</p> <p>128(150) 461(498) 74(94)</p> |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |



| | |
|--|--|
| <p>1</p> <p>65(49) 618(675) 221(302)</p> <p>56(39) 635(608) 162(152)</p> <p>197(158) 643(564) 81(85)</p> <p>263(225) 844(747) 107(95)</p> | <p>7</p> <p>54(29)</p> <p>74(41) 601(701)</p> <p>24(15) 670(605)</p> |
| <p>2</p> <p>108(91) 643(632) 96(144)</p> <p>65(54) 11(13) 30(51)</p> <p>131(166) 11(17) 21(28)</p> <p>16(31) 857(679) 25(32)</p> | <p>8</p> <p>47(31) 235(299) 162(169)</p> <p>60(33) 518(502) 70(88)</p> <p>175(136) 701(581) 52(47)</p> <p>78(61) 319(348) 71(57)</p> |
| <p>3</p> <p>64(65) 674(666) 193(193)</p> <p>70(56) 421(483) 290(356)</p> <p>177(144) 426(358) 99(85)</p> <p>256(229) 649(671) 103(89)</p> | <p>9</p> <p>140(104) 292(328) 203(238)</p> <p>105(91) 231(249) 72(74)</p> <p>38(41) 138(86) 31(7)</p> <p>93(131) 231(155) 141(121)</p> |
| <p>4</p> <p>913(960) 330(276)</p> <p>338(274) 30(38)</p> <p>1006(915) 42(86)</p> | <p>10</p> <p>36(52) 233(352)</p> <p>40(34) 393(452)</p> <p>312(290) 465(477)</p> |
| <p>5</p> <p>232(236) 763(754) 160(220)</p> <p>106(86) 212(167) 18(53)</p> <p>39(35) 181(156) 27(25)</p> <p>32(46) 874(754) 164(139)</p> | |
| <p>6</p> <p>115(123) 677(713) 197(208)</p> <p>236(277) 398(459) 158(210)</p> <p>142(128) 323(349) 183(151)</p> <p>139(146) 474(417) 75(73)</p> | |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |

5.5 2030 BACKGROUND ANALYSIS RESULTS

The results of the 2030 analysis are shown in **Table 14** through **Table 17** and **Figure 10** and **Figure 11**. Detailed LOS analysis reports for the 2030 background conditions are supplied in **Appendix G**.

The 2030 Synchro model timings were optimized, assuming that the Town will periodically optimize signal timings as traffic volumes change over time.

Table 14. 2030 Weekday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS |
|---|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|---------|-----------------------|---------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| <i>Higley Road and Germann Road</i> | | | | | | | | | | | | | |
| MD Peak | C 26 | C 27 | C 34 | C 24 | C 24 | C 24 | D 40 | B 16 | C 28 | C 34 | | C 30 | |
| PM Peak | D 44 | D 38 | F 124 | C 28 | C 23 | C 23 | F 84 | A 7 | D 55 | D 39 | | D 52 | |
| <i>Higley Road and Arrowhead Trail</i> | | | | | | | | | | | | | |
| MD Peak | A 1 | A 3 | A 0 | B 12 | B 11 | A 6 | E 64 | B 17 | D 41 | B 14 | | A 10 | |
| PM Peak | A 2 | A 3 | A 0 | B 17 | A 4 | A 1 | E 70 | B 18 | D 39 | B 18 | | A 8 | |
| <i>Higley Road and Queen Creek Road</i> | | | | | | | | | | | | | |
| MD Peak | E 59 | C 27 | A 6 | D 46 | B 16 | C 32 | D 46 | B 17 | C 31 | D 36 | B 10 | C 30 | |
| PM Peak | E 62 | C 35 | A 9 | D 37 | C 31 | B 19 | D 41 | C 24 | D 52 | C 28 | A 6 | C 33 | |
| <i>Higley Road and Ocotillo Road</i> | | | | | | | | | | | | | |
| MD Peak | A 9 | B 15 | B 14 | A 8 | D 38 | D 40 | A 5 | C 28 | D 51 | A 1 | | B 18 | |
| PM Peak | B 11 | C 25 | C 32 | B 15 | C 32 | D 42 | B 12 | C 28 | D 54 | A 1 | | C 24 | |
| <i>Higley Road and Chandler Heights Road</i> | | | | | | | | | | | | | |
| MD Peak | C 27 | C 23 | C 26 | C 23 | D 47 | C 28 | D 38 | C 22 | | | | C 26 | |
| PM Peak | D 46 | C 25 | E 61 | D 46 | D 50 | E 79 | F 103 | C 27 | | | | D 53 | |
| <i>Greenfield Road and Queen Creek Road</i> | | | | | | | | | | | | | |
| MD Peak | C 32 | D 42 | D 36 | C 27 | A 3 | A 2 | A 4 | A 6 | | | | B 16 | |
| PM Peak | C 25 | D 49 | E 56 | D 47 | B 18 | C 27 | B 19 | C 23 | | | | C 33 | |
| <i>Greenfield Road and Ocotillo Road</i> | | | | | | | | | | | | | |
| MD Peak | A 9 | A 9 | A 9 | A 8 | C 32 | D 49 | C 33 | D 35 | A 2 | | | C 21 | |
| PM Peak | B 20 | B 15 | C 29 | C 27 | B 19 | D 48 | B 17 | C 32 | A 0 | | | C 30 | |
| <i>Greenfield Road and Chandler Heights Road</i> | | | | | | | | | | | | | |
| MD Peak | | - | D 35 | - | A 7 | A 7 | A 8 | - | - | A 6 | | B 12 | |
| PM Peak | | - | D 38 | - | A 6 | B 10 | B 12 | - | - | B 19 | | B 20 | |

Table 15. 2030 Saturday Level of Service and Delay: Signalized Intersections

| Intersection | NB | | | SB | | | EB | | | WB | | | Intersection LOS |
|--|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|---------|---------|------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R | |
| Higley Road and Germann Road | | | | | | | | | | | | | |
| MD Peak | D 39 | C 31 | D 44 | C 25 | C 31 | D 41 | B 13 | C 34 | D 37 | | | | C 34 |
| PM Peak | D 36 | C 32 | D 51 | C 30 | C 26 | D 40 | B 14 | D 35 | D 37 | | | | D 35 |
| Higley Road and Arrowhead Trail | | | | | | | | | | | | | |
| MD Peak | A 1 | A 3 | A 0 | B 13 | A 10 | A 5 | E 61 | B 19 | D 39 | B 14 | | | A 9 |
| PM Peak | A 1 | A 3 | A 0 | B 16 | B 12 | A 5 | F 104 | B 16 | D 40 | B 14 | | | B 12 |
| Higley Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | E 61 | C 28 | A 8 | D 44 | B 16 | C 35 | D 46 | B 15 | C 31 | D 38 | B 11 | C 30 | |
| PM Peak | E 60 | C 27 | A 6 | D 43 | B 14 | C 31 | D 46 | B 17 | C 30 | D 35 | A 9 | C 29 | |
| Higley Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | B 12 | C 22 | C 33 | B 12 | D 42 | D 38 | A 5 | C 27 | E 67 | A 1 | | | C 24 |
| PM Peak | B 11 | C 24 | C 34 | B 14 | D 36 | D 36 | B 11 | C 26 | D 55 | A 1 | | | C 24 |
| Higley Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | D 40 | C 23 | C 35 | C 25 | D 49 | C 26 | D 44 | C 20 | | | | | C 29 |
| PM Peak | D 51 | C 22 | C 34 | C 27 | E 68 | C 28 | D 46 | C 22 | | | | | C 31 |
| Greenfield Road and Queen Creek Road | | | | | | | | | | | | | |
| MD Peak | C 27 | D 43 | D 52 | C 30 | A 8 | A 5 | A 6 | A 10 | | | | | B 19 |
| PM Peak | C 30 | D 42 | D 52 | C 33 | A 3 | A 4 | A 5 | A 7 | | | | | C 20 |
| Greenfield Road and Ocotillo Road | | | | | | | | | | | | | |
| MD Peak | B 10 | A 10 | B 11 | A 9 | D 36 | D 52 | D 37 | C 29 | A 6 | | | | C 23 |
| PM Peak | B 18 | B 14 | C 22 | C 21 | C 21 | D 47 | B 16 | C 33 | A 2 | | | | C 25 |
| Greenfield Road and Chandler Heights Road | | | | | | | | | | | | | |
| MD Peak | - | | C 35 | - | A 8 | A 7 | A 8 | - | - | A 8 | | | B 12 |
| PM Peak | - | | D 40 | - | A 7 | A 8 | A 9 | - | - | A 10 | | | B 15 |

The signalized study area intersections operate at LOS A-C during a typical weekday in the 2030 background condition with the exception of Higley Road/Germann Road and Higley Road/Chandler Heights Road, which operate at LOS D during the PM peak hour. Intersections and individual movements with LOS D-F are bolded in **Table 14**.

The signalized study area intersections operate at LOS A-C during a typical Saturday in the 2030 background condition with the exception of Higley Road/Germann Road, which operates at LOS D during the PM peak hour. Intersections and individual movements with LOS D-F are bolded in **Table 15**.

Table 16. 2030 Weekday Level of Service and Delay: Unsignalized Intersections

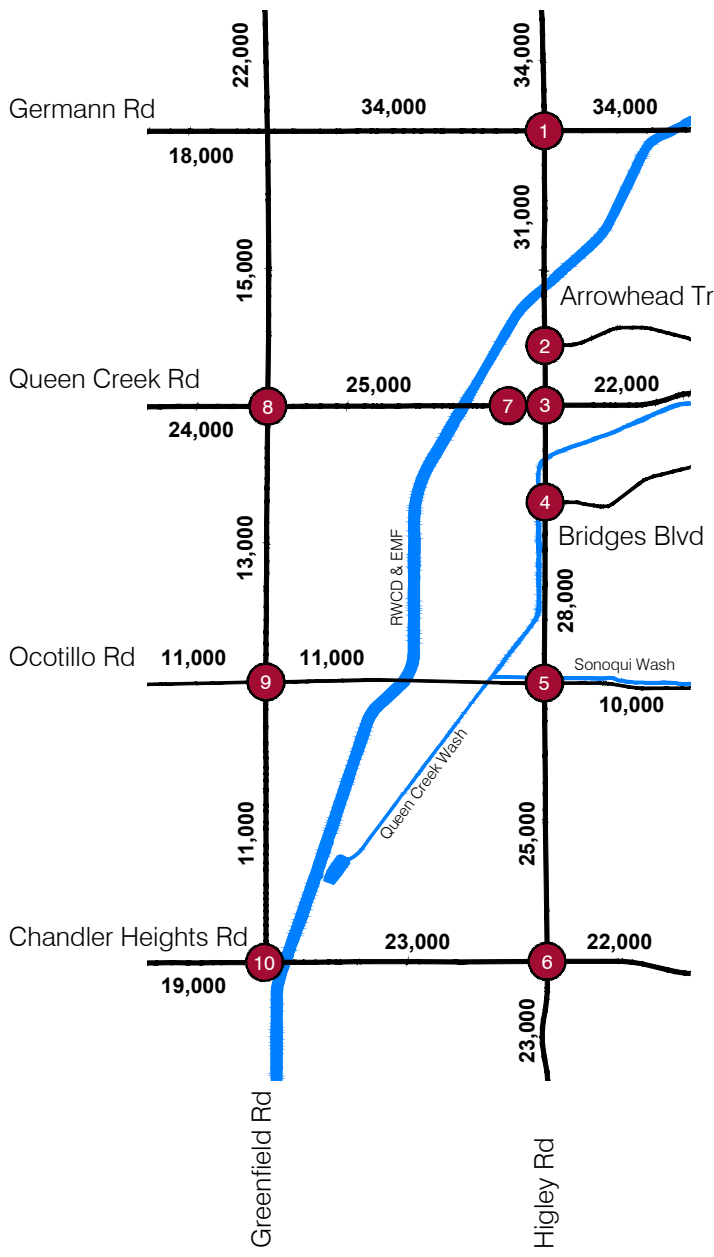
| Intersection | NB | | | SB | | | EB | | | WB | | |
|--|----|---|---|----------------------------|---|---------|---------|---|---|----------------------------|---|-----------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| <i>Higley Road and Bridges Boulevard</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 25 | - | - | - | - | - | F 241 | - | D 29 |
| PM Peak | - | - | - | F >300 | - | - | - | - | - | F >300 | - | F 84 |
| <i>Queen Creek Road and Lowe's Driveway</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 27 | - | B 11 | A 9 | - | - | - | - | - |
| PM Peak | - | - | - | E 44 | - | B 11 | A 10 | - | - | - | - | - |

Most of the individual turning movements of the unsignalized study area intersections for a typical weekday operate at LOS D-F in the 2030 background condition. Individual movements with LOS D-F are bolded in **Table 16**. The delay for the westbound left and southbound left movements at the intersection of Higley Road/Bridges Boulevard are considered unacceptable. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.

Table 17. 2030 Saturday Level of Service and Delay: Unsignalized Intersections

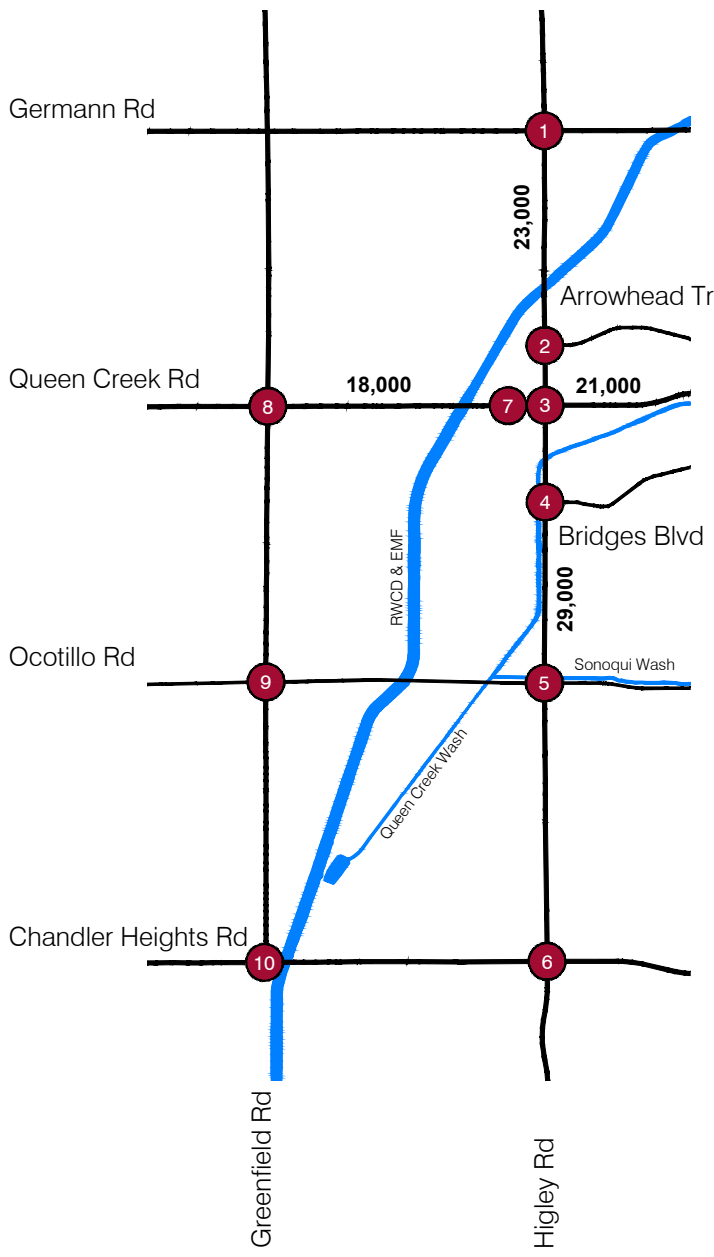
| Intersection | NB | | | SB | | | EB | | | WB | | |
|--|----|---|---|-----------------------|---|---------|---------|---|---|----------------------------|---|-----------------------|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| <i>Higley Road and Bridges Boulevard</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | F 76 | - | - | - | - | - | F >999 | - | F 53 |
| PM Peak | - | - | - | E 37 | - | - | - | - | - | F >600 | - | D 30 |
| <i>Queen Creek Road and Lowe's Driveway</i> | | | | | | | | | | | | |
| MD Peak | - | - | - | D 31 | - | B 11 | A 10 | - | - | - | - | - |
| PM Peak | - | - | - | C 25 | - | B 11 | A 9 | - | - | - | - | - |

Most of the individual turning movements of the unsignalized study area intersections for a typical Saturday operate at LOS D-F in the 2030 background condition. Individual movements with LOS D-F are bolded in **Table 17**. The delay for the westbound left movement at the intersection of Higley Road/Bridges Boulevard is considered unacceptable. The LOS and delay of all other movements are considered acceptable and are typical of unsignalized minor street approaches during peak traffic periods of the adjacent arterial roadway.



| | |
|--|--|
| <p>1</p> <p>56(66) 576(660) 224(399)</p> <p>157(213) 539(588) 66(138)</p> <p>25(56) 502(1139) 122(230)</p> <p>221(275) 720(656) 114(153)</p> | <p>7</p> <p>32(36)</p> <p>23(12) 654(691)</p> <p>30(50) 570(1237)</p> |
| <p>2</p> <p>65(106) 551(665) 98(235)</p> <p>131(137) 8(28) 21(31)</p> <p>51(70) 10(25) 48(59)</p> <p>24(48) 734(832) 27(51)</p> | <p>8</p> <p>38(36) 202(339) 106(241)</p> <p>172(143) 630(701) 42(52)</p> <p>48(70) 428(949) 75(121)</p> <p>79(60) 303(344) 51(75)</p> |
| <p>3</p> <p>61(94) 554(650) 214(260)</p> <p>187(179) 393(396) 85(134)</p> <p>56(104) 489(908) 226(568)</p> <p>222(259) 604(652) 92(157)</p> | <p>9</p> <p>100(145) 217(371) 208(291)</p> <p>12(7) 108(119) 15(11)</p> <p>55(99) 213(342) 63(110)</p> <p>94(104) 166(175) 82(155)</p> |
| <p>4</p> <p>694(1308) 254(463)</p> <p>288(378) 44(32)</p> <p>881(1094) 60(48)</p> | <p>10</p> <p>46(43) 225(396)</p> <p>33(48) 385(796)</p> <p>282(319) 445(520)</p> |
| <p>5</p> <p>182(287) 538(871) 130(249)</p> <p>25(36) 130(176) 22(26)</p> <p>67(62) 162(191) 41(124)</p> <p>55(76) 662(831) 114(164)</p> | |
| <p>6</p> <p>97(126) 578(1105) 167(275)</p> <p>193(145) 355(452) 175(244)</p> <p>184(264) 425(693) 141(379)</p> <p>128(150) 480(518) 77(88)</p> | |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |



| | | |
|--|---|---|
| <p>1</p> <p>69(52) ← 618(675) ← 235(321) ←</p> <p>56(39) → 674(645) → 162(152) →</p> | <p>197(158) ← 683(599) ← 81(85) ←</p> <p>279(239) → 844(747) → 114(101) →</p> | <p>7</p> <p>54(29) ←</p> <p>24(15) ← 670(605) ←</p> |
| <p>2</p> <p>108(91) ← 643(632) ← 96(144) ←</p> <p>65(54) → 11(13) → 30(51) →</p> | <p>131(166) ← 11(17) ← 21(28) ←</p> <p>16(31) → 857(679) → 25(32) →</p> | <p>8</p> <p>47(31) ← 235(299) ← 162(169) ←</p> <p>60(33) → 518(502) → 70(88) →</p> |
| <p>3</p> <p>64(65) ← 674(666) ← 202(202) ←</p> <p>70(56) → 440(505) → 290(356) →</p> | <p>177(144) ← 426(358) ← 99(85) ←</p> <p>256(229) → 649(571) → 108(93) →</p> | <p>9</p> <p>140(104) ← 292(328) ← 203(238) ←</p> <p>105(91) → 271(289) → 72(74) →</p> |
| <p>4</p> <p>913(960) ← 330(276) ←</p> <p>106(86) → 212(167) → 49(93) →</p> | <p>338(274) ←</p> <p>77(76) → 874(754) → 164(139) →</p> | <p>10</p> <p>39(55) ←</p> <p>40(34) → 393(452) →</p> |
| <p>5</p> <p>232(236) ← 763(754) ← 160(220) ←</p> <p>106(86) → 212(167) → 49(93) →</p> | <p>39(35) ← 181(156) ← 27(25) ←</p> <p>77(76) → 874(754) → 164(139) →</p> | |
| <p>6</p> <p>115(123) ← 740(780) ← 206(218) ←</p> <p>246(288) → 416(480) → 173(230) →</p> | <p>148(133) ← 323(349) ← 200(165) ←</p> <p>139(146) → 493(434) → 78(76) →</p> | |

| LEGEND | |
|----------|----------------------------------|
| ← XX(XX) | MD(PM) PEAK HOUR TRAFFIC VOLUMES |
| XXXX | AVERAGE DAILY TRAFFIC VOLUMES |

6.0 CONCLUSIONS AND RECOMMENDATIONS

The findings from the existing and future background analysis resulted in the following conclusions and recommendations:

- All existing signalized study area intersections operate at LOS A-C during typical weekday and Saturday MD and PM peak hours.
- Most turning movements at existing unsignalized study area intersections operate at LOS A-C during typical weekday and Saturday MD and PM peak hours.
- All signalized study area intersections are projected to operate at LOS A-C during the PM peak hour of a typical weekday for the 2020, 2025, and 2030 background conditions with the exception of Higley Road/Germann Road (LOS D in 2020, 2025, and 2030), Higley Road/Queen Creek Road (LOS D in 2020), Higley Road/Chandler Heights Road (LOS D in 2020, 2025, and 2030), and Greenfield Road/Queen Creek Road (LOS D in 2020).
- All signalized study area intersections are projected to operate at LOS A-C during typical Saturday MD and PM peak hours for the 2020, 2025, and 2030 background conditions with the exception of Higley Road/Germann Road, which operates at LOS D in the 2030 Saturday PM background condition.
- Most turning movements at unsignalized study area intersections operate at LOS D-F for the 2020, 2025, and 2030 background conditions. Many turning movements report more than 300 seconds of delay.
- It is recommended that a traffic signal be installed at the intersection of Ocotillo Road/Greenfield Road in 2016 as proposed in the *Gilbert FY2016-2025 Capital Improvement Plan*.
- It is recommended that a traffic signal be installed at the intersection of Higley Road/Bridges Boulevard as existing delays are excessive.
- It is recommended that the unsignalized intersection of Queen Creek Road/Lowe's Driveway be monitored to determine if or when signalization becomes necessary.

APPENDIX A

EXISTING TURNING MOVEMENT COUNT DATA



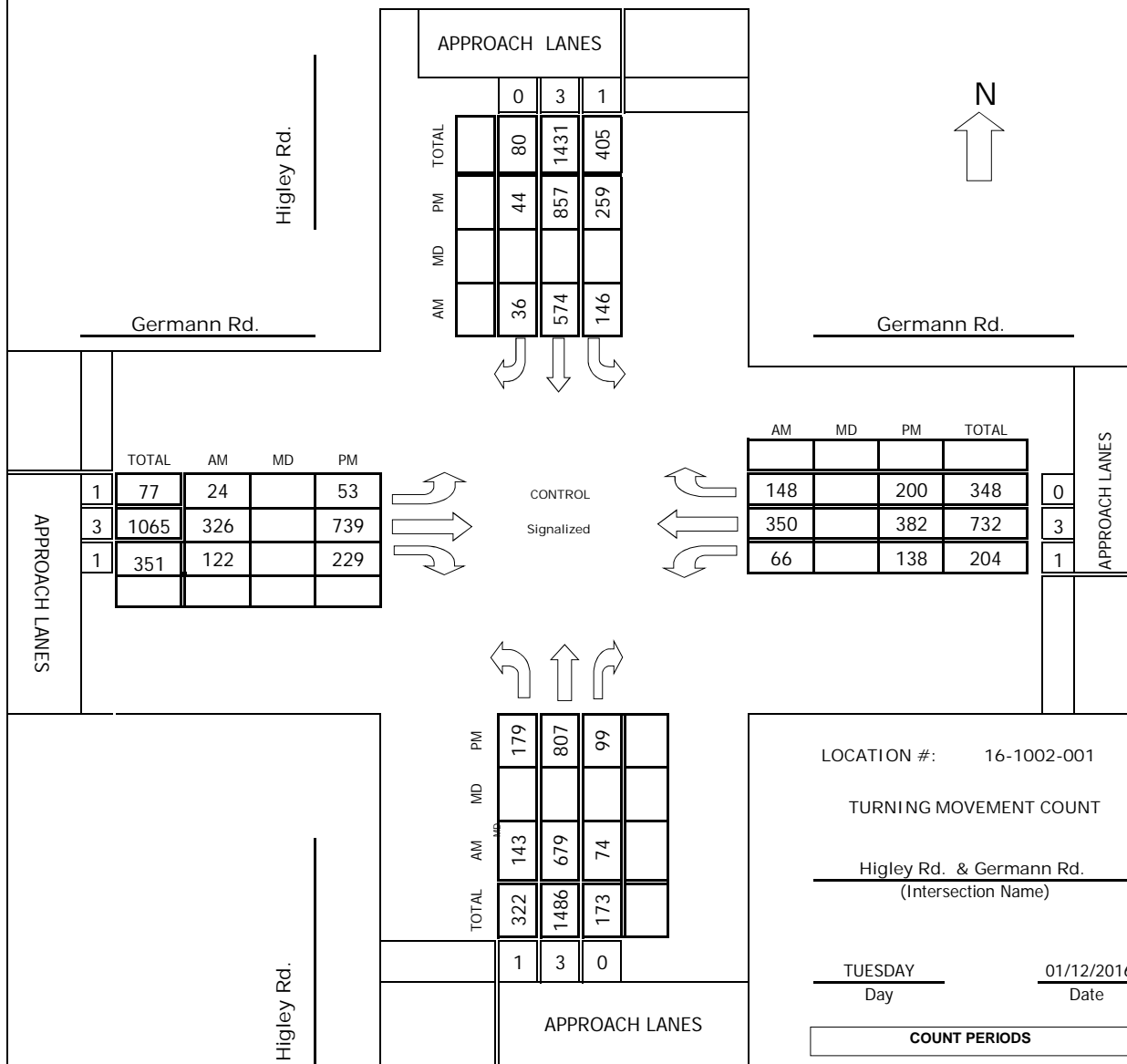
Intersection Turning Movement

Prepared by:



Project #: 16-1002-001

TMC SUMMARY OF Higley Rd. & Germann Rd.



| | | | | | |
|------------|-------|----------------|------|-----|---|
| | | APPROACH LANES | | | |
| | | | 0 | 3 | 1 |
| Higley Rd. | TOTAL | 80 | 1431 | 405 | |
| | PM | 44 | 857 | 259 | |
| | AM | 36 | 574 | 146 | |

| | | | | | |
|----------------|---|-------|-----|----|-----|
| APPROACH LANES | | TOTAL | AM | MD | PM |
| | 1 | 77 | 24 | | 53 |
| | 3 | 1065 | 326 | | 739 |
| | 1 | 351 | 122 | | 229 |

| | | | | | |
|-------------|-------|----------------|------|-----|---|
| | | APPROACH LANES | | | |
| | | | 0 | 3 | 1 |
| Germann Rd. | TOTAL | 80 | 1431 | 405 | |
| | PM | 44 | 857 | 259 | |
| | AM | 36 | 574 | 146 | |

| | | | | | |
|-------------|-------|----------------|-----|-----|---|
| | | APPROACH LANES | | | |
| | | | 0 | 3 | 1 |
| Germann Rd. | TOTAL | 148 | 200 | 348 | |
| | PM | 66 | 138 | 204 | |
| | AM | 148 | 350 | 732 | |

| | | | | | |
|------------|-------|----------------|------|-----|---|
| | | APPROACH LANES | | | |
| | | | 0 | 3 | 1 |
| Higley Rd. | TOTAL | 179 | 807 | 99 | |
| | PM | 143 | 679 | 74 | |
| | AM | 322 | 1486 | 173 | |

| | | | | | |
|------------|-------|----------------|------|-----|---|
| | | APPROACH LANES | | | |
| | | | 0 | 3 | 1 |
| Higley Rd. | TOTAL | 179 | 807 | 99 | |
| | PM | 143 | 679 | 74 | |
| | AM | 322 | 1486 | 173 | |

LOCATION #: 16-1002-001

TURNING MOVEMENT COUNT

Higley Rd. & Germann Rd.
(Intersection Name)

TUESDAY 01/12/2016
Day Date

| COUNT PERIODS | | |
|---------------|--------|-------|
| AM | 1100AM | 100PM |
| NOON | - | - |
| PM | 430PM | 630PM |

AM PEAK HOUR 730 AM

NOON PEAK HOUR _____

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Germann Rd.** DAY: **TUESDAY** PROJECT#: **16-1002-001**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|-----|----|------------|-----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | 1 | 1 | 3 | 0 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 49 | 159 | 9 | 27 | 138 | 3 | 9 | 60 | 27 | 27 | 90 | 36 | 634 |
| 11:15 AM | 36 | 189 | 13 | 27 | 121 | 5 | 4 | 79 | 27 | 10 | 84 | 50 | 645 |
| 11:30 AM | 41 | 192 | 23 | 45 | 156 | 8 | 6 | 78 | 36 | 15 | 89 | 29 | 718 |
| 11:45 AM | 35 | 171 | 21 | 32 | 140 | 12 | 5 | 75 | 27 | 20 | 73 | 34 | 645 |
| 12:00 PM | 31 | 167 | 10 | 41 | 142 | 7 | 7 | 69 | 24 | 10 | 84 | 44 | 636 |
| 12:15 PM | 36 | 149 | 20 | 28 | 136 | 9 | 6 | 104 | 35 | 21 | 104 | 41 | 689 |
| 12:30 PM | 43 | 176 | 15 | 26 | 158 | 5 | 7 | 77 | 48 | 15 | 98 | 33 | 701 |
| 12:45 PM | 39 | 154 | 17 | 28 | 131 | 0 | 10 | 85 | 41 | 10 | 78 | 33 | 626 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Volumes | 310 | 1357 | 128 | 254 | 1122 | 49 | 54 | 627 | 265 | 128 | 700 | 300 | 5294 |
| Approach % | 17.27 | 75.60 | 7.13 | 17.82 | 78.74 | 3.44 | 5.71 | 66.28 | 28.01 | 11.35 | 62.06 | 26.60 | |
| App/Depart | 1795 | / | 1711 | 1425 | / | 1515 | 946 | / | 1009 | 1128 | / | 1059 | |

AM Peak Hr Begins at: 730 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| Volumes | 143 | 679 | 74 | 146 | 574 | 36 | 24 | 326 | 122 | 66 | 350 | 148 | 2688 |
| Approach % | 15.96 | 75.78 | 8.26 | 19.31 | 75.93 | 4.76 | 5.08 | 69.07 | 25.85 | 11.70 | 62.06 | 26.24 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.875 | 0.904 | 0.814 | 0.849 | 0.936 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.277515, -111.720818**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Germann Rd.** DAY: **TUESDAY** PROJECT#: **16-1002-001**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | 1 | 1 | 3 | 0 | |

| | | | | | | | | | | | | | |
|---------|----|-----|----|----|-----|----|----|-----|----|----|-----|----|------|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 32 | 201 | 21 | 63 | 220 | 10 | 18 | 168 | 78 | 27 | 96 | 39 | 973 |
| 4:45 PM | 39 | 180 | 24 | 62 | 225 | 12 | 12 | 181 | 57 | 30 | 83 | 54 | 959 |
| 5:00 PM | 44 | 195 | 22 | 75 | 213 | 12 | 12 | 181 | 66 | 28 | 100 | 46 | 994 |
| 5:15 PM | 39 | 198 | 33 | 64 | 204 | 15 | 16 | 188 | 46 | 35 | 112 | 49 | 999 |
| 5:30 PM | 57 | 234 | 20 | 58 | 215 | 5 | 13 | 189 | 60 | 45 | 87 | 51 | 1034 |
| 5:45 PM | 37 | 190 | 26 | 66 | 177 | 7 | 8 | 176 | 59 | 29 | 110 | 48 | 933 |
| 6:00 PM | 35 | 162 | 29 | 68 | 198 | 8 | 11 | 143 | 61 | 22 | 91 | 34 | 862 |
| 6:15 PM | 47 | 166 | 25 | 58 | 185 | 8 | 15 | 134 | 62 | 26 | 102 | 48 | 876 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Volumes | 330 | 1526 | 200 | 514 | 1637 | 77 | 105 | 1360 | 489 | 242 | 781 | 369 | 7630 |
| Approach % | 16.05 | 74.22 | 9.73 | 23.07 | 73.47 | 3.46 | 5.37 | 69.60 | 25.03 | 17.39 | 56.11 | 26.51 | |
| App/Depart | 2056 | / | 2000 | 2228 | / | 2368 | 1954 | / | 2074 | 1392 | / | 1188 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| Volumes | 179 | 807 | 99 | 259 | 857 | 44 | 53 | 739 | 229 | 138 | 382 | 200 | 3986 |
| Approach % | 16.50 | 74.38 | 9.12 | 22.33 | 73.88 | 3.79 | 5.19 | 72.38 | 22.43 | 19.17 | 53.06 | 27.78 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.872 | 0.967 | 0.974 | 0.918 | 0.964 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.277515, -111.720818**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Germann Rd.

Date: 01/12/2016
Day: TUESDAY

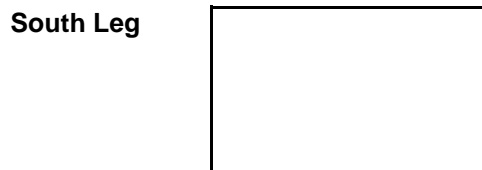
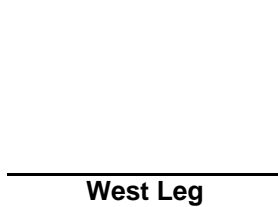
City: Gilbert
Project #: 16-1002-001

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 2 | 1 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 2 | 1 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 1 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 1 |
| 12:30 PM | 0 | 0 | 1 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 1 | 1 | 1 |

| | PEDESTRIANS | | | |
|--------------|-------------|----------|-----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 1 | 0 | 6 | 0 |
| 5:00 PM | 0 | 0 | 2 | 1 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 2 | 0 |
| 5:45 PM | 0 | 0 | 1 | 1 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 1 | 0 |
| TOTAL | 1 | 0 | 12 | 2 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 1 | 1 |
| 6:00 PM | 0 | 0 | 1 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 2 | 1 |



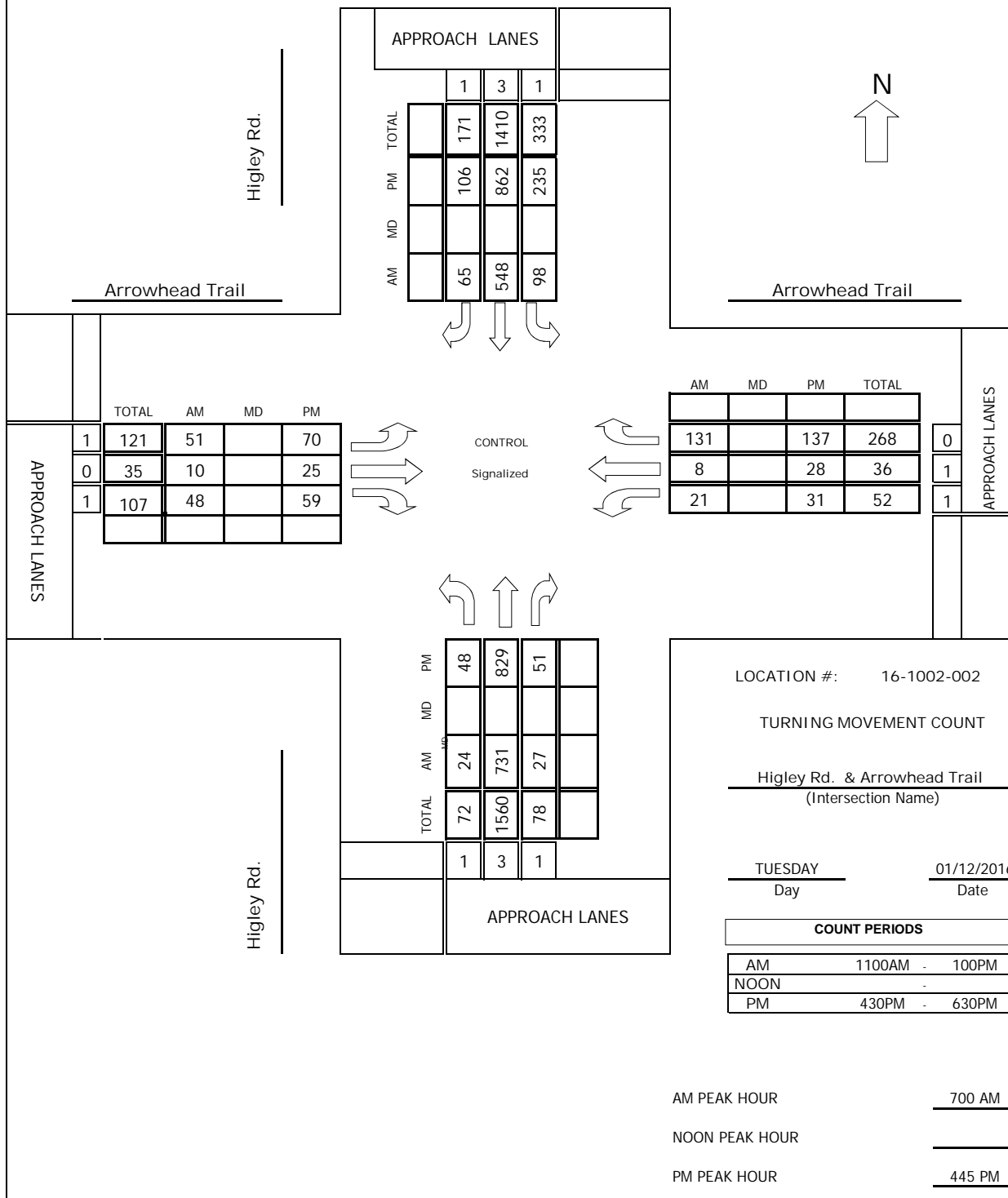
Intersection Turning Movement

Prepared by:



Project #: 16-1002-002

TMC SUMMARY OF Higley Rd. & Arrowhead Trail



Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Arrowhead Trail** DAY: **TUESDAY** PROJECT# **16-1002-002**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 1 | 1 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|----------|----|-----|----|----|-----|----|----|---|----|---|---|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 4 | 183 | 6 | 23 | 130 | 20 | 10 | 5 | 18 | 4 | 1 | 27 | 431 |
| 11:15 AM | 6 | 180 | 6 | 20 | 120 | 13 | 14 | 1 | 10 | 6 | 1 | 36 | 413 |
| 11:30 AM | 10 | 184 | 11 | 32 | 153 | 17 | 12 | 2 | 7 | 7 | 5 | 36 | 476 |
| 11:45 AM | 4 | 184 | 4 | 23 | 145 | 15 | 15 | 2 | 13 | 4 | 1 | 32 | 442 |
| 12:00 PM | 6 | 153 | 6 | 34 | 121 | 26 | 13 | 2 | 5 | 6 | 5 | 33 | 410 |
| 12:15 PM | 6 | 160 | 8 | 34 | 131 | 17 | 18 | 4 | 10 | 3 | 1 | 30 | 422 |
| 12:30 PM | 3 | 175 | 12 | 29 | 152 | 18 | 15 | 4 | 13 | 8 | 2 | 25 | 456 |
| 12:45 PM | 1 | 148 | 4 | 34 | 130 | 12 | 11 | 3 | 6 | 4 | 2 | 25 | 380 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|
| Volumes | 40 | 1367 | 57 | 229 | 1082 | 138 | 108 | 23 | 82 | 42 | 18 | 244 | 3430 |
| Approach % | 2.73 | 93.37 | 3.89 | 15.80 | 74.67 | 9.52 | 50.70 | 10.80 | 38.50 | 13.82 | 5.92 | 80.26 | |
| App/Depart | 1464 | / | 1719 | 1449 | / | 1206 | 213 | / | 309 | 304 | / | 196 | |

AM Peak Hr Begins at: 700 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|------|-------|------|-------|-------|------|-------|------|
| Volumes | 24 | 731 | 27 | 98 | 548 | 65 | 51 | 10 | 48 | 21 | 8 | 131 | 1762 |
| Approach % | 3.07 | 93.48 | 3.45 | 13.78 | 77.07 | 9.14 | 46.79 | 9.17 | 44.04 | 13.13 | 5.00 | 81.88 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.954 | 0.880 | 0.826 | 0.833 | 0.925 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**

COMMENT 1:

GPS: **33.266309, -111.720794**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Arrowhead Trail** DAY: **TUESDAY** PROJECT#: **16-1002-002**

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 1 | 3 | 1 | 1 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|---------|----|-----|----|----|-----|----|----|----|----|----|----|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 14 | 208 | 10 | 62 | 235 | 29 | 10 | 2 | 13 | 6 | 4 | 43 | 636 |
| 4:45 PM | 9 | 174 | 17 | 56 | 201 | 18 | 21 | 6 | 13 | 9 | 10 | 32 | 566 |
| 5:00 PM | 12 | 231 | 10 | 61 | 243 | 23 | 15 | 5 | 10 | 5 | 4 | 33 | 652 |
| 5:15 PM | 13 | 206 | 12 | 46 | 199 | 32 | 19 | 7 | 17 | 12 | 7 | 27 | 597 |
| 5:30 PM | 14 | 218 | 12 | 72 | 219 | 33 | 15 | 7 | 19 | 5 | 7 | 45 | 666 |
| 5:45 PM | 5 | 196 | 10 | 39 | 184 | 26 | 20 | 10 | 14 | 11 | 6 | 36 | 557 |
| 6:00 PM | 11 | 160 | 11 | 52 | 182 | 42 | 15 | 10 | 15 | 6 | 9 | 30 | 543 |
| 6:15 PM | 6 | 178 | 11 | 46 | 182 | 25 | 12 | 12 | 21 | 8 | 11 | 35 | 547 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 84 | 1571 | 93 | 434 | 1645 | 228 | 127 | 59 | 122 | 62 | 58 | 281 | 4764 |
| Approach % | 4.81 | 89.87 | 5.32 | 18.81 | 71.30 | 9.88 | 41.23 | 19.16 | 39.61 | 15.46 | 14.46 | 70.07 | |
| App/Depart | 1748 | / | 1979 | 2307 | / | 1829 | 308 | / | 586 | 401 | / | 370 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|
| Volumes | 48 | 829 | 51 | 235 | 862 | 106 | 70 | 25 | 59 | 31 | 28 | 137 | 2481 |
| Approach % | 5.17 | 89.33 | 5.50 | 19.53 | 71.65 | 8.81 | 45.45 | 16.23 | 38.31 | 15.82 | 14.29 | 69.90 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.917 | 0.920 | 0.895 | 0.860 | 0.931 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.266309, -111.720794**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Arrowhead Trail

Date: 01/12/2016
Day: TUESDAY

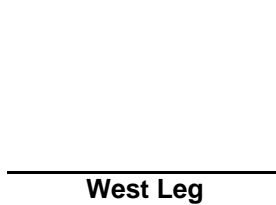
City: Gilbert
Project #: 16-1002-002

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 1 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 2 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 2 | 0 | 1 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 1 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |

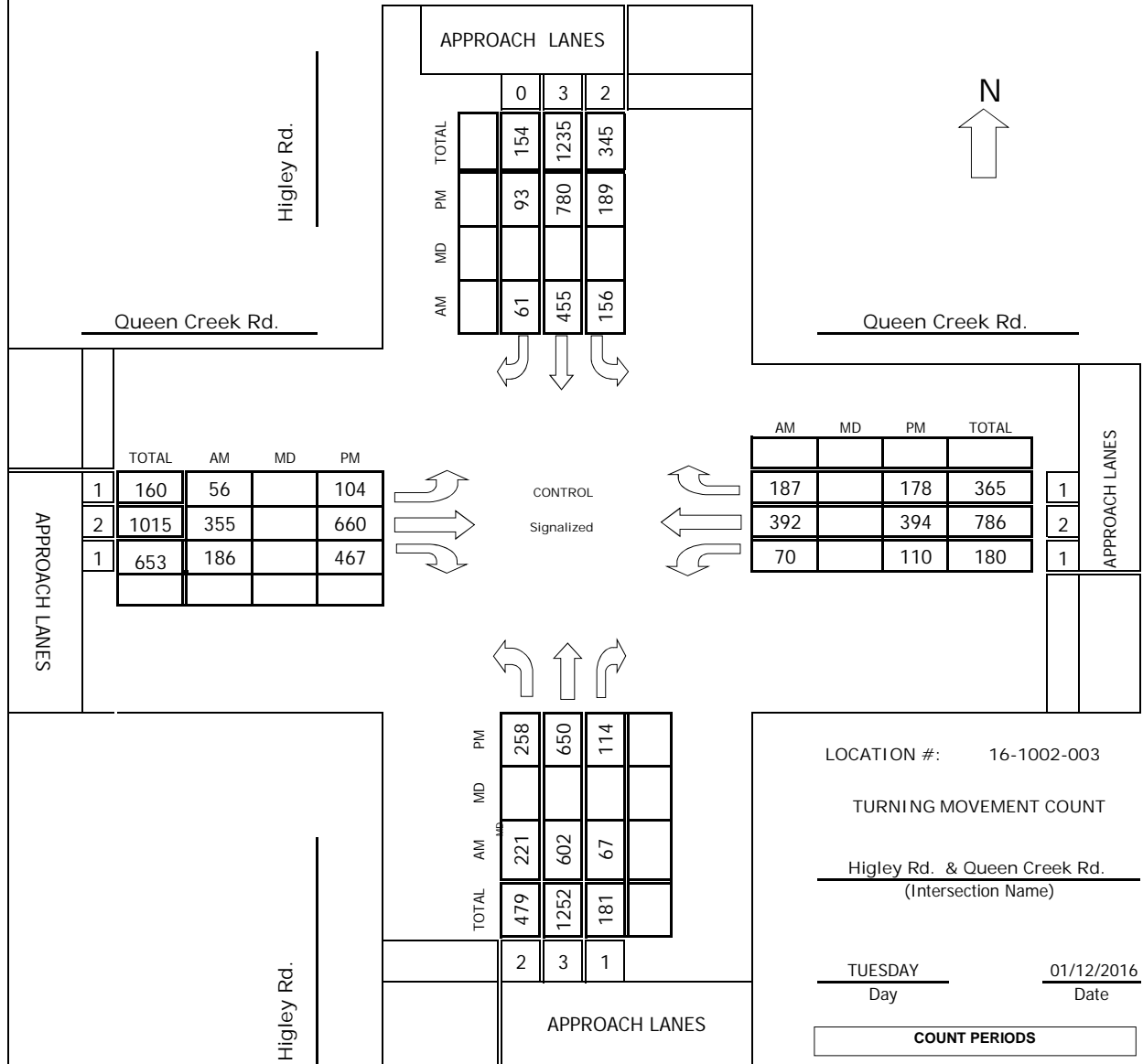
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 5 | 0 | 1 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 3 | 1 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 1 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 1 | 0 |
| TOTAL | 0 | 8 | 2 | 2 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 1 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 3 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 1 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 4 | 1 | 0 |



Project #: 16-1002-003

TMC SUMMARY OF Higley Rd. & Queen Creek Rd.



| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 160 | 56 | | 104 |
| 2 | 1015 | 355 | | 660 |
| 1 | 653 | 186 | | 467 |

| | AM | MD | PM | TOTAL |
|---|-----|----|-----|-------|
| 1 | 187 | | 178 | 365 |
| 2 | 392 | | 394 | 786 |
| 1 | 70 | | 110 | 180 |

| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 2 | 479 | 221 | | 258 |
| 3 | 1252 | 602 | | 650 |
| 1 | 181 | 67 | | 114 |

LOCATION #: 16-1002-003

TURNING MOVEMENT COUNT

Higley Rd. & Queen Creek Rd.
(Intersection Name)

TUESDAY 01/12/2016
Day Date

| COUNT PERIODS | | |
|---------------|--------|---------|
| AM | 1100AM | - 100PM |
| NOON | - | - |
| PM | 430PM | - 630PM |

AM PEAK HOUR 715 AM
 NOON PEAK HOUR _____
 PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Queen Creek Rd.** DAY: **TUESDAY** PROJECT# **16-1002-003**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|-----|----|------------|-----|----|-----------|----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 3 | 1 | 2 | 3 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 43 | 153 | 20 | 29 | 111 | 10 | 14 | 72 | 43 | 20 | 97 | 24 | 636 |
| 11:15 AM | 54 | 149 | 20 | 44 | 106 | 12 | 15 | 80 | 54 | 18 | 95 | 56 | 703 |
| 11:30 AM | 64 | 146 | 19 | 35 | 117 | 15 | 13 | 81 | 46 | 18 | 105 | 44 | 703 |
| 11:45 AM | 58 | 156 | 13 | 44 | 121 | 17 | 17 | 99 | 50 | 15 | 117 | 49 | 756 |
| 12:00 PM | 45 | 151 | 15 | 33 | 111 | 17 | 11 | 95 | 36 | 19 | 75 | 38 | 646 |
| 12:15 PM | 45 | 119 | 10 | 29 | 102 | 15 | 16 | 73 | 47 | 13 | 107 | 29 | 605 |
| 12:30 PM | 55 | 140 | 15 | 41 | 129 | 18 | 16 | 77 | 55 | 11 | 79 | 38 | 674 |
| 12:45 PM | 34 | 116 | 19 | 36 | 135 | 11 | 12 | 75 | 52 | 15 | 81 | 38 | 624 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Volumes | 398 | 1130 | 131 | 291 | 932 | 115 | 114 | 652 | 383 | 129 | 756 | 316 | 5347 |
| Approach % | 23.99 | 68.11 | 7.90 | 21.75 | 69.66 | 8.59 | 9.92 | 56.74 | 33.33 | 10.74 | 62.95 | 26.31 | |
| App/Depart | 1659 | / | 1560 | 1338 | / | 1444 | 1149 | / | 1074 | 1201 | / | 1269 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| Volumes | 221 | 602 | 67 | 156 | 455 | 61 | 56 | 355 | 186 | 70 | 392 | 187 | 2808 |
| Approach % | 24.83 | 67.64 | 7.53 | 23.21 | 67.71 | 9.08 | 9.38 | 59.46 | 31.16 | 10.79 | 60.40 | 28.81 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.972 | 0.923 | 0.899 | 0.896 | 0.929 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.263029, -111.720788**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Queen Creek Rd.** DAY: **TUESDAY** PROJECT#: **16-1002-003**

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 2 | 3 | 1 | 2 | 3 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | |

| | | | | | | | | | | | | | |
|---------|----|-----|----|----|-----|----|----|-----|-----|----|-----|----|------|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 56 | 149 | 22 | 45 | 209 | 17 | 26 | 159 | 125 | 34 | 95 | 52 | 989 |
| 4:45 PM | 66 | 158 | 30 | 43 | 200 | 23 | 27 | 168 | 109 | 34 | 103 | 45 | 1006 |
| 5:00 PM | 65 | 163 | 26 | 48 | 184 | 29 | 29 | 157 | 116 | 25 | 100 | 32 | 974 |
| 5:15 PM | 71 | 180 | 36 | 53 | 187 | 24 | 22 | 176 | 117 | 17 | 96 | 49 | 1028 |
| 5:30 PM | 51 | 191 | 24 | 34 | 180 | 19 | 38 | 189 | 108 | 23 | 76 | 43 | 976 |
| 5:45 PM | 78 | 173 | 28 | 57 | 208 | 11 | 18 | 159 | 117 | 28 | 74 | 37 | 988 |
| 6:00 PM | 55 | 148 | 24 | 43 | 180 | 11 | 27 | 138 | 125 | 16 | 74 | 32 | 873 |
| 6:15 PM | 53 | 146 | 23 | 41 | 168 | 21 | 31 | 156 | 95 | 24 | 81 | 28 | 867 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Volumes | 495 | 1308 | 213 | 364 | 1516 | 155 | 218 | 1302 | 912 | 201 | 699 | 318 | 7701 |
| Approach % | 24.55 | 64.88 | 10.57 | 17.89 | 74.50 | 7.62 | 8.96 | 53.54 | 37.50 | 16.50 | 57.39 | 26.11 | |
| App/Depart | 2016 | / | 1844 | 2035 | / | 2629 | 2432 | / | 1879 | 1218 | / | 1349 | |

PM Peak Hr Begins at: 430 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| Volumes | 258 | 650 | 114 | 189 | 780 | 93 | 104 | 660 | 467 | 110 | 394 | 178 | 3997 |
| Approach % | 25.24 | 63.60 | 11.15 | 17.80 | 73.45 | 8.76 | 8.45 | 53.61 | 37.94 | 16.13 | 57.77 | 26.10 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.890 | 0.980 | 0.977 | 0.937 | 0.972 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.263029, -111.720788**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Queen Creek Rd.

Date: 01/12/2016
Day: TUESDAY

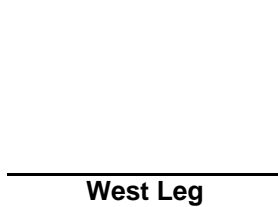
City: Gilbert
Project #: 16-1002-003

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 1 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 1 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 1 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 1 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |

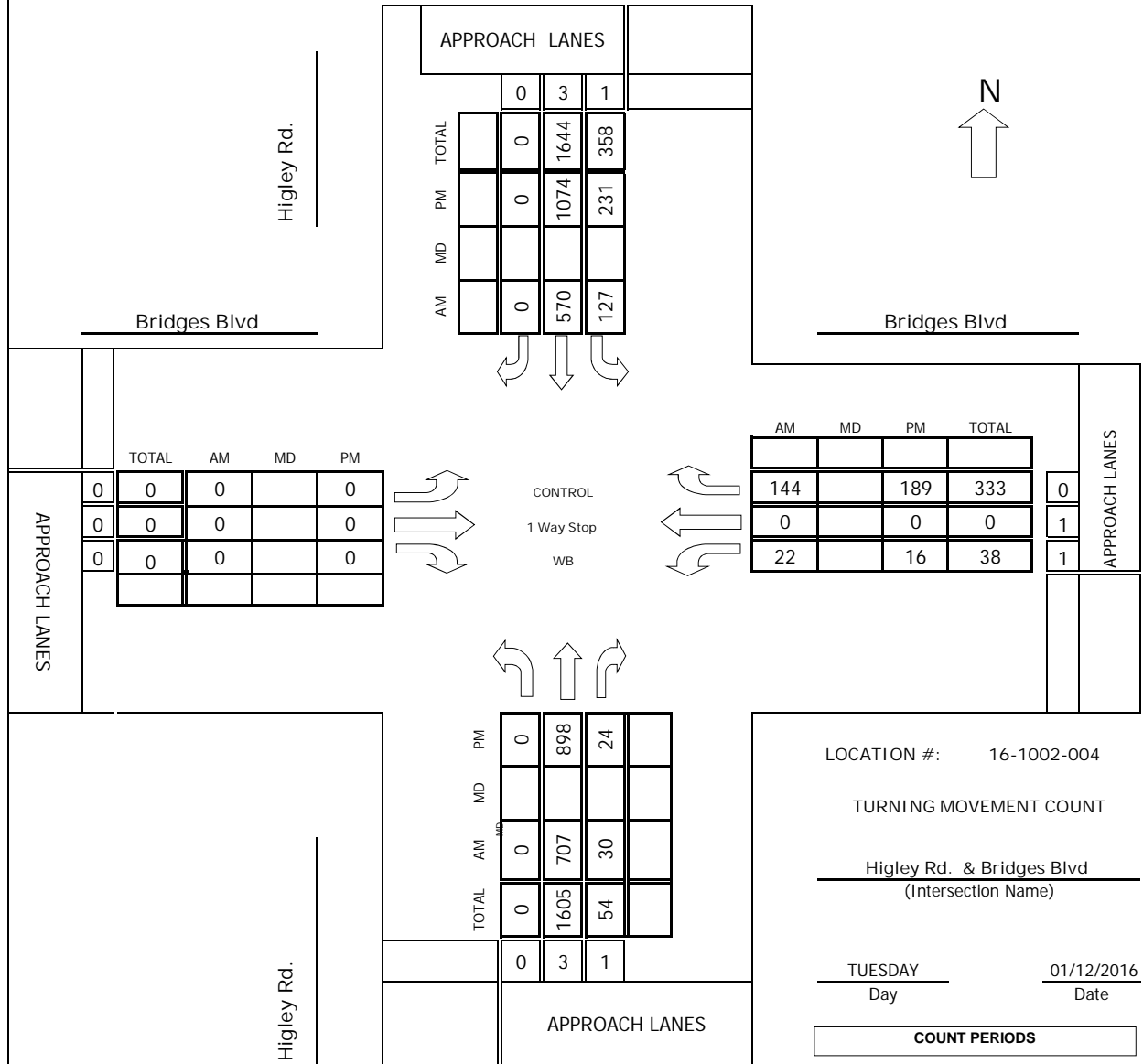
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 1 |
| TOTAL | 0 | 0 | 0 | 1 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 1 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |



Project #: 16-1002-004

TMC SUMMARY OF Higley Rd. & Bridges Blvd



| | | | | | |
|--------------|-------|----------------|---|------|-----|
| | | APPROACH LANES | | | |
| | | 0 | 3 | 1 | |
| Higley Rd. | TOTAL | 0 | 0 | 1644 | 358 |
| | PM | 0 | 0 | 1074 | 231 |
| | AM | 0 | 0 | 570 | 127 |
| Bridges Blvd | | | | | |

| | | | | |
|----------------|-------|---|---|---|
| APPROACH LANES | TOTAL | 0 | 0 | 0 |
| | AM | 0 | 0 | 0 |
| | MD | 0 | 0 | 0 |
| | PM | 0 | 0 | 0 |

| | | | |
|------------|--|--|--|
| CONTROL | | | |
| 1 Way Stop | | | |
| WB | | | |

| | | | | | |
|--|-----|----|-----|-------|----------------|
| | AM | MD | PM | TOTAL | |
| | 144 | | 189 | 333 | 0 |
| | 0 | | 0 | 0 | 1 |
| | 22 | | 16 | 38 | 1 |
| | | | | | APPROACH LANES |

| | | | | |
|----------------|-------|---|-----|----|
| Higley Rd. | TOTAL | 0 | 898 | 24 |
| | AM | 0 | 707 | 30 |
| | MD | 0 | | |
| | PM | 0 | | |
| APPROACH LANES | | 0 | 3 | 1 |

LOCATION #: 16-1002-004

TURNING MOVEMENT COUNT

Higley Rd. & Bridges Blvd
 (Intersection Name)

TUESDAY 01/12/2016
 Day Date

| COUNT PERIODS | | |
|---------------|--------|-------|
| AM | 1100AM | 100PM |
| NOON | - | - |
| PM | 430PM | 630PM |

AM PEAK HOUR 700 AM
 NOON PEAK HOUR _____
 PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytraffic group

N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Bridges Blvd** DAY: **TUESDAY** PROJECT#: **16-1002-004**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | | 3 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|----------|---|-----|----|----|-----|---|---|---|---|---|---|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 0 | 175 | 5 | 41 | 138 | 0 | 0 | 0 | 0 | 5 | 0 | 44 | 408 |
| 11:15 AM | 0 | 178 | 8 | 30 | 145 | 0 | 0 | 0 | 0 | 3 | 0 | 41 | 405 |
| 11:30 AM | 0 | 184 | 10 | 33 | 147 | 0 | 0 | 0 | 0 | 5 | 0 | 37 | 416 |
| 11:45 AM | 0 | 170 | 7 | 23 | 140 | 0 | 0 | 0 | 0 | 9 | 0 | 22 | 371 |
| 12:00 PM | 0 | 144 | 4 | 38 | 125 | 0 | 0 | 0 | 0 | 6 | 0 | 27 | 344 |
| 12:15 PM | 0 | 178 | 8 | 36 | 159 | 0 | 0 | 0 | 0 | 3 | 0 | 28 | 412 |
| 12:30 PM | 0 | 148 | 8 | 35 | 153 | 0 | 0 | 0 | 0 | 5 | 0 | 30 | 379 |
| 12:45 PM | 0 | 152 | 4 | 30 | 163 | 0 | 0 | 0 | 0 | 9 | 0 | 36 | 394 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|------|------|------|------|-------|------|-------|-------|
| Volumes | 0 | 1329 | 54 | 266 | 1170 | 0 | 0 | 0 | 0 | 45 | 0 | 265 | 3129 |
| Approach % | 0.00 | 96.10 | 3.90 | 18.52 | 81.48 | 0.00 | #### | #### | #### | 14.52 | 0.00 | 85.48 | |
| App/Depart | 1383 | / | 1594 | 1436 | / | 1215 | 0 | / | 320 | 310 | / | 0 | |

AM Peak Hr Begins at: 700 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|------|------|------|------|-------|------|-------|------|
| Volumes | 0 | 707 | 30 | 127 | 570 | 0 | 0 | 0 | 0 | 22 | 0 | 144 | 1600 |
| Approach % | 0.00 | 95.93 | 4.07 | 18.22 | 81.78 | 0.00 | #### | #### | #### | 13.25 | 0.00 | 86.75 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.950 | 0.968 | 0.000 | 0.847 | 0.962 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **1 way Stop (WB)**
 COMMENT 1:
 GPS: **33.2589291, -111.720572**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Bridges Blvd** DAY: **TUESDAY** PROJECT#: **16-1002-004**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 3 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|---------|---|-----|----|----|-----|---|---|---|---|---|---|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 0 | 205 | 8 | 45 | 284 | 0 | 0 | 0 | 0 | 4 | 0 | 45 | 591 |
| 4:45 PM | 0 | 212 | 7 | 59 | 260 | 0 | 0 | 0 | 0 | 5 | 0 | 42 | 585 |
| 5:00 PM | 0 | 234 | 8 | 54 | 270 | 0 | 0 | 0 | 0 | 2 | 0 | 50 | 618 |
| 5:15 PM | 0 | 210 | 1 | 58 | 244 | 0 | 0 | 0 | 0 | 3 | 0 | 50 | 566 |
| 5:30 PM | 0 | 242 | 8 | 60 | 300 | 0 | 0 | 0 | 0 | 6 | 0 | 47 | 663 |
| 5:45 PM | 0 | 193 | 5 | 57 | 252 | 0 | 0 | 0 | 0 | 4 | 0 | 43 | 554 |
| 6:00 PM | 0 | 191 | 11 | 49 | 241 | 0 | 0 | 0 | 0 | 2 | 0 | 47 | 541 |
| 6:15 PM | 0 | 185 | 7 | 49 | 216 | 0 | 0 | 0 | 0 | 2 | 0 | 26 | 485 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|------|------|------|------|------|------|-------|-------|
| Volumes | 0 | 1672 | 55 | 431 | 2067 | 0 | 0 | 0 | 0 | 28 | 0 | 350 | 4603 |
| Approach % | 0.00 | 96.82 | 3.18 | 17.25 | 82.75 | 0.00 | #### | #### | #### | 7.41 | 0.00 | 92.59 | |
| App/Depart | 1727 | / | 2022 | 2498 | / | 2095 | 0 | / | 486 | 378 | / | 0 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|------|------|------|------|------|------|-------|------|
| Volumes | 0 | 898 | 24 | 231 | 1074 | 0 | 0 | 0 | 0 | 16 | 0 | 189 | 2432 |
| Approach % | 0.00 | 97.40 | 2.60 | 17.70 | 82.30 | 0.00 | #### | #### | #### | 7.80 | 0.00 | 92.20 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.922 | 0.906 | 0.000 | 0.967 | 0.917 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **1 way Stop (WB)**
 COMMENT 1: **0**
 GPS: **33.2589291, -111.720572**



Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Bridges Blvd

Date: 01/12/2016
Day: TUESDAY

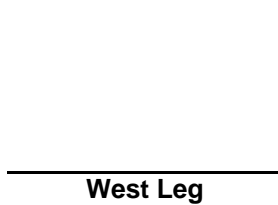
City: Gilbert
Project #: 16-1002-004

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 2 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 2 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 1 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 1 | 0 |



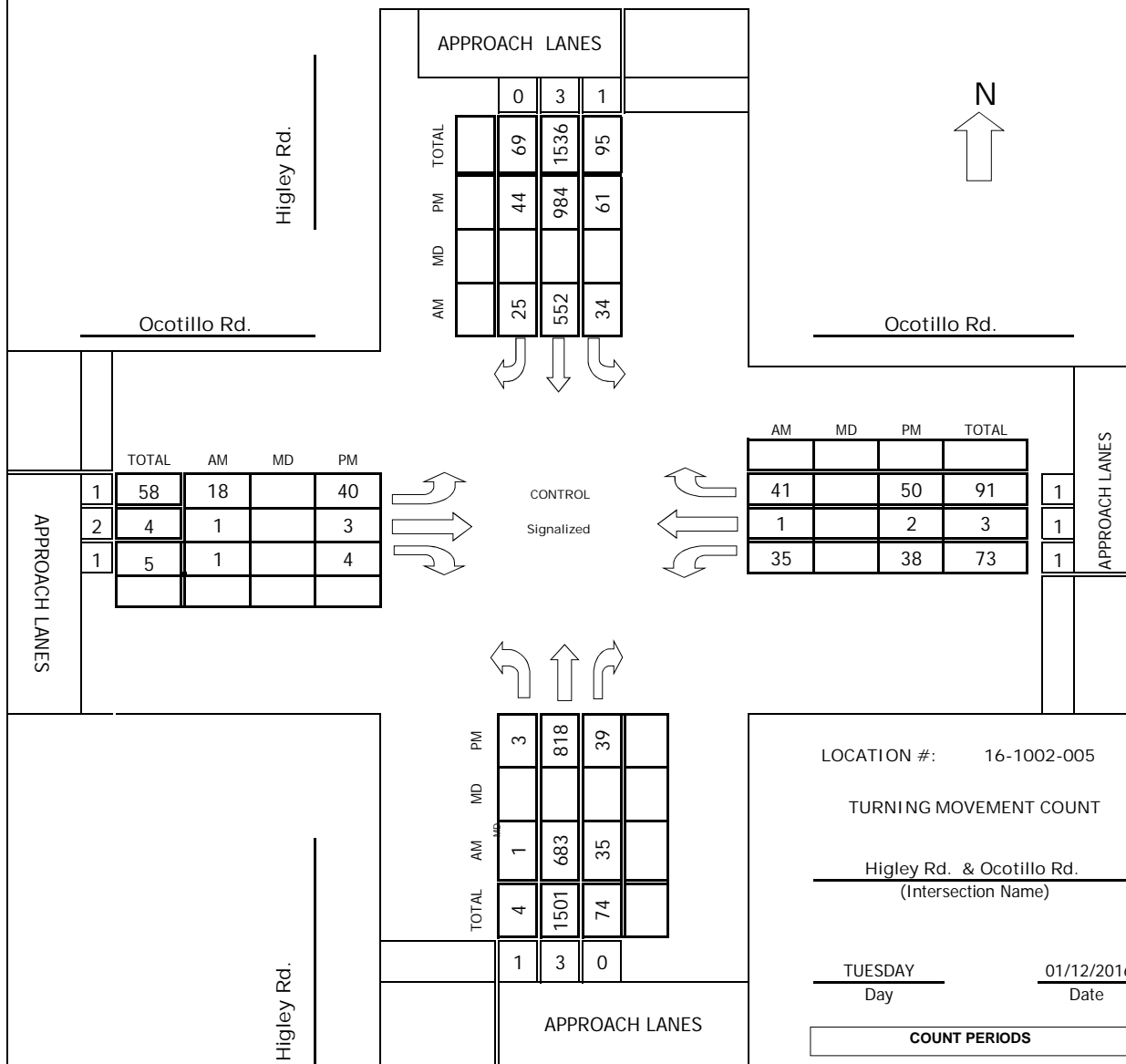
Intersection Turning Movement

Prepared by:



Project #: 16-1002-005

TMC SUMMARY OF Higley Rd. & Ocotillo Rd.



LOCATION #: 16-1002-005

TURNING MOVEMENT COUNT

Higley Rd. & Ocotillo Rd.
(Intersection Name)

TUESDAY
Day

01/12/2016
Date

COUNT PERIODS

| | | | |
|------|--------|---|-------|
| AM | 1100AM | - | 100PM |
| NOON | - | - | - |
| PM | 430PM | - | 630PM |

AM PEAK HOUR 715 AM

NOON PEAK HOUR _____

PM PEAK HOUR 500 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Ocotillo Rd.** DAY: **TUESDAY** PROJECT#: **16-1002-005**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|-----|----|------------|-----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 0 | 159 | 7 | 6 | 138 | 2 | 7 | 1 | 0 | 14 | 0 | 9 | 343 |
| 11:15 AM | 0 | 180 | 5 | 9 | 126 | 6 | 4 | 0 | 1 | 11 | 0 | 13 | 355 |
| 11:30 AM | 0 | 182 | 12 | 7 | 140 | 7 | 8 | 0 | 0 | 9 | 0 | 9 | 374 |
| 11:45 AM | 0 | 150 | 8 | 8 | 148 | 7 | 4 | 0 | 0 | 7 | 1 | 11 | 344 |
| 12:00 PM | 1 | 171 | 10 | 10 | 138 | 5 | 2 | 1 | 0 | 8 | 0 | 8 | 354 |
| 12:15 PM | 1 | 154 | 11 | 8 | 122 | 2 | 4 | 0 | 1 | 10 | 0 | 7 | 320 |
| 12:30 PM | 2 | 159 | 15 | 10 | 140 | 7 | 3 | 0 | 0 | 4 | 0 | 16 | 356 |
| 12:45 PM | 2 | 132 | 10 | 5 | 165 | 4 | 4 | 0 | 0 | 8 | 0 | 4 | 334 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|------|-------|------|-------|------|------|-------|------|-------|-------|
| Volumes | 6 | 1287 | 78 | 63 | 1117 | 40 | 36 | 2 | 2 | 71 | 1 | 77 | 2780 |
| Approach % | 0.44 | 93.87 | 5.69 | 5.16 | 91.56 | 3.28 | 90.00 | 5.00 | 5.00 | 47.65 | 0.67 | 51.68 | |
| App/Depart | 1371 | / | 1400 | 1220 | / | 1190 | 40 | / | 143 | 149 | / | 47 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|------|-------|------|-------|------|------|-------|------|-------|------|
| Volumes | 1 | 683 | 35 | 34 | 552 | 25 | 18 | 1 | 1 | 35 | 1 | 41 | 1427 |
| Approach % | 0.14 | 94.99 | 4.87 | 5.56 | 90.34 | 4.09 | 90.00 | 5.00 | 5.00 | 45.45 | 1.30 | 53.25 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.927 | 0.937 | 0.625 | 0.802 | 0.954 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.248379, -111.720802**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Ocotillo Rd.** DAY: **TUESDAY** PROJECT#: **16-1002-005**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | |

| | | | | | | | | | | | | | |
|---------|---|-----|----|----|-----|----|----|---|---|----|---|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 1 | 173 | 14 | 15 | 268 | 18 | 12 | 0 | 2 | 11 | 0 | 6 | 520 |
| 4:45 PM | 1 | 183 | 8 | 18 | 247 | 12 | 14 | 0 | 1 | 9 | 0 | 13 | 506 |
| 5:00 PM | 0 | 189 | 9 | 14 | 252 | 12 | 10 | 1 | 1 | 16 | 0 | 11 | 515 |
| 5:15 PM | 0 | 210 | 11 | 16 | 239 | 12 | 12 | 0 | 0 | 6 | 0 | 11 | 517 |
| 5:30 PM | 2 | 215 | 9 | 17 | 222 | 12 | 15 | 0 | 2 | 8 | 1 | 10 | 513 |
| 5:45 PM | 1 | 204 | 10 | 14 | 271 | 8 | 3 | 2 | 1 | 8 | 1 | 18 | 541 |
| 6:00 PM | 1 | 168 | 14 | 18 | 247 | 8 | 9 | 0 | 3 | 12 | 1 | 15 | 496 |
| 6:15 PM | 1 | 176 | 5 | 7 | 217 | 8 | 14 | 1 | 0 | 4 | 1 | 9 | 443 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|------|-------|------|-------|------|------|-------|------|-------|-------|
| Volumes | 7 | 1518 | 80 | 119 | 1963 | 90 | 89 | 4 | 10 | 74 | 4 | 93 | 4051 |
| Approach % | 0.44 | 94.58 | 4.98 | 5.48 | 90.38 | 4.14 | 86.41 | 3.88 | 9.71 | 43.27 | 2.34 | 54.39 | |
| App/Depart | 1605 | / | 1700 | 2172 | / | 2047 | 103 | / | 203 | 171 | / | 101 | |

PM Peak Hr Begins at: 500 PM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|------|-------|------|-------|------|------|-------|------|-------|------|
| Volumes | 3 | 818 | 39 | 61 | 984 | 44 | 40 | 3 | 4 | 38 | 2 | 50 | 2086 |
| Approach % | 0.35 | 95.12 | 4.53 | 5.60 | 90.36 | 4.04 | 85.11 | 6.38 | 8.51 | 42.22 | 2.22 | 55.56 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.951 | 0.929 | 0.691 | 0.833 | 0.964 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.248379, -111.720802**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Ocotillo Rd.

Date: 01/12/2016
Day: TUESDAY

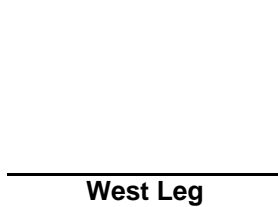
City: Gilbert
Project #: 16-1002-005

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 1 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 1 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 0 |

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 1 |
| 5:15 PM | 0 | 0 | 0 | 1 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 2 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 1 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |



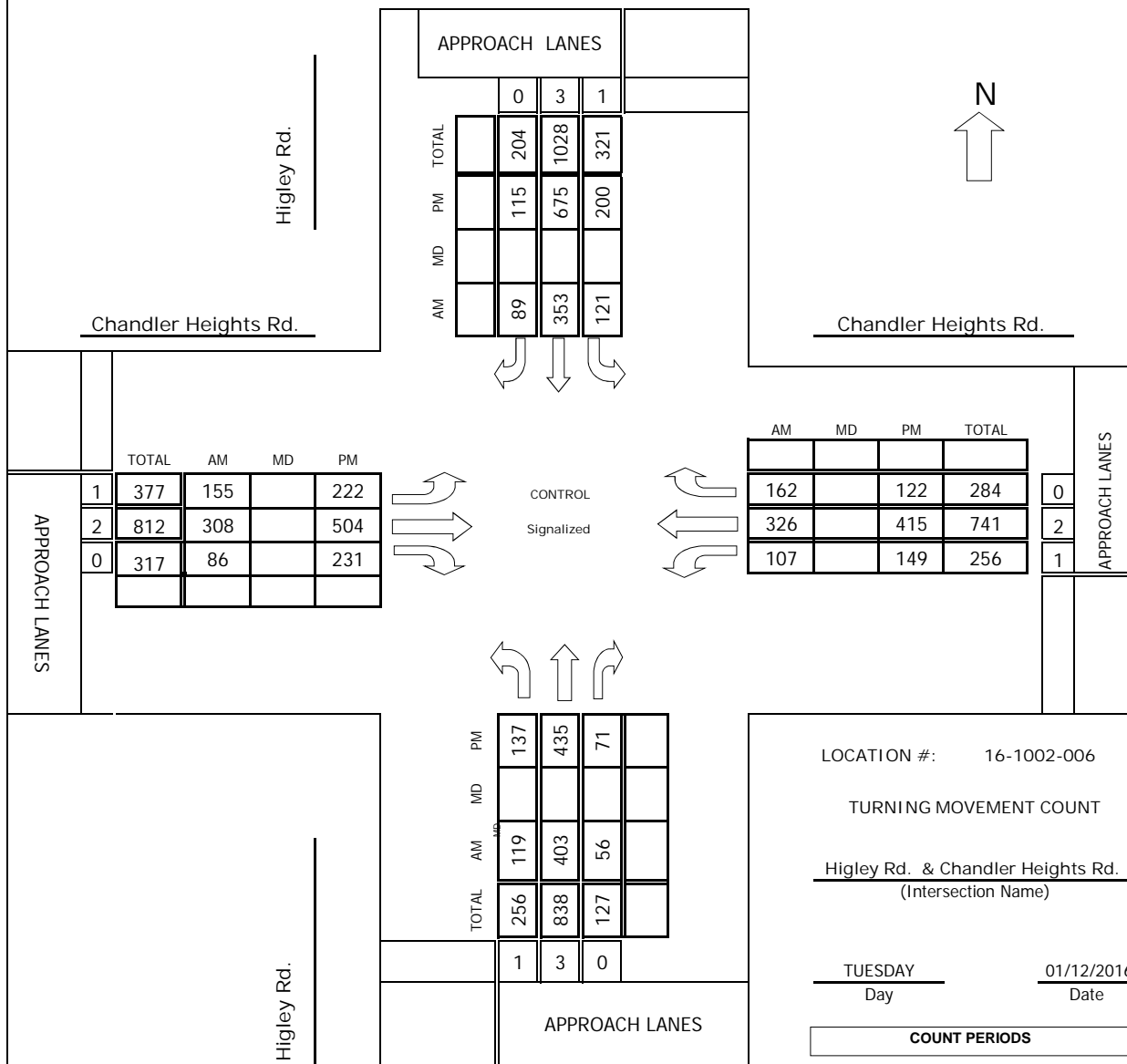
Intersection Turning Movement

Prepared by:



Project #: 16-1002-006

TMC SUMMARY OF Higley Rd. & Chandler Heights Rd.



| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 377 | 155 | | 222 |
| 2 | 812 | 308 | | 504 |
| 0 | 317 | 86 | | 231 |

| | AM | MD | PM | TOTAL | |
|--|-----|----|-----|-------|---|
| | 162 | | 122 | 284 | 0 |
| | 326 | | 415 | 741 | 2 |
| | 107 | | 149 | 256 | 1 |

| | TOTAL | AM | MD | PM |
|--|-------|-----|----|-----|
| | 256 | 119 | | 137 |
| | 838 | 403 | | 435 |
| | 127 | 56 | | 71 |

LOCATION #: 16-1002-006

TURNING MOVEMENT COUNT

Higley Rd. & Chandler Heights Rd.
(Intersection Name)

TUESDAY 01/12/2016
Day Date

| COUNT PERIODS | | |
|---------------|--------|---------|
| AM | 1100AM | - 100PM |
| NOON | - | - |
| PM | 430PM | - 630PM |

AM PEAK HOUR 715 AM
NOON PEAK HOUR _____
PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Chandler Heights Rd.** DAY: **TUESDAY** PROJECT# **16-1002-006**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|-----|----|------------|----|----|-----------|----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 22 | 102 | 13 | 31 | 80 | 26 | 41 | 71 | 18 | 32 | 73 | 29 | 538 |
| 11:15 AM | 23 | 107 | 10 | 35 | 81 | 29 | 41 | 63 | 16 | 31 | 67 | 35 | 538 |
| 11:30 AM | 38 | 105 | 18 | 31 | 77 | 19 | 39 | 83 | 21 | 30 | 82 | 37 | 580 |
| 11:45 AM | 32 | 88 | 18 | 27 | 96 | 18 | 33 | 91 | 27 | 21 | 100 | 52 | 603 |
| 12:00 PM | 26 | 103 | 10 | 28 | 99 | 23 | 42 | 71 | 22 | 25 | 77 | 38 | 564 |
| 12:15 PM | 25 | 77 | 10 | 29 | 97 | 21 | 42 | 58 | 27 | 17 | 75 | 33 | 511 |
| 12:30 PM | 35 | 86 | 14 | 23 | 88 | 19 | 49 | 67 | 32 | 22 | 70 | 27 | 532 |
| 12:45 PM | 30 | 88 | 9 | 28 | 96 | 20 | 37 | 70 | 29 | 14 | 66 | 24 | 511 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 231 | 756 | 102 | 232 | 714 | 175 | 324 | 574 | 192 | 192 | 610 | 275 | 4377 |
| Approach % | 21.21 | 69.42 | 9.37 | 20.70 | 63.69 | 15.61 | 29.72 | 52.66 | 17.61 | 17.83 | 56.64 | 25.53 | |
| App/Depart | 1089 | / | 1355 | 1121 | / | 1098 | 1090 | / | 908 | 1077 | / | 1016 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Volumes | 119 | 403 | 56 | 121 | 353 | 89 | 155 | 308 | 86 | 107 | 326 | 162 | 2285 |
| Approach % | 20.59 | 69.72 | 9.69 | 21.49 | 62.70 | 15.81 | 28.23 | 56.10 | 15.66 | 17.98 | 54.79 | 27.23 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.898 | 0.938 | 0.909 | 0.860 | 0.947 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.233746, -111.720695**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/12/2016** LOCATION: **Gilbert**
 E-W STREET: **Chandler Heights Rd.** DAY: **TUESDAY** PROJECT#: **16-1002-006**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|---------|------------|-----|----|------------|-----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 35 | 98 | 15 | 50 | 182 | 28 | 35 | 142 | 64 | 33 | 91 | 39 | 812 |
| 4:45 PM | 31 | 110 | 15 | 59 | 159 | 31 | 67 | 120 | 43 | 41 | 121 | 31 | 828 |
| 5:00 PM | 38 | 114 | 23 | 46 | 149 | 35 | 58 | 126 | 55 | 33 | 117 | 32 | 826 |
| 5:15 PM | 33 | 113 | 18 | 45 | 185 | 21 | 62 | 116 | 69 | 42 | 86 | 20 | 810 |
| 5:30 PM | 45 | 121 | 13 | 42 | 132 | 30 | 60 | 121 | 57 | 23 | 104 | 34 | 782 |
| 5:45 PM | 41 | 131 | 24 | 49 | 176 | 29 | 67 | 128 | 53 | 22 | 87 | 30 | 837 |
| 6:00 PM | 27 | 102 | 20 | 39 | 157 | 27 | 59 | 120 | 68 | 42 | 69 | 36 | 766 |
| 6:15 PM | 37 | 90 | 11 | 39 | 136 | 34 | 57 | 130 | 36 | 36 | 81 | 28 | 715 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 287 | 879 | 139 | 369 | 1276 | 235 | 465 | 1003 | 445 | 272 | 756 | 250 | 6376 |
| Approach % | 21.99 | 67.36 | 10.65 | 19.63 | 67.87 | 12.50 | 24.31 | 52.43 | 23.26 | 21.28 | 59.15 | 19.56 | |
| App/Depart | 1305 | / | 1594 | 1880 | / | 1993 | 1913 | / | 1511 | 1278 | / | 1278 | |

PM Peak Hr Begins at: 430 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Volumes | 137 | 435 | 71 | 200 | 675 | 115 | 222 | 504 | 231 | 149 | 415 | 122 | 3276 |
| Approach % | 21.31 | 67.65 | 11.04 | 20.20 | 68.18 | 11.62 | 23.20 | 52.66 | 24.14 | 21.72 | 60.50 | 17.78 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.919 | 0.952 | 0.969 | 0.889 | 0.989 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.233746, -111.720695**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Chandler Heights Rd.

Date: 01/12/2016
Day: TUESDAY

City: Gilbert
Project #: 16-1002-006

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 1 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |

| | PEDESTRIANS | | | |
|--------------|-------------|-----------|----------|-----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 1 |
| 4:45 PM | 2 | 5 | 2 | 2 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 5 | 4 | 6 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 1 | 0 |
| 6:00 PM | 2 | 5 | 2 | 6 |
| 6:15 PM | 0 | 2 | 0 | 0 |
| TOTAL | 4 | 17 | 9 | 15 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 1 | 0 | 0 | 0 |
| 4:45 PM | 1 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 1 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 2 | 1 | 3 |
| 6:00 PM | 1 | 2 | 1 | 1 |
| 6:15 PM | 3 | 0 | 0 | 0 |
| TOTAL | 6 | 5 | 2 | 4 |



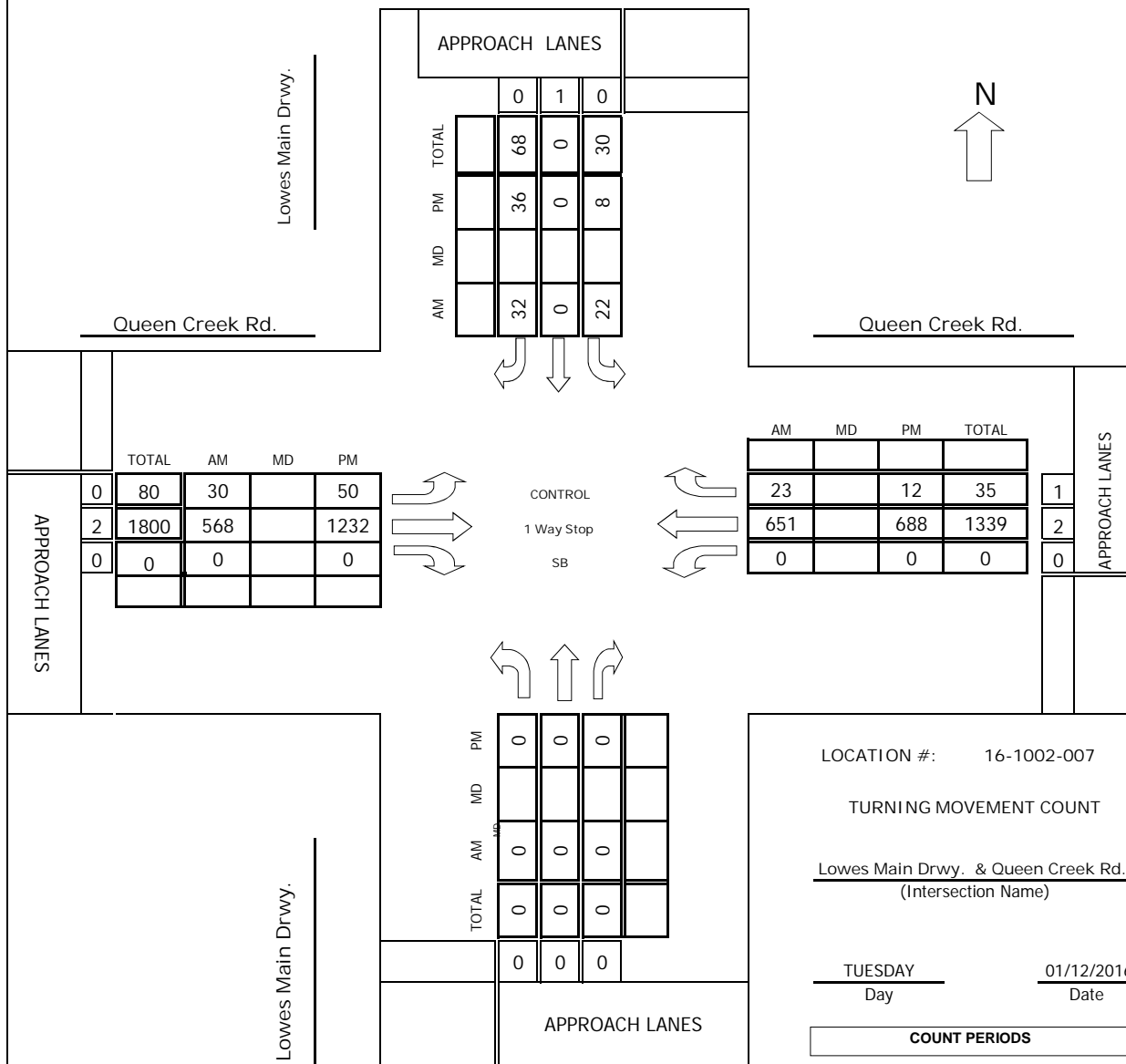
Intersection Turning Movement

Prepared by:



Project #: 16-1002-007

TMC SUMMARY OF Lowes Main Drwy. & Queen Creek Rd.



| APPROACH LANES | |
|----------------|---|
| 0 | 1 |
| 68 | 0 |
| 36 | 0 |
| 32 | 0 |
| 22 | 0 |

| | | |
|----|---|----|
| 0 | 1 | 0 |
| 68 | 0 | 30 |
| 36 | 0 | 8 |
| 32 | 0 | 22 |

| AM | MD | PM | TOTAL |
|-----|-----|------|-------|
| 23 | 12 | 35 | 1 |
| 651 | 688 | 1339 | 2 |
| 0 | 0 | 0 | 0 |

| | TOTAL | AM | MD | PM |
|---|-------|-----|------|----|
| 0 | 80 | 30 | 50 | 0 |
| 2 | 1800 | 568 | 1232 | 0 |
| 0 | 0 | 0 | 0 | 0 |

| | | |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |

| AM | MD | PM | TOTAL |
|----|----|----|-------|
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |

LOCATION #: 16-1002-007

TURNING MOVEMENT COUNT

Lowes Main Drwy. & Queen Creek Rd.
(Intersection Name)

TUESDAY 01/12/2016
Day Date

| COUNT PERIODS | | |
|---------------|----------|-------|
| AM | 1100AM - | 100PM |
| NOON | - | - |
| PM | 430PM - | 630PM |

AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Lowes Main Drwy. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: TUESDAY PROJECT#: 16-1002-007

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | |

| | | | | | | | | | | | | | |
|----------|---|---|---|---|---|----|----|-----|---|---|-----|---|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 0 | 0 | 0 | 2 | 0 | 13 | 7 | 123 | 0 | 0 | 138 | 5 | 288 |
| 11:15 AM | 0 | 0 | 0 | 5 | 0 | 5 | 6 | 144 | 0 | 0 | 155 | 8 | 323 |
| 11:30 AM | 0 | 0 | 0 | 6 | 0 | 6 | 7 | 131 | 0 | 0 | 183 | 4 | 337 |
| 11:45 AM | 0 | 0 | 0 | 4 | 0 | 8 | 5 | 161 | 0 | 0 | 145 | 4 | 327 |
| 12:00 PM | 0 | 0 | 0 | 7 | 0 | 13 | 12 | 132 | 0 | 0 | 168 | 7 | 339 |
| 12:15 PM | 0 | 0 | 0 | 4 | 0 | 12 | 19 | 133 | 0 | 0 | 110 | 5 | 283 |
| 12:30 PM | 0 | 0 | 0 | 2 | 0 | 11 | 9 | 149 | 0 | 0 | 172 | 7 | 350 |
| 12:45 PM | 0 | 0 | 0 | 6 | 0 | 15 | 15 | 132 | 0 | 0 | 178 | 5 | 351 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|------|------|-------|------|-------|------|-------|------|------|-------|------|-------|
| Volumes | 0 | 0 | 0 | 36 | 0 | 83 | 80 | 1105 | 0 | 0 | 1249 | 45 | 2598 |
| Approach % | #### | #### | #### | 30.25 | 0.00 | 69.75 | 6.75 | 93.25 | 0.00 | 0.00 | 96.52 | 3.48 | |
| App/Depart | 0 | / | 125 | 119 | / | 0 | 1185 | / | 1141 | 1294 | / | 1332 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|------|------|-------|------|-------|------|-------|------|------|-------|------|------|
| Volumes | 0 | 0 | 0 | 22 | 0 | 32 | 30 | 568 | 0 | 0 | 651 | 23 | 1326 |
| Approach % | #### | #### | #### | 40.74 | 0.00 | 59.26 | 5.02 | 94.98 | 0.00 | 0.00 | 96.59 | 3.41 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.675 | 0.901 | 0.901 | 0.978 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 1 Way Stop (SB)
 COMMENT 1:
 GPS: 33.277515, -111.720818

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Lowes Main Drwy. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: TUESDAY PROJECT#: 16-1002-007

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | |

| | | | | | | | | | | | | | |
|---------|---|---|---|---|---|----|----|-----|---|---|-----|---|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 0 | 0 | 0 | 2 | 0 | 8 | 14 | 316 | 0 | 0 | 126 | 4 | 470 |
| 4:45 PM | 0 | 0 | 0 | 1 | 0 | 9 | 14 | 305 | 0 | 0 | 155 | 5 | 489 |
| 5:00 PM | 0 | 0 | 0 | 4 | 0 | 9 | 10 | 297 | 0 | 0 | 156 | 5 | 481 |
| 5:15 PM | 0 | 0 | 0 | 1 | 0 | 8 | 15 | 318 | 0 | 0 | 181 | 1 | 524 |
| 5:30 PM | 0 | 0 | 0 | 2 | 0 | 10 | 11 | 312 | 0 | 0 | 196 | 1 | 532 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 307 | 0 | 0 | 154 | 3 | 478 |
| 6:00 PM | 0 | 0 | 0 | 1 | 0 | 11 | 10 | 291 | 0 | 0 | 141 | 3 | 457 |
| 6:15 PM | 0 | 0 | 0 | 2 | 0 | 8 | 9 | 273 | 0 | 0 | 146 | 3 | 441 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|------|-------|------|-------|------|------|-------|------|-------|
| Volumes | 0 | 0 | 0 | 13 | 0 | 70 | 90 | 2419 | 0 | 0 | 1255 | 25 | 3872 |
| Approach % | ##### | ##### | ##### | 15.66 | 0.00 | 84.34 | 3.59 | 96.41 | 0.00 | 0.00 | 98.05 | 1.95 | |
| App/Depart | 0 | / | 115 | 83 | / | 0 | 2509 | / | 2432 | 1280 | / | 1325 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|------|-------|------|-------|------|------|-------|------|------|
| Volumes | 0 | 0 | 0 | 8 | 0 | 36 | 50 | 1232 | 0 | 0 | 688 | 12 | 2026 |
| Approach % | ##### | ##### | ##### | 18.18 | 0.00 | 81.82 | 3.90 | 96.10 | 0.00 | 0.00 | 98.29 | 1.71 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.846 | 0.962 | 0.888 | 0.952 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 1 Way Stop (SB)
 COMMENT 1: 0
 GPS: 33.277515, -111.720818



Pedestrian & Bicycle Study

N-S STREET: Lowes Main Drwy.
E-W STREET: Queen Creek Rd.

Date: 01/12/2016
Day: TUESDAY

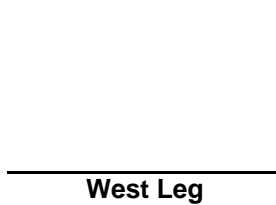
City: Gilbert
Project #: 16-1002-007

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 1 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 2 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 2 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 1 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 0 |



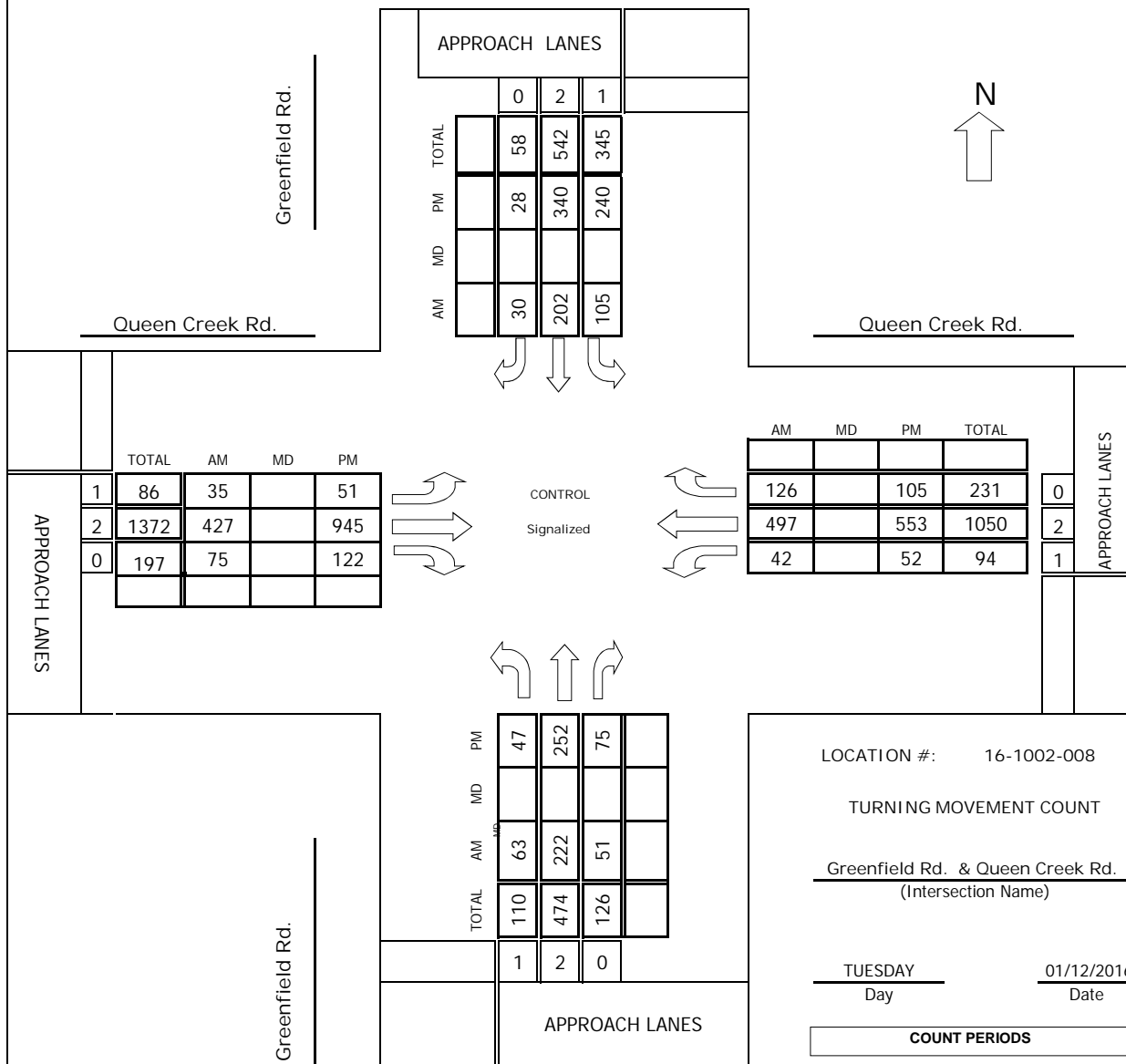
Intersection Turning Movement

Prepared by:



Project #: 16-1002-008

TMC SUMMARY OF Greenfield Rd. & Queen Creek Rd.



| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 86 | 35 | | 51 |
| 2 | 1372 | 427 | | 945 |
| 0 | 197 | 75 | | 122 |

| | AM | MD | PM | TOTAL |
|---|-----|----|-----|-------|
| 0 | 126 | | 105 | 231 |
| 2 | 497 | | 553 | 1050 |
| 1 | 42 | | 52 | 94 |

| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 110 | 63 | | 47 |
| 2 | 474 | 222 | | 252 |
| 0 | 126 | 51 | | 75 |

LOCATION #: 16-1002-008

TURNING MOVEMENT COUNT

Greenfield Rd. & Queen Creek Rd.
(Intersection Name)

TUESDAY 01/12/2016
Day Date

| COUNT PERIODS | | |
|---------------|--------|---------|
| AM | 1100AM | - 100PM |
| NOON | - | - |
| PM | 430PM | - 630PM |

AM PEAK HOUR 715 AM
NOON PEAK HOUR _____
PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: TUESDAY PROJECT#: 16-1002-008

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|----|----|------------|----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 12 | 56 | 11 | 26 | 43 | 15 | 9 | 101 | 13 | 5 | 89 | 35 | 415 |
| 11:15 AM | 20 | 56 | 14 | 29 | 40 | 8 | 11 | 98 | 15 | 12 | 138 | 29 | 470 |
| 11:30 AM | 14 | 61 | 9 | 32 | 56 | 8 | 6 | 121 | 23 | 9 | 136 | 35 | 510 |
| 11:45 AM | 17 | 57 | 16 | 20 | 54 | 7 | 10 | 104 | 20 | 13 | 119 | 28 | 465 |
| 12:00 PM | 12 | 48 | 12 | 24 | 52 | 7 | 8 | 104 | 17 | 8 | 104 | 34 | 430 |
| 12:15 PM | 6 | 32 | 10 | 39 | 54 | 5 | 8 | 118 | 17 | 13 | 121 | 27 | 450 |
| 12:30 PM | 13 | 39 | 7 | 39 | 59 | 4 | 9 | 107 | 18 | 9 | 107 | 19 | 430 |
| 12:45 PM | 6 | 53 | 7 | 40 | 53 | 8 | 10 | 119 | 15 | 17 | 111 | 29 | 468 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|-------|
| Volumes | 100 | 402 | 86 | 249 | 411 | 62 | 71 | 872 | 138 | 86 | 925 | 236 | 3638 |
| Approach % | 17.01 | 68.37 | 14.63 | 34.49 | 56.93 | 8.59 | 6.57 | 80.67 | 12.77 | 6.90 | 74.18 | 18.93 | |
| App/Depart | 588 | / | 709 | 722 | / | 635 | 1081 | / | 1207 | 1247 | / | 1087 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|------|
| Volumes | 63 | 222 | 51 | 105 | 202 | 30 | 35 | 427 | 75 | 42 | 497 | 126 | 1875 |
| Approach % | 18.75 | 66.07 | 15.18 | 31.16 | 59.94 | 8.90 | 6.52 | 79.52 | 13.97 | 6.32 | 74.74 | 18.95 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.933 | 0.878 | 0.895 | 0.924 | 0.919 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1:
 GPS: 33.263041, -111.738136

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: TUESDAY PROJECT#: 16-1002-008

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|---------|------------|----|----|------------|----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 10 | 65 | 18 | 59 | 92 | 9 | 16 | 249 | 29 | 8 | 146 | 39 | 740 |
| 4:45 PM | 12 | 50 | 21 | 51 | 81 | 4 | 11 | 233 | 31 | 14 | 128 | 25 | 661 |
| 5:00 PM | 15 | 64 | 25 | 53 | 99 | 9 | 11 | 213 | 36 | 13 | 137 | 18 | 693 |
| 5:15 PM | 10 | 73 | 11 | 77 | 68 | 6 | 13 | 250 | 26 | 17 | 142 | 23 | 716 |
| 5:30 PM | 24 | 75 | 15 | 58 | 84 | 9 | 12 | 245 | 26 | 17 | 125 | 31 | 721 |
| 5:45 PM | 10 | 45 | 17 | 63 | 89 | 17 | 7 | 226 | 32 | 10 | 103 | 21 | 640 |
| 6:00 PM | 13 | 61 | 22 | 43 | 71 | 6 | 13 | 213 | 22 | 14 | 123 | 17 | 618 |
| 6:15 PM | 7 | 52 | 16 | 44 | 54 | 4 | 10 | 172 | 28 | 16 | 113 | 24 | 540 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|-------|
| Volumes | 101 | 485 | 145 | 448 | 638 | 64 | 93 | 1801 | 230 | 109 | 1017 | 198 | 5329 |
| Approach % | 13.82 | 66.35 | 19.84 | 38.96 | 55.48 | 5.57 | 4.38 | 84.79 | 10.83 | 8.23 | 76.81 | 14.95 | |
| App/Depart | 731 | / | 776 | 1150 | / | 977 | 2124 | / | 2394 | 1324 | / | 1182 | |

PM Peak Hr Begins at: 430 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|------|
| Volumes | 47 | 252 | 75 | 240 | 340 | 28 | 51 | 945 | 122 | 52 | 553 | 105 | 2810 |
| Approach % | 12.57 | 67.38 | 20.05 | 39.47 | 55.92 | 4.61 | 4.56 | 84.53 | 10.91 | 7.32 | 77.89 | 14.79 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.899 | 0.944 | 0.951 | 0.920 | 0.949 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1: 0
 GPS: 33.263041, -111.738136

Pedestrian & Bicycle Study

N-S STREET: Greenfield Rd.
E-W STREET: Queen Creek Rd.

Date: 01/12/2016
Day: TUESDAY

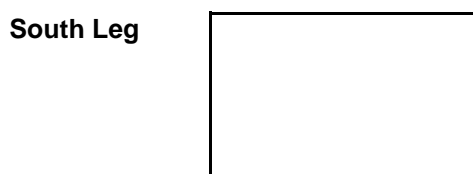
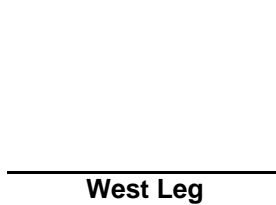
City: Gilbert
Project #: 16-1002-008

| PEDESTRIANS | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| BICYCLES | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 1 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 1 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 1 | 0 |
| 12:45 PM | 0 | 1 | 0 | 0 |
| TOTAL | 0 | 2 | 2 | 0 |

| PEDESTRIANS | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 1 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 1 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 1 | 1 | 0 |

| BICYCLES | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 1 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 1 | 0 |



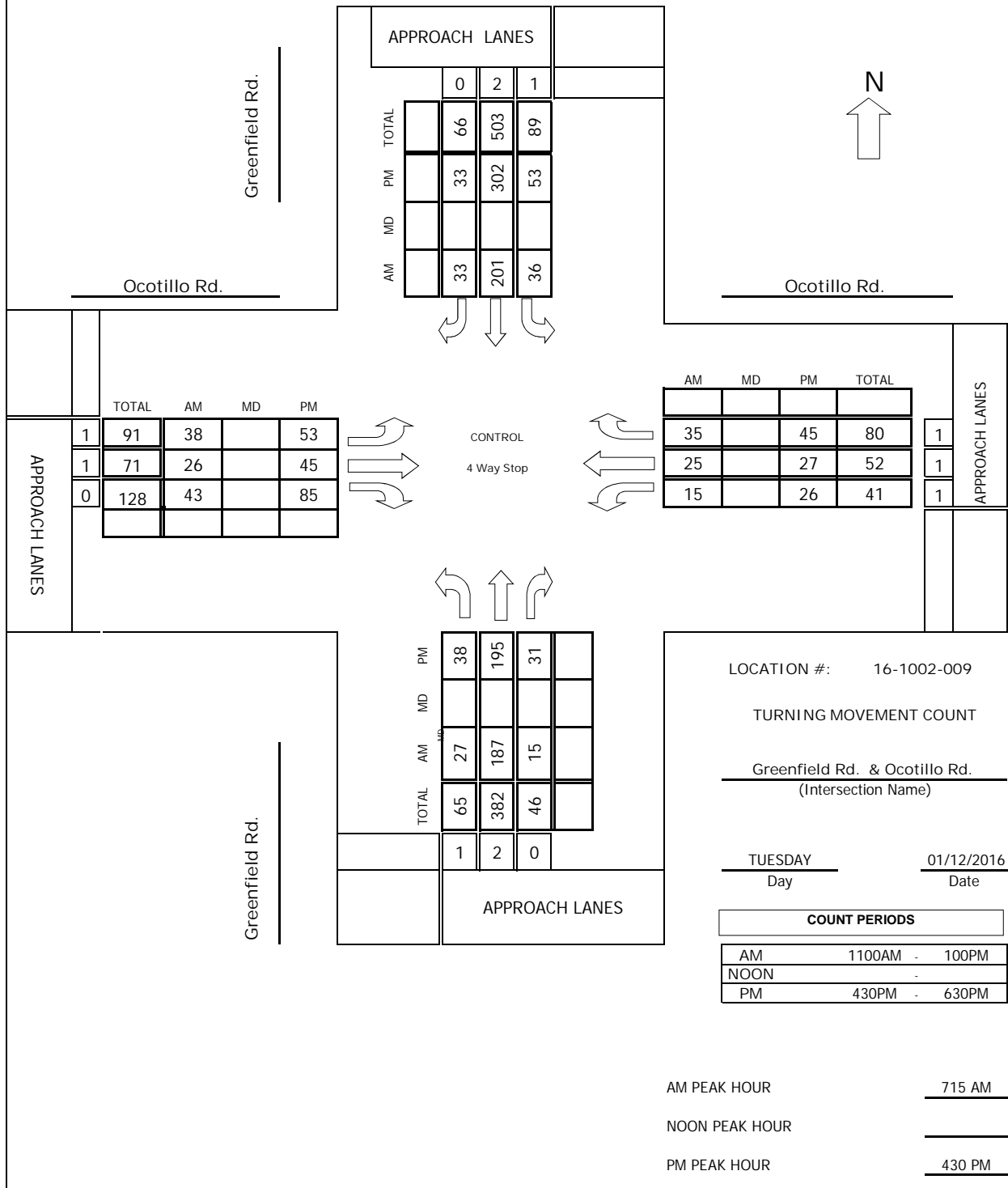
Intersection Turning Movement

Prepared by:



Project #: 16-1002-009

TMC SUMMARY OF Greenfield Rd. & Ocotillo Rd.



Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Ocotillo Rd. DAY: TUESDAY PROJECT#: 16-1002-009

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 5 | 58 | 1 | 5 | 48 | 7 | 17 | 8 | 7 | 2 | 4 | 5 | 167 |
| 11:15 AM | 4 | 46 | 6 | 2 | 41 | 5 | 10 | 7 | 9 | 3 | 8 | 4 | 145 |
| 11:30 AM | 5 | 64 | 2 | 14 | 54 | 11 | 10 | 8 | 16 | 6 | 6 | 7 | 203 |
| 11:45 AM | 11 | 40 | 4 | 8 | 46 | 10 | 15 | 3 | 12 | 2 | 2 | 11 | 164 |
| 12:00 PM | 7 | 37 | 3 | 12 | 60 | 7 | 3 | 8 | 6 | 4 | 9 | 13 | 169 |
| 12:15 PM | 8 | 33 | 8 | 10 | 44 | 7 | 1 | 6 | 5 | 3 | 8 | 5 | 138 |
| 12:30 PM | 4 | 46 | 2 | 4 | 58 | 3 | 2 | 5 | 16 | 2 | 3 | 4 | 149 |
| 12:45 PM | 8 | 43 | 5 | 10 | 54 | 5 | 7 | 5 | 4 | 4 | 4 | 8 | 157 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 52 | 367 | 31 | 65 | 405 | 55 | 65 | 50 | 75 | 26 | 44 | 57 | 1292 |
| Approach % | 11.56 | 81.56 | 6.89 | 12.38 | 77.14 | 10.48 | 34.21 | 26.32 | 39.47 | 20.47 | 34.65 | 44.88 | |
| App/Depart | 450 | / | 489 | 525 | / | 506 | 190 | / | 146 | 127 | / | 151 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Volumes | 27 | 187 | 15 | 36 | 201 | 33 | 38 | 26 | 43 | 15 | 25 | 35 | 681 |
| Approach % | 11.79 | 81.66 | 6.55 | 13.33 | 74.44 | 12.22 | 35.51 | 24.30 | 40.19 | 20.00 | 33.33 | 46.67 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.806 | 0.854 | 0.787 | 0.721 | 0.839 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 4 Way Stop
 COMMENT 1:
 GPS: 33.248501, -111.738267

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Ocotillo Rd. DAY: TUESDAY PROJECT#: 16-1002-009

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | |

| | | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|---|----|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 12 | 46 | 4 | 11 | 93 | 7 | 14 | 15 | 19 | 4 | 5 | 13 | 243 |
| 4:45 PM | 7 | 44 | 12 | 12 | 73 | 8 | 13 | 13 | 16 | 6 | 9 | 11 | 224 |
| 5:00 PM | 7 | 49 | 7 | 18 | 80 | 14 | 14 | 8 | 28 | 8 | 10 | 11 | 254 |
| 5:15 PM | 12 | 56 | 8 | 12 | 56 | 4 | 12 | 9 | 22 | 8 | 3 | 10 | 212 |
| 5:30 PM | 5 | 56 | 9 | 13 | 73 | 3 | 13 | 11 | 22 | 6 | 6 | 12 | 229 |
| 5:45 PM | 6 | 43 | 8 | 16 | 84 | 7 | 13 | 7 | 11 | 9 | 4 | 10 | 218 |
| 6:00 PM | 9 | 37 | 6 | 10 | 61 | 6 | 16 | 9 | 9 | 2 | 6 | 9 | 180 |
| 6:15 PM | 4 | 47 | 8 | 7 | 51 | 4 | 7 | 8 | 14 | 3 | 5 | 6 | 164 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 62 | 378 | 62 | 99 | 571 | 53 | 102 | 80 | 141 | 46 | 48 | 82 | 1724 |
| Approach % | 12.35 | 75.30 | 12.35 | 13.69 | 78.98 | 7.33 | 31.58 | 24.77 | 43.65 | 26.14 | 27.27 | 46.59 | |
| App/Depart | 502 | / | 562 | 723 | / | 758 | 323 | / | 241 | 176 | / | 163 | |

PM Peak Hr Begins at: 430 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-----|
| Volumes | 38 | 195 | 31 | 53 | 302 | 33 | 53 | 45 | 85 | 26 | 27 | 45 | 933 |
| Approach % | 14.39 | 73.86 | 11.74 | 13.66 | 77.84 | 8.51 | 28.96 | 24.59 | 46.45 | 26.53 | 27.55 | 45.92 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.868 | 0.866 | 0.915 | 0.845 | 0.918 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 4 Way Stop
 COMMENT 1: 0
 GPS: 33.248501, -111.738267

Pedestrian & Bicycle Study

N-S STREET: Greenfield Rd.
E-W STREET: Ocotillo Rd.

Date: 01/12/2016
Day: TUESDAY

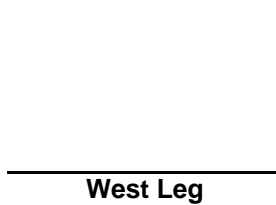
City: Gilbert
Project #: 16-1002-009

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 1 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |

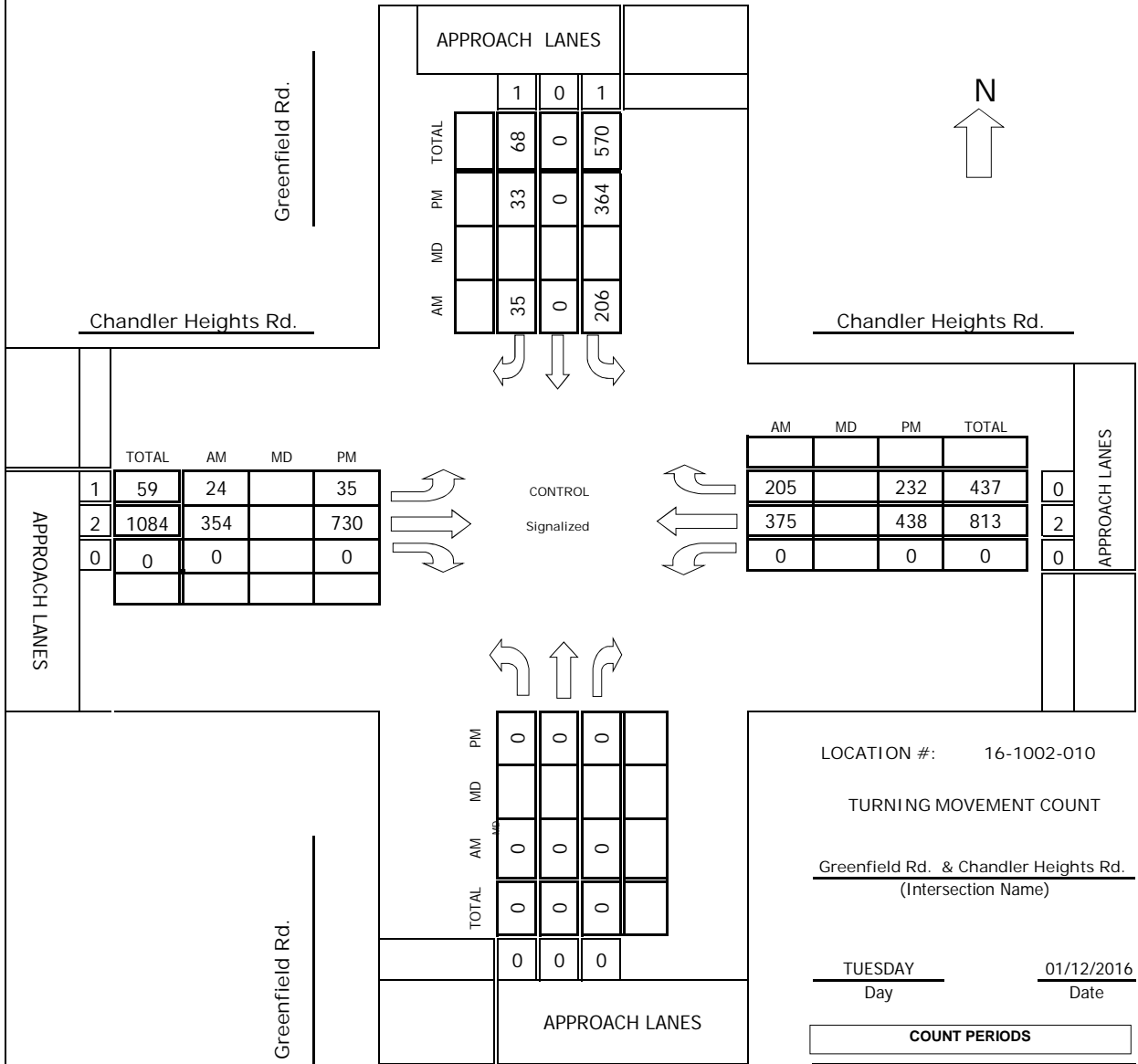
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 1 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 1 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |



Project #: 16-1002-010

TMC SUMMARY OF Greenfield Rd. & Chandler Heights Rd.



| APPROACH LANES | | 1 | 0 | 1 |
|----------------|--|----|---|-----|
| TOTAL | | 68 | 0 | 570 |
| PM | | 33 | 0 | 364 |
| MD | | | | |
| AM | | 35 | 0 | 206 |

| AM | MD | PM | TOTAL |
|-----|----|-----|-------|
| 205 | | 232 | 437 |
| 375 | | 438 | 813 |
| 0 | | 0 | 0 |

| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 59 | 24 | | 35 |
| 2 | 1084 | 354 | | 730 |
| 0 | 0 | 0 | | 0 |

| TOTAL | AM | MD | PM |
|-------|----|----|----|
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |

LOCATION #: 16-1002-010
 TURNING MOVEMENT COUNT
 Greenfield Rd. & Chandler Heights Rd.
 (Intersection Name)
 TUESDAY 01/12/2016
 Day Date

| COUNT PERIODS | | |
|---------------|--------|-------|
| AM | 1100AM | 100PM |
| NOON | - | - |
| PM | 430PM | 630PM |

AM PEAK HOUR 715 AM
 NOON PEAK HOUR _____
 PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Chandler Heights Rd. DAY: TUESDAY PROJECT#: 16-1002-010

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | |

| | | | | | | | | | | | | | |
|----------|---|---|---|----|---|----|---|----|---|---|-----|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 0 | 0 | 0 | 47 | 0 | 10 | 5 | 76 | 0 | 0 | 85 | 46 | 269 |
| 11:15 AM | 0 | 0 | 0 | 39 | 0 | 5 | 8 | 87 | 0 | 0 | 95 | 57 | 291 |
| 11:30 AM | 0 | 0 | 0 | 56 | 0 | 8 | 5 | 82 | 0 | 0 | 104 | 50 | 305 |
| 11:45 AM | 0 | 0 | 0 | 64 | 0 | 15 | 5 | 86 | 0 | 0 | 93 | 52 | 315 |
| 12:00 PM | 0 | 0 | 0 | 47 | 0 | 7 | 6 | 99 | 0 | 0 | 83 | 46 | 288 |
| 12:15 PM | 0 | 0 | 0 | 64 | 0 | 13 | 4 | 78 | 0 | 0 | 98 | 32 | 289 |
| 12:30 PM | 0 | 0 | 0 | 40 | 0 | 9 | 8 | 97 | 0 | 0 | 80 | 53 | 287 |
| 12:45 PM | 0 | 0 | 0 | 60 | 0 | 5 | 6 | 76 | 0 | 0 | 89 | 47 | 283 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|------|------|-------|------|-------|------|-------|------|------|-------|-------|-------|
| Volumes | 0 | 0 | 0 | 417 | 0 | 72 | 47 | 681 | 0 | 0 | 727 | 383 | 2327 |
| Approach % | #### | #### | #### | 85.28 | 0.00 | 14.72 | 6.46 | 93.54 | 0.00 | 0.00 | 65.50 | 34.50 | |
| App/Depart | 0 | / | 430 | 489 | / | 0 | 728 | / | 1098 | 1110 | / | 799 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|------|------|-------|------|-------|------|-------|------|------|-------|-------|------|
| Volumes | 0 | 0 | 0 | 206 | 0 | 35 | 24 | 354 | 0 | 0 | 375 | 205 | 1199 |
| Approach % | #### | #### | #### | 85.48 | 0.00 | 14.52 | 6.35 | 93.65 | 0.00 | 0.00 | 64.66 | 35.34 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.763 | 0.900 | 0.942 | 0.952 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1:
 GPS: 33.233720, -111.738513

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/12/2016 LOCATION: Gilbert
 E-W STREET: Chandler Heights Rd. DAY: TUESDAY PROJECT#: 16-1002-010

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | |

| | | | | | | | | | | | | | |
|---------|---|---|---|-----|---|----|----|-----|---|---|-----|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 0 | 0 | 0 | 66 | 0 | 8 | 10 | 179 | 0 | 0 | 119 | 58 | 440 |
| 4:45 PM | 0 | 0 | 0 | 110 | 0 | 12 | 6 | 186 | 0 | 0 | 118 | 48 | 480 |
| 5:00 PM | 0 | 0 | 0 | 81 | 0 | 6 | 10 | 177 | 0 | 0 | 110 | 59 | 443 |
| 5:15 PM | 0 | 0 | 0 | 107 | 0 | 7 | 9 | 188 | 0 | 0 | 91 | 67 | 469 |
| 5:30 PM | 0 | 0 | 0 | 81 | 0 | 8 | 5 | 160 | 0 | 0 | 134 | 49 | 437 |
| 5:45 PM | 0 | 0 | 0 | 94 | 0 | 7 | 8 | 177 | 0 | 0 | 104 | 65 | 455 |
| 6:00 PM | 0 | 0 | 0 | 75 | 0 | 4 | 6 | 165 | 0 | 0 | 81 | 53 | 384 |
| 6:15 PM | 0 | 0 | 0 | 74 | 0 | 3 | 9 | 148 | 0 | 0 | 95 | 51 | 380 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|------|------|------|-------|------|------|-------|-------|-------|
| Volumes | 0 | 0 | 0 | 688 | 0 | 55 | 63 | 1380 | 0 | 0 | 852 | 450 | 3488 |
| Approach % | ##### | ##### | ##### | 92.60 | 0.00 | 7.40 | 4.37 | 95.63 | 0.00 | 0.00 | 65.44 | 34.56 | |
| App/Depart | 0 | / | 513 | 743 | / | 0 | 1443 | / | 2068 | 1302 | / | 907 | |

PM Peak Hr Begins at: 430 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|------|------|------|-------|------|------|-------|-------|------|
| Volumes | 0 | 0 | 0 | 364 | 0 | 33 | 35 | 730 | 0 | 0 | 438 | 232 | 1832 |
| Approach % | ##### | ##### | ##### | 91.69 | 0.00 | 8.31 | 4.58 | 95.42 | 0.00 | 0.00 | 65.37 | 34.63 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.814 | 0.971 | 0.946 | 0.954 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1: 0
 GPS: 33.233720, -111.738513

Pedestrian & Bicycle Study

N-S STREET: Greenfield Rd.
E-W STREET: Chandler Heights Rd.

Date: 01/12/2016
Day: TUESDAY

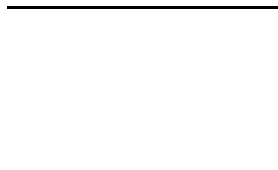
City: Gilbert
Project #: 16-1002-010

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 1 | 0 | 1 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 1 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 1 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 1 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 2 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

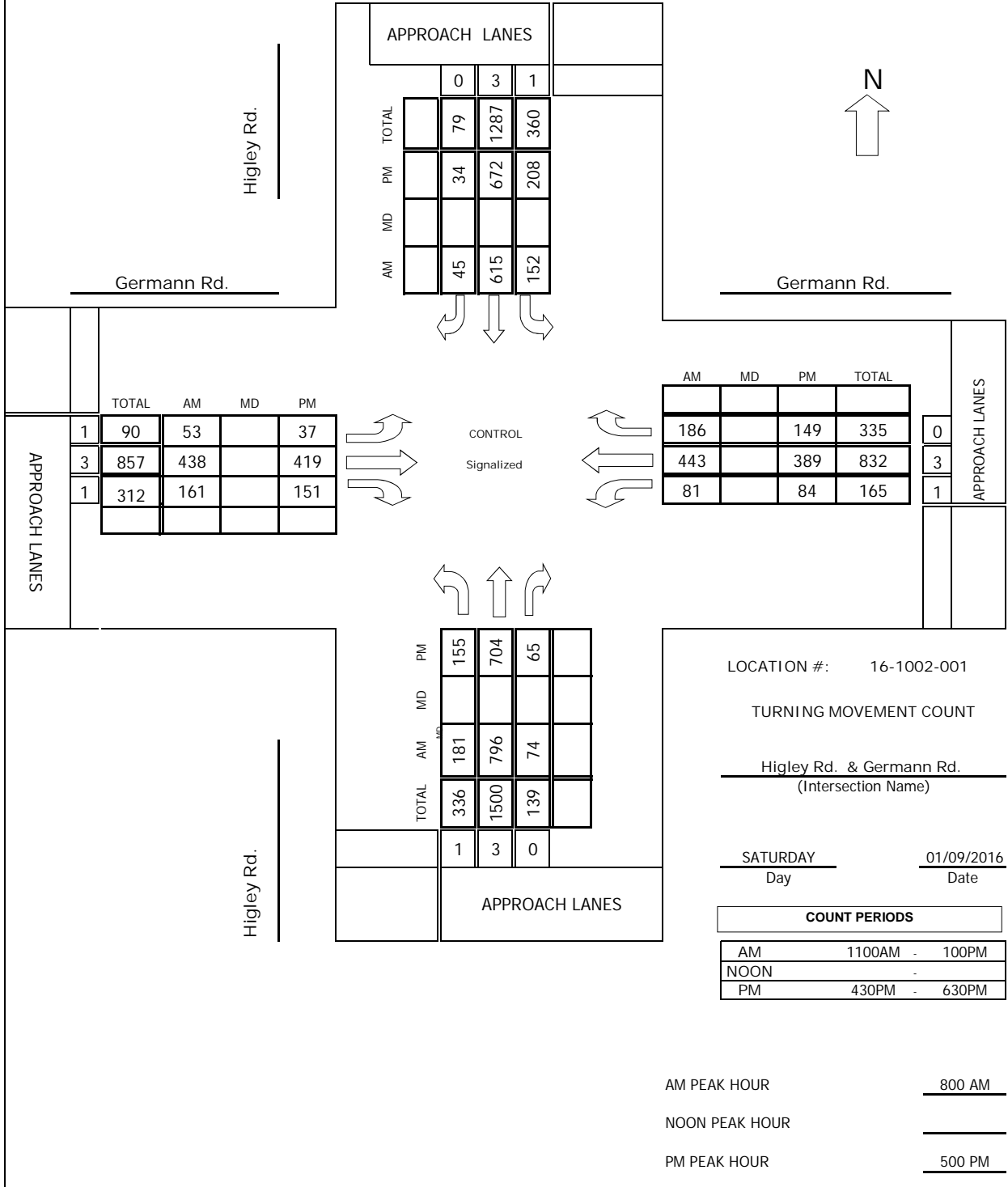


Intersection Turning Movement
Prepared by:



Project #: 16-1002-001

TMC SUMMARY OF Higley Rd. & Germann Rd.



Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Germann Rd.** DAY: **SATURDAY** PROJECT# **16-1002-001**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | 1 | 1 | 3 | 0 | |

| | | | | | | | | | | | | | |
|----------|----|-----|----|----|-----|----|----|-----|----|----|-----|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 35 | 204 | 17 | 35 | 124 | 9 | 9 | 83 | 30 | 21 | 109 | 39 | 715 |
| 11:15 AM | 50 | 200 | 12 | 20 | 139 | 9 | 11 | 85 | 36 | 18 | 103 | 56 | 739 |
| 11:30 AM | 54 | 200 | 9 | 33 | 124 | 9 | 12 | 92 | 30 | 16 | 112 | 55 | 746 |
| 11:45 AM | 28 | 189 | 23 | 31 | 138 | 10 | 13 | 71 | 33 | 19 | 91 | 58 | 704 |
| 12:00 PM | 47 | 168 | 16 | 21 | 142 | 10 | 10 | 92 | 37 | 21 | 120 | 44 | 728 |
| 12:15 PM | 43 | 215 | 13 | 42 | 158 | 12 | 9 | 104 | 26 | 25 | 96 | 46 | 789 |
| 12:30 PM | 38 | 208 | 12 | 46 | 145 | 14 | 14 | 123 | 57 | 19 | 130 | 49 | 855 |
| 12:45 PM | 53 | 205 | 33 | 43 | 170 | 9 | 20 | 119 | 41 | 16 | 97 | 47 | 853 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Volumes | 348 | 1589 | 135 | 271 | 1140 | 82 | 98 | 769 | 290 | 155 | 858 | 394 | 6129 |
| Approach % | 16.80 | 76.69 | 6.52 | 18.15 | 76.36 | 5.49 | 8.47 | 66.46 | 25.06 | 11.02 | 60.98 | 28.00 | |
| App/Depart | 2072 | / | 2081 | 1493 | / | 1585 | 1157 | / | 1175 | 1407 | / | 1288 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| Volumes | 181 | 796 | 74 | 152 | 615 | 45 | 53 | 438 | 161 | 81 | 443 | 186 | 3225 |
| Approach % | 17.22 | 75.74 | 7.04 | 18.72 | 75.74 | 5.54 | 8.13 | 67.18 | 24.69 | 11.41 | 62.39 | 26.20 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.903 | 0.914 | 0.840 | 0.896 | 0.943 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.277515, -111.720818**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Germann Rd.** DAY: **SATURDAY** PROJECT#: **16-1002-001**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 3 | 1 | 1 | 3 | 0 | |

| | | | | | | | | | | | | | |
|---------|----|-----|----|----|-----|----|----|-----|----|----|-----|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 34 | 169 | 21 | 49 | 158 | 11 | 6 | 125 | 50 | 19 | 104 | 39 | 785 |
| 4:45 PM | 40 | 157 | 21 | 56 | 134 | 8 | 5 | 120 | 37 | 20 | 104 | 46 | 748 |
| 5:00 PM | 41 | 164 | 11 | 48 | 172 | 7 | 10 | 109 | 51 | 20 | 125 | 44 | 802 |
| 5:15 PM | 35 | 164 | 16 | 42 | 145 | 4 | 11 | 108 | 39 | 18 | 91 | 33 | 706 |
| 5:30 PM | 40 | 203 | 14 | 58 | 153 | 13 | 7 | 105 | 23 | 25 | 83 | 39 | 763 |
| 5:45 PM | 39 | 173 | 24 | 60 | 202 | 10 | 9 | 97 | 38 | 21 | 90 | 33 | 796 |
| 6:00 PM | 31 | 165 | 17 | 50 | 152 | 8 | 7 | 105 | 38 | 14 | 78 | 32 | 697 |
| 6:15 PM | 30 | 127 | 14 | 51 | 151 | 6 | 12 | 109 | 25 | 13 | 71 | 38 | 647 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Volumes | 290 | 1322 | 138 | 414 | 1267 | 67 | 67 | 878 | 301 | 150 | 746 | 304 | 5944 |
| Approach % | 16.57 | 75.54 | 7.89 | 23.68 | 72.48 | 3.83 | 5.38 | 70.47 | 24.16 | 12.50 | 62.17 | 25.33 | |
| App/Depart | 1750 | / | 1693 | 1748 | / | 1718 | 1246 | / | 1430 | 1200 | / | 1103 | |

PM Peak Hr Begins at: 500 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| Volumes | 155 | 704 | 65 | 208 | 672 | 34 | 37 | 419 | 151 | 84 | 389 | 149 | 3067 |
| Approach % | 16.77 | 76.19 | 7.03 | 22.76 | 73.52 | 3.72 | 6.10 | 69.03 | 24.88 | 13.50 | 62.54 | 23.95 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.899 | 0.840 | 0.893 | 0.823 | 0.956 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.277515, -111.720818**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Germann Rd.

Date: 01/09/2016
Day: SATURDAY

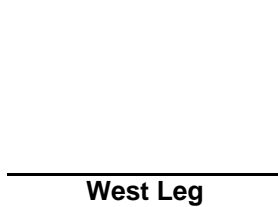
City: Gilbert
Project #: 16-1002-001

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 1 | 3 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 1 | 0 | 0 | 1 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 1 | 3 | 1 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 1 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 1 | 1 |
| 12:00 PM | 2 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 1 | 1 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 1 | 0 |
| TOTAL | 2 | 0 | 4 | 2 |

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 1 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 1 | 1 | 1 |
| 6:00 PM | 1 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 1 | 1 | 2 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 1 | 0 |
| 5:00 PM | 0 | 0 | 3 | 0 |
| 5:15 PM | 0 | 0 | 2 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 1 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 7 | 0 |



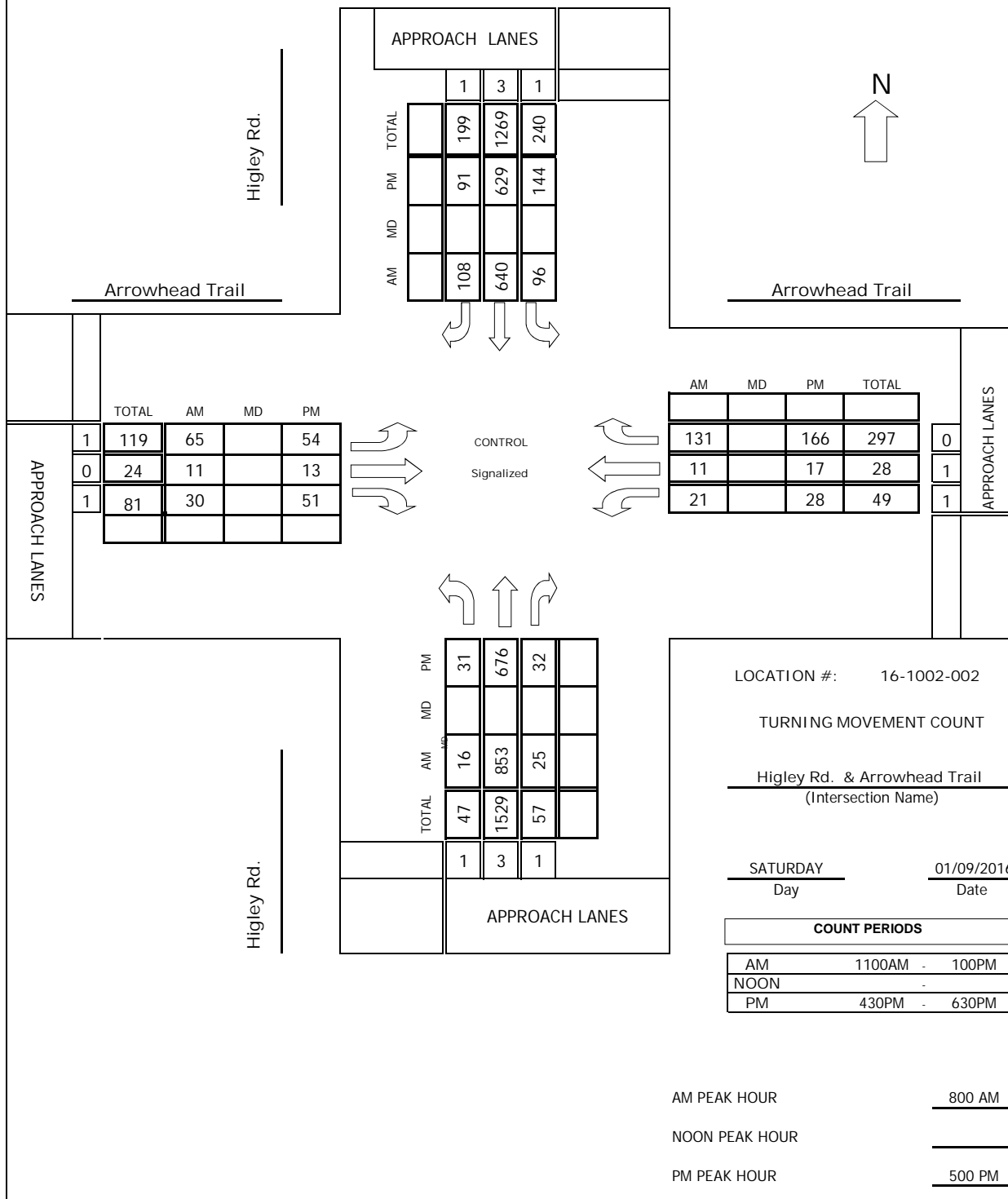
Intersection Turning Movement

Prepared by:



Project #: 16-1002-002

TMC SUMMARY OF Higley Rd. & Arrowhead Trail



Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Arrowhead Trail** DAY: **SATURDAY** PROJECT#: **16-1002-002**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 1 | 1 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|----------|---|-----|----|----|-----|----|----|---|----|----|---|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 4 | 201 | 16 | 27 | 134 | 22 | 7 | 4 | 10 | 4 | 3 | 27 | 459 |
| 11:15 AM | 9 | 199 | 4 | 37 | 144 | 17 | 18 | 5 | 5 | 10 | 2 | 51 | 501 |
| 11:30 AM | 7 | 167 | 13 | 18 | 133 | 19 | 14 | 3 | 6 | 8 | 3 | 40 | 431 |
| 11:45 AM | 6 | 185 | 8 | 24 | 131 | 20 | 31 | 4 | 7 | 9 | 6 | 31 | 462 |
| 12:00 PM | 5 | 213 | 12 | 25 | 161 | 25 | 11 | 1 | 10 | 5 | 5 | 33 | 506 |
| 12:15 PM | 5 | 218 | 4 | 24 | 159 | 26 | 12 | 3 | 5 | 2 | 1 | 30 | 489 |
| 12:30 PM | 3 | 231 | 2 | 24 | 161 | 24 | 19 | 6 | 7 | 4 | 1 | 38 | 520 |
| 12:45 PM | 3 | 191 | 7 | 23 | 159 | 33 | 23 | 1 | 8 | 10 | 4 | 30 | 492 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Volumes | 42 | 1605 | 66 | 202 | 1182 | 186 | 135 | 27 | 58 | 52 | 25 | 280 | 3860 |
| Approach % | 2.45 | 93.70 | 3.85 | 12.87 | 75.29 | 11.85 | 61.36 | 12.27 | 26.36 | 14.57 | 7.00 | 78.43 | |
| App/Depart | 1713 | / | 2020 | 1570 | / | 1292 | 220 | / | 295 | 357 | / | 253 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|
| Volumes | 16 | 853 | 25 | 96 | 640 | 108 | 65 | 11 | 30 | 21 | 11 | 131 | 2007 |
| Approach % | 1.79 | 95.41 | 2.80 | 11.37 | 75.83 | 12.80 | 61.32 | 10.38 | 28.30 | 12.88 | 6.75 | 80.37 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.947 | 0.981 | 0.828 | 0.926 | 0.965 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.266309, -111.720794**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Arrowhead Trail** DAY: **SATURDAY** PROJECT#: **16-1002-002**

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 1 | 3 | 1 | 1 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|---------|----|-----|----|----|-----|----|----|---|----|----|---|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 8 | 171 | 10 | 42 | 174 | 15 | 14 | 5 | 9 | 10 | 4 | 28 | 490 |
| 4:45 PM | 11 | 168 | 12 | 40 | 145 | 18 | 16 | 6 | 8 | 7 | 5 | 46 | 482 |
| 5:00 PM | 9 | 155 | 11 | 39 | 160 | 25 | 10 | 0 | 9 | 8 | 1 | 43 | 470 |
| 5:15 PM | 4 | 168 | 7 | 41 | 144 | 18 | 16 | 4 | 15 | 8 | 6 | 42 | 473 |
| 5:30 PM | 12 | 187 | 10 | 27 | 150 | 22 | 10 | 5 | 10 | 10 | 7 | 44 | 494 |
| 5:45 PM | 6 | 166 | 4 | 37 | 175 | 26 | 18 | 4 | 17 | 2 | 3 | 37 | 495 |
| 6:00 PM | 7 | 138 | 10 | 40 | 154 | 12 | 8 | 2 | 15 | 5 | 7 | 29 | 427 |
| 6:15 PM | 6 | 119 | 10 | 33 | 126 | 8 | 13 | 5 | 9 | 6 | 7 | 24 | 366 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 63 | 1272 | 74 | 299 | 1228 | 144 | 105 | 31 | 92 | 56 | 40 | 293 | 3697 |
| Approach % | 4.47 | 90.28 | 5.25 | 17.89 | 73.49 | 8.62 | 46.05 | 13.60 | 40.35 | 14.40 | 10.28 | 75.32 | |
| App/Depart | 1409 | / | 1670 | 1671 | / | 1376 | 228 | / | 404 | 389 | / | 247 | |

PM Peak Hr Begins at: 500 PM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|
| Volumes | 31 | 676 | 32 | 144 | 629 | 91 | 54 | 13 | 51 | 28 | 17 | 166 | 1932 |
| Approach % | 4.19 | 91.47 | 4.33 | 16.67 | 72.80 | 10.53 | 45.76 | 11.02 | 43.22 | 13.27 | 8.06 | 78.67 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.884 | 0.908 | 0.756 | 0.865 | 0.976 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.266309, -111.720794**



Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Arrowhead Trail

Date: 01/09/2016
Day: SATURDAY

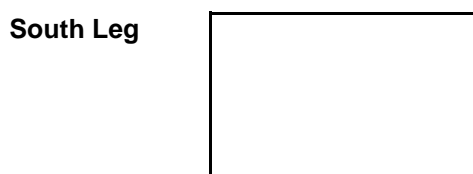
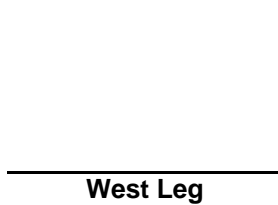
City: Gilbert
Project #: 16-1002-002

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 1 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 1 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 3 | 0 | 0 |
| 12:45 PM | 3 | 0 | 0 | 1 |
| TOTAL | 3 | 4 | 0 | 2 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 1 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |

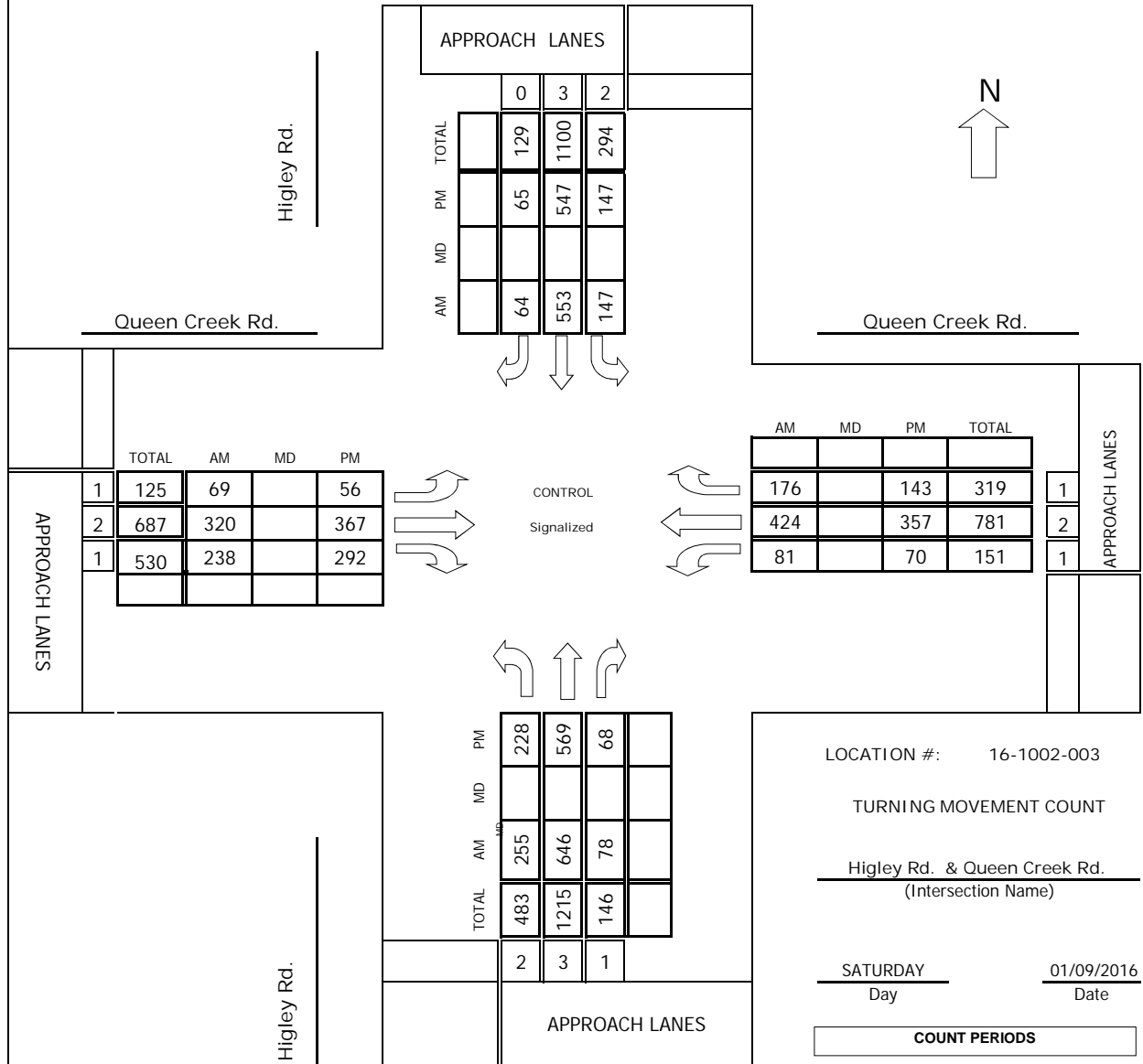
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 4 | 0 | 0 |
| 4:45 PM | 0 | 0 | 3 | 0 |
| 5:00 PM | 1 | 1 | 0 | 1 |
| 5:15 PM | 5 | 0 | 0 | 0 |
| 5:30 PM | 2 | 0 | 0 | 0 |
| 5:45 PM | 0 | 2 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 8 | 7 | 3 | 1 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 1 | 1 | 0 |
| 5:00 PM | 0 | 2 | 0 | 0 |
| 5:15 PM | 0 | 2 | 0 | 1 |
| 5:30 PM | 0 | 0 | 0 | 1 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 5 | 1 | 2 |



Project #: 16-1002-003

TMC SUMMARY OF Higley Rd. & Queen Creek Rd.



| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 125 | 69 | | 56 |
| 2 | 687 | 320 | | 367 |
| 1 | 530 | 238 | | 292 |

| | AM | MD | PM | TOTAL |
|---|-----|----|-----|-------|
| 1 | 176 | | 143 | 319 |
| 2 | 424 | | 357 | 781 |
| 1 | 81 | | 70 | 151 |

| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 2 | 483 | 255 | | 228 |
| 3 | 1215 | 646 | | 569 |
| 1 | 146 | 78 | | 68 |

LOCATION #: 16-1002-003

TURNING MOVEMENT COUNT

Higley Rd. & Queen Creek Rd.
(Intersection Name)

SATURDAY 01/09/2016
Day Date

| COUNT PERIODS | | |
|---------------|--------|-------|
| AM | 1100AM | 100PM |
| NOON | - | - |
| PM | 430PM | 630PM |

AM PEAK HOUR 800 AM
 NOON PEAK HOUR _____
 PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Queen Creek Rd.** DAY: **SATURDAY** PROJECT# **16-1002-003**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|-----|----|------------|-----|----|-----------|----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 3 | 1 | 2 | 3 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 65 | 190 | 26 | 37 | 133 | 21 | 18 | 77 | 48 | 18 | 104 | 31 | 768 |
| 11:15 AM | 69 | 169 | 28 | 33 | 108 | 23 | 9 | 71 | 51 | 15 | 111 | 42 | 729 |
| 11:30 AM | 65 | 179 | 20 | 33 | 125 | 22 | 9 | 86 | 49 | 22 | 119 | 27 | 756 |
| 11:45 AM | 61 | 152 | 20 | 50 | 108 | 10 | 11 | 84 | 6 | 25 | 96 | 31 | 654 |
| 12:00 PM | 66 | 142 | 25 | 31 | 125 | 15 | 17 | 72 | 45 | 18 | 107 | 50 | 713 |
| 12:15 PM | 53 | 179 | 19 | 40 | 147 | 12 | 18 | 78 | 72 | 19 | 109 | 36 | 782 |
| 12:30 PM | 69 | 174 | 20 | 39 | 134 | 16 | 21 | 80 | 61 | 24 | 105 | 40 | 783 |
| 12:45 PM | 67 | 151 | 14 | 37 | 147 | 21 | 13 | 90 | 60 | 20 | 103 | 50 | 773 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 515 | 1336 | 172 | 300 | 1027 | 140 | 116 | 638 | 392 | 161 | 854 | 307 | 5958 |
| Approach % | 25.46 | 66.04 | 8.50 | 20.45 | 70.01 | 9.54 | 10.12 | 55.67 | 34.21 | 12.18 | 64.60 | 23.22 | |
| App/Depart | 2023 | / | 1759 | 1467 | / | 1580 | 1146 | / | 1110 | 1322 | / | 1509 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|
| Volumes | 255 | 646 | 78 | 147 | 553 | 64 | 69 | 320 | 238 | 81 | 424 | 176 | 3051 |
| Approach % | 26.05 | 65.99 | 7.97 | 19.24 | 72.38 | 8.38 | 11.00 | 51.04 | 37.96 | 11.89 | 62.26 | 25.84 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.931 | 0.932 | 0.933 | 0.973 | 0.974 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**

COMMENT 1:

GPS: **33.263029, -111.720788**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Queen Creek Rd.** DAY: **SATURDAY** PROJECT#: **16-1002-003**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 3 | 1 | 2 | 3 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | |

| | | | | | | | | | | | | | |
|---------|----|-----|----|----|-----|----|----|-----|----|----|----|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 51 | 148 | 16 | 45 | 125 | 11 | 19 | 90 | 72 | 23 | 73 | 33 | 706 |
| 4:45 PM | 56 | 147 | 21 | 34 | 146 | 16 | 19 | 92 | 79 | 16 | 94 | 43 | 763 |
| 5:00 PM | 50 | 116 | 15 | 36 | 128 | 23 | 11 | 87 | 77 | 20 | 96 | 42 | 701 |
| 5:15 PM | 56 | 142 | 13 | 31 | 153 | 10 | 12 | 100 | 65 | 10 | 97 | 29 | 718 |
| 5:30 PM | 66 | 164 | 19 | 46 | 120 | 16 | 14 | 88 | 71 | 24 | 70 | 29 | 727 |
| 5:45 PM | 56 | 146 | 21 | 44 | 149 | 18 | 16 | 78 | 63 | 20 | 92 | 34 | 737 |
| 6:00 PM | 39 | 150 | 24 | 44 | 138 | 13 | 11 | 95 | 76 | 16 | 70 | 27 | 703 |
| 6:15 PM | 49 | 132 | 20 | 34 | 141 | 5 | 13 | 87 | 68 | 18 | 72 | 20 | 659 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Volumes | 423 | 1145 | 149 | 314 | 1100 | 112 | 115 | 717 | 571 | 147 | 664 | 257 | 5714 |
| Approach % | 24.64 | 66.69 | 8.68 | 20.58 | 72.08 | 7.34 | 8.20 | 51.10 | 40.70 | 13.76 | 62.17 | 24.06 | |
| App/Depart | 1717 | / | 1517 | 1526 | / | 1818 | 1403 | / | 1180 | 1068 | / | 1199 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|-------|------|
| Volumes | 228 | 569 | 68 | 147 | 547 | 65 | 56 | 367 | 292 | 70 | 357 | 143 | 2909 |
| Approach % | 26.36 | 65.78 | 7.86 | 19.37 | 72.07 | 8.56 | 7.83 | 51.33 | 40.84 | 12.28 | 62.63 | 25.09 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.868 | 0.968 | 0.941 | 0.902 | 0.953 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.263029, -111.720788**



Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Queen Creek Rd.

Date: 01/09/2016
Day: SATURDAY

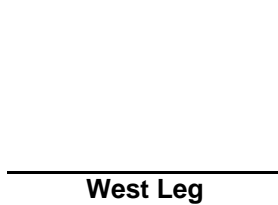
City: Gilbert
Project #: 16-1002-003

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 1 |
| 11:30 AM | 1 | 1 | 0 | 2 |
| 11:45 AM | 0 | 1 | 0 | 1 |
| 12:00 PM | 0 | 3 | 0 | 0 |
| 12:15 PM | 1 | 0 | 0 | 0 |
| 12:30 PM | 2 | 1 | 2 | 1 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 4 | 6 | 2 | 5 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 1 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 2 |
| 12:30 PM | 1 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 3 |

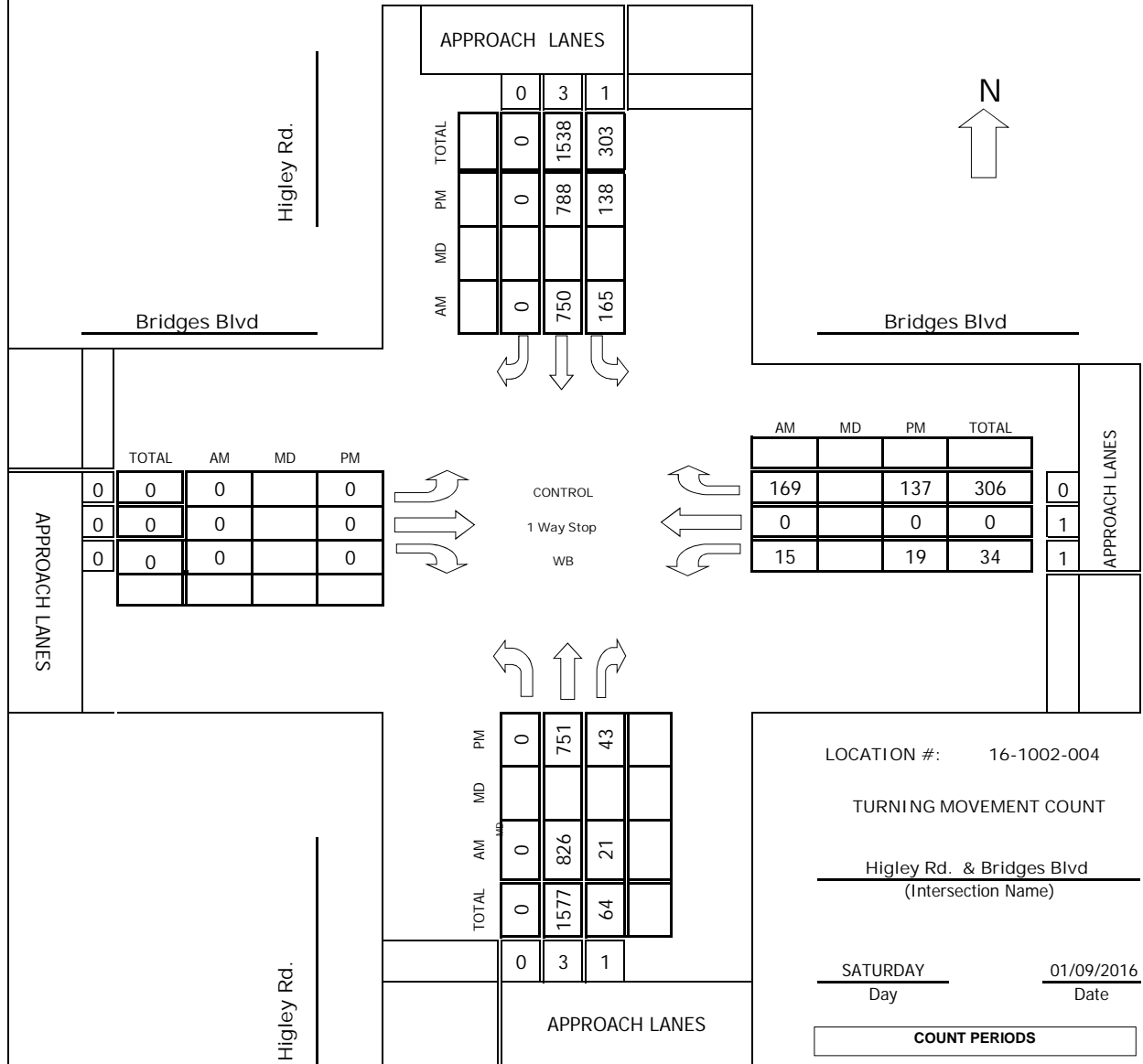
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 1 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 1 |



Project #: 16-1002-004

TMC SUMMARY OF Higley Rd. & Bridges Blvd



| | | | | |
|---|-------|----|----|----|
| | TOTAL | AM | MD | PM |
| 0 | 0 | 0 | | 0 |
| 0 | 0 | 0 | | 0 |
| 0 | 0 | 0 | | 0 |

CONTROL
 1 Way Stop
 WB

| | | | | | |
|-----|----|----|-----|-------|---|
| | AM | MD | PM | TOTAL | |
| 169 | | | 137 | 306 | 0 |
| 0 | | | 0 | 0 | 1 |
| 15 | | | 19 | 34 | 1 |

| | | | | |
|---|-------|----|-----|----|
| | TOTAL | AM | MD | PM |
| 0 | 0 | 0 | | 0 |
| 0 | 826 | | 751 | 43 |
| 0 | 1577 | | 64 | |
| 0 | 3 | | 1 | |

LOCATION #: 16-1002-004

TURNING MOVEMENT COUNT

Higley Rd. & Bridges Blvd
 (Intersection Name)

SATURDAY 01/09/2016
 Day Date

| COUNT PERIODS | | |
|---------------|----------|-------|
| AM | 1100AM - | 100PM |
| NOON | - | |
| PM | 430PM - | 630PM |

AM PEAK HOUR 800 AM
 NOON PEAK HOUR _____
 PM PEAK HOUR 515 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Bridges Blvd** DAY: **SATURDAY** PROJECT# **16-1002-004**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | | 3 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|----------|---|-----|----|----|-----|---|---|---|---|---|---|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 0 | 209 | 7 | 34 | 141 | 0 | 0 | 0 | 0 | 7 | 0 | 47 | 445 |
| 11:15 AM | 0 | 227 | 4 | 16 | 182 | 0 | 0 | 0 | 0 | 4 | 0 | 43 | 476 |
| 11:30 AM | 0 | 194 | 6 | 30 | 157 | 0 | 0 | 0 | 0 | 3 | 0 | 31 | 421 |
| 11:45 AM | 0 | 198 | 7 | 40 | 152 | 0 | 0 | 0 | 0 | 5 | 0 | 37 | 439 |
| 12:00 PM | 0 | 225 | 4 | 47 | 191 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 509 |
| 12:15 PM | 0 | 213 | 5 | 41 | 171 | 0 | 0 | 0 | 0 | 4 | 0 | 43 | 477 |
| 12:30 PM | 0 | 199 | 2 | 45 | 187 | 0 | 0 | 0 | 0 | 7 | 0 | 38 | 478 |
| 12:45 PM | 0 | 189 | 10 | 32 | 201 | 0 | 0 | 0 | 0 | 4 | 0 | 46 | 482 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|------|------|------|------|------|------|-------|-------|
| Volumes | 0 | 1654 | 45 | 285 | 1382 | 0 | 0 | 0 | 0 | 34 | 0 | 327 | 3727 |
| Approach % | 0.00 | 97.35 | 2.65 | 17.10 | 82.90 | 0.00 | #### | #### | #### | 9.42 | 0.00 | 90.58 | |
| App/Depart | 1699 | / | 1981 | 1667 | / | 1416 | 0 | / | 330 | 361 | / | 0 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|------|------|------|------|------|------|-------|------|
| Volumes | 0 | 826 | 21 | 165 | 750 | 0 | 0 | 0 | 0 | 15 | 0 | 169 | 1946 |
| Approach % | 0.00 | 97.52 | 2.48 | 18.03 | 81.97 | 0.00 | #### | #### | #### | 8.15 | 0.00 | 91.85 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.925 | 0.961 | 0.000 | 0.920 | 0.956 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **1 way Stop (WB)**
 COMMENT 1:
 GPS: **33.2589291, -111.720572**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Bridges Blvd** DAY: **SATURDAY** PROJECT#: **16-1002-004**

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 0 | 3 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | |

| | | | | | | | | | | | | | |
|---------|---|-----|----|----|-----|---|---|---|---|---|---|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 0 | 182 | 7 | 37 | 201 | 0 | 0 | 0 | 0 | 3 | 0 | 36 | 466 |
| 4:45 PM | 0 | 143 | 7 | 36 | 193 | 0 | 0 | 0 | 0 | 9 | 0 | 34 | 422 |
| 5:00 PM | 0 | 186 | 5 | 39 | 182 | 0 | 0 | 0 | 0 | 5 | 0 | 39 | 456 |
| 5:15 PM | 0 | 213 | 9 | 33 | 189 | 0 | 0 | 0 | 0 | 4 | 0 | 35 | 483 |
| 5:30 PM | 0 | 192 | 12 | 29 | 202 | 0 | 0 | 0 | 0 | 4 | 0 | 39 | 478 |
| 5:45 PM | 0 | 171 | 11 | 38 | 198 | 0 | 0 | 0 | 0 | 7 | 0 | 34 | 459 |
| 6:00 PM | 0 | 175 | 11 | 38 | 199 | 0 | 0 | 0 | 0 | 4 | 0 | 29 | 456 |
| 6:15 PM | 0 | 130 | 8 | 28 | 176 | 0 | 0 | 0 | 0 | 7 | 0 | 30 | 379 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|-------|-------|------|------|------|------|-------|------|-------|-------|
| Volumes | 0 | 1392 | 70 | 278 | 1540 | 0 | 0 | 0 | 0 | 43 | 0 | 276 | 3599 |
| Approach % | 0.00 | 95.21 | 4.79 | 15.29 | 84.71 | 0.00 | #### | #### | #### | 13.48 | 0.00 | 86.52 | |
| App/Depart | 1462 | / | 1668 | 1818 | / | 1583 | 0 | / | 348 | 319 | / | 0 | |

PM Peak Hr Begins at: 515 PM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|-------|-------|------|------|------|------|-------|------|-------|------|
| Volumes | 0 | 751 | 43 | 138 | 788 | 0 | 0 | 0 | 0 | 19 | 0 | 137 | 1876 |
| Approach % | 0.00 | 94.58 | 5.42 | 14.90 | 85.10 | 0.00 | #### | #### | #### | 12.18 | 0.00 | 87.82 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.894 | 0.977 | 0.000 | 0.907 | 0.971 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **1 way Stop (WB)**
 COMMENT 1: **0**
 GPS: **33.2589291, -111.720572**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Bridges Blvd

Date: 01/09/2016
Day: SATURDAY

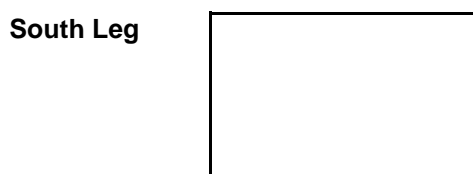
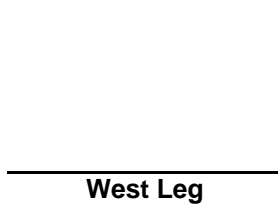
City: Gilbert
Project #: 16-1002-004

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 2 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 1 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 2 | 0 |
| 12:30 PM | 0 | 0 | 2 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 7 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 2 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 2 | 0 |

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 1 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 2 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 3 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |



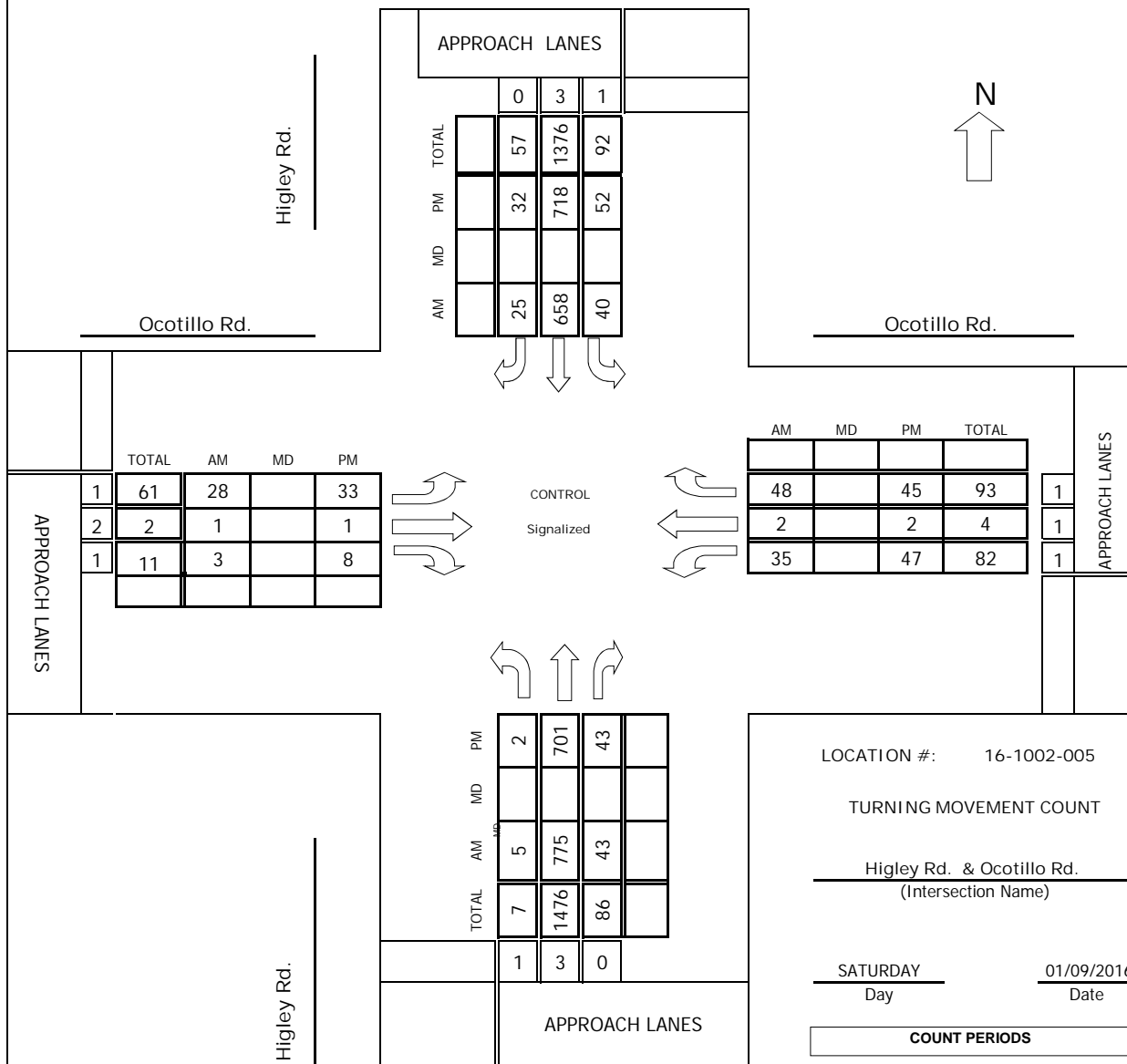
Intersection Turning Movement

Prepared by:



Project #: 16-1002-005

TMC SUMMARY OF Higley Rd. & Ocotillo Rd.



LOCATION #: 16-1002-005

TURNING MOVEMENT COUNT

Higley Rd. & Ocotillo Rd.
(Intersection Name)

SATURDAY 01/09/2016
Day Date

COUNT PERIODS

| | |
|------|----------------|
| AM | 1100AM - 100PM |
| NOON | - |
| PM | 430PM - 630PM |

AM PEAK HOUR 800 AM

NOON PEAK HOUR _____

PM PEAK HOUR 515 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Ocotillo Rd.** DAY: **SATURDAY** PROJECT# **16-1002-005**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | |

| | | | | | | | | | | | | | |
|----------|---|-----|----|----|-----|----|----|---|---|----|---|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 1 | 215 | 8 | 8 | 139 | 5 | 12 | 0 | 5 | 11 | 1 | 16 | 421 |
| 11:15 AM | 0 | 191 | 13 | 13 | 149 | 5 | 15 | 1 | 4 | 9 | 0 | 7 | 407 |
| 11:30 AM | 2 | 186 | 15 | 7 | 145 | 10 | 7 | 0 | 0 | 11 | 3 | 11 | 397 |
| 11:45 AM | 2 | 200 | 15 | 12 | 155 | 7 | 6 | 0 | 2 | 12 | 1 | 11 | 423 |
| 12:00 PM | 1 | 191 | 9 | 7 | 142 | 1 | 9 | 0 | 2 | 10 | 2 | 13 | 387 |
| 12:15 PM | 1 | 193 | 12 | 15 | 182 | 9 | 8 | 0 | 0 | 10 | 0 | 14 | 444 |
| 12:30 PM | 2 | 200 | 12 | 8 | 155 | 7 | 5 | 1 | 1 | 3 | 0 | 14 | 408 |
| 12:45 PM | 1 | 191 | 10 | 10 | 179 | 8 | 6 | 0 | 0 | 12 | 0 | 7 | 424 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|------|-------|------|-------|------|-------|-------|------|-------|-------|
| Volumes | 10 | 1567 | 94 | 80 | 1246 | 52 | 68 | 2 | 14 | 78 | 7 | 93 | 3311 |
| Approach % | 0.60 | 93.78 | 5.63 | 5.81 | 90.42 | 3.77 | 80.95 | 2.38 | 16.67 | 43.82 | 3.93 | 52.25 | |
| App/Depart | 1671 | / | 1728 | 1378 | / | 1338 | 84 | / | 176 | 178 | / | 69 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|------|-------|------|-------|------|------|-------|------|-------|------|
| Volumes | 5 | 775 | 43 | 40 | 658 | 25 | 28 | 1 | 3 | 35 | 2 | 48 | 1663 |
| Approach % | 0.61 | 94.17 | 5.22 | 5.53 | 91.01 | 3.46 | 87.50 | 3.13 | 9.38 | 41.18 | 2.35 | 56.47 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.961 | 0.877 | 0.727 | 0.850 | 0.936 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.248379, -111.720802**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Ocotillo Rd.** DAY: **SATURDAY** PROJECT#: **16-1002-005**

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | |

| | | | | | | | | | | | | | |
|---------|---|-----|----|----|-----|----|----|---|---|----|---|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 1 | 158 | 20 | 17 | 156 | 10 | 9 | 0 | 1 | 9 | 0 | 9 | 390 |
| 4:45 PM | 1 | 147 | 7 | 7 | 180 | 8 | 6 | 0 | 1 | 11 | 0 | 10 | 378 |
| 5:00 PM | 1 | 150 | 10 | 12 | 177 | 11 | 11 | 0 | 0 | 12 | 0 | 8 | 392 |
| 5:15 PM | 2 | 163 | 13 | 12 | 179 | 7 | 12 | 0 | 4 | 4 | 2 | 8 | 406 |
| 5:30 PM | 0 | 201 | 7 | 9 | 190 | 6 | 9 | 0 | 2 | 20 | 0 | 18 | 462 |
| 5:45 PM | 0 | 158 | 12 | 18 | 169 | 8 | 6 | 1 | 0 | 12 | 0 | 12 | 396 |
| 6:00 PM | 0 | 179 | 11 | 13 | 180 | 11 | 6 | 0 | 2 | 11 | 0 | 7 | 420 |
| 6:15 PM | 3 | 134 | 7 | 17 | 181 | 4 | 5 | 0 | 1 | 3 | 0 | 6 | 361 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|-------|------|------|-------|------|-------|------|-------|-------|------|-------|-------|
| Volumes | 8 | 1290 | 87 | 105 | 1412 | 65 | 64 | 1 | 11 | 82 | 2 | 78 | 3205 |
| Approach % | 0.58 | 93.14 | 6.28 | 6.64 | 89.25 | 4.11 | 84.21 | 1.32 | 14.47 | 50.62 | 1.23 | 48.15 | |
| App/Depart | 1385 | / | 1432 | 1582 | / | 1505 | 76 | / | 193 | 162 | / | 75 | |

PM Peak Hr Begins at: 515 PM

PEAK

| | | | | | | | | | | | | | |
|------------|------|-------|------|------|-------|------|-------|------|-------|-------|------|-------|------|
| Volumes | 2 | 701 | 43 | 52 | 718 | 32 | 33 | 1 | 8 | 47 | 2 | 45 | 1684 |
| Approach % | 0.27 | 93.97 | 5.76 | 6.48 | 89.53 | 3.99 | 78.57 | 2.38 | 19.05 | 50.00 | 2.13 | 47.87 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.897 | 0.978 | 0.656 | 0.618 | 0.911 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.248379, -111.720802**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Ocotillo Rd.

Date: 01/09/2016
Day: SATURDAY

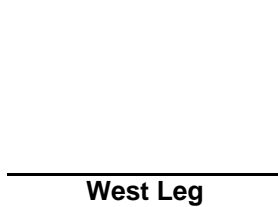
City: Gilbert
Project #: 16-1002-005

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 1 | 2 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 2 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 1 | 4 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 2 | 0 |
| 11:15 AM | 0 | 0 | 0 | 1 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 2 | 1 |

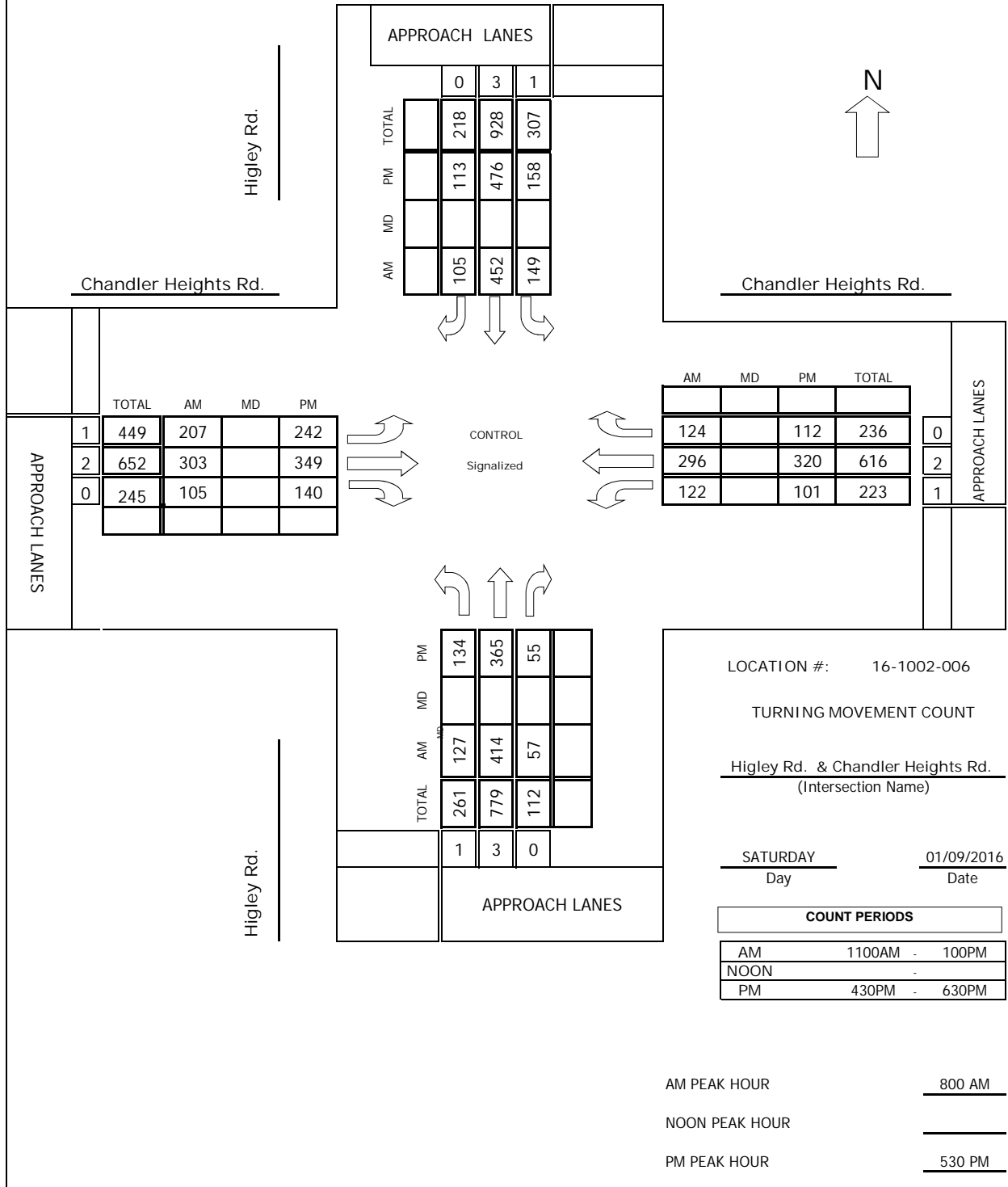
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |



Project #: 16-1002-006

TMC SUMMARY OF Higley Rd. & Chandler Heights Rd.



Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Chandler Heights Rd.** DAY: **SATURDAY** PROJECT# **16-1002-006**

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|-----|----|------------|-----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 32 | 134 | 13 | 40 | 112 | 44 | 43 | 73 | 22 | 27 | 64 | 21 | 625 |
| 11:15 AM | 29 | 92 | 16 | 29 | 96 | 24 | 57 | 72 | 25 | 31 | 85 | 28 | 584 |
| 11:30 AM | 24 | 76 | 16 | 21 | 87 | 43 | 54 | 63 | 28 | 33 | 85 | 41 | 571 |
| 11:45 AM | 23 | 96 | 13 | 36 | 85 | 20 | 38 | 64 | 27 | 28 | 94 | 41 | 565 |
| 12:00 PM | 20 | 91 | 8 | 36 | 111 | 24 | 60 | 71 | 25 | 25 | 76 | 31 | 578 |
| 12:15 PM | 39 | 114 | 17 | 34 | 107 | 27 | 54 | 72 | 24 | 32 | 72 | 35 | 627 |
| 12:30 PM | 28 | 103 | 19 | 41 | 109 | 36 | 48 | 83 | 34 | 31 | 77 | 39 | 648 |
| 12:45 PM | 40 | 106 | 13 | 38 | 125 | 18 | 45 | 77 | 22 | 34 | 71 | 19 | 608 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 235 | 812 | 115 | 275 | 832 | 236 | 399 | 575 | 207 | 241 | 624 | 255 | 4806 |
| Approach % | 20.22 | 69.88 | 9.90 | 20.48 | 61.95 | 17.57 | 33.78 | 48.69 | 17.53 | 21.52 | 55.71 | 22.77 | |
| App/Depart | 1162 | / | 1466 | 1343 | / | 1280 | 1181 | / | 965 | 1120 | / | 1095 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Volumes | 127 | 414 | 57 | 149 | 452 | 105 | 207 | 303 | 105 | 122 | 296 | 124 | 2461 |
| Approach % | 21.24 | 69.23 | 9.53 | 21.10 | 64.02 | 14.87 | 33.66 | 49.27 | 17.07 | 22.51 | 54.61 | 22.88 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.879 | 0.949 | 0.932 | 0.922 | 0.949 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1:
 GPS: **33.233746, -111.720695**

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: **Higley Rd.** DATE: **01/09/2016** LOCATION: **Gilbert**
 E-W STREET: **Chandler Heights Rd.** DAY: **SATURDAY** PROJECT#: **16-1002-006**

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 1 | 3 | 0 | 1 | 3 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |

| | | | | | | | | | | | | | |
|---------|----|-----|----|----|-----|----|----|-----|----|----|----|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 34 | 77 | 19 | 42 | 117 | 18 | 43 | 80 | 37 | 23 | 70 | 24 | 584 |
| 4:45 PM | 34 | 72 | 7 | 33 | 107 | 36 | 59 | 101 | 43 | 40 | 80 | 26 | 638 |
| 5:00 PM | 31 | 71 | 20 | 38 | 129 | 25 | 60 | 113 | 39 | 27 | 95 | 21 | 669 |
| 5:15 PM | 34 | 102 | 17 | 33 | 110 | 29 | 47 | 92 | 35 | 29 | 73 | 29 | 630 |
| 5:30 PM | 35 | 105 | 10 | 33 | 107 | 21 | 55 | 86 | 31 | 23 | 94 | 28 | 628 |
| 5:45 PM | 35 | 80 | 12 | 38 | 110 | 35 | 66 | 90 | 35 | 30 | 76 | 24 | 631 |
| 6:00 PM | 47 | 87 | 19 | 42 | 138 | 31 | 67 | 83 | 29 | 24 | 78 | 28 | 673 |
| 6:15 PM | 17 | 93 | 14 | 45 | 121 | 26 | 54 | 90 | 45 | 24 | 72 | 32 | 633 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 267 | 687 | 118 | 304 | 939 | 221 | 451 | 735 | 294 | 220 | 638 | 212 | 5086 |
| Approach % | 24.91 | 64.09 | 11.01 | 20.77 | 64.14 | 15.10 | 30.47 | 49.66 | 19.86 | 20.56 | 59.63 | 19.81 | |
| App/Depart | 1072 | / | 1350 | 1464 | / | 1453 | 1480 | / | 1157 | 1070 | / | 1126 | |

PM Peak Hr Begins at: 530 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Volumes | 134 | 365 | 55 | 158 | 476 | 113 | 242 | 349 | 140 | 101 | 320 | 112 | 2565 |
| Approach % | 24.19 | 65.88 | 9.93 | 21.15 | 63.72 | 15.13 | 33.11 | 47.74 | 19.15 | 18.95 | 60.04 | 21.01 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.905 | 0.885 | 0.957 | 0.919 | 0.953 |
|---------|-------|-------|-------|-------|-------|

CONTROL: **Signalized**
 COMMENT 1: **0**
 GPS: **33.233746, -111.720695**

Pedestrian & Bicycle Study

N-S STREET: Higley Rd.
E-W STREET: Chandler Heights Rd.

Date: 01/09/2016
Day: SATURDAY

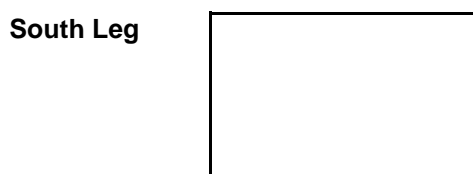
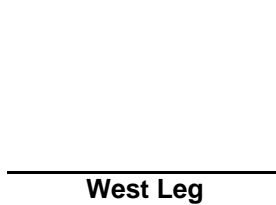
City: Gilbert
Project #: 16-1002-006

| | PEDESTRIANS | | | |
|--------------|-------------|-----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 3 | 0 | 3 |
| 11:15 AM | 2 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 3 | 2 | 0 | 0 |
| 12:00 PM | 2 | 4 | 1 | 3 |
| 12:15 PM | 3 | 4 | 3 | 0 |
| 12:30 PM | 2 | 0 | 0 | 1 |
| 12:45 PM | 4 | 1 | 4 | 0 |
| TOTAL | 16 | 14 | 8 | 7 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 1 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 2 |
| 12:00 PM | 2 | 0 | 0 | 6 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 2 | 0 | 0 | 9 |

| | PEDESTRIANS | | | |
|--------------|-------------|-----------|----------|-----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 5 | 4 | 0 | 4 |
| 4:45 PM | 1 | 3 | 2 | 0 |
| 5:00 PM | 0 | 4 | 0 | 1 |
| 5:15 PM | 1 | 1 | 3 | 1 |
| 5:30 PM | 0 | 11 | 2 | 5 |
| 5:45 PM | 0 | 0 | 2 | 0 |
| 6:00 PM | 0 | 0 | 0 | 3 |
| 6:15 PM | 0 | 1 | 0 | 0 |
| TOTAL | 7 | 24 | 9 | 14 |

| | BICYCLES | | | |
|--------------|----------|-----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 1 | 5 | 0 | 2 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 2 | 1 | 1 | 0 |
| 5:15 PM | 0 | 0 | 1 | 2 |
| 5:30 PM | 0 | 6 | 0 | 2 |
| 5:45 PM | 0 | 1 | 2 | 0 |
| 6:00 PM | 0 | 2 | 2 | 0 |
| 6:15 PM | 1 | 0 | 0 | 0 |
| TOTAL | 4 | 15 | 6 | 6 |



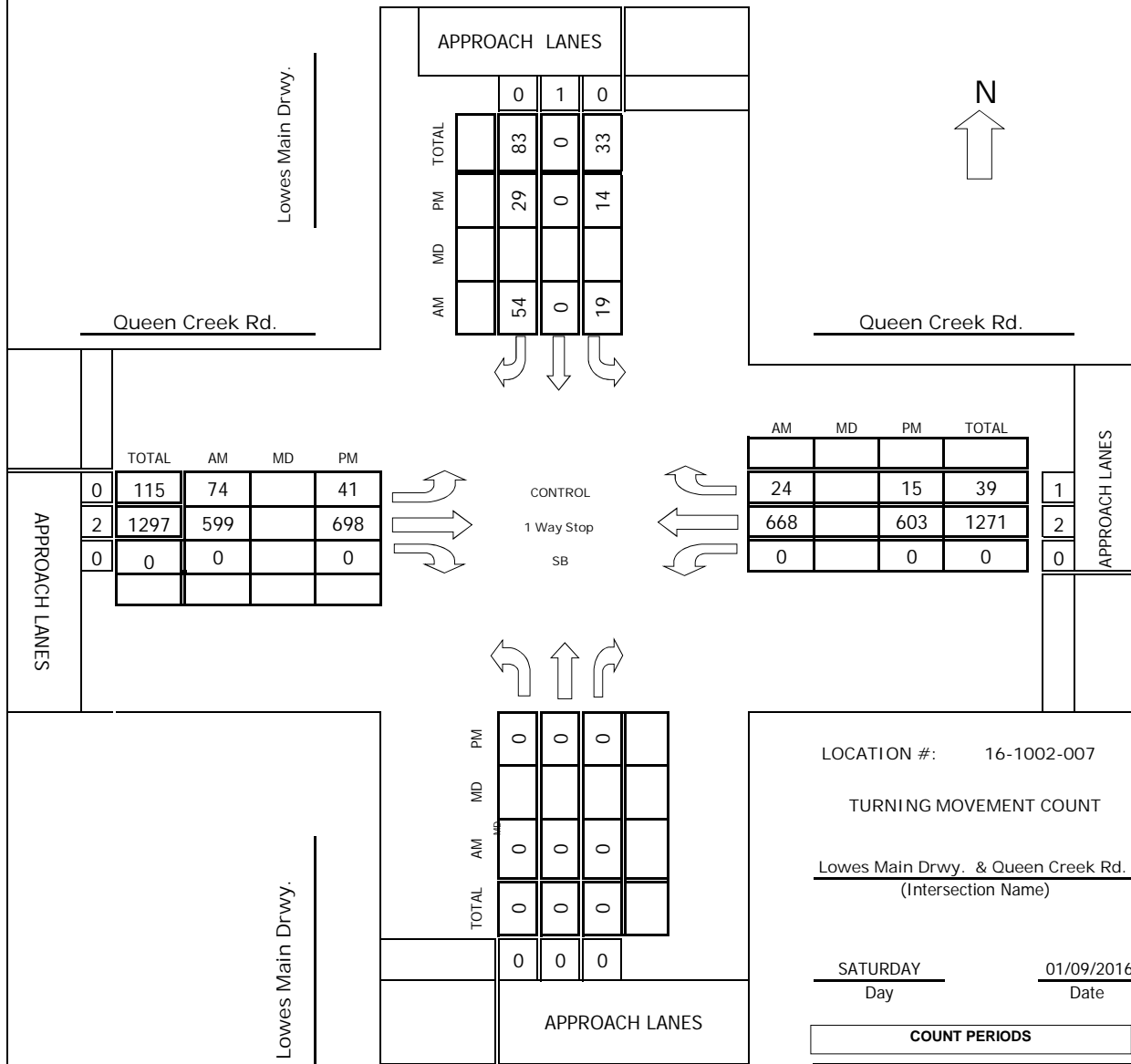
Intersection Turning Movement

Prepared by:



Project #: 16-1002-007

TMC SUMMARY OF Lowes Main Drwy. & Queen Creek Rd.



| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 0 | 115 | 74 | | 41 |
| 2 | 1297 | 599 | | 698 |
| 0 | 0 | 0 | | 0 |

| | AM | MD | PM | TOTAL |
|---|-----|----|-----|-------|
| 1 | 24 | | 15 | 39 |
| 2 | 668 | | 603 | 1271 |
| 0 | 0 | | 0 | 0 |

| | TOTAL | AM | MD | PM |
|---|-------|----|----|----|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |

LOCATION #: 16-1002-007

TURNING MOVEMENT COUNT

Lowes Main Drwy. & Queen Creek Rd.
(Intersection Name)

SATURDAY 01/09/2016
Day Date

COUNT PERIODS

| | | | |
|------|--------|---|-------|
| AM | 1100AM | - | 100PM |
| NOON | - | - | - |
| PM | 430PM | - | 630PM |

AM PEAK HOUR 800 AM

NOON PEAK HOUR _____

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Lowes Main Drwy. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: SATURDAY PROJECT#: 16-1002-007

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | |

| | | | | | | | | | | | | | |
|----------|---|---|---|---|---|----|----|-----|---|---|-----|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 0 | 0 | 0 | 5 | 0 | 11 | 11 | 124 | 0 | 0 | 187 | 11 | 349 |
| 11:15 AM | 0 | 0 | 0 | 2 | 0 | 11 | 11 | 135 | 0 | 0 | 186 | 3 | 348 |
| 11:30 AM | 0 | 0 | 0 | 3 | 0 | 6 | 12 | 139 | 0 | 0 | 185 | 4 | 349 |
| 11:45 AM | 0 | 0 | 0 | 2 | 0 | 6 | 16 | 162 | 0 | 0 | 147 | 4 | 337 |
| 12:00 PM | 0 | 0 | 0 | 3 | 0 | 12 | 14 | 127 | 0 | 0 | 169 | 8 | 333 |
| 12:15 PM | 0 | 0 | 0 | 8 | 0 | 16 | 20 | 152 | 0 | 0 | 151 | 5 | 352 |
| 12:30 PM | 0 | 0 | 0 | 3 | 0 | 11 | 21 | 163 | 0 | 0 | 171 | 6 | 375 |
| 12:45 PM | 0 | 0 | 0 | 5 | 0 | 15 | 19 | 157 | 0 | 0 | 177 | 5 | 378 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|------|------|-------|------|-------|------|-------|------|------|-------|------|-------|
| Volumes | 0 | 0 | 0 | 31 | 0 | 88 | 124 | 1159 | 0 | 0 | 1373 | 46 | 2821 |
| Approach % | #### | #### | #### | 26.05 | 0.00 | 73.95 | 9.66 | 90.34 | 0.00 | 0.00 | 96.76 | 3.24 | |
| App/Depart | 0 | / | 170 | 119 | / | 0 | 1283 | / | 1190 | 1419 | / | 1461 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|------|------|-------|------|-------|-------|-------|------|------|-------|------|------|
| Volumes | 0 | 0 | 0 | 19 | 0 | 54 | 74 | 599 | 0 | 0 | 668 | 24 | 1438 |
| Approach % | #### | #### | #### | 26.03 | 0.00 | 73.97 | 11.00 | 89.00 | 0.00 | 0.00 | 96.53 | 3.47 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.760 | 0.914 | 0.951 | 0.951 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 1 Way Stop (SB)
 COMMENT 1:
 GPS: 33.277515, -111.720818

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Lowes Main Drwy. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: SATURDAY PROJECT#: 16-1002-007

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|---------|------------|----|----|------------|----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 0 | 0 | 0 | 3 | 0 | 8 | 9 | 177 | 0 | 0 | 124 | 4 | 325 |
| 4:45 PM | 0 | 0 | 0 | 2 | 0 | 9 | 8 | 188 | 0 | 0 | 158 | 5 | 370 |
| 5:00 PM | 0 | 0 | 0 | 2 | 0 | 9 | 13 | 170 | 0 | 0 | 156 | 5 | 355 |
| 5:15 PM | 0 | 0 | 0 | 5 | 0 | 7 | 8 | 169 | 0 | 0 | 150 | 5 | 344 |
| 5:30 PM | 0 | 0 | 0 | 5 | 0 | 4 | 12 | 171 | 0 | 0 | 139 | 0 | 331 |
| 5:45 PM | 0 | 0 | 0 | 5 | 0 | 11 | 4 | 149 | 0 | 0 | 161 | 0 | 330 |
| 6:00 PM | 0 | 0 | 0 | 1 | 0 | 12 | 13 | 183 | 0 | 0 | 111 | 2 | 322 |
| 6:15 PM | 0 | 0 | 0 | 4 | 0 | 8 | 6 | 168 | 0 | 0 | 120 | 2 | 308 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|------|-------|------|-------|------|------|-------|------|-------|
| Volumes | 0 | 0 | 0 | 27 | 0 | 68 | 73 | 1375 | 0 | 0 | 1119 | 23 | 2685 |
| Approach % | ##### | ##### | ##### | 28.42 | 0.00 | 71.58 | 5.04 | 94.96 | 0.00 | 0.00 | 97.99 | 2.01 | |
| App/Depart | 0 | / | 96 | 95 | / | 0 | 1448 | / | 1402 | 1142 | / | 1187 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|------|-------|------|-------|------|------|-------|------|------|
| Volumes | 0 | 0 | 0 | 14 | 0 | 29 | 41 | 698 | 0 | 0 | 603 | 15 | 1400 |
| Approach % | ##### | ##### | ##### | 32.56 | 0.00 | 67.44 | 5.55 | 94.45 | 0.00 | 0.00 | 97.57 | 2.43 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.896 | 0.943 | 0.948 | 0.946 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 1 Way Stop (SB)
 COMMENT 1: 0
 GPS: 33.277515, -111.720818



Pedestrian & Bicycle Study

N-S STREET: Lowes Main Drwy.
E-W STREET: Queen Creek Rd.

Date: 01/09/2016
Day: SATURDAY

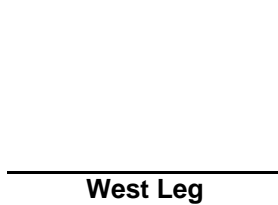
City: Gilbert
Project #: 16-1002-007

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 1 | 0 | 0 | 0 |
| 11:30 AM | 3 | 0 | 0 | 0 |
| 11:45 AM | 1 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 1 | 0 | 0 | 0 |
| 12:30 PM | 2 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 1 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

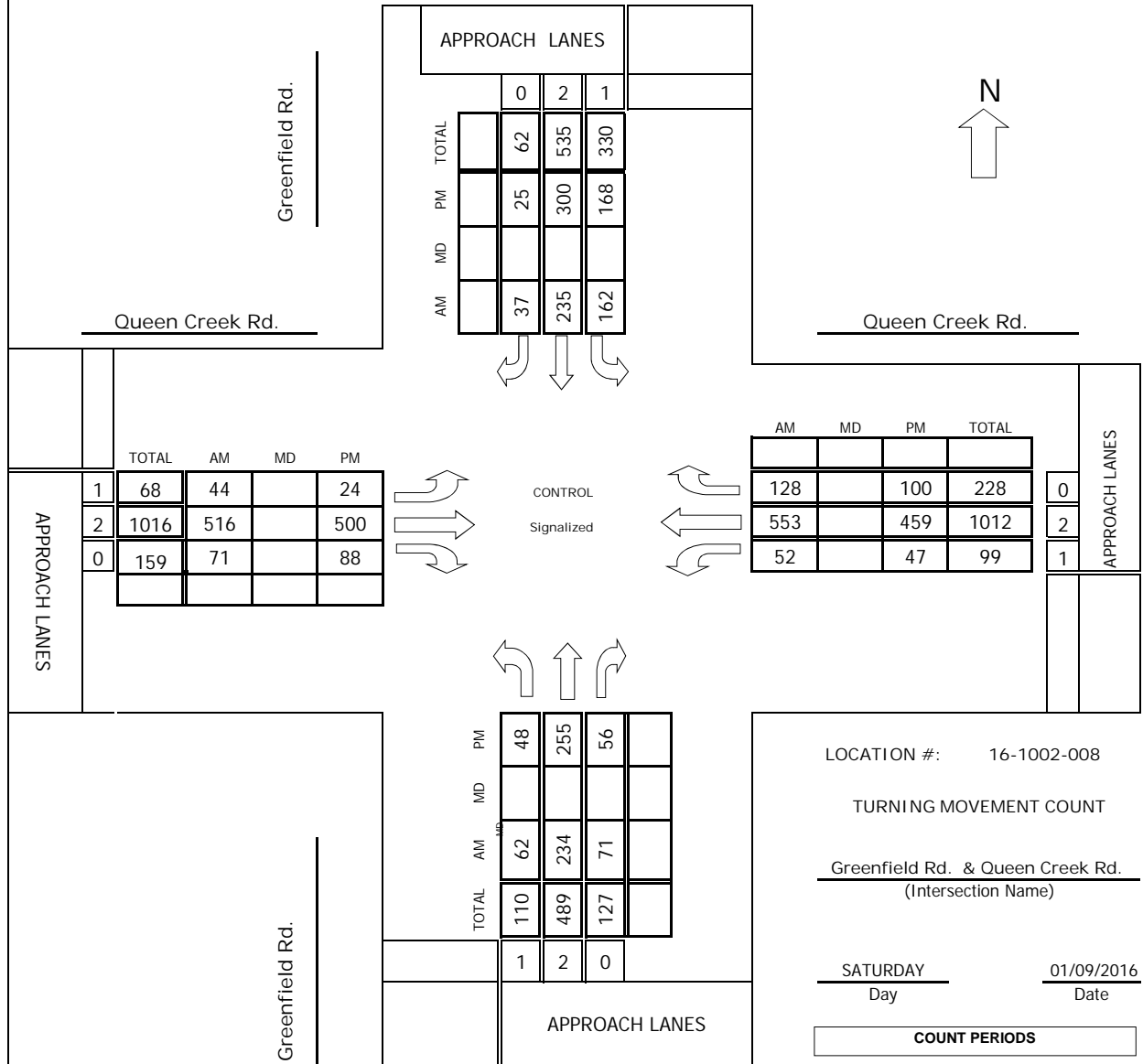
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 2 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 2 | 0 | 0 | 0 |



Project #: 16-1002-008

TMC SUMMARY OF Greenfield Rd. & Queen Creek Rd.



| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 68 | 44 | | 24 |
| 2 | 1016 | 516 | | 500 |
| 0 | 159 | 71 | | 88 |

| | AM | MD | PM | TOTAL |
|---|-----|----|-----|-------|
| 0 | 128 | | 100 | 228 |
| 2 | 553 | | 459 | 1012 |
| 1 | 52 | | 47 | 99 |

| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 110 | 62 | | 48 |
| 2 | 489 | 234 | | 255 |
| 0 | 127 | 71 | | 56 |

LOCATION #: 16-1002-008
 TURNING MOVEMENT COUNT
 Greenfield Rd. & Queen Creek Rd.
 (Intersection Name)
 SATURDAY 01/09/2016
 Day Date

| COUNT PERIODS | | |
|---------------|--------|-------|
| AM | 1100AM | 100PM |
| NOON | - | - |
| PM | 430PM | 630PM |

AM PEAK HOUR 800 AM
 NOON PEAK HOUR _____
 PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: SATURDAY PROJECT#: 16-1002-008

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|----|----|------------|----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 11 | 68 | 17 | 20 | 44 | 6 | 11 | 90 | 17 | 15 | 164 | 45 | 508 |
| 11:15 AM | 12 | 72 | 17 | 22 | 55 | 11 | 7 | 115 | 14 | 11 | 136 | 42 | 514 |
| 11:30 AM | 13 | 66 | 16 | 29 | 58 | 12 | 8 | 129 | 21 | 13 | 143 | 33 | 541 |
| 11:45 AM | 13 | 69 | 16 | 27 | 59 | 9 | 10 | 96 | 16 | 8 | 112 | 40 | 475 |
| 12:00 PM | 15 | 55 | 13 | 36 | 55 | 10 | 11 | 127 | 22 | 11 | 118 | 31 | 504 |
| 12:15 PM | 14 | 60 | 21 | 32 | 64 | 8 | 10 | 122 | 18 | 8 | 157 | 36 | 550 |
| 12:30 PM | 16 | 53 | 18 | 47 | 50 | 9 | 15 | 124 | 14 | 15 | 141 | 36 | 538 |
| 12:45 PM | 17 | 66 | 19 | 47 | 66 | 10 | 8 | 143 | 17 | 18 | 137 | 25 | 573 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|-------|
| Volumes | 111 | 509 | 137 | 260 | 451 | 75 | 80 | 946 | 139 | 99 | 1108 | 288 | 4203 |
| Approach % | 14.66 | 67.24 | 18.10 | 33.08 | 57.38 | 9.54 | 6.87 | 81.20 | 11.93 | 6.62 | 74.11 | 19.26 | |
| App/Depart | 757 | / | 877 | 786 | / | 689 | 1165 | / | 1343 | 1495 | / | 1294 | |

AM Peak Hr Begins at: 800 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|------|
| Volumes | 62 | 234 | 71 | 162 | 235 | 37 | 44 | 516 | 71 | 52 | 553 | 128 | 2165 |
| Approach % | 16.89 | 63.76 | 19.35 | 37.33 | 54.15 | 8.53 | 6.97 | 81.77 | 11.25 | 7.09 | 75.44 | 17.46 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.900 | 0.882 | 0.939 | 0.912 | 0.945 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1:
 GPS: 33.263041, -111.738136

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Queen Creek Rd. DAY: SATURDAY PROJECT#: 16-1002-008

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|---------|------------|----|----|------------|----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 10 | 58 | 12 | 45 | 70 | 8 | 9 | 129 | 13 | 9 | 116 | 14 | 493 |
| 4:45 PM | 13 | 72 | 13 | 46 | 89 | 4 | 9 | 120 | 22 | 11 | 121 | 31 | 551 |
| 5:00 PM | 7 | 78 | 14 | 42 | 71 | 5 | 6 | 130 | 22 | 14 | 131 | 20 | 540 |
| 5:15 PM | 11 | 45 | 17 | 47 | 74 | 7 | 3 | 128 | 20 | 11 | 86 | 19 | 468 |
| 5:30 PM | 17 | 60 | 12 | 33 | 66 | 9 | 6 | 122 | 24 | 11 | 121 | 30 | 511 |
| 5:45 PM | 9 | 58 | 11 | 36 | 74 | 9 | 3 | 139 | 25 | 14 | 101 | 24 | 503 |
| 6:00 PM | 6 | 47 | 15 | 50 | 78 | 13 | 3 | 121 | 19 | 18 | 106 | 10 | 486 |
| 6:15 PM | 5 | 45 | 5 | 42 | 54 | 10 | 5 | 118 | 16 | 11 | 107 | 16 | 434 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|-------|
| Volumes | 78 | 463 | 99 | 341 | 576 | 65 | 44 | 1007 | 161 | 99 | 889 | 164 | 3986 |
| Approach % | 12.19 | 72.34 | 15.47 | 34.73 | 58.66 | 6.62 | 3.63 | 83.09 | 13.28 | 8.59 | 77.17 | 14.24 | |
| App/Depart | 640 | / | 671 | 982 | / | 836 | 1212 | / | 1447 | 1152 | / | 1032 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|-------|-------|------|
| Volumes | 48 | 255 | 56 | 168 | 300 | 25 | 24 | 500 | 88 | 47 | 459 | 100 | 2070 |
| Approach % | 13.37 | 71.03 | 15.60 | 34.08 | 60.85 | 5.07 | 3.92 | 81.70 | 14.38 | 7.76 | 75.74 | 16.50 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.907 | 0.887 | 0.968 | 0.918 | 0.939 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1: 0
 GPS: 33.263041, -111.738136



Pedestrian & Bicycle Study

N-S STREET: Greenfield Rd.
E-W STREET: Queen Creek Rd.

Date: 01/09/2016
Day: SATURDAY

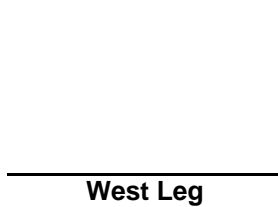
City: Gilbert
Project #: 16-1002-008

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 1 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 2 | 1 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 2 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 5 | 1 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 1 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 2 | 0 | 0 | 0 |
| TOTAL | 3 | 0 | 0 | 0 |

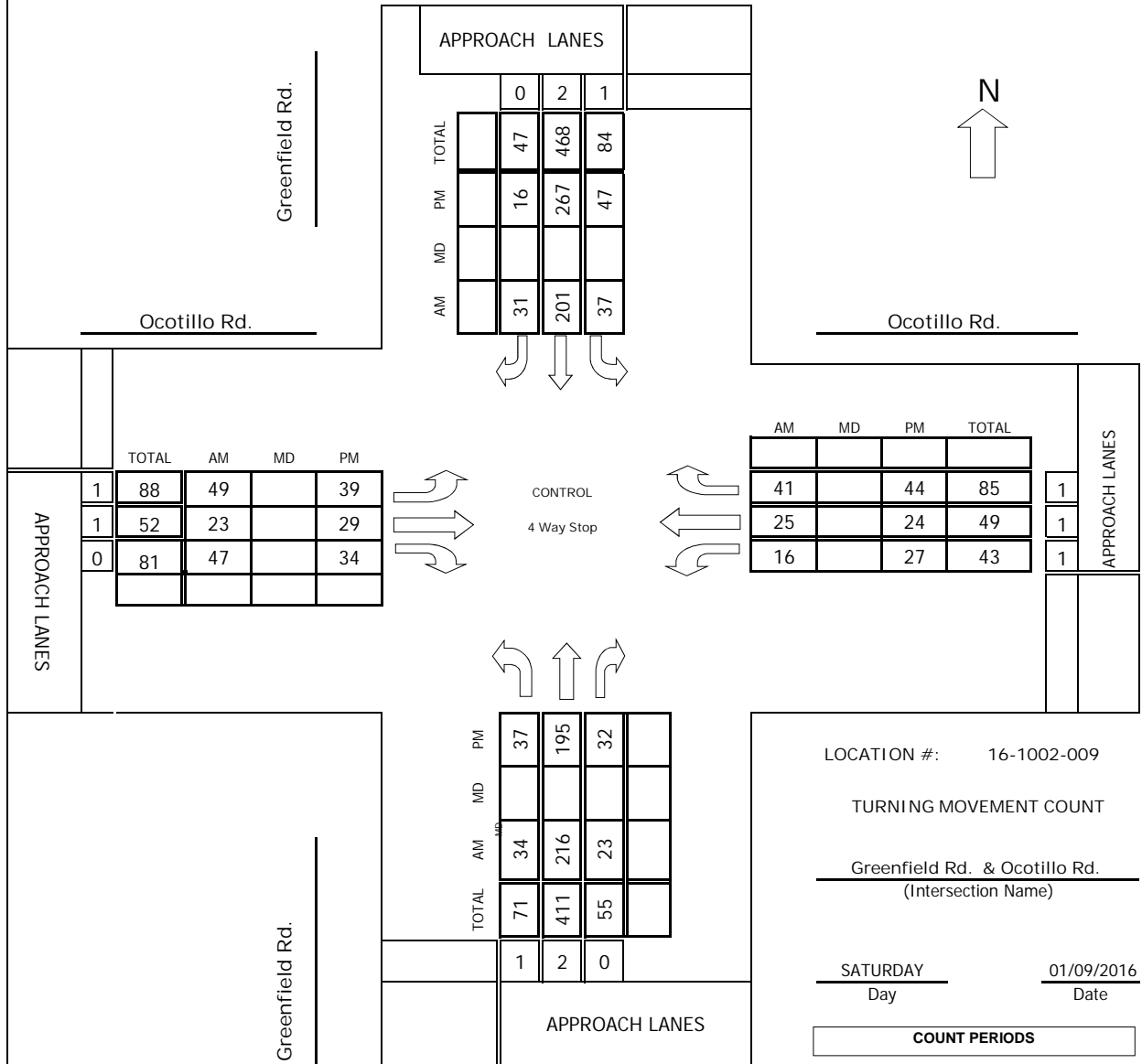
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |



Project #: 16-1002-009

TMC SUMMARY OF Greenfield Rd. & Ocotillo Rd.



LOCATION #: 16-1002-009

TURNING MOVEMENT COUNT

Greenfield Rd. & Ocotillo Rd.
(Intersection Name)

SATURDAY 01/09/2016
Day Date

| COUNT PERIODS | | |
|---------------|--------|-------|
| AM | 1100AM | 100PM |
| NOON | - | - |
| PM | 430PM | 630PM |

AM PEAK HOUR 700 AM
 NOON PEAK HOUR _____
 PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Ocotillo Rd. DAY: SATURDAY PROJECT#: 16-1002-009

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|----------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 5 | 56 | 8 | 9 | 47 | 5 | 17 | 10 | 11 | 4 | 7 | 10 | 189 |
| 11:15 AM | 10 | 55 | 9 | 6 | 56 | 9 | 11 | 3 | 7 | 4 | 6 | 15 | 191 |
| 11:30 AM | 14 | 50 | 2 | 10 | 41 | 11 | 10 | 3 | 12 | 4 | 4 | 6 | 167 |
| 11:45 AM | 5 | 55 | 4 | 12 | 57 | 6 | 11 | 7 | 17 | 4 | 8 | 10 | 196 |
| 12:00 PM | 8 | 51 | 6 | 5 | 62 | 4 | 10 | 6 | 10 | 2 | 1 | 8 | 173 |
| 12:15 PM | 4 | 55 | 3 | 11 | 47 | 3 | 11 | 7 | 9 | 3 | 5 | 9 | 167 |
| 12:30 PM | 9 | 51 | 7 | 14 | 44 | 7 | 9 | 9 | 16 | 12 | 6 | 4 | 188 |
| 12:45 PM | 7 | 58 | 2 | 13 | 55 | 6 | 9 | 8 | 12 | 8 | 6 | 6 | 190 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 62 | 431 | 41 | 80 | 409 | 51 | 88 | 53 | 94 | 41 | 43 | 68 | 1461 |
| Approach % | 11.61 | 80.71 | 7.68 | 14.81 | 75.74 | 9.44 | 37.45 | 22.55 | 40.00 | 26.97 | 28.29 | 44.74 | |
| App/Depart | 534 | / | 587 | 540 | / | 544 | 235 | / | 174 | 152 | / | 156 | |

AM Peak Hr Begins at: 700 AM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Volumes | 34 | 216 | 23 | 37 | 201 | 31 | 49 | 23 | 47 | 16 | 25 | 41 | 743 |
| Approach % | 12.45 | 79.12 | 8.42 | 13.75 | 74.72 | 11.52 | 41.18 | 19.33 | 39.50 | 19.51 | 30.49 | 50.00 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.922 | 0.897 | 0.783 | 0.820 | 0.948 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 4 Way Stop
 COMMENT 1:
 GPS: 33.248501, -111.738267

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Ocotillo Rd. DAY: SATURDAY PROJECT#: 16-1002-009

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | |

| | | | | | | | | | | | | | |
|---------|----|----|----|----|----|---|----|----|----|---|---|----|-----|
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 4 | 44 | 3 | 7 | 60 | 3 | 9 | 10 | 13 | 3 | 2 | 8 | 166 |
| 4:45 PM | 10 | 60 | 8 | 11 | 98 | 1 | 7 | 8 | 8 | 3 | 8 | 17 | 239 |
| 5:00 PM | 7 | 47 | 5 | 13 | 64 | 3 | 9 | 10 | 6 | 6 | 6 | 7 | 183 |
| 5:15 PM | 10 | 47 | 9 | 9 | 51 | 7 | 11 | 8 | 8 | 9 | 3 | 9 | 181 |
| 5:30 PM | 10 | 41 | 10 | 14 | 54 | 5 | 12 | 3 | 12 | 9 | 7 | 11 | 188 |
| 5:45 PM | 5 | 47 | 9 | 6 | 51 | 4 | 11 | 5 | 12 | 8 | 6 | 9 | 173 |
| 6:00 PM | 6 | 35 | 6 | 10 | 50 | 5 | 11 | 16 | 7 | 7 | 7 | 7 | 167 |
| 6:15 PM | 7 | 30 | 7 | 10 | 43 | 7 | 1 | 3 | 9 | 2 | 3 | 6 | 128 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| Volumes | 59 | 351 | 57 | 80 | 471 | 35 | 71 | 63 | 75 | 47 | 42 | 74 | 1425 |
| Approach % | 12.63 | 75.16 | 12.21 | 13.65 | 80.38 | 5.97 | 33.97 | 30.14 | 35.89 | 28.83 | 25.77 | 45.40 | |
| App/Depart | 467 | / | 496 | 586 | / | 593 | 209 | / | 200 | 163 | / | 136 | |

PM Peak Hr Begins at: 445 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-----|
| Volumes | 37 | 195 | 32 | 47 | 267 | 16 | 39 | 29 | 34 | 27 | 24 | 44 | 791 |
| Approach % | 14.02 | 73.86 | 12.12 | 14.24 | 80.91 | 4.85 | 38.24 | 28.43 | 33.33 | 28.42 | 25.26 | 46.32 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.846 | 0.750 | 0.944 | 0.848 | 0.827 |
|---------|-------|-------|-------|-------|-------|

CONTROL: 4 Way Stop
 COMMENT 1: 0
 GPS: 33.248501, -111.738267

Pedestrian & Bicycle Study

N-S STREET: Greenfield Rd.
E-W STREET: Ocotillo Rd.

Date: 01/09/2016
Day: SATURDAY

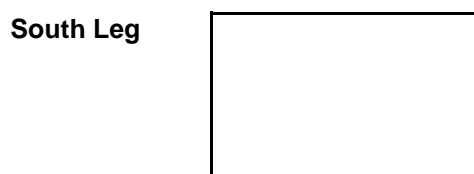
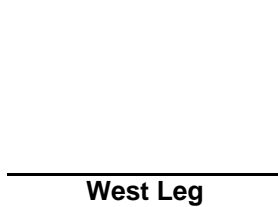
City: Gilbert
Project #: 16-1002-009

| PEDESTRIANS | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| BICYCLES | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| PEDESTRIANS | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| BICYCLES | | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |



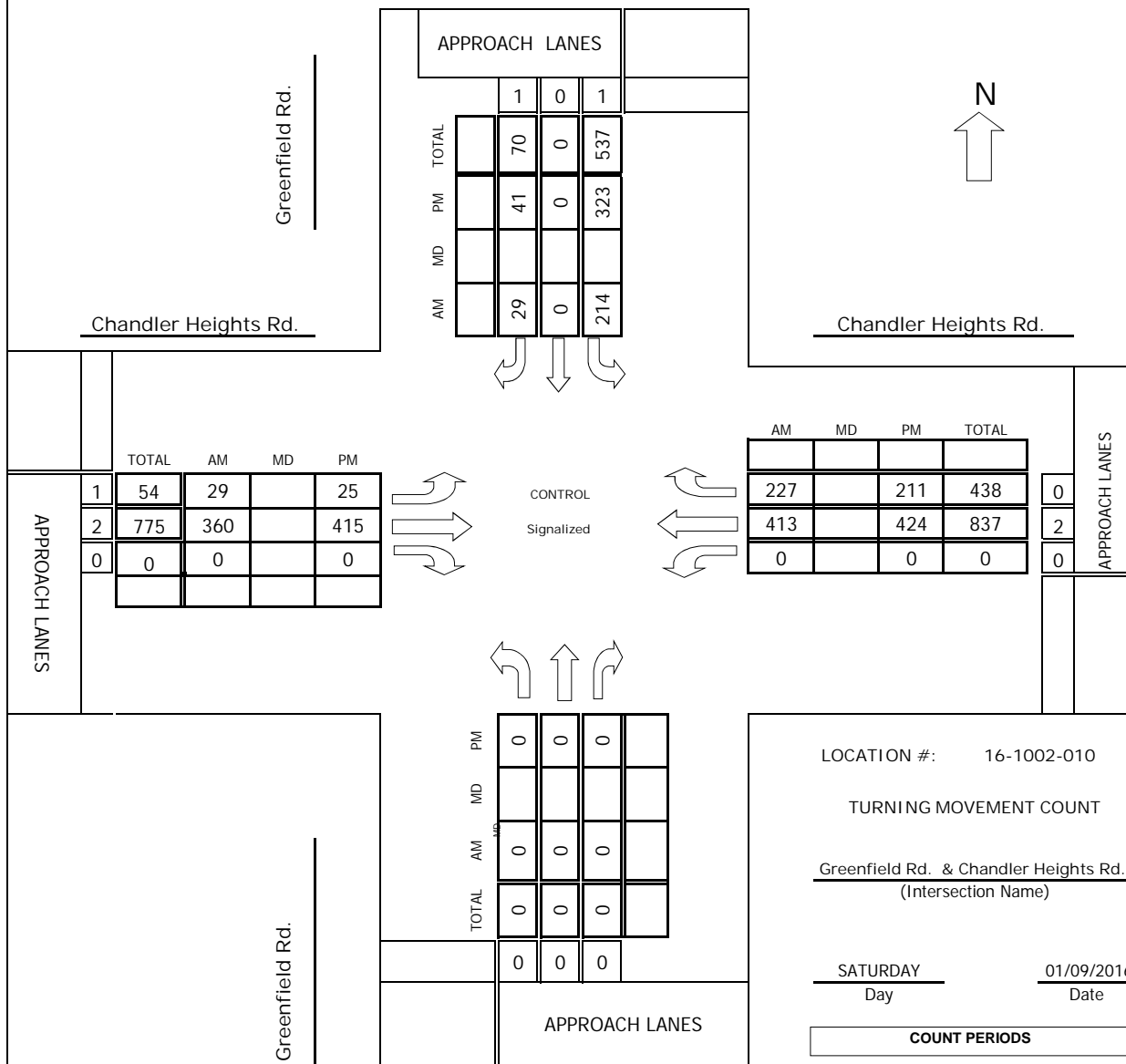
Intersection Turning Movement

Prepared by:



Project #: 16-1002-010

TMC SUMMARY OF Greenfield Rd. & Chandler Heights Rd.



| | TOTAL | AM | MD | PM |
|---|-------|-----|----|-----|
| 1 | 54 | 29 | | 25 |
| 2 | 775 | 360 | | 415 |
| 0 | 0 | 0 | | 0 |

| | AM | MD | PM | TOTAL |
|---|-----|----|-----|-------|
| 0 | 227 | | 211 | 438 |
| 2 | 413 | | 424 | 837 |
| 0 | 0 | | 0 | 0 |

| | TOTAL | AM | MD | PM |
|---|-------|----|----|----|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |

LOCATION #: 16-1002-010

TURNING MOVEMENT COUNT

Greenfield Rd. & Chandler Heights Rd.
(Intersection Name)

SATURDAY 01/09/2016
Day Date

| COUNT PERIODS | | |
|---------------|--------|---------|
| AM | 1100AM | - 100PM |
| NOON | - | - |
| PM | 430PM | - 630PM |

AM PEAK HOUR 715 AM
NOON PEAK HOUR _____
PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Chandler Heights Rd. DAY: SATURDAY PROJECT#: 16-1002-010

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | |

| | | | | | | | | | | | | | |
|----------|---|---|---|----|---|----|----|-----|---|---|-----|----|-----|
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | 0 | 0 | 0 | 54 | 0 | 6 | 6 | 96 | 0 | 0 | 94 | 50 | 306 |
| 11:15 AM | 0 | 0 | 0 | 44 | 0 | 6 | 4 | 98 | 0 | 0 | 111 | 69 | 332 |
| 11:30 AM | 0 | 0 | 0 | 54 | 0 | 7 | 9 | 93 | 0 | 0 | 116 | 56 | 335 |
| 11:45 AM | 0 | 0 | 0 | 53 | 0 | 5 | 9 | 83 | 0 | 0 | 90 | 50 | 290 |
| 12:00 PM | 0 | 0 | 0 | 63 | 0 | 11 | 7 | 86 | 0 | 0 | 96 | 52 | 315 |
| 12:15 PM | 0 | 0 | 0 | 26 | 0 | 6 | 6 | 45 | 0 | 0 | 63 | 25 | 171 |
| 12:30 PM | 0 | 0 | 0 | 57 | 0 | 10 | 5 | 97 | 0 | 0 | 86 | 51 | 306 |
| 12:45 PM | 0 | 0 | 0 | 61 | 0 | 9 | 10 | 110 | 0 | 0 | 91 | 55 | 336 |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|------|------|------|-------|------|-------|------|-------|------|------|-------|-------|-------|
| Volumes | 0 | 0 | 0 | 412 | 0 | 60 | 56 | 708 | 0 | 0 | 747 | 408 | 2391 |
| Approach % | #### | #### | #### | 87.29 | 0.00 | 12.71 | 7.33 | 92.67 | 0.00 | 0.00 | 64.68 | 35.32 | |
| App/Depart | 0 | / | 464 | 472 | / | 0 | 764 | / | 1120 | 1155 | / | 807 | |

AM Peak Hr Begins at: 715 AM

PEAK

| | | | | | | | | | | | | | |
|------------|------|------|------|-------|------|-------|------|-------|------|------|-------|-------|------|
| Volumes | 0 | 0 | 0 | 214 | 0 | 29 | 29 | 360 | 0 | 0 | 413 | 227 | 1272 |
| Approach % | #### | #### | #### | 88.07 | 0.00 | 11.93 | 7.46 | 92.54 | 0.00 | 0.00 | 64.53 | 35.47 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.821 | 0.953 | 0.889 | 0.949 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1:
 GPS: 33.233720, -111.738513

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



N-S STREET: Greenfield Rd. DATE: 01/09/2016 LOCATION: Gilbert
 E-W STREET: Chandler Heights Rd. DAY: SATURDAY PROJECT#: 16-1002-010

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|---------|------------|----|----|------------|----|----|-----------|-----|----|-----------|-----|----|-------|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | | | | | | |
| 4:15 PM | | | | | | | | | | | | | |
| 4:30 PM | 0 | 0 | 0 | 89 | 0 | 10 | 4 | 99 | 0 | 0 | 92 | 52 | 346 |
| 4:45 PM | 0 | 0 | 0 | 78 | 0 | 17 | 8 | 114 | 0 | 0 | 99 | 54 | 370 |
| 5:00 PM | 0 | 0 | 0 | 92 | 0 | 8 | 7 | 103 | 0 | 0 | 130 | 67 | 407 |
| 5:15 PM | 0 | 0 | 0 | 64 | 0 | 6 | 6 | 99 | 0 | 0 | 103 | 38 | 316 |
| 5:30 PM | 0 | 0 | 0 | 54 | 0 | 3 | 13 | 81 | 0 | 0 | 118 | 58 | 327 |
| 5:45 PM | 0 | 0 | 0 | 89 | 0 | 4 | 16 | 103 | 0 | 0 | 90 | 52 | 354 |
| 6:00 PM | 0 | 0 | 0 | 69 | 0 | 9 | 5 | 115 | 0 | 0 | 96 | 39 | 333 |
| 6:15 PM | 0 | 0 | 0 | 51 | 0 | 5 | 7 | 122 | 0 | 0 | 75 | 36 | 296 |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|------------|-------|-------|-------|-------|------|------|------|-------|------|------|-------|-------|-------|
| Volumes | 0 | 0 | 0 | 586 | 0 | 62 | 66 | 836 | 0 | 0 | 803 | 396 | 2749 |
| Approach % | ##### | ##### | ##### | 90.43 | 0.00 | 9.57 | 7.32 | 92.68 | 0.00 | 0.00 | 66.97 | 33.03 | |
| App/Depart | 0 | / | 462 | 648 | / | 0 | 902 | / | 1422 | 1199 | / | 865 | |

PM Peak Hr Begins at: 430 PM

PEAK

| | | | | | | | | | | | | | |
|------------|-------|-------|-------|-------|------|-------|------|-------|------|------|-------|-------|------|
| Volumes | 0 | 0 | 0 | 323 | 0 | 41 | 25 | 415 | 0 | 0 | 424 | 211 | 1439 |
| Approach % | ##### | ##### | ##### | 88.74 | 0.00 | 11.26 | 5.68 | 94.32 | 0.00 | 0.00 | 66.77 | 33.23 | |

PEAK HR.

| | | | | | |
|---------|-------|-------|-------|-------|-------|
| FACTOR: | 0.000 | 0.910 | 0.902 | 0.806 | 0.884 |
|---------|-------|-------|-------|-------|-------|

CONTROL: Signalized
 COMMENT 1: 0
 GPS: 33.233720, -111.738513



Pedestrian & Bicycle Study

N-S STREET: Greenfield Rd.
E-W STREET: Chandler Heights Rd.

Date: 01/09/2016
Day: SATURDAY

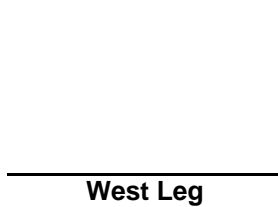
City: Gilbert
Project #: 16-1002-010

| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 0 |
| 11:15 AM | 0 | 0 | 0 | 0 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 11:00 AM | 0 | 0 | 0 | 1 |
| 11:15 AM | 1 | 0 | 0 | 1 |
| 11:30 AM | 0 | 0 | 0 | 0 |
| 11:45 AM | 0 | 0 | 0 | 0 |
| 12:00 PM | 0 | 0 | 0 | 0 |
| 12:15 PM | 0 | 0 | 0 | 0 |
| 12:30 PM | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 2 |

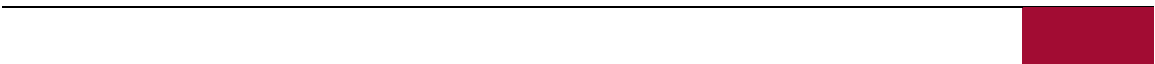
| | PEDESTRIANS | | | |
|--------------|-------------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 1 | 0 | 1 |
| 5:00 PM | 0 | 1 | 0 | 1 |
| 5:15 PM | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 2 | 0 | 2 |

| | BICYCLES | | | |
|--------------|----------|----------|----------|----------|
| | N-LEG | S-LEG | E-LEG | W-LEG |
| 4:30 PM | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 2 |
| 5:00 PM | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 1 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 |
| 6:00 PM | 0 | 0 | 0 | 0 |
| 6:15 PM | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 1 | 2 |



APPENDIX B

EXISTING AND PROJECTED 2035 DAILY VOLUMES



Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Saturday, January 09, 2016

City: Gilbert

Project #: 16-1002-001

Location: Queen Creek Rd. btwn. Lowes Middle Drwy. & Eastern Drwy.

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | |
|-----------|----|----|-----|-----|-----------|-----|------|-----|-----|-----|-----|------|
| 00:00 | | | 49 | 24 | 12:00 | | | 146 | 177 | | | |
| 00:15 | | | 51 | 11 | 12:15 | | | 164 | 196 | | | |
| 00:30 | | | 39 | 12 | 12:30 | | | 157 | 151 | | | |
| 00:45 | | | 46 | 185 | 19 | 66 | 251 | 139 | 606 | 164 | 688 | 1294 |
| 01:00 | | | 35 | 15 | 13:00 | | | 171 | 162 | | | |
| 01:15 | | | 34 | 7 | 13:15 | | | 161 | 175 | | | |
| 01:30 | | | 22 | 11 | 13:30 | | | 170 | 181 | | | |
| 01:45 | | | 19 | 110 | 6 | 39 | 149 | 182 | 684 | 150 | 668 | 1352 |
| 02:00 | | | 16 | 7 | 14:00 | | | 181 | 144 | | | |
| 02:15 | | | 12 | 2 | 14:15 | | | 163 | 169 | | | |
| 02:30 | | | 11 | 6 | 14:30 | | | 169 | 176 | | | |
| 02:45 | | | 13 | 52 | 4 | 19 | 71 | 174 | 687 | 154 | 643 | 1330 |
| 03:00 | | | 16 | 8 | 15:00 | | | 179 | 137 | | | |
| 03:15 | | | 11 | 7 | 15:15 | | | 194 | 133 | | | |
| 03:30 | | | 8 | 2 | 15:30 | | | 198 | 140 | | | |
| 03:45 | | | 13 | 48 | 6 | 23 | 71 | 172 | 743 | 154 | 564 | 1307 |
| 04:00 | | | 6 | 5 | 16:00 | | | 207 | 134 | | | |
| 04:15 | | | 10 | 6 | 16:15 | | | 180 | 149 | | | |
| 04:30 | | | 1 | 1 | 16:30 | | | 166 | 146 | | | |
| 04:45 | | | 4 | 21 | 9 | 21 | 42 | 203 | 756 | 131 | 560 | 1316 |
| 05:00 | | | 8 | 9 | 17:00 | | | 180 | 133 | | | |
| 05:15 | | | 9 | 7 | 17:15 | | | 169 | 144 | | | |
| 05:30 | | | 10 | 17 | 17:30 | | | 198 | 156 | | | |
| 05:45 | | | 7 | 34 | 24 | 57 | 91 | 157 | 704 | 153 | 586 | 1290 |
| 06:00 | | | 15 | 24 | 18:00 | | | 183 | 136 | | | |
| 06:15 | | | 7 | 20 | 18:15 | | | 161 | 146 | | | |
| 06:30 | | | 17 | 28 | 18:30 | | | 164 | 149 | | | |
| 06:45 | | | 15 | 54 | 45 | 117 | 171 | 174 | 682 | 115 | 546 | 1228 |
| 07:00 | | | 30 | 40 | 19:00 | | | 174 | 119 | | | |
| 07:15 | | | 42 | 59 | 19:15 | | | 143 | 127 | | | |
| 07:30 | | | 63 | 64 | 19:30 | | | 148 | 97 | | | |
| 07:45 | | | 48 | 183 | 61 | 224 | 407 | 154 | 619 | 83 | 426 | 1045 |
| 08:00 | | | 50 | 94 | 20:00 | | | 105 | 84 | | | |
| 08:15 | | | 67 | 94 | 20:15 | | | 118 | 58 | | | |
| 08:30 | | | 90 | 74 | 20:30 | | | 113 | 79 | | | |
| 08:45 | | | 74 | 281 | 91 | 353 | 634 | 131 | 467 | 57 | 278 | 745 |
| 09:00 | | | 84 | 103 | 21:00 | | | 122 | 66 | | | |
| 09:15 | | | 76 | 130 | 21:15 | | | 93 | 39 | | | |
| 09:30 | | | 89 | 138 | 21:30 | | | 83 | 55 | | | |
| 09:45 | | | 92 | 341 | 142 | 513 | 854 | 97 | 395 | 45 | 205 | 600 |
| 10:00 | | | 103 | 143 | 22:00 | | | 98 | 58 | | | |
| 10:15 | | | 110 | 149 | 22:15 | | | 92 | 39 | | | |
| 10:30 | | | 101 | 156 | 22:30 | | | 85 | 34 | | | |
| 10:45 | | | 114 | 428 | 152 | 600 | 1028 | 96 | 371 | 50 | 181 | 552 |
| 11:00 | | | 109 | 153 | 23:00 | | | 110 | 40 | | | |
| 11:15 | | | 164 | 175 | 23:15 | | | 74 | 22 | | | |
| 11:30 | | | 148 | 195 | 23:30 | | | 74 | 36 | | | |
| 11:45 | | | 133 | 554 | 206 | 729 | 1283 | 69 | 327 | 29 | 127 | 454 |

Total Vol. 2291 2761 5052 7041 5472 12513

GPS Coordinates: 33.263173, -111.722239

| | | Daily Totals | | | |
|--|----|--------------|------|------|----------|
| | NB | SB | EB | WB | Combined |
| | | | 9332 | 8233 | 17565 |

| Split % | AM | | | PM | | |
|-----------|-------|-------|-------|-------|-------|-------|
| | | | | | | |
| | 45.3% | 54.7% | 28.8% | 56.3% | 43.7% | 71.2% |
| Peak Hour | 11:45 | 11:30 | 11:30 | 15:15 | 12:00 | 13:00 |
| Volume | 600 | 774 | 1365 | 771 | 688 | 1352 |
| P.H.F. | 0.91 | 0.94 | 0.95 | 0.93 | 0.88 | 0.96 |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Saturday, January 09, 2016

City: Gilbert

Project #: 16-1002-002

Location: Higley Rd. north of Arrowhead Trail

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB |
|------------|------|------|-----|------|-----------|------|------|-----|-------|
| 00:00 | 40 | 45 | | | 12:00 | 253 | 207 | | |
| 00:15 | 31 | 43 | | | 12:15 | 253 | 197 | | |
| 00:30 | 32 | 37 | | | 12:30 | 234 | 201 | | |
| 00:45 | 22 | 125 | 35 | 160 | 12:45 | 238 | 978 | 199 | 804 |
| 01:00 | 21 | 32 | | | 13:00 | 252 | 216 | | |
| 01:15 | 22 | 30 | | | 13:15 | 269 | 189 | | |
| 01:30 | 17 | 11 | | | 13:30 | 241 | 231 | | |
| 01:45 | 8 | 68 | 22 | 95 | 13:45 | 234 | 996 | 195 | 831 |
| 02:00 | 17 | 14 | | | 14:00 | 193 | 232 | | |
| 02:15 | 8 | 9 | | | 14:15 | 232 | 240 | | |
| 02:30 | 5 | 11 | | | 14:30 | 194 | 213 | | |
| 02:45 | 12 | 42 | 9 | 43 | 14:45 | 231 | 850 | 204 | 889 |
| 03:00 | 6 | 2 | | | 15:00 | 212 | 230 | | |
| 03:15 | 7 | 16 | | | 15:15 | 227 | 246 | | |
| 03:30 | 9 | 6 | | | 15:30 | 201 | 205 | | |
| 03:45 | 1 | 23 | 3 | 27 | 15:45 | 221 | 861 | 206 | 887 |
| 04:00 | 9 | 4 | | | 16:00 | 214 | 188 | | |
| 04:15 | 7 | 6 | | | 16:15 | 211 | 206 | | |
| 04:30 | 3 | 3 | | | 16:30 | 224 | 208 | | |
| 04:45 | 14 | 33 | 3 | 16 | 16:45 | 212 | 861 | 230 | 832 |
| 05:00 | 12 | 7 | | | 17:00 | 198 | 198 | | |
| 05:15 | 24 | 12 | | | 17:15 | 209 | 191 | | |
| 05:30 | 11 | 10 | | | 17:30 | 213 | 184 | | |
| 05:45 | 23 | 70 | 9 | 38 | 17:45 | 217 | 837 | 233 | 806 |
| 06:00 | 25 | 16 | | | 18:00 | 192 | 186 | | |
| 06:15 | 29 | 13 | | | 18:15 | 237 | 198 | | |
| 06:30 | 28 | 7 | | | 18:30 | 219 | 222 | | |
| 06:45 | 63 | 145 | 22 | 58 | 18:45 | 202 | 850 | 191 | 797 |
| 07:00 | 54 | 21 | | | 19:00 | 156 | 192 | | |
| 07:15 | 68 | 56 | | | 19:15 | 154 | 176 | | |
| 07:30 | 77 | 67 | | | 19:30 | 145 | 175 | | |
| 07:45 | 80 | 279 | 64 | 208 | 19:45 | 114 | 569 | 130 | 673 |
| 08:00 | 101 | 62 | | | 20:00 | 112 | 138 | | |
| 08:15 | 120 | 75 | | | 20:15 | 117 | 139 | | |
| 08:30 | 123 | 90 | | | 20:30 | 101 | 170 | | |
| 08:45 | 125 | 469 | 69 | 296 | 20:45 | 98 | 428 | 121 | 568 |
| 09:00 | 124 | 83 | | | 21:00 | 83 | 124 | | |
| 09:15 | 155 | 94 | | | 21:15 | 80 | 85 | | |
| 09:30 | 178 | 149 | | | 21:30 | 70 | 98 | | |
| 09:45 | 190 | 647 | 119 | 445 | 21:45 | 64 | 297 | 94 | 401 |
| 10:00 | 215 | 127 | | | 22:00 | 70 | 84 | | |
| 10:15 | 199 | 151 | | | 22:15 | 45 | 90 | | |
| 10:30 | 206 | 172 | | | 22:30 | 42 | 88 | | |
| 10:45 | 204 | 824 | 148 | 598 | 22:45 | 98 | 255 | 93 | 355 |
| 11:00 | 246 | 163 | | | 23:00 | 68 | 83 | | |
| 11:15 | 238 | 186 | | | 23:15 | 58 | 60 | | |
| 11:30 | 254 | 208 | | | 23:30 | 54 | 77 | | |
| 11:45 | 268 | 1006 | 177 | 734 | 23:45 | 56 | 236 | 57 | 277 |
| Total Vol. | 3731 | 2718 | | 6449 | | 8018 | 8120 | | 16138 |

GPS Coordinates: 33.268827, -111.720405

| | | Daily Totals | | |
|-------|-------|--------------|----|----------|
| NB | SB | EB | WB | Combined |
| 11749 | 10838 | | | 22587 |

| | AM | | | PM | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Split % | 57.9% | 42.1% | 28.6% | 49.7% | 50.3% | 71.4% |
| Peak Hour | 11:30 | 11:30 | 11:30 | 12:45 | 13:30 | 12:45 |
| Volume | 1028 | 789 | 1817 | 1000 | 898 | 1835 |
| P.H.F. | 0.96 | 0.95 | 0.98 | 0.93 | 0.94 | 0.97 |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Saturday, January 09, 2016

City: Gilbert

Project #: 16-1002-003

Location: Queen Creek Rd. west of Soboba St.

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | | |
|-----------|----|----|-----|-----|-----------|-----|------|-------|-----|-----|-----|-----|------|
| 00:00 | | | 28 | 32 | 12:00 | | | 130 | 165 | | | | |
| 00:15 | | | 22 | 16 | 12:15 | | | 139 | 157 | | | | |
| 00:30 | | | 19 | 15 | 12:30 | | | 128 | 146 | | | | |
| 00:45 | | | 13 | 82 | 18 | 81 | 163 | 12:45 | 140 | 537 | 170 | 638 | 1175 |
| 01:00 | | | 15 | 15 | 13:00 | | | 164 | 179 | | | | |
| 01:15 | | | 9 | 4 | 13:15 | | | 147 | 175 | | | | |
| 01:30 | | | 7 | 9 | 13:30 | | | 159 | 158 | | | | |
| 01:45 | | | 5 | 36 | 6 | 34 | 70 | 13:45 | 161 | 631 | 143 | 655 | 1286 |
| 02:00 | | | 8 | 6 | 14:00 | | | 135 | 131 | | | | |
| 02:15 | | | 14 | 2 | 14:15 | | | 151 | 162 | | | | |
| 02:30 | | | 10 | 2 | 14:30 | | | 164 | 155 | | | | |
| 02:45 | | | 9 | 41 | 0 | 10 | 51 | 14:45 | 147 | 597 | 148 | 596 | 1193 |
| 03:00 | | | 6 | 5 | 15:00 | | | 164 | 133 | | | | |
| 03:15 | | | 2 | 5 | 15:15 | | | 162 | 135 | | | | |
| 03:30 | | | 2 | 3 | 15:30 | | | 145 | 127 | | | | |
| 03:45 | | | 3 | 13 | 2 | 15 | 28 | 15:45 | 137 | 608 | 126 | 521 | 1129 |
| 04:00 | | | 1 | 8 | 16:00 | | | 172 | 136 | | | | |
| 04:15 | | | 4 | 4 | 16:15 | | | 140 | 123 | | | | |
| 04:30 | | | 6 | 2 | 16:30 | | | 144 | 151 | | | | |
| 04:45 | | | 5 | 16 | 9 | 23 | 39 | 16:45 | 152 | 608 | 153 | 563 | 1171 |
| 05:00 | | | 3 | 7 | 17:00 | | | 137 | 118 | | | | |
| 05:15 | | | 6 | 6 | 17:15 | | | 139 | 148 | | | | |
| 05:30 | | | 11 | 13 | 17:30 | | | 155 | 144 | | | | |
| 05:45 | | | 8 | 28 | 17 | 43 | 71 | 17:45 | 142 | 573 | 157 | 567 | 1140 |
| 06:00 | | | 14 | 19 | 18:00 | | | 166 | 124 | | | | |
| 06:15 | | | 22 | 14 | 18:15 | | | 140 | 122 | | | | |
| 06:30 | | | 31 | 25 | 18:30 | | | 125 | 139 | | | | |
| 06:45 | | | 38 | 105 | 33 | 91 | 196 | 18:45 | 127 | 558 | 132 | 517 | 1075 |
| 07:00 | | | 45 | 34 | 19:00 | | | 113 | 121 | | | | |
| 07:15 | | | 47 | 46 | 19:15 | | | 96 | 116 | | | | |
| 07:30 | | | 47 | 62 | 19:30 | | | 84 | 83 | | | | |
| 07:45 | | | 51 | 190 | 43 | 185 | 375 | 19:45 | 83 | 376 | 71 | 391 | 767 |
| 08:00 | | | 57 | 63 | 20:00 | | | 90 | 85 | | | | |
| 08:15 | | | 70 | 80 | 20:15 | | | 78 | 60 | | | | |
| 08:30 | | | 77 | 85 | 20:30 | | | 72 | 52 | | | | |
| 08:45 | | | 80 | 284 | 86 | 314 | 598 | 20:45 | 67 | 307 | 62 | 259 | 566 |
| 09:00 | | | 72 | 88 | 21:00 | | | 70 | 58 | | | | |
| 09:15 | | | 92 | 125 | 21:15 | | | 73 | 46 | | | | |
| 09:30 | | | 93 | 137 | 21:30 | | | 72 | 47 | | | | |
| 09:45 | | | 120 | 377 | 124 | 474 | 851 | 21:45 | 55 | 270 | 34 | 185 | 455 |
| 10:00 | | | 102 | 109 | 22:00 | | | 73 | 48 | | | | |
| 10:15 | | | 99 | 134 | 22:15 | | | 71 | 30 | | | | |
| 10:30 | | | 122 | 137 | 22:30 | | | 46 | 28 | | | | |
| 10:45 | | | 132 | 455 | 157 | 537 | 992 | 22:45 | 42 | 232 | 44 | 150 | 382 |
| 11:00 | | | 139 | 134 | 23:00 | | | 44 | 29 | | | | |
| 11:15 | | | 131 | 150 | 23:15 | | | 29 | 25 | | | | |
| 11:30 | | | 137 | 160 | 23:30 | | | 34 | 21 | | | | |
| 11:45 | | | 154 | 561 | 173 | 617 | 1178 | 23:45 | 25 | 132 | 21 | 96 | 228 |

Total Vol. 2188 2424 4612 5429 5138 10567

GPS Coordinates: 33.263668, -111.709286

| | | Daily Totals | | |
|----|----|--------------|------|----------|
| NB | SB | EB | WB | Combined |
| | | 7617 | 7562 | 15179 |

| Split % | AM | | | PM | | |
|-----------|-------|-------|-------|-------|-------|-------|
| | 47.4% | 52.6% | 30.4% | 51.4% | 48.6% | 69.6% |
| Peak Hour | 11:00 | 11:30 | 11:30 | 14:30 | 12:45 | 12:45 |
| Volume | 561 | 655 | 1215 | 637 | 682 | 1292 |
| P.H.F. | 0.91 | 0.95 | 0.93 | 0.97 | 0.95 | 0.94 |

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Saturday, January 09, 2016

City: Gilbert

Project #: 16-1002-004

Location: Higley Rd. north of Bridges Blvd.

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB |
|------------|------|------|-----|------|-----------|------|------|-----|-------|
| 00:00 | 22 | 46 | | | 12:00 | 245 | 192 | | |
| 00:15 | 16 | 43 | | | 12:15 | 244 | 232 | | |
| 00:30 | 26 | 41 | | | 12:30 | 260 | 209 | | |
| 00:45 | 21 | 85 | 28 | 158 | 12:45 | 242 | 991 | 232 | 865 |
| 01:00 | 12 | 25 | | | 13:00 | 231 | 223 | | |
| 01:15 | 17 | 20 | | | 13:15 | 197 | 221 | | |
| 01:30 | 13 | 14 | | | 13:30 | 249 | 247 | | |
| 01:45 | 8 | 50 | 9 | 68 | 13:45 | 208 | 885 | 219 | 910 |
| 02:00 | 7 | 13 | | | 14:00 | 228 | 217 | | |
| 02:15 | 8 | 8 | | | 14:15 | 236 | 223 | | |
| 02:30 | 8 | 12 | | | 14:30 | 204 | 248 | | |
| 02:45 | 6 | 29 | 14 | 47 | 14:45 | 197 | 865 | 213 | 901 |
| 03:00 | 8 | 10 | | | 15:00 | 224 | 210 | | |
| 03:15 | 7 | 4 | | | 15:15 | 207 | 212 | | |
| 03:30 | 7 | 7 | | | 15:30 | 210 | 236 | | |
| 03:45 | 5 | 27 | 5 | 26 | 15:45 | 221 | 862 | 251 | 909 |
| 04:00 | 9 | 7 | | | 16:00 | 223 | 227 | | |
| 04:15 | 14 | 5 | | | 16:15 | 200 | 228 | | |
| 04:30 | 15 | 15 | | | 16:30 | 219 | 208 | | |
| 04:45 | 16 | 54 | 12 | 39 | 16:45 | 212 | 854 | 220 | 883 |
| 05:00 | 20 | 6 | | | 17:00 | 176 | 231 | | |
| 05:15 | 35 | 21 | | | 17:15 | 215 | 205 | | |
| 05:30 | 27 | 13 | | | 17:30 | 234 | 216 | | |
| 05:45 | 36 | 118 | 14 | 54 | 17:45 | 244 | 869 | 224 | 876 |
| 06:00 | 66 | 11 | | | 18:00 | 203 | 229 | | |
| 06:15 | 65 | 22 | | | 18:15 | 195 | 229 | | |
| 06:30 | 59 | 52 | | | 18:30 | 158 | 203 | | |
| 06:45 | 76 | 266 | 67 | 152 | 18:45 | 154 | 710 | 175 | 836 |
| 07:00 | 74 | 61 | | | 19:00 | 128 | 163 | | |
| 07:15 | 122 | 58 | | | 19:15 | 102 | 152 | | |
| 07:30 | 115 | 61 | | | 19:30 | 99 | 145 | | |
| 07:45 | 138 | 449 | 100 | 280 | 19:45 | 94 | 423 | 172 | 632 |
| 08:00 | 120 | 93 | | | 20:00 | 103 | 176 | | |
| 08:15 | 139 | 102 | | | 20:15 | 85 | 158 | | |
| 08:30 | 177 | 74 | | | 20:30 | 86 | 114 | | |
| 08:45 | 204 | 640 | 135 | 404 | 20:45 | 73 | 347 | 114 | 562 |
| 09:00 | 204 | 131 | | | 21:00 | 66 | 123 | | |
| 09:15 | 205 | 113 | | | 21:15 | 72 | 96 | | |
| 09:30 | 244 | 152 | | | 21:30 | 48 | 81 | | |
| 09:45 | 232 | 885 | 139 | 535 | 21:45 | 51 | 237 | 102 | 402 |
| 10:00 | 216 | 144 | | | 22:00 | 86 | 112 | | |
| 10:15 | 212 | 147 | | | 22:15 | 70 | 96 | | |
| 10:30 | 254 | 176 | | | 22:30 | 48 | 92 | | |
| 10:45 | 268 | 950 | 180 | 647 | 22:45 | 53 | 257 | 73 | 373 |
| 11:00 | 275 | 197 | | | 23:00 | 35 | 81 | | |
| 11:15 | 257 | 179 | | | 23:15 | 59 | 56 | | |
| 11:30 | 276 | 190 | | | 23:30 | 27 | 47 | | |
| 11:45 | 212 | 1020 | 199 | 765 | 23:45 | 24 | 145 | 41 | 225 |
| Total Vol. | 4573 | 3175 | | 7748 | | 7445 | 8374 | | 15819 |

GPS Coordinates: 33.259139, -111.720572

| | | Daily Totals | | |
|-------|-------|--------------|----|----------|
| NB | SB | EB | WB | Combined |
| 12018 | 11549 | | | 23567 |

| | AM | | | PM | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Split % | 59.0% | 41.0% | 32.9% | 47.1% | 52.9% | 67.1% |
| Peak Hour | 10:45 | 11:45 | 10:45 | 12:00 | 15:30 | 12:15 |
| Volume | 1076 | 832 | 1822 | 991 | 942 | 1873 |
| P.H.F. | 0.97 | 0.90 | 0.97 | 0.95 | 0.94 | 0.98 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501184
 Route: Chandler Heights Road
 Location: btwn Greenfield Road & Higley Road

Site Ref: 5
 Direction: WB
 Latitude: 33.2338
 Longitude: -111.7309

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 4 | 152 | 4 | 132 | | | | | | | | | | | | | 4 | 142 |
| 00:15 | 4 | 149 | 5 | 140 | | | | | | | | | | | | | 5 | 145 |
| 00:30 | 6 | 127 | 3 | 134 | | | | | | | | | | | | | 5 | 131 |
| 00:45 | 3 | 124 | 5 | 135 | | | | | | | | | | | | | 4 | 130 |
| 01:00 | 6 | 117 | 5 | 98 | | | | | | | | | | | | | 6 | 108 |
| 01:15 | 7 | 128 | 4 | 144 | | | | | | | | | | | | | 6 | 136 |
| 01:30 | 3 | 107 | 7 | 129 | | | | | | | | | | | | | 5 | 118 |
| 01:45 | 5 | 107 | 4 | 144 | | | | | | | | | | | | | 5 | 126 |
| 02:00 | 7 | 142 | 1 | 126 | | | | | | | | | | | | | 4 | 134 |
| 02:15 | 3 | 152 | 1 | 134 | | | | | | | | | | | | | 2 | 143 |
| 02:30 | 2 | 146 | 5 | 171 | | | | | | | | | | | | | 4 | 159 |
| 02:45 | 6 | 206 | 8 | 171 | | | | | | | | | | | | | 7 | 189 |
| 03:00 | 7 | 205 | 7 | 201 | | | | | | | | | | | | | 7 | 203 |
| 03:15 | 12 | 178 | 5 | 166 | | | | | | | | | | | | | 9 | 172 |
| 03:30 | 7 | 158 | 15 | 160 | | | | | | | | | | | | | 11 | 159 |
| 03:45 | 16 | 142 | 16 | 138 | | | | | | | | | | | | | 16 | 140 |
| 04:00 | 20 | 172 | 15 | 161 | | | | | | | | | | | | | 18 | 167 |
| 04:15 | 32 | 159 | 30 | 166 | | | | | | | | | | | | | 31 | 163 |
| 04:30 | 60 | 161 | 54 | 176 | | | | | | | | | | | | | 57 | 169 |
| 04:45 | 69 | 158 | 56 | 144 | | | | | | | | | | | | | 63 | 151 |
| 05:00 | 72 | 151 | 77 | 151 | | | | | | | | | | | | | 75 | 151 |
| 05:15 | 128 | 173 | 119 | 133 | | | | | | | | | | | | | 124 | 153 |
| 05:30 | 125 | 166 | 118 | 163 | | | | | | | | | | | | | 122 | 165 |
| 05:45 | 147 | 170 | 151 | 132 | | | | | | | | | | | | | 149 | 151 |
| 06:00 | 183 | 131 | 185 | 147 | | | | | | | | | | | | | 184 | 139 |
| 06:15 | 227 | 127 | 219 | 159 | | | | | | | | | | | | | 223 | 143 |
| 06:30 | 228 | 123 | 212 | 136 | | | | | | | | | | | | | 220 | 130 |
| 06:45 | 300 | 133 | 324 | 120 | | | | | | | | | | | | | 312 | 127 |
| 07:00 | 387 | 96 | 371 | 102 | | | | | | | | | | | | | 379 | 99 |
| 07:15 | 284 | 87 | 305 | 102 | | | | | | | | | | | | | 295 | 95 |
| 07:30 | 242 | 79 | 256 | 81 | | | | | | | | | | | | | 249 | 80 |
| 07:45 | 279 | 64 | 290 | 71 | | | | | | | | | | | | | 285 | 68 |
| 08:00 | 307 | 69 | 315 | 54 | | | | | | | | | | | | | 311 | 62 |
| 08:15 | 286 | 48 | 276 | 62 | | | | | | | | | | | | | 281 | 55 |
| 08:30 | 196 | 39 | 214 | 66 | | | | | | | | | | | | | 205 | 53 |
| 08:45 | 169 | 49 | 175 | 42 | | | | | | | | | | | | | 172 | 46 |
| 09:00 | 172 | 44 | 165 | 51 | | | | | | | | | | | | | 169 | 48 |
| 09:15 | 152 | 41 | 166 | 51 | | | | | | | | | | | | | 159 | 46 |
| 09:30 | 130 | 25 | 144 | 42 | | | | | | | | | | | | | 137 | 34 |
| 09:45 | 119 | 19 | 145 | 22 | | | | | | | | | | | | | 132 | 21 |
| 10:00 | 137 | 20 | 117 | 24 | | | | | | | | | | | | | 127 | 22 |
| 10:15 | 127 | 18 | 120 | 18 | | | | | | | | | | | | | 124 | 18 |
| 10:30 | 140 | 16 | 155 | 26 | | | | | | | | | | | | | 148 | 21 |
| 10:45 | 127 | 15 | 117 | 15 | | | | | | | | | | | | | 122 | 15 |
| 11:00 | 118 | 12 | 151 | 19 | | | | | | | | | | | | | 135 | 16 |
| 11:15 | 117 | 16 | 113 | 15 | | | | | | | | | | | | | 115 | 16 |
| 11:30 | 122 | 4 | 111 | 7 | | | | | | | | | | | | | 117 | 6 |
| 11:45 | 117 | 7 | 117 | 5 | | | | | | | | | | | | | 117 | 6 |
| Totals | 5417 | 4932 | 5478 | 4986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5448 | 4959 |
| Day Total | 10349 | | 10464 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 10407 | |
| AM Pct | 52.3% | | 52.4% | | | | | | | | | | | | | | 52.3% | |
| Peak Hour | 6:45 | 14:45 | 6:45 | 14:30 | | | | | | | | | | | | | 6:45 | 14:45 |
| Peak Volume | 1213 | 747 | 1256 | 709 | | | | | | | | | | | | | 1235 | 723 |
| P.H.F | 0.7836 | 0.9066 | 0.8464 | 0.8818 | | | | | | | | | | | | | 0.8143 | 0.8898 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501183
 Route: Chandler Heights Road
 Location: btwn Greenfield Road & Higley Road

Site Ref: 5
 Direction: EB
 Latitude: 33.2338
 Longitude: -111.7309

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| | Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | |
| 00:00 | 14 | 117 | 12 | 136 | | | | | | | | | | | | | 13 | 127 |
| 00:15 | 17 | 126 | 11 | 151 | | | | | | | | | | | | | 14 | 139 |
| 00:30 | 4 | 121 | 13 | 127 | | | | | | | | | | | | | 9 | 124 |
| 00:45 | 11 | 124 | 3 | 147 | | | | | | | | | | | | | 7 | 136 |
| 01:00 | 15 | 136 | 2 | 135 | | | | | | | | | | | | | 9 | 136 |
| 01:15 | 10 | 128 | 9 | 150 | | | | | | | | | | | | | 10 | 139 |
| 01:30 | 7 | 146 | 9 | 143 | | | | | | | | | | | | | 8 | 145 |
| 01:45 | 2 | 122 | 5 | 136 | | | | | | | | | | | | | 4 | 129 |
| 02:00 | 8 | 159 | 3 | 142 | | | | | | | | | | | | | 6 | 151 |
| 02:15 | 4 | 222 | 4 | 246 | | | | | | | | | | | | | 4 | 234 |
| 02:30 | 5 | 245 | 5 | 215 | | | | | | | | | | | | | 5 | 230 |
| 02:45 | 6 | 243 | 6 | 234 | | | | | | | | | | | | | 6 | 239 |
| 03:00 | 2 | 213 | 5 | 228 | | | | | | | | | | | | | 4 | 221 |
| 03:15 | 3 | 260 | 7 | 252 | | | | | | | | | | | | | 5 | 256 |
| 03:30 | 1 | 263 | 2 | 222 | | | | | | | | | | | | | 2 | 243 |
| 03:45 | 12 | 232 | 5 | 243 | | | | | | | | | | | | | 9 | 238 |
| 04:00 | 8 | 243 | 2 | 233 | | | | | | | | | | | | | 5 | 238 |
| 04:15 | 5 | 242 | 6 | 284 | | | | | | | | | | | | | 6 | 263 |
| 04:30 | 2 | 246 | 7 | 262 | | | | | | | | | | | | | 5 | 254 |
| 04:45 | 17 | 291 | 14 | 268 | | | | | | | | | | | | | 16 | 280 |
| 05:00 | 11 | 264 | 13 | 261 | | | | | | | | | | | | | 12 | 263 |
| 05:15 | 17 | 296 | 19 | 312 | | | | | | | | | | | | | 18 | 304 |
| 05:30 | 31 | 252 | 25 | 301 | | | | | | | | | | | | | 28 | 277 |
| 05:45 | 55 | 266 | 39 | 227 | | | | | | | | | | | | | 47 | 247 |
| 06:00 | 49 | 270 | 53 | 238 | | | | | | | | | | | | | 51 | 254 |
| 06:15 | 78 | 248 | 97 | 241 | | | | | | | | | | | | | 88 | 245 |
| 06:30 | 103 | 225 | 72 | 236 | | | | | | | | | | | | | 88 | 231 |
| 06:45 | 85 | 225 | 87 | 212 | | | | | | | | | | | | | 86 | 219 |
| 07:00 | 117 | 204 | 118 | 218 | | | | | | | | | | | | | 118 | 211 |
| 07:15 | 118 | 167 | 140 | 174 | | | | | | | | | | | | | 129 | 171 |
| 07:30 | 113 | 167 | 107 | 167 | | | | | | | | | | | | | 110 | 167 |
| 07:45 | 172 | 138 | 161 | 186 | | | | | | | | | | | | | 167 | 162 |
| 08:00 | 137 | 145 | 141 | 156 | | | | | | | | | | | | | 139 | 151 |
| 08:15 | 161 | 122 | 133 | 146 | | | | | | | | | | | | | 147 | 134 |
| 08:30 | 154 | 121 | 166 | 117 | | | | | | | | | | | | | 160 | 119 |
| 08:45 | 135 | 106 | 139 | 117 | | | | | | | | | | | | | 137 | 112 |
| 09:00 | 116 | 95 | 118 | 104 | | | | | | | | | | | | | 117 | 100 |
| 09:15 | 94 | 99 | 111 | 101 | | | | | | | | | | | | | 103 | 100 |
| 09:30 | 98 | 75 | 84 | 90 | | | | | | | | | | | | | 91 | 83 |
| 09:45 | 90 | 67 | 112 | 73 | | | | | | | | | | | | | 101 | 70 |
| 10:00 | 97 | 45 | 103 | 47 | | | | | | | | | | | | | 100 | 46 |
| 10:15 | 90 | 55 | 117 | 52 | | | | | | | | | | | | | 104 | 54 |
| 10:30 | 114 | 37 | 105 | 34 | | | | | | | | | | | | | 110 | 36 |
| 10:45 | 118 | 30 | 105 | 31 | | | | | | | | | | | | | 112 | 31 |
| 11:00 | 98 | 28 | 120 | 35 | | | | | | | | | | | | | 109 | 32 |
| 11:15 | 126 | 30 | 131 | 19 | | | | | | | | | | | | | 129 | 25 |
| 11:30 | 134 | 18 | 133 | 18 | | | | | | | | | | | | | 134 | 18 |
| 11:45 | 156 | 16 | 128 | 12 | | | | | | | | | | | | | 142 | 14 |
| Totals | 3020 | 7690 | 3007 | 7879 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3014 | 7785 |
| Day Total | 10710 | | 10886 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 10798 | |
| AM Pct | 28.2% | | 27.6% | | | | | | | | | | | | | | 27.9% | |
| Peak Hour | 7:45 | 16:45 | 7:45 | 16:45 | | | | | | | | | | | | | 7:45 | 16:45 |
| Peak Volume | 624 | 1103 | 601 | 1142 | | | | | | | | | | | | | 613 | 1123 |
| P.H.F | 0.9070 | 0.9316 | 0.9051 | 0.9151 | | | | | | | | | | | | | 0.9197 | 0.9231 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501227
 Route: GreenField Road
 Location: btwn Ocotillo Road & Chandler Heights Road

Site Ref: 27
 Direction: NB
 Latitude: 33.2442
 Longitude: -111.7381

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 2 | 65 | 0 | 49 | | | | | | | | | | | | | 1 | 57 |
| 00:15 | 1 | 62 | 1 | 58 | | | | | | | | | | | | | 1 | 60 |
| 00:30 | 2 | 56 | 0 | 40 | | | | | | | | | | | | | 1 | 48 |
| 00:45 | 0 | 29 | 1 | 62 | | | | | | | | | | | | | 1 | 46 |
| 01:00 | 0 | 34 | 0 | 44 | | | | | | | | | | | | | 0 | 39 |
| 01:15 | 1 | 48 | 0 | 48 | | | | | | | | | | | | | 1 | 48 |
| 01:30 | 1 | 39 | 1 | 35 | | | | | | | | | | | | | 1 | 37 |
| 01:45 | 2 | 35 | 2 | 47 | | | | | | | | | | | | | 2 | 41 |
| 02:00 | 1 | 55 | 0 | 64 | | | | | | | | | | | | | 1 | 60 |
| 02:15 | 2 | 52 | 0 | 39 | | | | | | | | | | | | | 1 | 46 |
| 02:30 | 4 | 52 | 2 | 53 | | | | | | | | | | | | | 3 | 53 |
| 02:45 | 0 | 58 | 0 | 58 | | | | | | | | | | | | | 0 | 58 |
| 03:00 | 4 | 77 | 6 | 76 | | | | | | | | | | | | | 5 | 77 |
| 03:15 | 5 | 69 | 2 | 62 | | | | | | | | | | | | | 4 | 66 |
| 03:30 | 4 | 51 | 5 | 48 | | | | | | | | | | | | | 5 | 50 |
| 03:45 | 5 | 35 | 1 | 51 | | | | | | | | | | | | | 3 | 43 |
| 04:00 | 10 | 73 | 9 | 54 | | | | | | | | | | | | | 10 | 64 |
| 04:15 | 5 | 73 | 5 | 74 | | | | | | | | | | | | | 5 | 74 |
| 04:30 | 18 | 64 | 13 | 67 | | | | | | | | | | | | | 16 | 66 |
| 04:45 | 17 | 83 | 11 | 67 | | | | | | | | | | | | | 14 | 75 |
| 05:00 | 23 | 54 | 22 | 67 | | | | | | | | | | | | | 23 | 61 |
| 05:15 | 36 | 73 | 24 | 60 | | | | | | | | | | | | | 30 | 67 |
| 05:30 | 35 | 55 | 42 | 70 | | | | | | | | | | | | | 39 | 63 |
| 05:45 | 47 | 87 | 45 | 72 | | | | | | | | | | | | | 46 | 80 |
| 06:00 | 51 | 59 | 57 | 65 | | | | | | | | | | | | | 54 | 62 |
| 06:15 | 85 | 48 | 77 | 56 | | | | | | | | | | | | | 81 | 52 |
| 06:30 | 74 | 60 | 72 | 67 | | | | | | | | | | | | | 73 | 64 |
| 06:45 | 103 | 64 | 125 | 56 | | | | | | | | | | | | | 114 | 60 |
| 07:00 | 168 | 40 | 187 | 44 | | | | | | | | | | | | | 178 | 42 |
| 07:15 | 104 | 49 | 188 | 32 | | | | | | | | | | | | | 146 | 41 |
| 07:30 | 102 | 28 | 122 | 32 | | | | | | | | | | | | | 112 | 30 |
| 07:45 | 85 | 30 | 103 | 21 | | | | | | | | | | | | | 94 | 26 |
| 08:00 | 112 | 27 | 103 | 22 | | | | | | | | | | | | | 108 | 25 |
| 08:15 | 102 | 18 | 125 | 14 | | | | | | | | | | | | | 114 | 16 |
| 08:30 | 77 | 15 | 148 | 27 | | | | | | | | | | | | | 113 | 21 |
| 08:45 | 67 | 27 | 97 | 11 | | | | | | | | | | | | | 82 | 19 |
| 09:00 | 71 | 21 | 105 | 20 | | | | | | | | | | | | | 88 | 21 |
| 09:15 | 62 | 15 | 59 | 15 | | | | | | | | | | | | | 61 | 15 |
| 09:30 | 50 | 10 | 52 | 18 | | | | | | | | | | | | | 51 | 14 |
| 09:45 | 46 | 7 | 52 | 5 | | | | | | | | | | | | | 49 | 6 |
| 10:00 | 55 | 8 | 42 | 6 | | | | | | | | | | | | | 49 | 7 |
| 10:15 | 49 | 5 | 49 | 11 | | | | | | | | | | | | | 49 | 8 |
| 10:30 | 57 | 7 | 59 | 5 | | | | | | | | | | | | | 58 | 6 |
| 10:45 | 59 | 5 | 44 | 2 | | | | | | | | | | | | | 52 | 4 |
| 11:00 | 53 | 5 | 48 | 6 | | | | | | | | | | | | | 51 | 6 |
| 11:15 | 40 | 3 | 54 | 3 | | | | | | | | | | | | | 47 | 3 |
| 11:30 | 41 | 0 | 51 | 4 | | | | | | | | | | | | | 46 | 2 |
| 11:45 | 36 | 1 | 54 | 2 | | | | | | | | | | | | | 45 | 2 |
| Totals | 1974 | 1931 | 2265 | 1909 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2120 | 1920 |
| Day Total | 3905 | | 4174 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 4040 | |
| AM Pct | 50.6% | | 54.3% | | | | | | | | | | | | | | 52.5% | |
| Peak Hour | 6:45 | 16:00 | 6:45 | 16:15 | | | | | | | | | | | | | 6:45 | 16:00 |
| Peak Volume | 477 | 293 | 622 | 275 | | | | | | | | | | | | | 550 | 278 |
| P.H.F | 0.7098 | 0.8825 | 0.8271 | 0.9291 | | | | | | | | | | | | | 0.7739 | 0.9250 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501228
 Route: GreenField Road
 Location: btwn Ocotillo Road & Chandler Heights Road

Site Ref: 27
 Direction: SB
 Latitude: 33.2442
 Longitude: -111.7381

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 6 | 45 | 2 | 67 | | | | | | | | | | | | | 4 | 56 |
| 00:15 | 6 | 69 | 6 | 58 | | | | | | | | | | | | | 6 | 64 |
| 00:30 | 1 | 62 | 1 | 68 | | | | | | | | | | | | | 1 | 65 |
| 00:45 | 3 | 73 | 2 | 60 | | | | | | | | | | | | | 3 | 67 |
| 01:00 | 4 | 66 | 1 | 60 | | | | | | | | | | | | | 3 | 63 |
| 01:15 | 2 | 56 | 3 | 63 | | | | | | | | | | | | | 3 | 60 |
| 01:30 | 2 | 63 | 0 | 44 | | | | | | | | | | | | | 1 | 54 |
| 01:45 | 3 | 67 | 0 | 56 | | | | | | | | | | | | | 2 | 62 |
| 02:00 | 2 | 70 | 2 | 55 | | | | | | | | | | | | | 2 | 63 |
| 02:15 | 0 | 113 | 1 | 115 | | | | | | | | | | | | | 1 | 114 |
| 02:30 | 1 | 93 | 0 | 104 | | | | | | | | | | | | | 1 | 99 |
| 02:45 | 0 | 97 | 1 | 97 | | | | | | | | | | | | | 1 | 97 |
| 03:00 | 1 | 99 | 2 | 100 | | | | | | | | | | | | | 2 | 100 |
| 03:15 | 0 | 94 | 1 | 95 | | | | | | | | | | | | | 1 | 95 |
| 03:30 | 1 | 106 | 1 | 98 | | | | | | | | | | | | | 1 | 102 |
| 03:45 | 6 | 100 | 1 | 97 | | | | | | | | | | | | | 4 | 99 |
| 04:00 | 0 | 115 | 2 | 93 | | | | | | | | | | | | | 1 | 104 |
| 04:15 | 0 | 99 | 2 | 107 | | | | | | | | | | | | | 1 | 103 |
| 04:30 | 4 | 108 | 2 | 97 | | | | | | | | | | | | | 3 | 103 |
| 04:45 | 4 | 103 | 6 | 87 | | | | | | | | | | | | | 5 | 95 |
| 05:00 | 3 | 104 | 1 | 98 | | | | | | | | | | | | | 2 | 101 |
| 05:15 | 5 | 101 | 12 | 105 | | | | | | | | | | | | | 9 | 103 |
| 05:30 | 14 | 107 | 13 | 105 | | | | | | | | | | | | | 14 | 106 |
| 05:45 | 16 | 90 | 26 | 89 | | | | | | | | | | | | | 21 | 90 |
| 06:00 | 16 | 128 | 17 | 106 | | | | | | | | | | | | | 17 | 117 |
| 06:15 | 34 | 98 | 30 | 93 | | | | | | | | | | | | | 32 | 96 |
| 06:30 | 28 | 114 | 23 | 109 | | | | | | | | | | | | | 26 | 112 |
| 06:45 | 47 | 93 | 28 | 95 | | | | | | | | | | | | | 38 | 94 |
| 07:00 | 62 | 100 | 63 | 89 | | | | | | | | | | | | | 63 | 95 |
| 07:15 | 53 | 83 | 58 | 82 | | | | | | | | | | | | | 56 | 83 |
| 07:30 | 46 | 76 | 38 | 84 | | | | | | | | | | | | | 42 | 80 |
| 07:45 | 66 | 69 | 54 | 75 | | | | | | | | | | | | | 60 | 72 |
| 08:00 | 59 | 66 | 57 | 74 | | | | | | | | | | | | | 58 | 70 |
| 08:15 | 52 | 66 | 50 | 71 | | | | | | | | | | | | | 51 | 69 |
| 08:30 | 57 | 55 | 74 | 48 | | | | | | | | | | | | | 66 | 52 |
| 08:45 | 37 | 44 | 54 | 41 | | | | | | | | | | | | | 46 | 43 |
| 09:00 | 38 | 54 | 37 | 40 | | | | | | | | | | | | | 38 | 47 |
| 09:15 | 44 | 44 | 42 | 52 | | | | | | | | | | | | | 43 | 48 |
| 09:30 | 43 | 27 | 47 | 49 | | | | | | | | | | | | | 45 | 38 |
| 09:45 | 34 | 34 | 33 | 32 | | | | | | | | | | | | | 34 | 33 |
| 10:00 | 30 | 25 | 44 | 22 | | | | | | | | | | | | | 37 | 24 |
| 10:15 | 27 | 25 | 39 | 15 | | | | | | | | | | | | | 33 | 20 |
| 10:30 | 41 | 17 | 50 | 14 | | | | | | | | | | | | | 46 | 16 |
| 10:45 | 54 | 15 | 42 | 9 | | | | | | | | | | | | | 48 | 12 |
| 11:00 | 43 | 6 | 36 | 8 | | | | | | | | | | | | | 40 | 7 |
| 11:15 | 56 | 10 | 54 | 7 | | | | | | | | | | | | | 55 | 9 |
| 11:30 | 58 | 7 | 61 | 8 | | | | | | | | | | | | | 60 | 8 |
| 11:45 | 59 | 8 | 64 | 6 | | | | | | | | | | | | | 62 | 7 |
| Totals | 1168 | 3364 | 1183 | 3247 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1176 | 3306 |
| Day Total | 4532 | | 4430 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 4481 | |
| AM Pct | 25.8% | | 26.7% | | | | | | | | | | | | | | 26.2% | |
| Peak Hour | 11:45 | 18:00 | 11:45 | 14:15 | | | | | | | | | | | | | 11:45 | 18:00 |
| Peak Volume | 235 | 433 | 257 | 416 | | | | | | | | | | | | | 246 | 418 |
| P.H.F | 0.8514 | 0.8457 | 0.9449 | 0.9043 | | | | | | | | | | | | | 0.9462 | 0.8932 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501225
 Route: GreenField Road
 Location: btwn Queen Creek Road & Ocotillo Road

Site Ref: 26
 Direction: NB
 Latitude: 33.2618
 Longitude: -111.7380

| Count Date | 3/24/2015 | | | | 3/25/2015 | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 3 | 97 | 1 | 80 | | | | | | | | | | | | | 2 | 89 |
| 00:15 | 8 | 106 | 2 | 87 | | | | | | | | | | | | | 5 | 97 |
| 00:30 | 4 | 98 | 0 | 75 | | | | | | | | | | | | | 2 | 87 |
| 00:45 | 0 | 55 | 0 | 79 | | | | | | | | | | | | | 0 | 67 |
| 01:00 | 1 | 58 | 1 | 95 | | | | | | | | | | | | | 1 | 77 |
| 01:15 | 1 | 75 | 0 | 60 | | | | | | | | | | | | | 1 | 68 |
| 01:30 | 2 | 61 | 4 | 52 | | | | | | | | | | | | | 3 | 57 |
| 01:45 | 4 | 59 | 3 | 61 | | | | | | | | | | | | | 4 | 60 |
| 02:00 | 3 | 90 | 0 | 82 | | | | | | | | | | | | | 2 | 86 |
| 02:15 | 2 | 87 | 0 | 53 | | | | | | | | | | | | | 1 | 70 |
| 02:30 | 8 | 104 | 2 | 79 | | | | | | | | | | | | | 5 | 92 |
| 02:45 | 2 | 99 | 5 | 73 | | | | | | | | | | | | | 4 | 86 |
| 03:00 | 3 | 126 | 6 | 91 | | | | | | | | | | | | | 5 | 109 |
| 03:15 | 8 | 87 | 3 | 85 | | | | | | | | | | | | | 6 | 86 |
| 03:30 | 4 | 97 | 11 | 77 | | | | | | | | | | | | | 8 | 87 |
| 03:45 | 11 | 64 | 8 | 88 | | | | | | | | | | | | | 10 | 76 |
| 04:00 | 13 | 83 | 11 | 80 | | | | | | | | | | | | | 12 | 82 |
| 04:15 | 20 | 112 | 15 | 102 | | | | | | | | | | | | | 18 | 107 |
| 04:30 | 34 | 111 | 29 | 96 | | | | | | | | | | | | | 32 | 104 |
| 04:45 | 41 | 128 | 27 | 100 | | | | | | | | | | | | | 34 | 114 |
| 05:00 | 38 | 85 | 52 | 82 | | | | | | | | | | | | | 45 | 84 |
| 05:15 | 78 | 136 | 66 | 91 | | | | | | | | | | | | | 72 | 114 |
| 05:30 | 87 | 103 | 88 | 94 | | | | | | | | | | | | | 88 | 99 |
| 05:45 | 116 | 117 | 126 | 110 | | | | | | | | | | | | | 121 | 114 |
| 06:00 | 128 | 80 | 137 | 97 | | | | | | | | | | | | | 133 | 89 |
| 06:15 | 199 | 68 | 193 | 89 | | | | | | | | | | | | | 196 | 79 |
| 06:30 | 137 | 96 | 164 | 93 | | | | | | | | | | | | | 151 | 95 |
| 06:45 | 157 | 86 | 210 | 70 | | | | | | | | | | | | | 184 | 78 |
| 07:00 | 243 | 68 | 227 | 56 | | | | | | | | | | | | | 235 | 62 |
| 07:15 | 179 | 58 | 267 | 45 | | | | | | | | | | | | | 223 | 52 |
| 07:30 | 221 | 38 | 207 | 34 | | | | | | | | | | | | | 214 | 36 |
| 07:45 | 171 | 55 | 191 | 42 | | | | | | | | | | | | | 181 | 49 |
| 08:00 | 173 | 31 | 169 | 33 | | | | | | | | | | | | | 171 | 32 |
| 08:15 | 142 | 35 | 188 | 30 | | | | | | | | | | | | | 165 | 33 |
| 08:30 | 128 | 30 | 182 | 32 | | | | | | | | | | | | | 155 | 31 |
| 08:45 | 130 | 41 | 137 | 23 | | | | | | | | | | | | | 134 | 32 |
| 09:00 | 107 | 32 | 155 | 37 | | | | | | | | | | | | | 131 | 35 |
| 09:15 | 91 | 14 | 90 | 14 | | | | | | | | | | | | | 91 | 14 |
| 09:30 | 96 | 18 | 81 | 31 | | | | | | | | | | | | | 89 | 25 |
| 09:45 | 77 | 18 | 77 | 16 | | | | | | | | | | | | | 77 | 17 |
| 10:00 | 72 | 16 | 85 | 8 | | | | | | | | | | | | | 79 | 12 |
| 10:15 | 78 | 11 | 80 | 19 | | | | | | | | | | | | | 79 | 15 |
| 10:30 | 75 | 11 | 75 | 11 | | | | | | | | | | | | | 75 | 11 |
| 10:45 | 85 | 9 | 96 | 4 | | | | | | | | | | | | | 91 | 7 |
| 11:00 | 94 | 8 | 79 | 7 | | | | | | | | | | | | | 87 | 8 |
| 11:15 | 91 | 4 | 111 | 2 | | | | | | | | | | | | | 101 | 3 |
| 11:30 | 98 | 5 | 104 | 5 | | | | | | | | | | | | | 101 | 5 |
| 11:45 | 64 | 12 | 75 | 4 | | | | | | | | | | | | | 70 | 8 |
| Totals | 3527 | 3082 | 3840 | 2774 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3684 | 2928 |
| Day Total | 6609 | | 6614 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 6612 | |
| AM Pct | 53.4% | | 58.1% | | | | | | | | | | | | | | 55.7% | |
| Peak Hour | 7:00 | 16:30 | 6:45 | 17:15 | | | | | | | | | | | | | 6:45 | 16:30 |
| Peak Volume | 814 | 460 | 911 | 392 | | | | | | | | | | | | | 856 | 415 |
| P.H.F | 0.8374 | 0.8456 | 0.8530 | 0.8909 | | | | | | | | | | | | | 0.9101 | 0.9090 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501226
 Route: GreenField Road
 Location: btwn Queen Creek Road & Ocotillo Road

Site Ref: 26
 Direction: SB
 Latitude: 33.2618
 Longitude: -111.7380

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 9 | 67 | 14 | 82 | | | | | | | | | | | | | 12 | 75 |
| 00:15 | 8 | 89 | 9 | 80 | | | | | | | | | | | | | 9 | 85 |
| 00:30 | 2 | 78 | 2 | 77 | | | | | | | | | | | | | 2 | 78 |
| 00:45 | 3 | 97 | 1 | 88 | | | | | | | | | | | | | 2 | 93 |
| 01:00 | 2 | 77 | 1 | 96 | | | | | | | | | | | | | 2 | 87 |
| 01:15 | 5 | 66 | 3 | 75 | | | | | | | | | | | | | 4 | 71 |
| 01:30 | 2 | 77 | 3 | 64 | | | | | | | | | | | | | 3 | 71 |
| 01:45 | 0 | 102 | 1 | 66 | | | | | | | | | | | | | 1 | 84 |
| 02:00 | 2 | 77 | 5 | 80 | | | | | | | | | | | | | 4 | 79 |
| 02:15 | 0 | 143 | 1 | 122 | | | | | | | | | | | | | 1 | 133 |
| 02:30 | 1 | 101 | 1 | 127 | | | | | | | | | | | | | 1 | 114 |
| 02:45 | 0 | 122 | 0 | 124 | | | | | | | | | | | | | 0 | 123 |
| 03:00 | 1 | 135 | 3 | 113 | | | | | | | | | | | | | 2 | 124 |
| 03:15 | 1 | 140 | 2 | 141 | | | | | | | | | | | | | 2 | 141 |
| 03:30 | 3 | 124 | 1 | 100 | | | | | | | | | | | | | 2 | 112 |
| 03:45 | 4 | 130 | 1 | 103 | | | | | | | | | | | | | 3 | 117 |
| 04:00 | 0 | 163 | 1 | 110 | | | | | | | | | | | | | 1 | 137 |
| 04:15 | 0 | 123 | 0 | 141 | | | | | | | | | | | | | 0 | 132 |
| 04:30 | 5 | 141 | 1 | 134 | | | | | | | | | | | | | 3 | 138 |
| 04:45 | 6 | 120 | 6 | 131 | | | | | | | | | | | | | 6 | 126 |
| 05:00 | 2 | 145 | 8 | 133 | | | | | | | | | | | | | 5 | 139 |
| 05:15 | 9 | 130 | 8 | 145 | | | | | | | | | | | | | 9 | 138 |
| 05:30 | 14 | 115 | 16 | 126 | | | | | | | | | | | | | 15 | 121 |
| 05:45 | 18 | 113 | 24 | 105 | | | | | | | | | | | | | 21 | 109 |
| 06:00 | 24 | 156 | 21 | 163 | | | | | | | | | | | | | 23 | 160 |
| 06:15 | 52 | 133 | 49 | 130 | | | | | | | | | | | | | 51 | 132 |
| 06:30 | 32 | 155 | 36 | 130 | | | | | | | | | | | | | 34 | 143 |
| 06:45 | 46 | 127 | 32 | 138 | | | | | | | | | | | | | 39 | 133 |
| 07:00 | 69 | 140 | 74 | 127 | | | | | | | | | | | | | 72 | 134 |
| 07:15 | 54 | 107 | 75 | 108 | | | | | | | | | | | | | 65 | 108 |
| 07:30 | 42 | 88 | 37 | 96 | | | | | | | | | | | | | 40 | 92 |
| 07:45 | 54 | 97 | 72 | 105 | | | | | | | | | | | | | 63 | 101 |
| 08:00 | 60 | 110 | 62 | 100 | | | | | | | | | | | | | 61 | 105 |
| 08:15 | 69 | 92 | 67 | 98 | | | | | | | | | | | | | 68 | 95 |
| 08:30 | 67 | 73 | 82 | 62 | | | | | | | | | | | | | 75 | 68 |
| 08:45 | 56 | 60 | 59 | 54 | | | | | | | | | | | | | 58 | 57 |
| 09:00 | 49 | 73 | 65 | 54 | | | | | | | | | | | | | 57 | 64 |
| 09:15 | 58 | 55 | 48 | 68 | | | | | | | | | | | | | 53 | 62 |
| 09:30 | 56 | 33 | 50 | 52 | | | | | | | | | | | | | 53 | 43 |
| 09:45 | 45 | 47 | 34 | 40 | | | | | | | | | | | | | 40 | 44 |
| 10:00 | 45 | 30 | 60 | 30 | | | | | | | | | | | | | 53 | 30 |
| 10:15 | 40 | 34 | 52 | 24 | | | | | | | | | | | | | 46 | 29 |
| 10:30 | 52 | 18 | 51 | 15 | | | | | | | | | | | | | 52 | 17 |
| 10:45 | 67 | 19 | 57 | 14 | | | | | | | | | | | | | 62 | 17 |
| 11:00 | 61 | 10 | 70 | 12 | | | | | | | | | | | | | 66 | 11 |
| 11:15 | 73 | 12 | 68 | 11 | | | | | | | | | | | | | 71 | 12 |
| 11:30 | 78 | 9 | 78 | 7 | | | | | | | | | | | | | 78 | 8 |
| 11:45 | 87 | 8 | 93 | 9 | | | | | | | | | | | | | 90 | 9 |
| Totals | 1433 | 4361 | 1504 | 4210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1469 | 4286 |
| Day Total | 5794 | | 5714 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 5754 | |
| AM Pct | 24.7% | | 26.3% | | | | | | | | | | | | | | 25.5% | |
| Peak Hour | 11:30 | 18:00 | 11:30 | 18:00 | | | | | | | | | | | | | 11:30 | 18:00 |
| Peak Volume | 321 | 571 | 333 | 561 | | | | | | | | | | | | | 327 | 566 |
| P.H.F | 0.9017 | 0.9151 | 0.8952 | 0.8604 | | | | | | | | | | | | | 0.9083 | 0.8871 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501253
 Route: Higley Road
 Location: btwn Germann Road & Queen Creek Road

Site Ref: 40
 Direction: NB
 Latitude: 33.2719
 Longitude: -111.7207

| Count Date | 3/24/2015 | | | | 3/25/2015 | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|--------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|--------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 13 | 269 | 14 | 251 | | | | | | | | | | | | | 14 | 260 |
| 00:15 | | 7 | 280 | 10 | 304 | | | | | | | | | | | | 9 | 292 |
| 00:30 | 10 | 225 | 3 | 323 | | | | | | | | | | | | | 7 | 274 |
| 00:45 | 14 | 237 | 5 | 277 | | | | | | | | | | | | | 10 | 257 |
| 01:00 | 9 | 250 | 4 | 295 | | | | | | | | | | | | | 7 | 273 |
| 01:15 | 6 | 230 | 1 | 265 | | | | | | | | | | | | | 4 | 248 |
| 01:30 | 5 | 246 | 11 | 260 | | | | | | | | | | | | | 8 | 253 |
| 01:45 | 4 | 268 | 3 | 244 | | | | | | | | | | | | | 4 | 256 |
| 02:00 | 7 | 241 | 7 | 266 | | | | | | | | | | | | | 7 | 254 |
| 02:15 | 8 | 292 | 7 | 272 | | | | | | | | | | | | | 8 | 282 |
| 02:30 | 3 | 351 | 9 | 345 | | | | | | | | | | | | | 6 | 348 |
| 02:45 | 9 | 315 | 5 | 312 | | | | | | | | | | | | | 7 | 314 |
| 03:00 | 11 | 346 | 14 | 327 | | | | | | | | | | | | | 13 | 337 |
| 03:15 | 13 | 305 | 23 | 352 | | | | | | | | | | | | | 18 | 329 |
| 03:30 | 13 | 305 | 17 | 346 | | | | | | | | | | | | | 15 | 326 |
| 03:45 | 14 | 295 | 14 | 353 | | | | | | | | | | | | | 14 | 324 |
| 04:00 | 35 | 333 | 46 | 372 | | | | | | | | | | | | | 41 | 353 |
| 04:15 | 61 | 348 | 43 | 332 | | | | | | | | | | | | | 52 | 340 |
| 04:30 | 76 | 323 | 70 | 305 | | | | | | | | | | | | | 73 | 314 |
| 04:45 | 57 | 369 | 66 | 342 | | | | | | | | | | | | | 62 | 356 |
| 05:00 | 98 | 310 | 95 | 303 | | | | | | | | | | | | | 97 | 307 |
| 05:15 | 157 | 324 | 163 | 373 | | | | | | | | | | | | | 160 | 349 |
| 05:30 | 171 | 319 | 158 | 364 | | | | | | | | | | | | | 165 | 342 |
| 05:45 | 178 | 295 | 147 | 262 | | | | | | | | | | | | | 163 | 279 |
| 06:00 | 237 | 303 | 256 | 294 | | | | | | | | | | | | | 247 | 299 |
| 06:15 | 275 | 272 | 308 | 290 | | | | | | | | | | | | | 292 | 281 |
| 06:30 | 298 | 270 | 282 | 263 | | | | | | | | | | | | | 290 | 267 |
| 06:45 | 311 | 241 | 339 | 246 | | | | | | | | | | | | | 325 | 244 |
| 07:00 | 390 | 203 | 432 | 274 | | | | | | | | | | | | | 411 | 239 |
| 07:15 | 389 | 206 | 426 | 179 | | | | | | | | | | | | | 408 | 193 |
| 07:30 | 420 | 189 | 410 | 184 | | | | | | | | | | | | | 415 | 187 |
| 07:45 | 385 | 116 | 409 | 150 | | | | | | | | | | | | | 397 | 133 |
| 08:00 | 418 | 138 | 374 | 158 | | | | | | | | | | | | | 396 | 148 |
| 08:15 | 366 | 141 | 394 | 113 | | | | | | | | | | | | | 380 | 127 |
| 08:30 | 376 | 94 | 452 | 107 | | | | | | | | | | | | | 414 | 101 |
| 08:45 | 356 | 108 | 319 | 85 | | | | | | | | | | | | | 338 | 97 |
| 09:00 | 331 | 90 | 267 | 122 | | | | | | | | | | | | | 299 | 106 |
| 09:15 | 316 | 76 | 270 | 99 | | | | | | | | | | | | | 293 | 88 |
| 09:30 | 362 | 63 | 317 | 71 | | | | | | | | | | | | | 340 | 67 |
| 09:45 | 325 | 45 | 309 | 67 | | | | | | | | | | | | | 317 | 56 |
| 10:00 | 268 | 39 | 287 | 54 | | | | | | | | | | | | | 278 | 47 |
| 10:15 | 225 | 45 | 264 | 39 | | | | | | | | | | | | | 245 | 42 |
| 10:30 | 281 | 25 | 259 | 43 | | | | | | | | | | | | | 270 | 34 |
| 10:45 | 280 | 30 | 278 | 32 | | | | | | | | | | | | | 279 | 31 |
| 11:00 | 276 | 27 | 273 | 31 | | | | | | | | | | | | | 275 | 29 |
| 11:15 | 283 | 40 | 279 | 24 | | | | | | | | | | | | | 281 | 32 |
| 11:30 | 301 | 22 | 265 | 21 | | | | | | | | | | | | | 283 | 22 |
| 11:45 | 301 | 16 | 284 | 13 | | | | | | | | | | | | | 293 | 15 |
| Totals | 8749 | 9875 | 8688 | 10404 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8719 | 10140 |
| Day Total | 18624 | | 19092 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 18858 | |
| AM Pct | 47.0% | | 45.5% | | | | | | | | | | | | | | 46.2% | |
| Peak Hour | 7:15 | 16:00 | 7:00 | 15:15 | | | | | | | | | | | | | 7:00 | 16:00 |
| Peak Volume | 1612 | 1373 | 1677 | 1423 | | | | | | | | | | | | | 1631 | 1362 |
| P.H.F | 0.9595 | 0.9302 | 0.9705 | 0.9563 | | | | | | | | | | | | | 0.9822 | 0.9578 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501254
 Route: Higley Road
 Location: btwn Germann Road & Queen Creek Road

Site Ref: 40
 Direction: SB
 Latitude: 33.2719
 Longitude: -111.7207

| Count Date | 3/24/2015 | | | | 3/25/2015 | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 15 | 184 | 13 | 174 | | | | | | | | | | | | | 14 | 179 |
| 00:15 | 16 | 175 | 13 | 183 | | | | | | | | | | | | | 15 | 179 |
| 00:30 | 7 | 173 | 9 | 186 | | | | | | | | | | | | | 8 | 180 |
| 00:45 | 6 | 192 | 14 | 199 | | | | | | | | | | | | | 10 | 196 |
| 01:00 | 7 | 171 | 6 | 184 | | | | | | | | | | | | | 7 | 178 |
| 01:15 | 5 | 179 | 6 | 178 | | | | | | | | | | | | | 6 | 179 |
| 01:30 | 7 | 167 | 7 | 150 | | | | | | | | | | | | | 7 | 159 |
| 01:45 | 4 | 170 | 6 | 195 | | | | | | | | | | | | | 5 | 183 |
| 02:00 | 3 | 177 | 5 | 196 | | | | | | | | | | | | | 4 | 187 |
| 02:15 | 5 | 254 | 6 | 243 | | | | | | | | | | | | | 6 | 249 |
| 02:30 | 10 | 239 | 5 | 258 | | | | | | | | | | | | | 8 | 249 |
| 02:45 | 7 | 259 | 7 | 224 | | | | | | | | | | | | | 7 | 242 |
| 03:00 | 3 | 256 | 4 | 279 | | | | | | | | | | | | | 4 | 268 |
| 03:15 | 3 | 296 | 3 | 286 | | | | | | | | | | | | | 3 | 291 |
| 03:30 | 10 | 271 | 5 | 244 | | | | | | | | | | | | | 8 | 258 |
| 03:45 | 7 | 265 | 13 | 283 | | | | | | | | | | | | | 10 | 274 |
| 04:00 | 5 | 273 | 13 | 259 | | | | | | | | | | | | | 9 | 266 |
| 04:15 | 10 | 263 | 10 | 257 | | | | | | | | | | | | | 10 | 260 |
| 04:30 | 14 | 260 | 14 | 269 | | | | | | | | | | | | | 14 | 265 |
| 04:45 | 21 | 267 | 26 | 280 | | | | | | | | | | | | | 24 | 274 |
| 05:00 | 30 | 299 | 32 | 259 | | | | | | | | | | | | | 31 | 279 |
| 05:15 | 34 | 277 | 32 | 291 | | | | | | | | | | | | | 33 | 284 |
| 05:30 | 35 | 252 | 42 | 253 | | | | | | | | | | | | | 39 | 253 |
| 05:45 | 66 | 246 | 64 | 231 | | | | | | | | | | | | | 65 | 239 |
| 06:00 | 72 | 252 | 93 | 227 | | | | | | | | | | | | | 83 | 240 |
| 06:15 | 101 | 200 | 111 | 247 | | | | | | | | | | | | | 106 | 224 |
| 06:30 | 124 | 234 | 125 | 225 | | | | | | | | | | | | | 125 | 230 |
| 06:45 | 147 | 210 | 141 | 202 | | | | | | | | | | | | | 144 | 206 |
| 07:00 | 176 | 211 | 163 | 204 | | | | | | | | | | | | | 170 | 208 |
| 07:15 | 191 | 155 | 178 | 195 | | | | | | | | | | | | | 185 | 175 |
| 07:30 | 195 | 122 | 189 | 168 | | | | | | | | | | | | | 192 | 145 |
| 07:45 | 242 | 139 | 232 | 194 | | | | | | | | | | | | | 237 | 167 |
| 08:00 | 207 | 155 | 244 | 164 | | | | | | | | | | | | | 226 | 160 |
| 08:15 | 182 | 139 | 187 | 167 | | | | | | | | | | | | | 185 | 153 |
| 08:30 | 184 | 141 | 173 | 118 | | | | | | | | | | | | | 179 | 130 |
| 08:45 | 194 | 113 | 180 | 123 | | | | | | | | | | | | | 187 | 118 |
| 09:00 | 161 | 109 | 133 | 114 | | | | | | | | | | | | | 147 | 112 |
| 09:15 | 133 | 104 | 150 | 102 | | | | | | | | | | | | | 142 | 103 |
| 09:30 | 156 | 106 | 144 | 94 | | | | | | | | | | | | | 150 | 100 |
| 09:45 | 157 | 75 | 121 | 80 | | | | | | | | | | | | | 139 | 78 |
| 10:00 | 176 | 53 | 157 | 64 | | | | | | | | | | | | | 167 | 59 |
| 10:15 | 155 | 51 | 136 | 50 | | | | | | | | | | | | | 146 | 51 |
| 10:30 | 157 | 43 | 147 | 37 | | | | | | | | | | | | | 152 | 40 |
| 10:45 | 149 | 31 | 168 | 31 | | | | | | | | | | | | | 159 | 31 |
| 11:00 | 149 | 32 | 156 | 31 | | | | | | | | | | | | | 153 | 32 |
| 11:15 | 188 | 27 | 147 | 21 | | | | | | | | | | | | | 168 | 24 |
| 11:30 | 178 | 21 | 159 | 23 | | | | | | | | | | | | | 169 | 22 |
| 11:45 | 213 | 19 | 209 | 15 | | | | | | | | | | | | | 211 | 17 |
| Totals | 4317 | 8307 | 4198 | 8457 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4258 | 8382 |
| Day Total | 12624 | | 12655 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 12640 | |
| AM Pct | 34.2% | | 33.2% | | | | | | | | | | | | | | 33.7% | |
| Peak Hour | 7:15 | 15:15 | 7:30 | 16:30 | | | | | | | | | | | | | 7:15 | 16:30 |
| Peak Volume | 835 | 1105 | 852 | 1099 | | | | | | | | | | | | | 839 | 1101 |
| P.H.F | 0.8626 | 0.9333 | 0.8730 | 0.9442 | | | | | | | | | | | | | 0.8850 | 0.9692 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501255
 Route: Higley Road
 Location: btwn Ocotillo Road & Chandler Heights Road

Site Ref: 41
 Direction: NB
 Latitude: 33.2397
 Longitude: -111.7204

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 00:00 | 2 | 181 | 8 | 164 | | | | | | | | | | | | | 5 | 173 |
| 00:15 | | 7 | 125 | 4 | 163 | | | | | | | | | | | | 6 | 144 |
| 00:30 | 3 | 145 | 2 | 175 | | | | | | | | | | | | | 3 | 160 |
| 00:45 | 8 | 131 | 3 | 152 | | | | | | | | | | | | | 6 | 142 |
| 01:00 | 6 | 150 | 2 | 156 | | | | | | | | | | | | | 4 | 153 |
| 01:15 | 5 | 122 | 0 | 132 | | | | | | | | | | | | | 3 | 127 |
| 01:30 | 4 | 128 | 5 | 127 | | | | | | | | | | | | | 5 | 128 |
| 01:45 | 2 | 120 | 5 | 151 | | | | | | | | | | | | | 4 | 136 |
| 02:00 | 6 | 124 | 5 | 148 | | | | | | | | | | | | | 6 | 136 |
| 02:15 | 2 | 142 | 3 | 161 | | | | | | | | | | | | | 3 | 152 |
| 02:30 | 4 | 194 | 1 | 199 | | | | | | | | | | | | | 3 | 197 |
| 02:45 | 5 | 182 | 5 | 193 | | | | | | | | | | | | | 5 | 188 |
| 03:00 | 2 | 184 | 4 | 188 | | | | | | | | | | | | | 3 | 186 |
| 03:15 | 8 | 224 | 6 | 221 | | | | | | | | | | | | | 7 | 223 |
| 03:30 | 6 | 171 | 13 | 174 | | | | | | | | | | | | | 10 | 173 |
| 03:45 | 7 | 162 | 9 | 184 | | | | | | | | | | | | | 8 | 173 |
| 04:00 | 20 | 214 | 20 | 212 | | | | | | | | | | | | | 20 | 213 |
| 04:15 | 30 | 197 | 30 | 214 | | | | | | | | | | | | | 30 | 206 |
| 04:30 | 27 | 185 | 30 | 227 | | | | | | | | | | | | | 29 | 206 |
| 04:45 | 37 | 213 | 33 | 198 | | | | | | | | | | | | | 35 | 206 |
| 05:00 | 60 | 195 | 58 | 207 | | | | | | | | | | | | | 59 | 201 |
| 05:15 | 66 | 207 | 72 | 192 | | | | | | | | | | | | | 69 | 200 |
| 05:30 | 74 | 161 | 72 | 198 | | | | | | | | | | | | | 73 | 180 |
| 05:45 | 94 | 147 | 99 | 158 | | | | | | | | | | | | | 97 | 153 |
| 06:00 | 129 | 174 | 150 | 157 | | | | | | | | | | | | | 140 | 166 |
| 06:15 | 124 | 153 | 137 | 171 | | | | | | | | | | | | | 131 | 162 |
| 06:30 | 152 | 165 | 148 | 142 | | | | | | | | | | | | | 150 | 154 |
| 06:45 | 170 | 132 | 168 | 156 | | | | | | | | | | | | | 169 | 144 |
| 07:00 | 217 | 139 | 201 | 151 | | | | | | | | | | | | | 209 | 145 |
| 07:15 | 222 | 119 | 232 | 109 | | | | | | | | | | | | | 227 | 114 |
| 07:30 | 212 | 101 | 213 | 89 | | | | | | | | | | | | | 213 | 95 |
| 07:45 | 214 | 66 | 191 | 73 | | | | | | | | | | | | | 203 | 70 |
| 08:00 | 212 | 84 | 223 | 86 | | | | | | | | | | | | | 218 | 85 |
| 08:15 | 217 | 73 | 261 | 74 | | | | | | | | | | | | | 239 | 74 |
| 08:30 | 260 | 58 | 259 | 65 | | | | | | | | | | | | | 260 | 62 |
| 08:45 | 212 | 60 | 189 | 78 | | | | | | | | | | | | | 201 | 69 |
| 09:00 | 203 | 53 | 208 | 54 | | | | | | | | | | | | | 206 | 54 |
| 09:15 | 178 | 48 | 169 | 46 | | | | | | | | | | | | | 174 | 47 |
| 09:30 | 150 | 35 | 153 | 39 | | | | | | | | | | | | | 152 | 37 |
| 09:45 | 159 | 26 | 166 | 34 | | | | | | | | | | | | | 163 | 30 |
| 10:00 | 126 | 24 | 152 | 21 | | | | | | | | | | | | | 139 | 23 |
| 10:15 | 147 | 30 | 164 | 25 | | | | | | | | | | | | | 156 | 28 |
| 10:30 | 172 | 12 | 135 | 24 | | | | | | | | | | | | | 154 | 18 |
| 10:45 | 147 | 12 | 138 | 15 | | | | | | | | | | | | | 143 | 14 |
| 11:00 | 151 | 17 | 159 | 13 | | | | | | | | | | | | | 155 | 15 |
| 11:15 | 158 | 17 | 173 | 16 | | | | | | | | | | | | | 166 | 17 |
| 11:30 | 155 | 14 | 137 | 9 | | | | | | | | | | | | | 146 | 12 |
| 11:45 | 138 | 9 | 166 | 4 | | | | | | | | | | | | | 152 | 7 |
| Totals | 4710 | 5625 | 4781 | 5945 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4746 | 5785 |
| Day Total | 10335 | | 10726 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 10531 | |
| AM Pct | 45.6% | | 44.6% | | | | | | | | | | | | | | 45.1% | |
| Peak Hour | 7:45 | 16:00 | 7:45 | 16:00 | | | | | | | | | | | | | 7:45 | 16:00 |
| Peak Volume | 903 | 809 | 934 | 851 | | | | | | | | | | | | | 919 | 830 |
| P.H.F | 0.8683 | 0.9451 | 0.8946 | 0.9372 | | | | | | | | | | | | | 0.8849 | 0.9742 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501256
 Route: Higley Road
 Location: btwn Ocotillo Road & Chandler Heights Road

Site Ref: 41
 Direction: SB
 Latitude: 33.2397
 Longitude: -111.7204

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| | Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | |
| 00:00 | 8 | 137 | 13 | 143 | | | | | | | | | | | | | 11 | 140 |
| 00:15 | 11 | 135 | 8 | 158 | | | | | | | | | | | | | 10 | 147 |
| 00:30 | 11 | 138 | 9 | 153 | | | | | | | | | | | | | 10 | 146 |
| 00:45 | 8 | 137 | 9 | 132 | | | | | | | | | | | | | 9 | 135 |
| 01:00 | 10 | 116 | 5 | 160 | | | | | | | | | | | | | 8 | 138 |
| 01:15 | 7 | 133 | 7 | 150 | | | | | | | | | | | | | 7 | 142 |
| 01:30 | 4 | 127 | 5 | 127 | | | | | | | | | | | | | 5 | 127 |
| 01:45 | 2 | 141 | 0 | 128 | | | | | | | | | | | | | 1 | 135 |
| 02:00 | 6 | 131 | 2 | 142 | | | | | | | | | | | | | 4 | 137 |
| 02:15 | 4 | 171 | 6 | 176 | | | | | | | | | | | | | 5 | 174 |
| 02:30 | 6 | 189 | 3 | 191 | | | | | | | | | | | | | 5 | 190 |
| 02:45 | 6 | 244 | 4 | 218 | | | | | | | | | | | | | 5 | 231 |
| 03:00 | 3 | 201 | 1 | 216 | | | | | | | | | | | | | 2 | 209 |
| 03:15 | 4 | 251 | 3 | 213 | | | | | | | | | | | | | 4 | 232 |
| 03:30 | 2 | 224 | 4 | 228 | | | | | | | | | | | | | 3 | 226 |
| 03:45 | 1 | 230 | 4 | 242 | | | | | | | | | | | | | 3 | 236 |
| 04:00 | 5 | 247 | 5 | 225 | | | | | | | | | | | | | 5 | 236 |
| 04:15 | 9 | 218 | 2 | 212 | | | | | | | | | | | | | 6 | 215 |
| 04:30 | 14 | 233 | 12 | 217 | | | | | | | | | | | | | 13 | 225 |
| 04:45 | 12 | 246 | 17 | 237 | | | | | | | | | | | | | 15 | 242 |
| 05:00 | 22 | 230 | 31 | 216 | | | | | | | | | | | | | 27 | 223 |
| 05:15 | 25 | 228 | 19 | 247 | | | | | | | | | | | | | 22 | 238 |
| 05:30 | 24 | 222 | 25 | 220 | | | | | | | | | | | | | 25 | 221 |
| 05:45 | 48 | 211 | 39 | 190 | | | | | | | | | | | | | 44 | 201 |
| 06:00 | 60 | 198 | 64 | 175 | | | | | | | | | | | | | 62 | 187 |
| 06:15 | 77 | 185 | 83 | 206 | | | | | | | | | | | | | 80 | 196 |
| 06:30 | 102 | 196 | 88 | 207 | | | | | | | | | | | | | 95 | 202 |
| 06:45 | 124 | 182 | 134 | 192 | | | | | | | | | | | | | 129 | 187 |
| 07:00 | 138 | 167 | 134 | 124 | | | | | | | | | | | | | 136 | 146 |
| 07:15 | 136 | 155 | 113 | 157 | | | | | | | | | | | | | 125 | 156 |
| 07:30 | 131 | 110 | 145 | 144 | | | | | | | | | | | | | 138 | 127 |
| 07:45 | 172 | 89 | 196 | 138 | | | | | | | | | | | | | 184 | 114 |
| 08:00 | 209 | 122 | 243 | 150 | | | | | | | | | | | | | 226 | 136 |
| 08:15 | 153 | 128 | 167 | 112 | | | | | | | | | | | | | 160 | 120 |
| 08:30 | 151 | 121 | 164 | 112 | | | | | | | | | | | | | 158 | 117 |
| 08:45 | 144 | 117 | 185 | 97 | | | | | | | | | | | | | 165 | 107 |
| 09:00 | 112 | 77 | 111 | 84 | | | | | | | | | | | | | 112 | 81 |
| 09:15 | 104 | 81 | 118 | 97 | | | | | | | | | | | | | 111 | 89 |
| 09:30 | 104 | 85 | 103 | 79 | | | | | | | | | | | | | 104 | 82 |
| 09:45 | 113 | 69 | 111 | 70 | | | | | | | | | | | | | 112 | 70 |
| 10:00 | 123 | 52 | 111 | 67 | | | | | | | | | | | | | 117 | 60 |
| 10:15 | 138 | 44 | 113 | 48 | | | | | | | | | | | | | 126 | 46 |
| 10:30 | 137 | 31 | 123 | 35 | | | | | | | | | | | | | 130 | 33 |
| 10:45 | 136 | 26 | 137 | 25 | | | | | | | | | | | | | 137 | 26 |
| 11:00 | 142 | 24 | 132 | 30 | | | | | | | | | | | | | 137 | 27 |
| 11:15 | 144 | 22 | 136 | 16 | | | | | | | | | | | | | 140 | 19 |
| 11:30 | 147 | 19 | 122 | 29 | | | | | | | | | | | | | 135 | 24 |
| 11:45 | 149 | 15 | 166 | 17 | | | | | | | | | | | | | 158 | 16 |
| Totals | 3398 | 6855 | 3432 | 6952 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3415 | 6904 |
| Day Total | 10253 | | 10384 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 10319 | |
| AM Pct | 33.1% | | 33.1% | | | | | | | | | | | | | | 33.1% | |
| Peak Hour | 7:45 | 15:15 | 7:45 | 16:45 | | | | | | | | | | | | | 7:45 | 15:15 |
| Peak Volume | 685 | 952 | 770 | 920 | | | | | | | | | | | | | 728 | 930 |
| P.H.F | 0.8194 | 0.9482 | 0.7922 | 0.9312 | | | | | | | | | | | | | 0.8048 | 0.9852 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501297
 Route: Queen Creek Road
 Location: btwn Greenfield Road & Higley Road

Site Ref: 62
 Direction: EB
 Latitude: 33.2632
 Longitude: -111.7311

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| | Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | |
| 00:00 | 21 | 151 | 25 | 163 | | | | | | | | | | | | | 23 | 157 |
| 00:15 | 18 | 172 | 20 | 216 | | | | | | | | | | | | | 19 | 194 |
| 00:30 | 14 | 161 | 7 | 166 | | | | | | | | | | | | | 11 | 164 |
| 00:45 | 9 | 165 | 12 | 166 | | | | | | | | | | | | | 11 | 166 |
| 01:00 | 14 | 138 | 9 | 178 | | | | | | | | | | | | | 12 | 158 |
| 01:15 | 7 | 172 | 8 | 155 | | | | | | | | | | | | | 8 | 164 |
| 01:30 | 5 | 157 | 9 | 148 | | | | | | | | | | | | | 7 | 153 |
| 01:45 | 1 | 167 | 6 | 169 | | | | | | | | | | | | | 4 | 168 |
| 02:00 | 3 | 149 | 7 | 169 | | | | | | | | | | | | | 5 | 159 |
| 02:15 | 6 | 274 | 9 | 289 | | | | | | | | | | | | | 8 | 282 |
| 02:30 | 3 | 306 | 2 | 322 | | | | | | | | | | | | | 3 | 314 |
| 02:45 | 2 | 284 | 6 | 255 | | | | | | | | | | | | | 4 | 270 |
| 03:00 | 1 | 281 | 3 | 273 | | | | | | | | | | | | | 2 | 277 |
| 03:15 | 5 | 311 | 5 | 278 | | | | | | | | | | | | | 5 | 295 |
| 03:30 | 2 | 280 | 6 | 271 | | | | | | | | | | | | | 4 | 276 |
| 03:45 | 7 | 270 | 2 | 282 | | | | | | | | | | | | | 5 | 276 |
| 04:00 | 8 | 299 | 13 | 290 | | | | | | | | | | | | | 11 | 295 |
| 04:15 | 6 | 324 | 17 | 306 | | | | | | | | | | | | | 12 | 315 |
| 04:30 | 4 | 313 | 19 | 298 | | | | | | | | | | | | | 12 | 306 |
| 04:45 | 12 | 348 | 21 | 326 | | | | | | | | | | | | | 17 | 337 |
| 05:00 | 15 | 319 | 29 | 311 | | | | | | | | | | | | | 22 | 315 |
| 05:15 | 32 | 357 | 37 | 344 | | | | | | | | | | | | | 35 | 351 |
| 05:30 | 35 | 359 | 47 | 331 | | | | | | | | | | | | | 41 | 345 |
| 05:45 | 81 | 317 | 63 | 318 | | | | | | | | | | | | | 72 | 318 |
| 06:00 | 81 | 309 | 74 | 335 | | | | | | | | | | | | | 78 | 322 |
| 06:15 | 105 | 294 | 115 | 273 | | | | | | | | | | | | | 110 | 284 |
| 06:30 | 115 | 310 | 109 | 305 | | | | | | | | | | | | | 112 | 308 |
| 06:45 | 105 | 240 | 112 | 220 | | | | | | | | | | | | | 109 | 230 |
| 07:00 | 130 | 252 | 152 | 213 | | | | | | | | | | | | | 141 | 233 |
| 07:15 | 167 | 192 | 188 | 244 | | | | | | | | | | | | | 178 | 218 |
| 07:30 | 127 | 172 | 142 | 196 | | | | | | | | | | | | | 135 | 184 |
| 07:45 | 184 | 149 | 182 | 159 | | | | | | | | | | | | | 183 | 154 |
| 08:00 | 173 | 169 | 128 | 207 | | | | | | | | | | | | | 151 | 188 |
| 08:15 | 143 | 155 | 144 | 165 | | | | | | | | | | | | | 144 | 160 |
| 08:30 | 183 | 140 | 165 | 156 | | | | | | | | | | | | | 174 | 148 |
| 08:45 | 134 | 117 | 134 | 133 | | | | | | | | | | | | | 134 | 125 |
| 09:00 | 106 | 123 | 128 | 137 | | | | | | | | | | | | | 117 | 130 |
| 09:15 | 107 | 105 | 122 | 132 | | | | | | | | | | | | | 115 | 119 |
| 09:30 | 114 | 73 | 104 | 130 | | | | | | | | | | | | | 109 | 102 |
| 09:45 | 107 | 96 | 118 | 95 | | | | | | | | | | | | | 113 | 96 |
| 10:00 | 113 | 74 | 113 | 68 | | | | | | | | | | | | | 113 | 71 |
| 10:15 | 109 | 64 | 113 | 70 | | | | | | | | | | | | | 111 | 67 |
| 10:30 | 119 | 45 | 139 | 55 | | | | | | | | | | | | | 129 | 50 |
| 10:45 | 141 | 37 | 159 | 44 | | | | | | | | | | | | | 150 | 41 |
| 11:00 | 130 | 27 | 155 | 26 | | | | | | | | | | | | | 143 | 27 |
| 11:15 | 164 | 30 | 163 | 28 | | | | | | | | | | | | | 164 | 29 |
| 11:30 | 177 | 25 | 159 | 33 | | | | | | | | | | | | | 168 | 29 |
| 11:45 | 170 | 25 | 166 | 28 | | | | | | | | | | | | | 168 | 27 |
| Totals | 3515 | 9297 | 3666 | 9476 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3591 | 9387 |
| Day Total | 12812 | | 13142 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 12977 | |
| AM Pct | 27.4% | | 27.9% | | | | | | | | | | | | | | 27.7% | |
| Peak Hour | 7:45 | 16:45 | 11:45 | 17:15 | | | | | | | | | | | | | 11:30 | 16:45 |
| Peak Volume | 683 | 1383 | 711 | 1328 | | | | | | | | | | | | | 687 | 1348 |
| P.H.F | 0.9280 | 0.9631 | 0.8229 | 0.9651 | | | | | | | | | | | | | 0.8853 | 0.9611 |

Traffic Research & Analysis, Inc.
 3844 East Indian School Road
 Phoenix, AZ 85018
 (602) 840-1500

Client: Gilbert
 File Number: 1501298
 Route: Queen Creek Road
 Location: btwn Greenfield Road & Higley Road

Site Ref: 62
 Direction: WB
 Latitude: 33.2632
 Longitude: -111.7311

| Count Date | 3/24/2015 | | 3/25/2015 | | | | | | | | | | | | | | Average | |
|------------------|--------------|-------------|--------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| | Count Time | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | |
| 00:00 | 4 | 137 | 5 | 157 | | | | | | | | | | | | | 5 | 147 |
| 00:15 | 4 | 144 | 6 | 142 | | | | | | | | | | | | | 5 | 143 |
| 00:30 | 2 | 150 | 0 | 152 | | | | | | | | | | | | | 1 | 151 |
| 00:45 | 2 | 140 | 4 | 113 | | | | | | | | | | | | | 3 | 127 |
| 01:00 | 4 | 124 | 3 | 122 | | | | | | | | | | | | | 4 | 123 |
| 01:15 | 5 | 129 | 1 | 148 | | | | | | | | | | | | | 3 | 139 |
| 01:30 | 0 | 137 | 1 | 151 | | | | | | | | | | | | | 1 | 144 |
| 01:45 | 4 | 167 | 5 | 131 | | | | | | | | | | | | | 5 | 149 |
| 02:00 | 3 | 151 | 7 | 191 | | | | | | | | | | | | | 5 | 171 |
| 02:15 | 1 | 172 | 1 | 164 | | | | | | | | | | | | | 1 | 168 |
| 02:30 | 1 | 175 | 1 | 199 | | | | | | | | | | | | | 1 | 187 |
| 02:45 | 3 | 187 | 2 | 182 | | | | | | | | | | | | | 3 | 185 |
| 03:00 | 2 | 181 | 2 | 179 | | | | | | | | | | | | | 2 | 180 |
| 03:15 | 5 | 192 | 7 | 184 | | | | | | | | | | | | | 6 | 188 |
| 03:30 | 6 | 172 | 14 | 177 | | | | | | | | | | | | | 10 | 175 |
| 03:45 | 12 | 154 | 9 | 174 | | | | | | | | | | | | | 11 | 164 |
| 04:00 | 9 | 194 | 12 | 162 | | | | | | | | | | | | | 11 | 178 |
| 04:15 | 26 | 182 | 25 | 163 | | | | | | | | | | | | | 26 | 173 |
| 04:30 | 37 | 174 | 33 | 203 | | | | | | | | | | | | | 35 | 189 |
| 04:45 | 47 | 176 | 49 | 187 | | | | | | | | | | | | | 48 | 182 |
| 05:00 | 69 | 179 | 66 | 179 | | | | | | | | | | | | | 68 | 179 |
| 05:15 | 91 | 177 | 94 | 178 | | | | | | | | | | | | | 93 | 178 |
| 05:30 | 142 | 170 | 141 | 149 | | | | | | | | | | | | | 142 | 160 |
| 05:45 | 126 | 155 | 135 | 168 | | | | | | | | | | | | | 131 | 162 |
| 06:00 | 186 | 143 | 188 | 145 | | | | | | | | | | | | | 187 | 144 |
| 06:15 | 263 | 139 | 281 | 165 | | | | | | | | | | | | | 272 | 152 |
| 06:30 | 245 | 147 | 244 | 132 | | | | | | | | | | | | | 245 | 140 |
| 06:45 | 325 | 172 | 288 | 144 | | | | | | | | | | | | | 307 | 158 |
| 07:00 | 390 | 97 | 416 | 128 | | | | | | | | | | | | | 403 | 113 |
| 07:15 | 322 | 80 | 316 | 97 | | | | | | | | | | | | | 319 | 89 |
| 07:30 | 288 | 79 | 279 | 79 | | | | | | | | | | | | | 284 | 79 |
| 07:45 | 275 | 62 | 284 | 82 | | | | | | | | | | | | | 280 | 72 |
| 08:00 | 319 | 75 | 304 | 72 | | | | | | | | | | | | | 312 | 74 |
| 08:15 | 288 | 77 | 271 | 67 | | | | | | | | | | | | | 280 | 72 |
| 08:30 | 229 | 52 | 258 | 59 | | | | | | | | | | | | | 244 | 56 |
| 08:45 | 208 | 50 | 258 | 58 | | | | | | | | | | | | | 233 | 54 |
| 09:00 | 201 | 37 | 183 | 49 | | | | | | | | | | | | | 192 | 43 |
| 09:15 | 164 | 47 | 150 | 52 | | | | | | | | | | | | | 157 | 50 |
| 09:30 | 174 | 32 | 178 | 27 | | | | | | | | | | | | | 176 | 30 |
| 09:45 | 154 | 17 | 193 | 34 | | | | | | | | | | | | | 174 | 26 |
| 10:00 | 159 | 26 | 152 | 22 | | | | | | | | | | | | | 156 | 24 |
| 10:15 | 155 | 21 | 171 | 21 | | | | | | | | | | | | | 163 | 21 |
| 10:30 | 154 | 16 | 163 | 15 | | | | | | | | | | | | | 159 | 16 |
| 10:45 | 141 | 22 | 141 | 10 | | | | | | | | | | | | | 141 | 16 |
| 11:00 | 148 | 14 | 136 | 18 | | | | | | | | | | | | | 142 | 16 |
| 11:15 | 124 | 9 | 154 | 13 | | | | | | | | | | | | | 139 | 11 |
| 11:30 | 151 | 7 | 159 | 8 | | | | | | | | | | | | | 155 | 8 |
| 11:45 | 149 | 8 | 177 | 6 | | | | | | | | | | | | | 163 | 7 |
| Totals | 5817 | 5348 | 5967 | 5458 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5892 | 5403 |
| Day Total | 11165 | | 11425 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 11295 | |
| AM Pct | 52.1% | | 52.2% | | | | | | | | | | | | | | 52.2% | |
| Peak Hour | 6:45 | 14:30 | 6:45 | 14:30 | | | | | | | | | | | | | 6:45 | 14:30 |
| Peak Volume | 1325 | 735 | 1299 | 747 | | | | | | | | | | | | | 1312 | 740 |
| P.H.F | 0.8494 | 0.9570 | 0.7806 | 0.9200 | | | | | | | | | | | | | 0.8139 | 0.9834 |

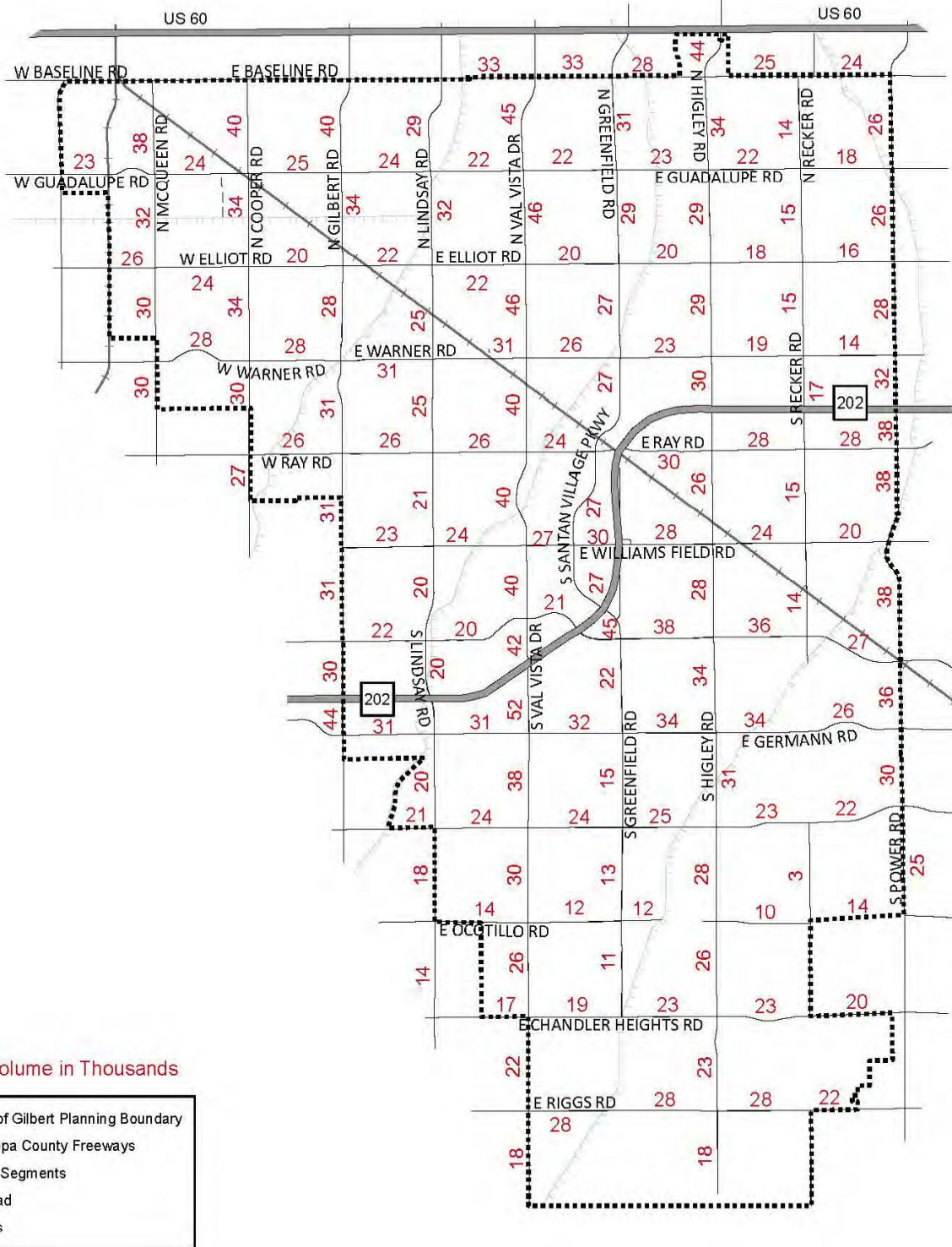


FIGURE 6-1: 2035 BASE TRAFFIC FORECASTS

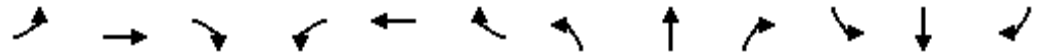
APPENDIX C

EXISTING TRAFFIC CAPACITY ANALYSIS



Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 35 | 427 | 75 | 42 | 497 | 126 | 63 | 222 | 51 | 105 | 202 | 30 |
| Future Volume (vph) | 35 | 427 | 75 | 42 | 497 | 126 | 63 | 222 | 51 | 105 | 202 | 30 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.978 | | | 0.970 | | | 0.972 | | | 0.981 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3346 | 0 | 1888 | 3319 | 0 | 1888 | 3325 | 0 | 1652 | 3356 | 0 |
| Flt Permitted | 0.361 | | | 0.424 | | | 0.541 | | | 0.490 | | |
| Satd. Flow (perm) | 628 | 3346 | 0 | 842 | 3319 | 0 | 1075 | 3325 | 0 | 852 | 3356 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 34 | | | 28 | | | 16 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 39 | 474 | 83 | 46 | 540 | 137 | 68 | 239 | 55 | 119 | 230 | 34 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 39 | 557 | 0 | 46 | 677 | 0 | 68 | 294 | 0 | 119 | 264 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | 13 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Existing Weekday MIDDAY











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | | 14.0 | 39.0 | | 12.0 | 35.0 | | 12.0 | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | | 14.0% | 39.0% | | 12.0% | 35.0% | | 12.0% | 35.0% | |
| Maximum Green (s) | 10.0 | 33.0 | | 10.0 | 33.0 | | 8.0 | 29.0 | | 8.0 | 29.0 | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | |
| Recall Mode | None | C-Max | | None | C-Max | | None | None | | None | None | |
| Act Effct Green (s) | 65.7 | 58.1 | | 65.7 | 58.1 | | 22.1 | 14.3 | | 22.1 | 14.3 | |
| Actuated g/C Ratio | 0.66 | 0.58 | | 0.66 | 0.58 | | 0.22 | 0.14 | | 0.22 | 0.14 | |
| v/c Ratio | 0.08 | 0.29 | | 0.08 | 0.35 | | 0.24 | 0.59 | | 0.51 | 0.53 | |
| Control Delay | 1.5 | 1.7 | | 2.5 | 2.8 | | 30.6 | 40.7 | | 33.2 | 30.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 1.5 | 1.7 | | 2.5 | 2.8 | | 30.6 | 40.7 | | 33.2 | 30.2 | |
| LOS | A | A | | A | A | | C | D | | C | C | |
| Approach Delay | | 1.7 | | | 2.8 | | | 38.8 | | | 31.2 | |
| Approach LOS | | A | | | A | | | D | | | C | |
| Queue Length 50th (ft) | 1 | 7 | | 3 | 21 | | 33 | 84 | | 72 | 85 | |
| Queue Length 95th (ft) | 4 | 19 | | m7 | 38 | | 64 | 122 | | 115 | 118 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 542 | 1954 | | 695 | 1943 | | 326 | 984 | | 271 | 984 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.07 | 0.29 | | 0.07 | 0.35 | | 0.21 | 0.30 | | 0.44 | 0.27 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 14.0 Intersection LOS: B
 Intersection Capacity Utilization 52.7% ICU Level of Service A
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

| | | | |
|--|--|--|--|
|  $\phi 2$ |  $\phi 1$ |  $\phi 4 (R)$ |  $\phi 3$ |
| 35 s | 12 s | 39 s | 14 s |
|  $\phi 6$ |  $\phi 5$ |  $\phi 8 (R)$ |  $\phi 7$ |
| 35 s | 12 s | 39 s | 14 s |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 355 | 186 | 70 | 392 | 187 | 221 | 602 | 67 | 156 | 455 | 61 |
| Future Volume (vph) | 56 | 355 | 186 | 70 | 392 | 187 | 221 | 602 | 67 | 156 | 455 | 61 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.982 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4827 | 0 |
| Flt Permitted | 0.361 | | | 0.408 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 628 | 3421 | 1478 | 709 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4827 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 207 | | | 177 | | | 142 | | 24 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 62 | 394 | 207 | 78 | 436 | 208 | 228 | 621 | 69 | 170 | 495 | 66 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 62 | 394 | 207 | 78 | 436 | 208 | 228 | 621 | 69 | 170 | 561 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Maximum Green (s) | 11.0 | 26.0 | 26.0 | 11.0 | 26.0 | 26.0 | 13.0 | 28.0 | 28.0 | 13.0 | 28.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | | Lag | Lead | Lead | Lag | Lead |
| Lead-Lag Optimize? | | | | | | | | Yes | Yes | Yes | Yes | Yes |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 29.4 | 20.4 | 20.4 | 29.4 | 20.4 | 20.4 | 12.5 | 40.3 | 40.3 | 12.5 | 40.3 | |
| Actuated g/C Ratio | 0.29 | 0.20 | 0.20 | 0.29 | 0.20 | 0.20 | 0.12 | 0.40 | 0.40 | 0.12 | 0.40 | |
| v/c Ratio | 0.24 | 0.57 | 0.44 | 0.28 | 0.63 | 0.47 | 0.57 | 0.31 | 0.10 | 0.42 | 0.29 | |
| Control Delay | 38.6 | 44.3 | 18.1 | 26.9 | 39.9 | 11.0 | 43.4 | 18.9 | 0.3 | 41.3 | 12.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 38.6 | 44.3 | 18.1 | 26.9 | 39.9 | 11.0 | 43.4 | 18.9 | 0.3 | 41.3 | 12.7 | |
| LOS | D | D | B | C | D | B | D | B | A | D | B | |
| Approach Delay | | 35.6 | | | 30.2 | | | 23.6 | | | | 19.4 |
| Approach LOS | | D | | | C | | | C | | | | B |
| Queue Length 50th (ft) | 29 | 124 | 44 | 34 | 134 | 16 | 71 | 72 | 0 | 58 | 21 | |
| Queue Length 95th (ft) | 59 | 167 | 95 | 63 | 173 | 73 | 110 | 95 | 1 | 82 | 47 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | | 1084 |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 322 | 889 | 537 | 340 | 889 | 515 | 416 | 1980 | 701 | 416 | 1958 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.19 | 0.44 | 0.39 | 0.23 | 0.49 | 0.40 | 0.55 | 0.31 | 0.10 | 0.41 | 0.29 | |

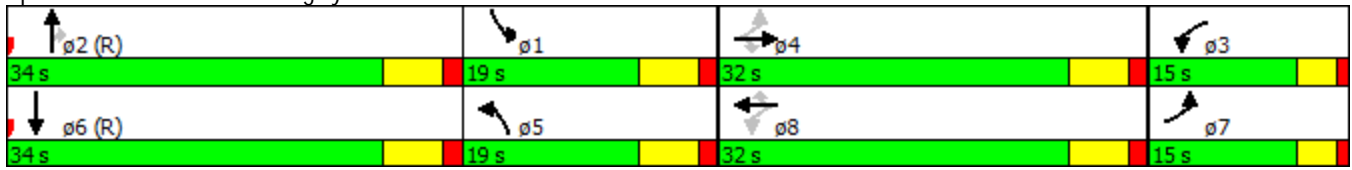
Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.63 |
| Intersection Signal Delay: | 26.7 |
| Intersection LOS: | C |
| Intersection Capacity Utilization | 52.5% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

























Existing Weekday MIDDAY

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

Existing Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 18 | 1 | 1 | 35 | 1 | 41 | 1 | 683 | 35 | 34 | 552 | 25 |
| Future Volume (vph) | 18 | 1 | 1 | 35 | 1 | 41 | 1 | 683 | 35 | 34 | 552 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.993 | | | 0.993 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3397 | 0 | 1711 | 4881 | 0 |
| Fl _t Permitted | 0.757 | | | 0.756 | | | 0.408 | | | 0.349 | | |
| Satd. Flow (perm) | 1457 | 3421 | 1531 | 1408 | 1801 | 1478 | 861 | 3397 | 0 | 628 | 4881 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 7 | | | 9 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.62 | 0.62 | 0.62 | 0.80 | 0.80 | 0.80 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 29 | 2 | 2 | 44 | 1 | 51 | 1 | 734 | 38 | 36 | 587 | 27 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 29 | 2 | 2 | 44 | 1 | 51 | 1 | 772 | 0 | 36 | 614 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 7.5 | 47.0 | | 7.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | | | | | | | | | | | | 5.0 |
| Flash Dont Walk (s) | | | | | | | | | | | | 11.0 |
| Pedestrian Calls (#/hr) | | | | | | | | | | | | 0 |
| Act Effct Green (s) | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 80.6 | 76.3 | | 80.6 | 76.3 | |
| Actuated g/C Ratio | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.81 | 0.76 | | 0.81 | 0.76 | |
| v/c Ratio | 0.19 | 0.01 | 0.01 | 0.30 | 0.01 | 0.22 | 0.00 | 0.30 | | 0.06 | 0.16 | |
| Control Delay | 43.9 | 39.0 | 0.0 | 47.0 | 39.0 | 5.9 | 3.0 | 5.6 | | 1.5 | 4.4 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 43.9 | 39.0 | 0.0 | 47.0 | 39.0 | 5.9 | 3.0 | 5.6 | | 1.5 | 4.4 | |
| LOS | D | D | A | D | D | A | A | A | | A | A | |
| Approach Delay | | 40.9 | | | 25.1 | | | 5.6 | | | 4.2 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 17 | 0 | 0 | 27 | 1 | 0 | 0 | 92 | | 3 | 27 | |
| Queue Length 95th (ft) | 30 | 3 | 0 | 53 | 5 | 9 | 1 | 130 | | 3 | 66 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 422 | 992 | 502 | 408 | 522 | 486 | 797 | 2593 | | 599 | 3725 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.07 | 0.00 | 0.00 | 0.11 | 0.00 | 0.10 | 0.00 | 0.30 | | 0.06 | 0.16 | |

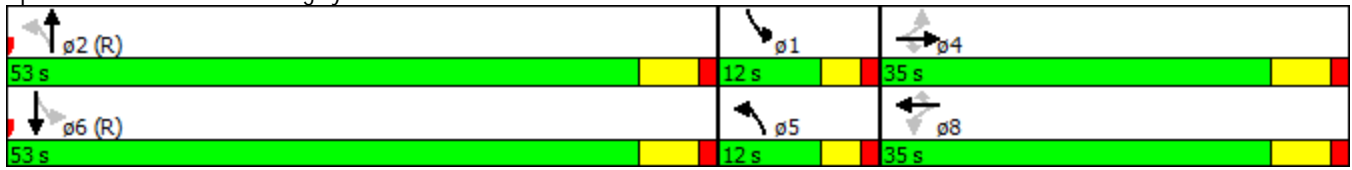
Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 45 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.30 |
| Intersection Signal Delay: | 7.0 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 51.7% |
| ICU Level of Service: | A |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

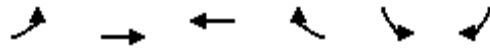
Existing Weekday MIDDAY

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

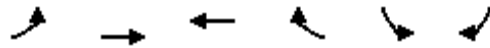
Existing Weekday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 24 | 354 | 375 | 205 | 206 | 35 |
| Future Volume (vph) | 24 | 354 | 375 | 205 | 206 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.947 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3352 | 0 | 1770 | 1583 |
| Flt Permitted | 0.362 | | | | 0.950 | |
| Satd. Flow (perm) | 674 | 3539 | 3352 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 156 | | | 46 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.94 | 0.94 | 0.76 | 0.76 |
| Adj. Flow (vph) | 27 | 393 | 399 | 218 | 271 | 46 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 27 | 393 | 617 | 0 | 271 | 46 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Existing Weekday MIDDAY



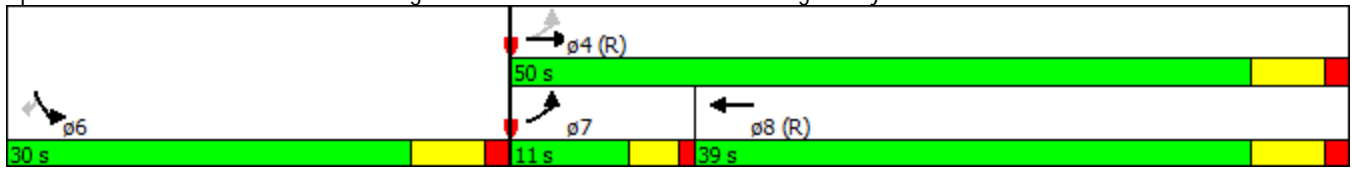
| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Maximum Green (s) | 7.0 | 44.0 | 33.0 | | 24.0 | 24.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | | 0 | | 0 | 0 |
| Act Effct Green (s) | 51.2 | 49.2 | 44.9 | | 18.8 | 18.8 |
| Actuated g/C Ratio | 0.64 | 0.62 | 0.56 | | 0.24 | 0.24 |
| v/c Ratio | 0.05 | 0.18 | 0.32 | | 0.65 | 0.11 |
| Control Delay | 6.6 | 7.3 | 5.6 | | 34.7 | 7.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 6.6 | 7.3 | 5.6 | | 34.7 | 7.6 |
| LOS | A | A | A | | C | A |
| Approach Delay | | 7.2 | 5.6 | | 30.8 | |
| Approach LOS | | A | A | | C | |
| Queue Length 50th (ft) | 5 | 46 | 45 | | 122 | 0 |
| Queue Length 95th (ft) | 15 | 67 | 71 | | 149 | 16 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 526 | 2174 | 1950 | | 531 | 507 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.05 | 0.18 | 0.32 | | 0.51 | 0.09 |

Intersection Summary

| | |
|------------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.65 |
| Intersection Signal Delay: | 12.0 |
| Intersection Capacity Utilization: | 41.4% |
| Analysis Period (min): | 15 |
| Intersection LOS: | B |
| ICU Level of Service: | A |

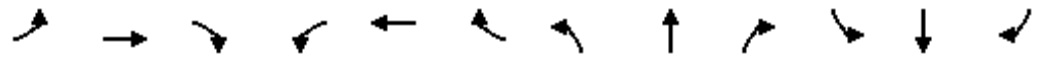
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 155 | 308 | 86 | 107 | 326 | 162 | 119 | 403 | 56 | 121 | 353 | 89 |
| Future Volume (vph) | 155 | 308 | 86 | 107 | 326 | 162 | 119 | 403 | 56 | 121 | 353 | 89 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.967 | | | 0.950 | | | 0.982 | | | 0.970 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3308 | 0 | 1652 | 3250 | 0 | 1652 | 4827 | 0 | 1652 | 4768 | 0 |
| Flt Permitted | 0.359 | | | 0.465 | | | 0.472 | | | 0.443 | | |
| Satd. Flow (perm) | 624 | 3308 | 0 | 808 | 3250 | 0 | 821 | 4827 | 0 | 770 | 4768 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 46 | | | 110 | | | 32 | | | 78 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 170 | 338 | 95 | 124 | 379 | 188 | 132 | 448 | 62 | 129 | 376 | 95 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 170 | 433 | 0 | 124 | 567 | 0 | 132 | 510 | 0 | 129 | 471 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | |
| Detector Phase | 7 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | | |
| Minimum Split (s) | 9.5 | 16.0 | 9.5 | 16.0 | 9.5 | 28.0 | 9.5 | 28.0 | 9.5 | 28.0 | | |
| Total Split (s) | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | | |
| Total Split (%) | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | | |
| Maximum Green (s) | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | | |
| Recall Mode | None | Max | None | Max | None | C-Max | None | C-Max | None | C-Max | | |
| Walk Time (s) | | | | | | | | | 4.0 | 4.0 | | |
| Flash Dont Walk (s) | | | | | | | | | 18.0 | 18.0 | | |
| Pedestrian Calls (#/hr) | | | | | | | | | 0 | 0 | | |
| Act Effct Green (s) | 33.0 | 26.0 | 33.0 | 26.0 | 31.0 | 24.0 | 31.0 | 24.0 | 31.0 | 24.0 | | |
| Actuated g/C Ratio | 0.41 | 0.32 | 0.41 | 0.32 | 0.39 | 0.30 | 0.39 | 0.30 | 0.39 | 0.30 | | |
| v/c Ratio | 0.52 | 0.39 | 0.32 | 0.50 | 0.35 | 0.35 | 0.36 | 0.32 | | | | |
| Control Delay | 33.5 | 23.8 | 17.5 | 19.8 | 19.8 | 22.3 | 18.8 | 18.6 | | | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay | 33.5 | 23.8 | 17.5 | 19.8 | 19.8 | 22.3 | 18.8 | 18.6 | | | | |
| LOS | C | C | B | B | B | C | B | B | | | | |
| Approach Delay | 26.5 | | 19.4 | | 21.8 | | 18.6 | | | | | |
| Approach LOS | C | | B | | C | | B | | | | | |
| Queue Length 50th (ft) | 64 | 86 | 36 | 98 | 40 | 70 | 37 | 54 | | | | |
| Queue Length 95th (ft) | 118 | 133 | 65 | 138 | 80 | 100 | 71 | 81 | | | | |
| Internal Link Dist (ft) | 546 | | 1487 | | 692 | | 712 | | | | | |
| Turn Bay Length (ft) | 205 | | 200 | | 210 | | 210 | | | | | |
| Base Capacity (vph) | 328 | 1106 | 391 | 1130 | 375 | 1470 | 359 | 1485 | | | | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Reduced v/c Ratio | 0.52 | 0.39 | 0.32 | 0.50 | 0.35 | 0.35 | 0.36 | 0.32 | | | | |









Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.52
 Intersection Signal Delay: 21.5 Intersection LOS: C
 Intersection Capacity Utilization 56.0% ICU Level of Service B
 Analysis Period (min) 15

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

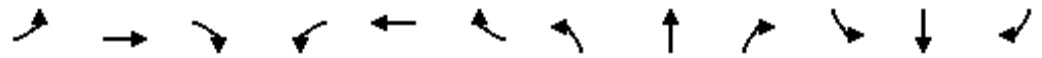
Existing Weekday MIDDAY

Splits and Phases: 1209: Higley Road & Chandler Heights Road

| | | | |
|--|--|--|--|
|  $\phi 2$ (R) |  $\phi 1$ |  $\phi 4$ |  $\phi 3$ |
| 30 s | 10 s | 30 s | 10 s |
|  $\phi 6$ (R) |  $\phi 5$ |  $\phi 8$ |  $\phi 7$ |
| 30 s | 10 s | 30 s | 10 s |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 731 | 27 | 98 | 548 | 65 |
| Future Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 731 | 27 | 98 | 548 | 65 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.876 | | | 0.859 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1523 | 0 | 1711 | 1493 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.483 | | | 0.711 | | | 0.405 | | | 0.346 | | |
| Satd. Flow (perm) | 870 | 1523 | 0 | 1280 | 1493 | 0 | 704 | 4916 | 1478 | 602 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 58 | | | 158 | | | | 82 | | | 82 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 61 | 12 | 58 | 25 | 10 | 158 | 25 | 769 | 28 | 111 | 623 | 74 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 61 | 70 | 0 | 25 | 168 | 0 | 25 | 769 | 28 | 111 | 623 | 74 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

Existing Weekday MIDDAY



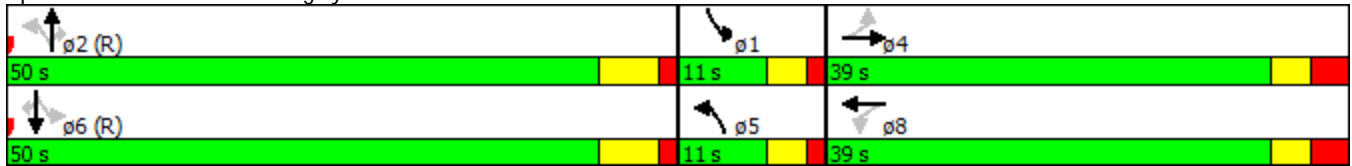
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 6.5 | 44.0 | 44.0 | 6.5 | 44.0 | 44.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | | 12.0 | 12.0 | | 12.0 | 12.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 11.9 | 11.9 | | 11.9 | 11.9 | | 73.1 | 65.6 | 65.6 | 73.1 | 65.6 | 65.6 |
| Actuated g/C Ratio | 0.12 | 0.12 | | 0.12 | 0.12 | | 0.73 | 0.66 | 0.66 | 0.73 | 0.66 | 0.66 |
| v/c Ratio | 0.59 | 0.30 | | 0.16 | 0.53 | | 0.04 | 0.24 | 0.03 | 0.22 | 0.19 | 0.07 |
| Control Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 1.0 | 3.0 | 0.1 | 10.6 | 13.2 | 8.4 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 1.0 | 3.0 | 0.1 | 10.6 | 13.2 | 8.4 |
| LOS | E | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 38.9 | | | 17.6 | | | 2.8 | | | 12.4 | |
| Approach LOS | | D | | | B | | | A | | | B | |
| Queue Length 50th (ft) | 38 | 7 | | 15 | 6 | | 1 | 18 | 0 | 11 | 111 | 6 |
| Queue Length 95th (ft) | 72 | 39 | | 35 | 51 | | m3 | 34 | m0 | 87 | 138 | 51 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 287 | 541 | | 422 | 598 | | 579 | 3223 | 997 | 511 | 3223 | 997 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.21 | 0.13 | | 0.06 | 0.28 | | 0.04 | 0.24 | 0.03 | 0.22 | 0.19 | 0.07 |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 10.7
 Intersection Capacity Utilization 55.2%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

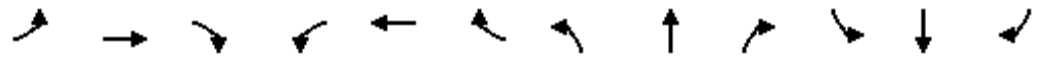
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
1307: Higley Road & Germann Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 24 | 326 | 122 | 66 | 350 | 148 | 143 | 679 | 74 | 146 | 574 | 36 |
| Future Volume (vph) | 24 | 326 | 122 | 66 | 350 | 148 | 143 | 679 | 74 | 146 | 574 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.955 | | | 0.985 | | | 0.991 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4695 | 0 | 1711 | 4842 | 0 | 1711 | 4872 | 0 |
| Fl _t Permitted | 0.314 | | | 0.476 | | | 0.359 | | | 0.279 | | |
| Satd. Flow (perm) | 565 | 4916 | 1531 | 857 | 4695 | 0 | 646 | 4842 | 0 | 502 | 4872 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 151 | | 102 | | | 20 | | | 10 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 | 0.88 | 0.88 | 0.88 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 30 | 402 | 151 | 78 | 412 | 174 | 163 | 772 | 84 | 162 | 638 | 40 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 30 | 402 | 151 | 78 | 586 | 0 | 163 | 856 | 0 | 162 | 678 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Maximum Green (s) | 6.5 | 25.0 | 25.0 | 6.5 | 25.0 | | 13.5 | 34.0 | | 13.5 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 26.6 | 19.4 | 19.4 | 26.6 | 19.4 | | 57.4 | 46.1 | | 57.4 | 46.1 | |
| Actuated g/C Ratio | 0.27 | 0.19 | 0.19 | 0.27 | 0.19 | | 0.57 | 0.46 | | 0.57 | 0.46 | |
| v/c Ratio | 0.14 | 0.42 | 0.36 | 0.28 | 0.59 | | 0.34 | 0.38 | | 0.40 | 0.30 | |
| Control Delay | 45.3 | 48.7 | 23.8 | 28.0 | 32.1 | | 14.5 | 19.0 | | 17.7 | 18.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 45.3 | 48.7 | 23.8 | 28.0 | 32.1 | | 14.5 | 19.0 | | 17.7 | 18.8 | |
| LOS | D | D | C | C | C | | B | B | | B | B | |
| Approach Delay | | 42.1 | | | 31.6 | | | 18.3 | | | 18.6 | |
| Approach LOS | | D | | | C | | | B | | | B | |
| Queue Length 50th (ft) | 0 | 97 | 25 | 36 | 103 | | 41 | 163 | | 42 | 98 | |
| Queue Length 95th (ft) | 39 | 116 | 89 | 61 | 122 | | 106 | 216 | | 84 | 149 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 229 | 1229 | 496 | 290 | 1250 | | 538 | 2241 | | 469 | 2249 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.13 | 0.33 | 0.30 | 0.27 | 0.47 | | 0.30 | 0.38 | | 0.35 | 0.30 | |









Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 55 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.59 |
| Intersection Signal Delay: | 25.7 |
| Intersection LOS: | C |
| Intersection Capacity Utilization | 54.6% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road
























Existing Weekday MIDDAY

Splits and Phases: 1307: Higley Road & Germann Road

| | | | |
|---|---|---|---|
|  ø2 (R) |  ø1 |  ø4 |  ø3 |
| 40 s | 18 s | 31 s | 11 s |
|  ø6 (R) |  ø5 |  ø8 |  ø7 |
| 40 s | 18 s | 31 s | 11 s |

Lanes and Geometrics
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

Existing Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 38 | 26 | 43 | 15 | 25 | 35 | 27 | 187 | 15 | 36 | 201 | 33 |
| Future Volume (vph) | 38 | 26 | 43 | 15 | 25 | 35 | 27 | 187 | 15 | 36 | 201 | 33 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.907 | | | | 0.850 | | 0.989 | | | 0.979 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1690 | 0 | 1770 | 1863 | 1583 | 1770 | 3500 | 0 | 1770 | 3465 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 1770 | 1690 | 0 | 1770 | 1863 | 1583 | 1770 | 3500 | 0 | 1770 | 3465 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 26.5 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.72 | 0.72 | 0.72 | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Area Type: | Other | | | | | | | | | | | |

| Intersection | | | | | | | | | | | | |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Intersection Delay, s/veh | 10.2 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBU | NBL | NBT | NBR |
| Traffic Vol, veh/h | 0 | 38 | 26 | 43 | 0 | 15 | 25 | 35 | 0 | 27 | 187 | 15 |
| Future Vol, veh/h | 0 | 38 | 26 | 43 | 0 | 15 | 25 | 35 | 0 | 27 | 187 | 15 |
| Peak Hour Factor | 0.92 | 0.79 | 0.79 | 0.79 | 0.92 | 0.72 | 0.72 | 0.72 | 0.92 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 48 | 33 | 54 | 0 | 21 | 35 | 49 | 0 | 33 | 231 | 19 |
| Number of Lanes | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 0 |
| Approach | EB | | | WB | | | NB | | | | | |
| Opposing Approach | WB | | | EB | | | SB | | | | | |
| Opposing Lanes | 3 | | | 2 | | | 3 | | | | | |
| Conflicting Approach Left | SB | | | NB | | | EB | | | | | |
| Conflicting Lanes Left | 3 | | | 3 | | | 2 | | | | | |
| Conflicting Approach Right | NB | | | SB | | | WB | | | | | |
| Conflicting Lanes Right | 3 | | | 3 | | | 3 | | | | | |
| HCM Control Delay | 10 | | | 9.6 | | | 10.4 | | | | | |
| HCM LOS | A | | | A | | | B | | | | | |
| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 | |
| Vol Left, % | 100% | 0% | 0% | 100% | 0% | 100% | 0% | 0% | 100% | 0% | 0% | |
| Vol Thru, % | 0% | 100% | 81% | 0% | 38% | 0% | 100% | 0% | 0% | 100% | 67% | |
| Vol Right, % | 0% | 0% | 19% | 0% | 62% | 0% | 0% | 100% | 0% | 0% | 33% | |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | |
| Traffic Vol by Lane | 27 | 125 | 77 | 38 | 69 | 15 | 25 | 35 | 36 | 134 | 100 | |
| LT Vol | 27 | 0 | 0 | 38 | 0 | 15 | 0 | 0 | 36 | 0 | 0 | |
| Through Vol | 0 | 125 | 62 | 0 | 26 | 0 | 25 | 0 | 0 | 134 | 67 | |
| RT Vol | 0 | 0 | 15 | 0 | 43 | 0 | 0 | 35 | 0 | 0 | 33 | |
| Lane Flow Rate | 33 | 154 | 95 | 48 | 87 | 21 | 35 | 49 | 42 | 158 | 118 | |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| Degree of Util (X) | 0.061 | 0.259 | 0.157 | 0.093 | 0.146 | 0.041 | 0.064 | 0.08 | 0.076 | 0.263 | 0.188 | |
| Departure Headway (Hd) | 6.563 | 6.06 | 5.923 | 6.972 | 6.036 | 7.095 | 6.594 | 5.892 | 6.5 | 5.997 | 5.765 | |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Cap | 546 | 593 | 605 | 514 | 594 | 505 | 543 | 607 | 551 | 599 | 622 | |
| Service Time | 4.299 | 3.796 | 3.659 | 4.715 | 3.779 | 4.84 | 4.338 | 3.637 | 4.236 | 3.733 | 3.501 | |
| HCM Lane V/C Ratio | 0.06 | 0.26 | 0.157 | 0.093 | 0.146 | 0.042 | 0.064 | 0.081 | 0.076 | 0.264 | 0.19 | |
| HCM Control Delay | 9.7 | 10.9 | 9.8 | 10.4 | 9.8 | 10.1 | 9.8 | 9.2 | 9.8 | 10.9 | 9.8 | |
| HCM Lane LOS | A | B | A | B | A | B | A | A | A | B | A | |
| HCM 95th-tile Q | 0.2 | 1 | 0.6 | 0.3 | 0.5 | 0.1 | 0.2 | 0.3 | 0.2 | 1.1 | 0.7 | |

| Intersection | | | | |
|----------------------------|------|------|------|------|
| Intersection Delay, s/veh | | | | |
| Intersection LOS | | | | |
| Movement | SBU | SBL | SBT | SBR |
| Traffic Vol, veh/h | 0 | 36 | 201 | 33 |
| Future Vol, veh/h | 0 | 36 | 201 | 33 |
| Peak Hour Factor | 0.92 | 0.85 | 0.85 | 0.85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 42 | 236 | 39 |
| Number of Lanes | 0 | 1 | 2 | 0 |
| Approach | | SB | | |
| Opposing Approach | | NB | | |
| Opposing Lanes | | 3 | | |
| Conflicting Approach Left | | WB | | |
| Conflicting Lanes Left | | 3 | | |
| Conflicting Approach Right | | EB | | |
| Conflicting Lanes Right | | 2 | | |
| HCM Control Delay | | 10.3 | | |
| HCM LOS | | B | | |
| Lane | | | | |

Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

Existing Weekday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 22 | 144 | 707 | 30 | 127 | 570 |
| Future Volume (vph) | 22 | 144 | 707 | 30 | 127 | 570 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.85 | 0.85 | 0.95 | 0.95 | 0.97 | 0.97 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 3

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 22 | 144 | 707 | 30 | 127 | 570 |
| Future Vol, veh/h | 22 | 144 | 707 | 30 | 127 | 570 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 85 | 85 | 95 | 95 | 97 | 97 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 169 | 744 | 32 | 131 | 588 |

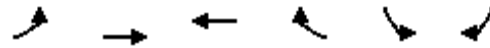
| Major/Minor | Minor1 | Minor2 | Major1 | Major2 | Major3 | Major4 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 1241 | 372 | 0 | 0 | 744 | 0 |
| Stage 1 | 744 | - | - | - | - | - |
| Stage 2 | 497 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 234 | 534 | - | - | 519 | - |
| Stage 1 | 346 | - | - | - | - | - |
| Stage 2 | 527 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 175 | 534 | - | - | 519 | - |
| Mov Cap-2 Maneuver | 175 | - | - | - | - | - |
| Stage 1 | 346 | - | - | - | - | - |
| Stage 2 | 394 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 16.7 | 0 | 2.6 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 175 | 534 | 519 | - |
| HCM Lane V/C Ratio | - | - | 0.148 | 0.317 | 0.252 | - |
| HCM Control Delay (s) | - | - | 29.1 | 14.8 | 14.3 | - |
| HCM Lane LOS | - | - | D | B | B | - |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 1.4 | 1 | - |

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

Existing Weekday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 30 | 568 | 651 | 23 | 22 | 32 |
| Future Volume (vph) | 30 | 568 | 651 | 23 | 22 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.68 | 0.68 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |
| Intersection Summary | | | | | | |
| Area Type: | Other | | | | | |

Intersection

Int Delay, s/veh 1.2

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 30 | 568 | 651 | 23 | 22 | 32 |
| Future Vol, veh/h | 30 | 568 | 651 | 23 | 22 | 32 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 68 | 68 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 631 | 723 | 26 | 32 | 47 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 723 | 0 | 1105 |
| Stage 1 | - | - | 723 |
| Stage 2 | - | - | 382 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 875 | - | 205 |
| Stage 1 | - | - | 441 |
| Stage 2 | - | - | 660 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 875 | - | 197 |
| Mov Cap-2 Maneuver | - | - | 197 |
| Stage 1 | - | - | 441 |
| Stage 2 | - | - | 635 |

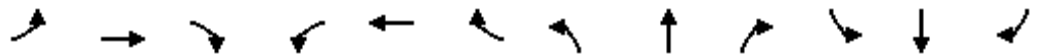
| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 17.5 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 875 | - | - | - | 197 | 635 |
| HCM Lane V/C Ratio | 0.038 | - | - | - | 0.164 | 0.074 |
| HCM Control Delay (s) | 9.3 | - | - | - | 26.8 | 11.1 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.6 | 0.2 |

Lanes, Volumes, Timings

Existing Weekday PM

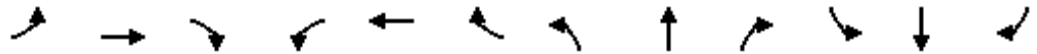
1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 51 | 945 | 122 | 52 | 553 | 105 | 47 | 252 | 75 | 240 | 340 | 28 |
| Future Volume (vph) | 51 | 945 | 122 | 52 | 553 | 105 | 47 | 252 | 75 | 240 | 340 | 28 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Fr't | | 0.983 | | | 0.976 | | | 0.966 | | | 0.989 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3363 | 0 | 1888 | 3339 | 0 | 1888 | 3305 | 0 | 1652 | 3384 | 0 |
| Flt Permitted | 0.312 | | | 0.145 | | | 0.377 | | | 0.413 | | |
| Satd. Flow (perm) | 542 | 3363 | 0 | 288 | 3339 | 0 | 749 | 3305 | 0 | 718 | 3384 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 25 | | | 30 | | | | 7 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | | 45 |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | | 640 |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | | 9.7 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 54 | 995 | 128 | 57 | 601 | 114 | 52 | 280 | 83 | 255 | 362 | 30 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 54 | 1123 | 0 | 57 | 715 | 0 | 52 | 363 | 0 | 255 | 392 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | | 13 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Existing Weekday PM



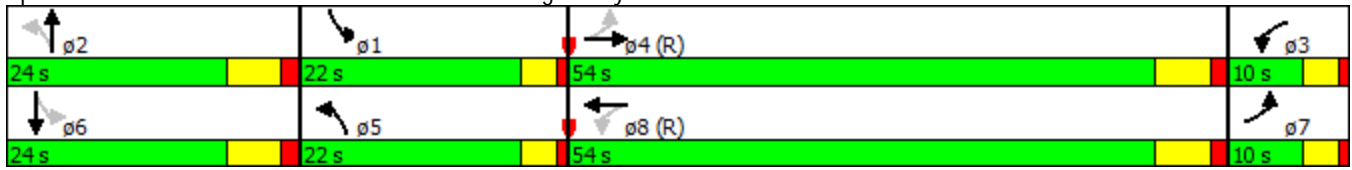
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|-------|-----|------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 10.0 | 54.0 | | 10.0 | 54.0 | | 22.0 | 24.0 | | 22.0 | 24.0 | |
| Total Split (%) | 9.1% | 49.1% | | 9.1% | 49.1% | | 20.0% | 21.8% | | 20.0% | 21.8% | |
| Maximum Green (s) | 6.0 | 48.0 | | 6.0 | 48.0 | | 18.0 | 18.0 | | 18.0 | 18.0 | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | |
| Recall Mode | None | C-Max | | None | C-Max | | None | Max | | None | Max | |
| Act Effct Green (s) | 60.6 | 53.0 | | 60.6 | 53.0 | | 35.3 | 20.3 | | 35.3 | 20.3 | |
| Actuated g/C Ratio | 0.55 | 0.48 | | 0.55 | 0.48 | | 0.32 | 0.18 | | 0.32 | 0.18 | |
| v/c Ratio | 0.15 | 0.69 | | 0.24 | 0.44 | | 0.14 | 0.57 | | 0.75 | 0.62 | |
| Control Delay | 13.5 | 25.4 | | 17.7 | 19.8 | | 25.5 | 42.2 | | 49.5 | 46.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 13.5 | 25.4 | | 17.7 | 19.8 | | 25.5 | 42.2 | | 49.5 | 46.2 | |
| LOS | B | C | | B | B | | C | D | | D | D | |
| Approach Delay | | 24.8 | | | 19.7 | | | 40.1 | | | 47.5 | |
| Approach LOS | | C | | | B | | | D | | | D | |
| Queue Length 50th (ft) | 16 | 313 | | 16 | 165 | | 25 | 116 | | 138 | 135 | |
| Queue Length 95th (ft) | 37 | 424 | | 38 | 233 | | 49 | 167 | | 201 | 189 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 361 | 1629 | | 247 | 1623 | | 460 | 634 | | 416 | 630 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.15 | 0.69 | | 0.23 | 0.44 | | 0.11 | 0.57 | | 0.61 | 0.62 | |

Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 110 |
| Actuated Cycle Length: | 110 |
| Offset: | 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.75 |
| Intersection Signal Delay: | 30.5 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 73.5% |
| ICU Level of Service: | D |
| Analysis Period (min): | 15 |

























1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

Existing Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 104 | 660 | 467 | 110 | 394 | 178 | 258 | 650 | 114 | 189 | 780 | 93 |
| Future Volume (vph) | 104 | 660 | 467 | 110 | 394 | 178 | 258 | 650 | 114 | 189 | 780 | 93 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4837 | 0 |
| Flt Permitted | 0.431 | | | 0.227 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 749 | 3421 | 1478 | 395 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4837 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 385 | | | 181 | | | 147 | | | 19 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1834 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 27.8 | | | 17.6 | |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.94 | 0.94 | 0.94 | 0.89 | 0.89 | 0.89 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 106 | 673 | 477 | 117 | 419 | 189 | 290 | 730 | 128 | 193 | 796 | 95 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 106 | 673 | 477 | 117 | 419 | 189 | 290 | 730 | 128 | 193 | 891 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

Existing Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.5 | 16.0 | 16.0 | 11.5 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 13.0 | 38.0 | 38.0 | 13.0 | 38.0 | 38.0 | 19.0 | 30.0 | 30.0 | 19.0 | 30.0 | |
| Total Split (%) | 13.0% | 38.0% | 38.0% | 13.0% | 38.0% | 38.0% | 19.0% | 30.0% | 30.0% | 19.0% | 30.0% | |
| Maximum Green (s) | 8.5 | 32.0 | 32.0 | 8.5 | 32.0 | 32.0 | 13.0 | 24.0 | 24.0 | 13.0 | 24.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 36.0 | 27.5 | 27.5 | 36.0 | 27.5 | 27.5 | 12.0 | 31.0 | 31.0 | 12.0 | 31.0 | |
| Actuated g/C Ratio | 0.36 | 0.28 | 0.28 | 0.36 | 0.28 | 0.28 | 0.12 | 0.31 | 0.31 | 0.12 | 0.31 | |
| v/c Ratio | 0.32 | 0.72 | 0.70 | 0.51 | 0.45 | 0.35 | 0.75 | 0.48 | 0.22 | 0.50 | 0.59 | |
| Control Delay | 22.7 | 36.9 | 12.3 | 34.3 | 30.9 | 6.4 | 49.8 | 41.7 | 14.8 | 28.7 | 18.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 22.7 | 36.9 | 12.3 | 34.3 | 30.9 | 6.4 | 49.8 | 41.7 | 14.8 | 28.7 | 18.8 | |
| LOS | C | D | B | C | C | A | D | D | B | C | B | |
| Approach Delay | | 26.4 | | | 25.1 | | | 40.7 | | | 20.5 | |
| Approach LOS | | C | | | C | | | D | | | C | |
| Queue Length 50th (ft) | 42 | 202 | 45 | 46 | 115 | 4 | 90 | 155 | 6 | 61 | 64 | |
| Queue Length 95th (ft) | 72 | 250 | 151 | 78 | 151 | 52 | 115 | 212 | 62 | 97 | 104 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1754 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 357 | 1094 | 734 | 254 | 1094 | 596 | 416 | 1523 | 575 | 416 | 1511 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.30 | 0.62 | 0.65 | 0.46 | 0.38 | 0.32 | 0.70 | 0.48 | 0.22 | 0.46 | 0.59 | |

















Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 18 (18%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.75 |
| Intersection Signal Delay: | 28.6 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 67.6% |
| ICU Level of Service: | C |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

























Existing Weekday PM

Splits and Phases: 1205: Higley Road & Queen Creek Road

| | | | |
|---|---|---|---|
|  ø2 (R) |  ø1 |  ø4 |  ø3 |
|  30 s |  19 s |  38 s |  13 s |
|  ø6 (R) |  ø5 |  ø8 |  ø7 |
|  30 s |  19 s |  38 s |  13 s |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

Existing Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 40 | 3 | 4 | 38 | 2 | 50 | 3 | 818 | 39 | 61 | 984 | 44 |
| Future Volume (vph) | 40 | 3 | 4 | 38 | 2 | 50 | 3 | 818 | 39 | 61 | 984 | 44 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.993 | | | 0.994 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3397 | 0 | 1711 | 4886 | 0 |
| Fl _t Permitted | 0.757 | | | 0.755 | | | 0.237 | | | 0.295 | | |
| Satd. Flow (perm) | 1457 | 3421 | 1531 | 1406 | 1801 | 1478 | 500 | 3397 | 0 | 531 | 4886 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 76 | | | 76 | | 8 | | | 12 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3506 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 53.1 | |
| Peak Hour Factor | 0.69 | 0.69 | 0.69 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 58 | 4 | 6 | 46 | 2 | 60 | 3 | 861 | 41 | 66 | 1058 | 47 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 58 | 4 | 6 | 46 | 2 | 60 | 3 | 902 | 0 | 66 | 1105 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

Existing Weekday PM

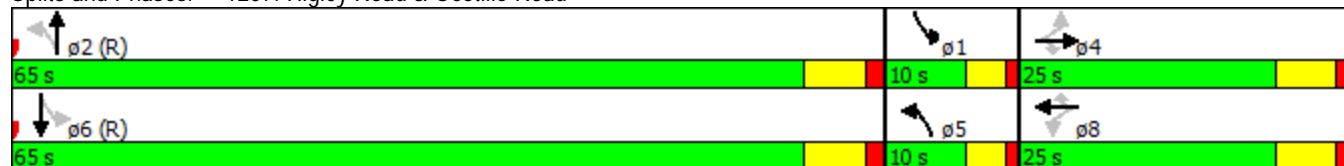


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 10.0 | 65.0 | | 10.0 | 65.0 | |
| Total Split (%) | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 10.0% | 65.0% | | 10.0% | 65.0% | |
| Maximum Green (s) | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 | 6.0 | 59.0 | | 6.0 | 59.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 | 4.0 | | 3.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 78.7 | 73.4 | | 78.7 | 73.4 | |
| Actuated g/C Ratio | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.79 | 0.73 | | 0.79 | 0.73 | |
| v/c Ratio | 0.35 | 0.01 | 0.03 | 0.29 | 0.01 | 0.26 | 0.01 | 0.36 | | 0.14 | 0.31 | |
| Control Delay | 46.8 | 38.0 | 0.2 | 45.1 | 38.0 | 9.2 | 3.0 | 7.1 | | 2.2 | 2.5 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 46.8 | 38.0 | 0.2 | 45.1 | 38.0 | 9.2 | 3.0 | 7.1 | | 2.2 | 2.5 | |
| LOS | D | D | A | D | D | A | A | A | | A | A | |
| Approach Delay | | 42.1 | | | 25.0 | | | 7.1 | | | 2.5 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 35 | 1 | 0 | 28 | 1 | 0 | 0 | 115 | | 5 | 47 | |
| Queue Length 95th (ft) | 54 | 4 | 0 | 56 | 7 | 21 | 2 | 171 | | m9 | 60 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3426 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 276 | 649 | 352 | 267 | 342 | 342 | 485 | 2495 | | 490 | 3589 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.21 | 0.01 | 0.02 | 0.17 | 0.01 | 0.18 | 0.01 | 0.36 | | 0.13 | 0.31 | |

Intersection Summary

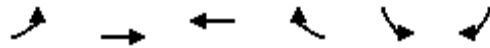
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 68 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 45
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.36
 Intersection Signal Delay: 6.6
 Intersection LOS: A
 Intersection Capacity Utilization 55.5%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

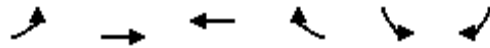
Existing Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 35 | 730 | 438 | 232 | 364 | 33 |
| Future Volume (vph) | 35 | 730 | 438 | 232 | 364 | 33 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.948 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3355 | 0 | 1770 | 1583 |
| Flt Permitted | 0.285 | | | | 0.950 | |
| Satd. Flow (perm) | 531 | 3539 | 3355 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 133 | | | 41 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.95 | 0.95 | 0.81 | 0.81 |
| Adj. Flow (vph) | 36 | 753 | 461 | 244 | 449 | 41 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 36 | 753 | 705 | 0 | 449 | 41 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Existing Weekday PM



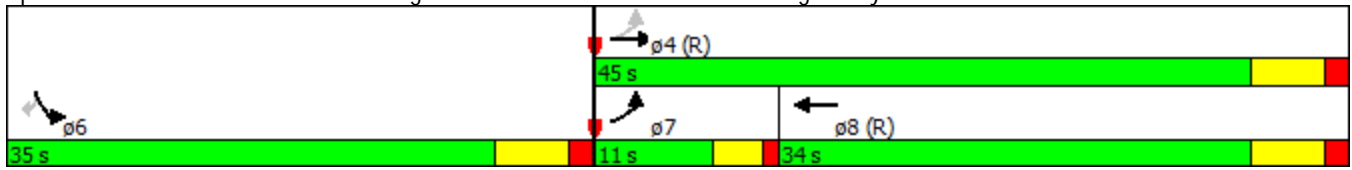
| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 30.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 45.0 | 34.0 | | 35.0 | 35.0 |
| Total Split (%) | 13.8% | 56.3% | 42.5% | | 43.8% | 43.8% |
| Maximum Green (s) | 7.0 | 39.0 | 28.0 | | 29.0 | 29.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | | | | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | 20.0 | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 44.3 | 42.3 | 36.0 | | 25.7 | 25.7 |
| Actuated g/C Ratio | 0.55 | 0.53 | 0.45 | | 0.32 | 0.32 |
| v/c Ratio | 0.09 | 0.40 | 0.45 | | 0.79 | 0.08 |
| Control Delay | 9.5 | 10.7 | 15.2 | | 35.3 | 6.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 9.5 | 10.7 | 15.2 | | 35.3 | 6.2 |
| LOS | A | B | B | | D | A |
| Approach Delay | | 10.6 | 15.2 | | 32.9 | |
| Approach LOS | | B | B | | C | |
| Queue Length 50th (ft) | 7 | 92 | 127 | | 194 | 0 |
| Queue Length 95th (ft) | m14 | 123 | 183 | | 251 | 16 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 402 | 1873 | 1581 | | 641 | 599 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.09 | 0.40 | 0.45 | | 0.70 | 0.07 |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 14 (18%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 17.8
 Intersection LOS: B
 Intersection Capacity Utilization 57.2%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

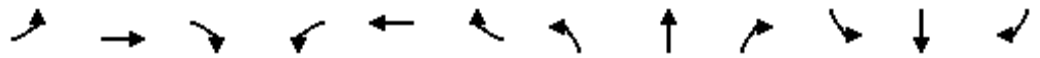
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

Existing Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 222 | 504 | 231 | 149 | 415 | 122 | 137 | 435 | 71 | 200 | 675 | 115 |
| Future Volume (vph) | 222 | 504 | 231 | 149 | 415 | 122 | 137 | 435 | 71 | 200 | 675 | 115 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.953 | | | 0.966 | | | 0.979 | | | 0.978 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3260 | 0 | 1652 | 3305 | 0 | 1652 | 4813 | 0 | 1652 | 4808 | 0 |
| Flt Permitted | 0.311 | | | 0.204 | | | 0.245 | | | 0.413 | | |
| Satd. Flow (perm) | 541 | 3260 | 0 | 355 | 3305 | 0 | 426 | 4813 | 0 | 718 | 4808 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 92 | | | 47 | | | 39 | | | 41 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.89 | 0.89 | 0.89 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 229 | 520 | 238 | 167 | 466 | 137 | 149 | 473 | 77 | 211 | 711 | 121 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 229 | 758 | 0 | 167 | 603 | 0 | 149 | 550 | 0 | 211 | 832 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

Existing Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
|-------------------------|-------|-------|-----|-----|-------|-------|-------|-------|------|-----|-------|-------|--|
| Permitted Phases | 4 | | | | 8 | | 2 | | | | 6 | | |
| Detector Phase | 7 | 4 | | | 3 | 8 | 5 | 2 | | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | | 5.0 | 10.0 | 5.0 | 10.0 | | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | | 9.0 | 16.0 | 9.0 | 28.0 | | | 9.0 | 28.0 | |
| Total Split (s) | 12.0 | 28.0 | | | 12.0 | 28.0 | 12.0 | 28.0 | | | 12.0 | 28.0 | |
| Total Split (%) | 15.0% | 35.0% | | | 15.0% | 35.0% | 15.0% | 35.0% | | | 15.0% | 35.0% | |
| Maximum Green (s) | 8.0 | 22.0 | | | 8.0 | 22.0 | 8.0 | 22.0 | | | 8.0 | 22.0 | |
| Yellow Time (s) | 3.0 | 4.5 | | | 3.0 | 4.5 | 3.0 | 4.5 | | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | | 1.0 | 1.5 | 1.0 | 1.5 | | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | | 4.0 | 6.0 | 4.0 | 6.0 | | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | | | 3.0 | 4.0 | 3.0 | 4.0 | | | 3.0 | 4.0 | |
| Recall Mode | None | Max | | | None | Max | None | C-Max | | | None | C-Max | |
| Walk Time (s) | | | | | | | | | 4.0 | | | | |
| Flash Dont Walk (s) | | | | | | | | | 18.0 | | | | |
| Pedestrian Calls (#/hr) | | | | | | | | | 0 | | | | |
| Act Effct Green (s) | 32.5 | 23.2 | | | 32.5 | 23.2 | 31.5 | 22.7 | | | 31.5 | 22.7 | |
| Actuated g/C Ratio | 0.41 | 0.29 | | | 0.41 | 0.29 | 0.39 | 0.28 | | | 0.39 | 0.28 | |
| v/c Ratio | 0.71 | 0.75 | | | 0.64 | 0.61 | 0.55 | 0.40 | | | 0.58 | 0.60 | |
| Control Delay | 31.1 | 30.2 | | | 35.2 | 25.8 | 35.3 | 23.6 | | | 26.1 | 25.7 | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 | |
| Total Delay | 31.1 | 30.2 | | | 35.2 | 25.8 | 35.3 | 23.6 | | | 26.1 | 25.7 | |
| LOS | C | C | | | D | C | D | C | | | C | C | |
| Approach Delay | 30.4 | | | | 27.8 | | 26.1 | | | | 25.8 | | |
| Approach LOS | C | | | | C | | C | | | | C | | |
| Queue Length 50th (ft) | 61 | 167 | | | 47 | 124 | 55 | 85 | | | 66 | 126 | |
| Queue Length 95th (ft) | m#108 | 243 | | | #90 | 180 | 106 | 116 | | | 111 | 166 | |
| Internal Link Dist (ft) | 546 | | | | 1487 | | 692 | | | | 712 | | |
| Turn Bay Length (ft) | 205 | | | | 200 | | 210 | | | | 210 | | |
| Base Capacity (vph) | 335 | 1010 | | | 276 | 991 | 296 | 1392 | | | 386 | 1392 | |
| Starvation Cap Reductn | 0 | 0 | | | 0 | 0 | 0 | 0 | | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | | 0 | 0 | 0 | 0 | | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | | 0 | 0 | 0 | 0 | | | 0 | 0 | |
| Reduced v/c Ratio | 0.68 | 0.75 | | | 0.61 | 0.61 | 0.50 | 0.40 | | | 0.55 | 0.60 | |

Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.75 |
| Intersection Signal Delay: | 27.6 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 69.4% |
| ICU Level of Service: | C |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road









Existing Weekday PM

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

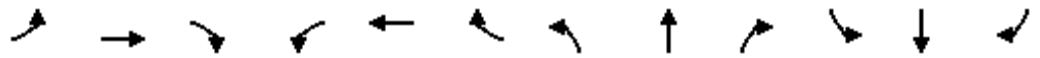
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road

| | | | |
|--|--|--|--|
|  $\phi 2$ (R) 28 s |  $\phi 1$ 12 s |  $\phi 4$ 28 s |  $\phi 3$ 12 s |
|  $\phi 6$ (R) 28 s |  $\phi 5$ 12 s |  $\phi 8$ 28 s |  $\phi 7$ 12 s |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

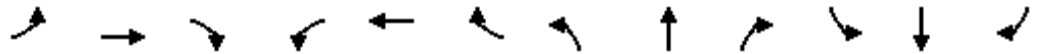
Existing Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 829 | 51 | 235 | 862 | 106 |
| Future Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 829 | 51 | 235 | 862 | 106 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.895 | | | 0.876 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1556 | 0 | 1711 | 1523 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.445 | | | 0.696 | | | 0.279 | | | 0.292 | | |
| Satd. Flow (perm) | 801 | 1556 | 0 | 1253 | 1523 | 0 | 485 | 4916 | 1478 | 508 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 66 | | | 159 | | | | 76 | | | 93 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.86 | 0.86 | 0.86 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 78 | 28 | 66 | 36 | 33 | 159 | 52 | 901 | 55 | 255 | 937 | 115 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 94 | 0 | 36 | 192 | 0 | 52 | 901 | 55 | 255 | 937 | 115 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

Existing Weekday PM









| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 17.0 | 17.0 | | 17.0 | 17.0 | | 10.0 | 22.0 | 22.0 | 10.0 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 12.0 | 49.0 | 49.0 | 12.0 | 49.0 | 49.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 12.0% | 49.0% | 49.0% | 12.0% | 49.0% | 49.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 8.0 | 43.0 | 43.0 | 8.0 | 43.0 | 43.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effct Green (s) | 14.1 | 14.1 | | 14.1 | 14.1 | | 71.8 | 62.4 | 62.4 | 71.9 | 62.4 | 62.4 |
| Actuated g/C Ratio | 0.14 | 0.14 | | 0.14 | 0.14 | | 0.72 | 0.62 | 0.62 | 0.72 | 0.62 | 0.62 |
| v/c Ratio | 0.70 | 0.34 | | 0.20 | 0.55 | | 0.12 | 0.29 | 0.06 | 0.57 | 0.31 | 0.12 |
| Control Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.4 | 2.6 | 0.4 | 17.2 | 4.7 | 1.1 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.4 | 2.6 | 0.4 | 17.2 | 4.7 | 1.1 |
| LOS | E | B | | D | B | | A | A | A | B | A | A |
| Approach Delay | | 41.6 | | | 19.3 | | | 2.5 | | | 6.8 | |
| Approach LOS | | D | | | B | | | A | | | A | |
| Queue Length 50th (ft) | 48 | 16 | | 21 | 19 | | 3 | 31 | 0 | 39 | 50 | 1 |
| Queue Length 95th (ft) | 94 | 58 | | 45 | 71 | | m11 | 49 | m0 | 135 | 65 | m7 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 264 | 557 | | 413 | 609 | | 444 | 3069 | 951 | 459 | 3069 | 957 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.30 | 0.17 | | 0.09 | 0.32 | | 0.12 | 0.29 | 0.06 | 0.56 | 0.31 | 0.12 |

Intersection Summary

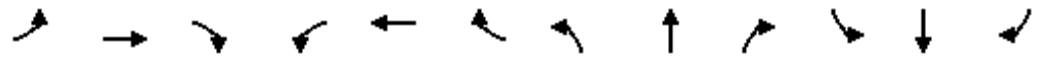
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 17 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 8.5 Intersection LOS: A
 Intersection Capacity Utilization 65.6% ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail

| | | |
|--|--|---|
|  φ2 (R) |  φ1 |  φ4 |
| 49 s | 12 s | 39 s |
|  φ6 (R) |  φ5 |  φ8 |
| 49 s | 12 s | 39 s |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

Existing Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 53 | 739 | 229 | 138 | 382 | 200 | 179 | 807 | 99 | 259 | 857 | 44 |
| Future Volume (vph) | 53 | 739 | 229 | 138 | 382 | 200 | 179 | 807 | 99 | 259 | 857 | 44 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.948 | | | 0.984 | | | 0.993 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4660 | 0 | 1711 | 4837 | 0 | 1711 | 4881 | 0 |
| Fl _t Permitted | 0.299 | | | 0.216 | | | 0.226 | | | 0.185 | | |
| Satd. Flow (perm) | 538 | 4916 | 1531 | 389 | 4660 | 0 | 407 | 4837 | 0 | 333 | 4881 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 236 | | 121 | | | 23 | | | 8 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2550 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 38.6 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 55 | 762 | 236 | 150 | 415 | 217 | 206 | 928 | 114 | 267 | 884 | 45 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 55 | 762 | 236 | 150 | 632 | 0 | 206 | 1042 | 0 | 267 | 929 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

Existing Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | | 7.0 | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | | 11.0 | 16.0 | | 11.0 | 16.0 | |
| Total Split (s) | 12.0 | 28.0 | 28.0 | 12.0 | 28.0 | | 20.0 | 40.0 | | 20.0 | 40.0 | |
| Total Split (%) | 12.0% | 28.0% | 28.0% | 12.0% | 28.0% | | 20.0% | 40.0% | | 20.0% | 40.0% | |
| Maximum Green (s) | 8.0 | 22.0 | 22.0 | 8.0 | 22.0 | | 16.0 | 34.0 | | 16.0 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 31.4 | 21.8 | 21.8 | 31.4 | 21.8 | | 52.6 | 37.1 | | 52.6 | 37.1 | |
| Actuated g/C Ratio | 0.31 | 0.22 | 0.22 | 0.31 | 0.22 | | 0.53 | 0.37 | | 0.53 | 0.37 | |
| v/c Ratio | 0.21 | 0.71 | 0.46 | 0.68 | 0.57 | | 0.53 | 0.58 | | 0.74 | 0.51 | |
| Control Delay | 16.1 | 27.2 | 4.9 | 49.6 | 30.1 | | 24.4 | 37.0 | | 40.5 | 26.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 16.1 | 27.2 | 4.9 | 49.6 | 30.1 | | 24.4 | 37.0 | | 40.5 | 26.1 | |
| LOS | B | C | A | D | C | | C | D | | D | C | |
| Approach Delay | | 21.6 | | | 33.8 | | | 34.9 | | | 29.3 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 18 | 173 | 25 | 65 | 104 | | 44 | 209 | | 86 | 173 | |
| Queue Length 95th (ft) | m22 | 87 | 12 | #125 | 145 | | 103 | 237 | | 162 | 217 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2470 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 264 | 1101 | 525 | 229 | 1137 | | 433 | 1809 | | 403 | 1816 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.21 | 0.69 | 0.45 | 0.66 | 0.56 | | 0.48 | 0.58 | | 0.66 | 0.51 | |

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 48 (48%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 29.9

Intersection LOS: C

Intersection Capacity Utilization 70.7%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.









Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road
























Existing Weekday PM

Splits and Phases: 1307: Higley Road & Germann Road

| | | | |
|--|--|--|--|
|  $\phi 2$ (R) 40 s |  $\phi 1$ 20 s |  $\phi 4$ 28 s |  $\phi 3$ 12 s |
|  $\phi 6$ (R) 40 s |  $\phi 5$ 20 s |  $\phi 8$ 28 s |  $\phi 7$ 12 s |

Lanes and Geometrics
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

Existing Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 53 | 45 | 85 | 26 | 27 | 45 | 38 | 195 | 31 | 53 | 302 | 33 |
| Future Volume (vph) | 53 | 45 | 85 | 26 | 27 | 45 | 38 | 195 | 31 | 53 | 302 | 33 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.902 | | | | 0.850 | | 0.979 | | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1680 | 0 | 1770 | 1863 | 1583 | 1770 | 3465 | 0 | 1770 | 3486 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 1770 | 1680 | 0 | 1770 | 1863 | 1583 | 1770 | 3465 | 0 | 1770 | 3486 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 4608 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 69.8 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.84 | 0.84 | 0.84 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Area Type: | Other | | | | | | | | | | | |

| Intersection | | | | | | | | | | | | |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Intersection Delay, s/veh | 11.7 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBU | NBL | NBT | NBR |
| Traffic Vol, veh/h | 0 | 53 | 45 | 85 | 0 | 26 | 27 | 45 | 0 | 38 | 195 | 31 |
| Future Vol, veh/h | 0 | 53 | 45 | 85 | 0 | 26 | 27 | 45 | 0 | 38 | 195 | 31 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.84 | 0.84 | 0.84 | 0.92 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 58 | 49 | 92 | 0 | 31 | 32 | 54 | 0 | 44 | 224 | 36 |
| Number of Lanes | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 0 |
| Approach | EB | | | WB | | | | NB | | | | |
| Opposing Approach | WB | | | EB | | | | SB | | | | |
| Opposing Lanes | 3 | | | 2 | | | | 3 | | | | |
| Conflicting Approach Left | SB | | | NB | | | | EB | | | | |
| Conflicting Lanes Left | 3 | | | 3 | | | | 2 | | | | |
| Conflicting Approach Right | NB | | | SB | | | | WB | | | | |
| Conflicting Lanes Right | 3 | | | 3 | | | | 3 | | | | |
| HCM Control Delay | 11.5 | | | 10.5 | | | | 11.4 | | | | |
| HCM LOS | B | | | B | | | | B | | | | |
| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 | |
| Vol Left, % | 100% | 0% | 0% | 100% | 0% | 100% | 0% | 0% | 100% | 0% | 0% | |
| Vol Thru, % | 0% | 100% | 68% | 0% | 35% | 0% | 100% | 0% | 0% | 100% | 75% | |
| Vol Right, % | 0% | 0% | 32% | 0% | 65% | 0% | 0% | 100% | 0% | 0% | 25% | |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | |
| Traffic Vol by Lane | 38 | 130 | 96 | 53 | 130 | 26 | 27 | 45 | 53 | 201 | 134 | |
| LT Vol | 38 | 0 | 0 | 53 | 0 | 26 | 0 | 0 | 53 | 0 | 0 | |
| Through Vol | 0 | 130 | 65 | 0 | 45 | 0 | 27 | 0 | 0 | 201 | 101 | |
| RT Vol | 0 | 0 | 31 | 0 | 85 | 0 | 0 | 45 | 0 | 0 | 33 | |
| Lane Flow Rate | 44 | 149 | 110 | 58 | 141 | 31 | 32 | 54 | 61 | 231 | 154 | |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| Degree of Util (X) | 0.087 | 0.277 | 0.198 | 0.12 | 0.256 | 0.067 | 0.065 | 0.098 | 0.117 | 0.412 | 0.266 | |
| Departure Headway (Hd) | 7.187 | 6.683 | 6.455 | 7.477 | 6.52 | 7.77 | 7.267 | 6.563 | 6.908 | 6.404 | 6.23 | |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Cap | 496 | 535 | 553 | 477 | 547 | 458 | 490 | 542 | 517 | 560 | 573 | |
| Service Time | 4.968 | 4.463 | 4.235 | 5.258 | 4.301 | 5.563 | 5.06 | 4.355 | 4.68 | 4.176 | 4.001 | |
| HCM Lane V/C Ratio | 0.089 | 0.279 | 0.199 | 0.122 | 0.258 | 0.068 | 0.065 | 0.1 | 0.118 | 0.412 | 0.269 | |
| HCM Control Delay | 10.7 | 12 | 10.8 | 11.3 | 11.6 | 11.1 | 10.6 | 10.1 | 10.6 | 13.6 | 11.3 | |
| HCM Lane LOS | B | B | B | B | B | B | B | B | B | B | B | |
| HCM 95th-tile Q | 0.3 | 1.1 | 0.7 | 0.4 | 1 | 0.2 | 0.2 | 0.3 | 0.4 | 2 | 1.1 | |

| Intersection | | | | |
|----------------------------|------|------|------|------|
| Intersection Delay, s/veh | | | | |
| Intersection LOS | | | | |
| Movement | SBU | SBL | SBT | SBR |
| Traffic Vol, veh/h | 0 | 53 | 302 | 33 |
| Future Vol, veh/h | 0 | 53 | 302 | 33 |
| Peak Hour Factor | 0.92 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 61 | 347 | 38 |
| Number of Lanes | 0 | 1 | 2 | 0 |
| Approach | | SB | | |
| Opposing Approach | | NB | | |
| Opposing Lanes | | 3 | | |
| Conflicting Approach Left | | WB | | |
| Conflicting Lanes Left | | 3 | | |
| Conflicting Approach Right | | EB | | |
| Conflicting Lanes Right | | 2 | | |
| HCM Control Delay | | 12.4 | | |
| HCM LOS | | B | | |
| Lane | | | | |

Lanes and Geometrics
4: Higley Road & Bridges Boulevard

Existing Weekday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 16 | 189 | 898 | 24 | 231 | 1074 |
| Future Volume (vph) | 16 | 189 | 898 | 24 | 231 | 1074 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3506 | | | 1834 |
| Travel Time (s) | 20.8 | | 53.1 | | | 27.8 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.97 | 0.97 | 0.92 | 0.92 | 0.91 | 0.91 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 5.2

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 16 | 189 | 898 | 24 | 231 | 1074 |
| Future Vol, veh/h | 16 | 189 | 898 | 24 | 231 | 1074 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 97 | 97 | 92 | 92 | 91 | 91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 195 | 976 | 26 | 254 | 1180 |

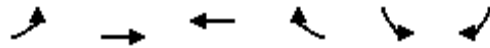
| Major/Minor | Minor1 | Minor2 | Major1 | Major2 | Major3 | Major4 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 1956 | 488 | 0 | 0 | 976 | 0 |
| Stage 1 | 976 | - | - | - | - | - |
| Stage 2 | 980 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 99 | 450 | - | - | 402 | - |
| Stage 1 | 250 | - | - | - | - | - |
| Stage 2 | 293 | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 36 | 450 | - | - | 402 | - |
| Mov Cap-2 Maneuver | 36 | - | - | - | - | - |
| Stage 1 | 250 | - | - | - | - | - |
| Stage 2 | 108 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 30.9 | 0 | 5 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 36 | 450 | 402 | - |
| HCM Lane V/C Ratio | - | - | 0.458 | 0.433 | 0.631 | - |
| HCM Control Delay (s) | - | - | 171.5 | 19 | 28.1 | - |
| HCM Lane LOS | - | - | F | C | D | - |
| HCM 95th %tile Q(veh) | - | - | 1.6 | 2.1 | 4.2 | - |

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

Existing Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↷↷ | ↷↷ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 50 | 1232 | 688 | 12 | 8 | 36 |
| Future Volume (vph) | 50 | 1232 | 688 | 12 | 8 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 30 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 8.1 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.89 | 0.89 | 0.85 | 0.85 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |
| Intersection Summary | | | | | | |
| Area Type: | Other | | | | | |

Intersection

Int Delay, s/veh 0.7

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 50 | 1232 | 688 | 12 | 8 | 36 |
| Future Vol, veh/h | 50 | 1232 | 688 | 12 | 8 | 36 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 89 | 89 | 85 | 85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 1283 | 773 | 13 | 9 | 42 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 773 | 0 | 1519 |
| Stage 1 | - | - | 773 |
| Stage 2 | - | - | 746 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 838 | - | 110 |
| Stage 1 | - | - | 416 |
| Stage 2 | - | - | 430 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 838 | - | 103 |
| Mov Cap-2 Maneuver | - | - | 103 |
| Stage 1 | - | - | 416 |
| Stage 2 | - | - | 403 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.4 | 0 | 17.1 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 838 | - | - | - | 103 | 611 |
| HCM Lane V/C Ratio | 0.062 | - | - | - | 0.091 | 0.069 |
| HCM Control Delay (s) | 9.6 | - | - | - | 43.4 | 11.3 |
| HCM Lane LOS | A | - | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.3 | 0.2 |

Lanes, Volumes, Timings

Existing Saturday MIDDAY

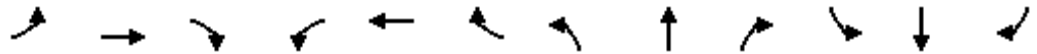
1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 44 | 516 | 71 | 52 | 553 | 128 | 62 | 234 | 71 | 162 | 235 | 37 |
| Future Volume (vph) | 44 | 516 | 71 | 52 | 553 | 128 | 62 | 234 | 71 | 162 | 235 | 37 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.982 | | | 0.972 | | | 0.965 | | | 0.980 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3360 | 0 | 1888 | 3325 | 0 | 1888 | 3301 | 0 | 1652 | 3353 | 0 |
| Flt Permitted | 0.316 | | | 0.379 | | | 0.477 | | | 0.431 | | |
| Satd. Flow (perm) | 549 | 3360 | 0 | 753 | 3325 | 0 | 948 | 3301 | 0 | 749 | 3353 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 30 | | | 40 | | | 18 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 47 | 549 | 76 | 57 | 608 | 141 | 69 | 260 | 79 | 184 | 267 | 42 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 47 | 625 | 0 | 57 | 749 | 0 | 69 | 339 | 0 | 184 | 309 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | 13 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Existing Saturday MIDDAY











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | |
| Detector Phase | 7 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | | |
| Minimum Split (s) | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | | |
| Total Split (s) | 14.0 | 39.0 | 14.0 | 39.0 | 12.0 | 35.0 | 12.0 | 35.0 | 12.0 | 35.0 | | |
| Total Split (%) | 14.0% | 39.0% | 14.0% | 39.0% | 12.0% | 35.0% | 12.0% | 35.0% | 12.0% | 35.0% | | |
| Maximum Green (s) | 10.0 | 33.0 | 10.0 | 33.0 | 8.0 | 29.0 | 8.0 | 29.0 | 8.0 | 29.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | | |
| All-Red Time (s) | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | | |
| Recall Mode | None | C-Max | None | C-Max | None | None | None | None | None | None | | |
| Act Effct Green (s) | 61.0 | 53.4 | 61.0 | 53.4 | 24.9 | 15.5 | 24.9 | 15.5 | 24.9 | 15.5 | | |
| Actuated g/C Ratio | 0.61 | 0.53 | 0.61 | 0.53 | 0.25 | 0.16 | 0.25 | 0.16 | 0.25 | 0.16 | | |
| v/c Ratio | 0.12 | 0.35 | 0.11 | 0.42 | 0.23 | 0.62 | 0.73 | 0.58 | 0.73 | 0.58 | | |
| Control Delay | 2.9 | 3.5 | 3.4 | 4.1 | 27.6 | 39.4 | 48.7 | 33.4 | 48.7 | 33.4 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 2.9 | 3.5 | 3.4 | 4.1 | 27.6 | 39.4 | 48.7 | 33.4 | 48.7 | 33.4 | | |
| LOS | A | A | A | A | C | D | D | C | D | C | | |
| Approach Delay | 3.4 | | 4.0 | | 37.4 | | 39.1 | | | | | |
| Approach LOS | A | | A | | D | | D | | | | | |
| Queue Length 50th (ft) | 2 | 20 | 4 | 30 | 33 | 94 | 110 | 97 | 110 | 97 | | |
| Queue Length 95th (ft) | 8 | 37 | m10 | 50 | 59 | 133 | 158 | 132 | 158 | 132 | | |
| Internal Link Dist (ft) | 400 | | 115 | | 607 | | 560 | | | | | |
| Turn Bay Length (ft) | 175 | | 210 | | 200 | | 170 | | | | | |
| Base Capacity (vph) | 469 | 1801 | 605 | 1789 | 326 | 985 | 271 | 985 | 271 | 985 | | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Reduced v/c Ratio | 0.10 | 0.35 | 0.09 | 0.42 | 0.21 | 0.34 | 0.68 | 0.31 | 0.68 | 0.31 | | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 16.9 Intersection LOS: B
 Intersection Capacity Utilization 57.9% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

| | | | |
|--|--|--|--|
|  $\phi 2$ |  $\phi 1$ |  $\phi 4 (R)$ |  $\phi 3$ |
| 35 s | 12 s | 39 s | 14 s |
|  $\phi 6$ |  $\phi 5$ |  $\phi 8 (R)$ |  $\phi 7$ |
| 35 s | 12 s | 39 s | 14 s |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 69 | 320 | 238 | 81 | 424 | 176 | 255 | 646 | 78 | 147 | 553 | 64 |
| Future Volume (vph) | 69 | 320 | 238 | 81 | 424 | 176 | 255 | 646 | 78 | 147 | 553 | 64 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4837 | 0 |
| Flt Permitted | 0.358 | | | 0.466 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 622 | 3421 | 1478 | 810 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4837 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 256 | | | 153 | | | 142 | | | 20 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.97 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 74 | 344 | 256 | 84 | 437 | 181 | 274 | 695 | 84 | 158 | 595 | 69 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 74 | 344 | 256 | 84 | 437 | 181 | 274 | 695 | 84 | 158 | 664 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Maximum Green (s) | 11.0 | 26.0 | 26.0 | 11.0 | 26.0 | 26.0 | 13.0 | 28.0 | 28.0 | 13.0 | 28.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | | Lag | Lead | Lead | Lag | Lead |
| Lead-Lag Optimize? | | | | | | | | Yes | Yes | Yes | Yes | Yes |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 29.2 | 20.2 | 20.2 | 29.2 | 20.2 | 20.2 | 12.8 | 40.2 | 40.2 | 12.8 | 40.2 | |
| Actuated g/C Ratio | 0.29 | 0.20 | 0.20 | 0.29 | 0.20 | 0.20 | 0.13 | 0.40 | 0.40 | 0.13 | 0.40 | |
| v/c Ratio | 0.29 | 0.50 | 0.51 | 0.28 | 0.63 | 0.43 | 0.67 | 0.35 | 0.12 | 0.39 | 0.34 | |
| Control Delay | 38.0 | 44.3 | 16.4 | 26.6 | 40.2 | 11.0 | 46.6 | 19.1 | 0.4 | 37.7 | 12.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 38.0 | 44.3 | 16.4 | 26.6 | 40.2 | 11.0 | 46.6 | 19.1 | 0.4 | 37.7 | 12.2 | |
| LOS | D | D | B | C | D | B | D | B | A | D | B | |
| Approach Delay | | 33.0 | | | 31.1 | | | 24.8 | | | | 17.1 |
| Approach LOS | | C | | | C | | | C | | | | B |
| Queue Length 50th (ft) | 32 | 101 | 48 | 37 | 134 | 15 | 87 | 82 | 0 | 53 | 37 | |
| Queue Length 95th (ft) | m64 | 146 | 102 | 66 | 173 | 68 | 130 | 105 | 2 | 79 | 63 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | | 1084 |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 320 | 889 | 573 | 361 | 889 | 497 | 416 | 1976 | 700 | 416 | 1956 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.23 | 0.39 | 0.45 | 0.23 | 0.49 | 0.36 | 0.66 | 0.35 | 0.12 | 0.38 | 0.34 | |

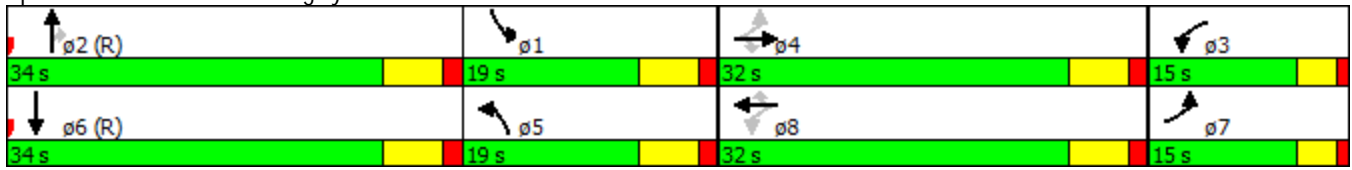
Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 25.9
 Intersection LOS: C
 Intersection Capacity Utilization 55.3%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

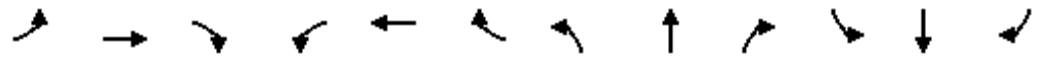
Existing Saturday MIDDAY

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 28 | 1 | 3 | 35 | 2 | 48 | 5 | 775 | 43 | 40 | 658 | 25 |
| Future Volume (vph) | 28 | 1 | 3 | 35 | 2 | 48 | 5 | 775 | 43 | 40 | 658 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.992 | | | 0.995 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3394 | 0 | 1711 | 4891 | 0 |
| Fl _t Permitted | 0.757 | | | 0.757 | | | 0.346 | | | 0.317 | | |
| Satd. Flow (perm) | 1457 | 3421 | 1531 | 1410 | 1801 | 1478 | 730 | 3394 | 0 | 571 | 4891 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 8 | | | 7 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.73 | 0.73 | 0.73 | 0.85 | 0.85 | 0.85 | 0.96 | 0.96 | 0.96 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 38 | 1 | 4 | 41 | 2 | 56 | 5 | 807 | 45 | 45 | 748 | 28 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 38 | 1 | 4 | 41 | 2 | 56 | 5 | 852 | 0 | 45 | 776 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

Existing Saturday MIDDAY









| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 7.5 | 47.0 | | 7.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | | | | | | | | | | | | 5.0 |
| Flash Dont Walk (s) | | | | | | | | | | | | 11.0 |
| Pedestrian Calls (#/hr) | | | | | | | | | | | | 0 |
| Act Effct Green (s) | 10.3 | 10.3 | 10.3 | 10.3 | 10.3 | 10.3 | 80.7 | 76.4 | | 80.7 | 76.4 | |
| Actuated g/C Ratio | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.81 | 0.76 | | 0.81 | 0.76 | |
| v/c Ratio | 0.25 | 0.00 | 0.02 | 0.28 | 0.01 | 0.25 | 0.01 | 0.33 | | 0.09 | 0.21 | |
| Control Delay | 45.6 | 40.0 | 0.0 | 46.5 | 40.0 | 7.1 | 2.4 | 5.7 | | 1.5 | 5.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 45.6 | 40.0 | 0.0 | 46.5 | 40.0 | 7.1 | 2.4 | 5.7 | | 1.5 | 5.2 | |
| LOS | D | D | A | D | D | A | A | A | | A | A | |
| Approach Delay | | 41.2 | | | 24.1 | | | 5.7 | | | 5.0 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 23 | 0 | 0 | 25 | 1 | 0 | 1 | 104 | | 3 | 30 | |
| Queue Length 95th (ft) | 43 | 2 | 0 | 54 | 8 | 17 | 3 | 144 | | 4 | 93 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 422 | 992 | 502 | 408 | 522 | 486 | 699 | 2593 | | 557 | 3736 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.09 | 0.00 | 0.01 | 0.10 | 0.00 | 0.12 | 0.01 | 0.33 | | 0.08 | 0.21 | |

Intersection Summary

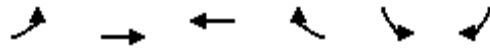
| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 50 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.33 |
| Intersection Signal Delay: | 7.2 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 54.5% |
| ICU Level of Service: | A |
| Analysis Period (min): | 15 |

Splits and Phases: 1207: Higley Road & Ocotillo Road

| | | |
|---|---|---|
|  ϕ2 (R) |  ϕ1 |  ϕ4 |
| 53 s | 12 s | 35 s |
|  ϕ6 (R) |  ϕ5 |  ϕ8 |
| 53 s | 12 s | 35 s |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

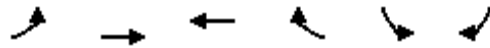
Existing Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | ↖ | ↗↗ | ↖↗ | | ↘ | ↘↘ |
| Traffic Volume (vph) | 29 | 360 | 413 | 227 | 214 | 29 |
| Future Volume (vph) | 29 | 360 | 413 | 227 | 214 | 29 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.947 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3352 | 0 | 1770 | 1583 |
| Flt Permitted | 0.314 | | | | 0.950 | |
| Satd. Flow (perm) | 585 | 3539 | 3352 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 159 | | | 35 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.89 | 0.89 | 0.82 | 0.82 |
| Adj. Flow (vph) | 31 | 379 | 464 | 255 | 261 | 35 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 31 | 379 | 719 | 0 | 261 | 35 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Existing Saturday MIDDAY



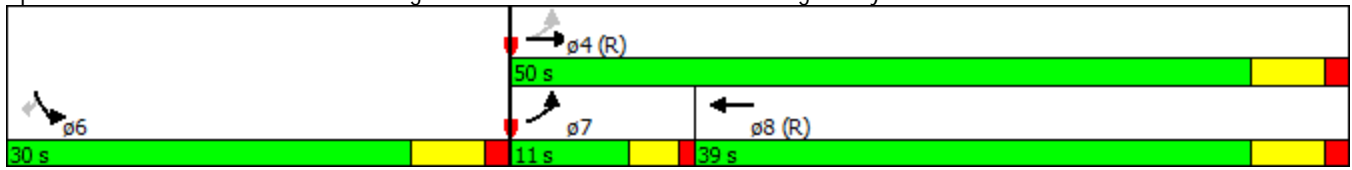
| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Maximum Green (s) | 7.0 | 44.0 | 33.0 | | 24.0 | 24.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | | 0 | | 0 | 0 |
| Act Effct Green (s) | 51.5 | 49.5 | 45.2 | | 18.5 | 18.5 |
| Actuated g/C Ratio | 0.64 | 0.62 | 0.56 | | 0.23 | 0.23 |
| v/c Ratio | 0.07 | 0.17 | 0.37 | | 0.64 | 0.09 |
| Control Delay | 6.6 | 7.1 | 6.7 | | 34.4 | 8.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 6.6 | 7.1 | 6.7 | | 34.4 | 8.3 |
| LOS | A | A | A | | C | A |
| Approach Delay | | 7.1 | 6.7 | | 31.3 | |
| Approach LOS | | A | A | | C | |
| Queue Length 50th (ft) | 6 | 44 | 62 | | 118 | 0 |
| Queue Length 95th (ft) | 17 | 65 | 104 | | 157 | 17 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 480 | 2187 | 1962 | | 531 | 499 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.06 | 0.17 | 0.37 | | 0.49 | 0.07 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.64 |
| Intersection Signal Delay: | 11.9 |
| Intersection Capacity Utilization | 46.0% |
| Analysis Period (min) | 15 |
| | Intersection LOS: B |
| | ICU Level of Service A |

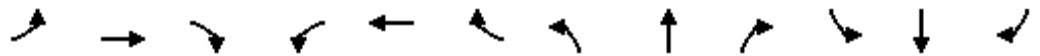
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 207 | 303 | 105 | 122 | 296 | 124 | 127 | 414 | 57 | 149 | 452 | 105 |
| Future Volume (vph) | 207 | 303 | 105 | 122 | 296 | 124 | 127 | 414 | 57 | 149 | 452 | 105 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.961 | | | 0.956 | | | 0.982 | | | 0.972 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3288 | 0 | 1652 | 3271 | 0 | 1652 | 4827 | 0 | 1652 | 4778 | 0 |
| Flt Permitted | 0.435 | | | 0.451 | | | 0.392 | | | 0.427 | | |
| Satd. Flow (perm) | 756 | 3288 | 0 | 784 | 3271 | 0 | 682 | 4827 | 0 | 742 | 4778 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 62 | | | 82 | | | 32 | | | 69 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 223 | 326 | 113 | 133 | 322 | 135 | 144 | 470 | 65 | 157 | 476 | 111 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 223 | 439 | 0 | 133 | 457 | 0 | 144 | 535 | 0 | 157 | 587 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|------|
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | |
| Maximum Green (s) | 5.5 | 24.0 | | 5.5 | 24.0 | | 5.5 | 24.0 | | 5.5 | 24.0 | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Walk Time (s) | | | | | | | | 4.0 | | | | 4.0 |
| Flash Dont Walk (s) | | | | | | | | 18.0 | | | | 18.0 |
| Pedestrian Calls (#/hr) | | | | | | | | 0 | | | | 0 |
| Act Effct Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | |
| v/c Ratio | 0.63 | 0.43 | | 0.37 | 0.44 | | 0.44 | 0.36 | | 0.45 | 0.40 | |
| Control Delay | 36.7 | 24.1 | | 18.8 | 19.9 | | 22.8 | 22.5 | | 21.2 | 20.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 36.7 | 24.1 | | 18.8 | 19.9 | | 22.8 | 22.5 | | 21.2 | 20.4 | |
| LOS | D | C | | B | B | | C | C | | C | C | |
| Approach Delay | | 28.3 | | | 19.7 | | | 22.5 | | | 20.6 | |
| Approach LOS | | C | | | B | | | C | | | C | |
| Queue Length 50th (ft) | 84 | 84 | | 39 | 77 | | 44 | 74 | | 46 | 73 | |
| Queue Length 95th (ft) | 158 | 131 | | 73 | 120 | | 84 | 103 | | 85 | 104 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 354 | 1029 | | 363 | 1038 | | 330 | 1470 | | 350 | 1481 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.63 | 0.43 | | 0.37 | 0.44 | | 0.44 | 0.36 | | 0.45 | 0.40 | |

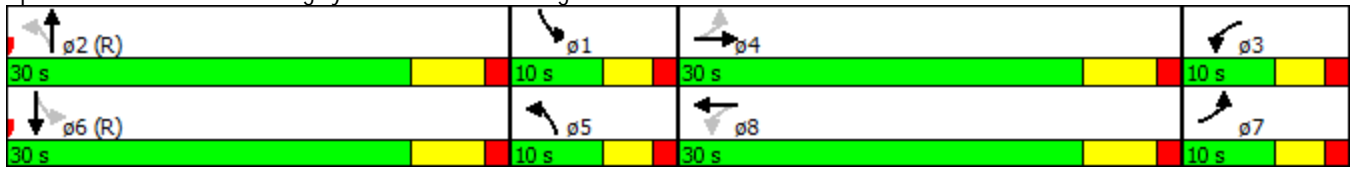
Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.63 |
| Intersection Signal Delay: | 22.8 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 59.2% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

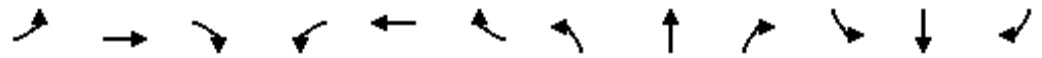
Existing Saturday MIDDAY

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 853 | 25 | 96 | 640 | 108 |
| Future Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 853 | 25 | 96 | 640 | 108 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.890 | | | 0.862 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1547 | 0 | 1711 | 1499 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.552 | | | 0.725 | | | 0.392 | | | 0.297 | | |
| Satd. Flow (perm) | 994 | 1547 | 0 | 1305 | 1499 | 0 | 682 | 4916 | 1478 | 516 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 36 | | | 141 | | | | 82 | | | 110 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.93 | 0.93 | 0.93 | 0.95 | 0.95 | 0.95 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 78 | 13 | 36 | 23 | 12 | 141 | 17 | 898 | 26 | 98 | 653 | 110 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 49 | 0 | 23 | 153 | 0 | 17 | 898 | 26 | 98 | 653 | 110 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

Existing Saturday MIDDAY



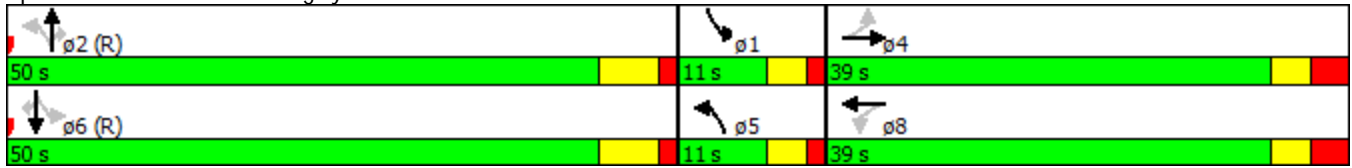
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 6.5 | 44.0 | 44.0 | 6.5 | 44.0 | 44.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | | 12.0 | 12.0 | | 12.0 | 12.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 12.8 | 12.8 | | 12.8 | 12.8 | | 74.3 | 66.8 | 66.8 | 74.3 | 66.8 | 66.8 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.74 | 0.67 | 0.67 | 0.74 | 0.67 | 0.67 |
| v/c Ratio | 0.61 | 0.21 | | 0.14 | 0.49 | | 0.03 | 0.27 | 0.03 | 0.22 | 0.20 | 0.11 |
| Control Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.1 | 2.8 | 0.0 | 12.8 | 13.0 | 7.8 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.1 | 2.8 | 0.0 | 12.8 | 13.0 | 7.8 |
| LOS | E | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 44.7 | | | 16.9 | | | 2.7 | | | 12.3 | |
| Approach LOS | | D | | | B | | | A | | | B | |
| Queue Length 50th (ft) | 48 | 7 | | 13 | 7 | | 1 | 20 | 0 | 28 | 117 | 18 |
| Queue Length 95th (ft) | 84 | 34 | | 35 | 61 | | m2 | 46 | 1 | 78 | 143 | 68 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 328 | 534 | | 430 | 589 | | 572 | 3281 | 1013 | 459 | 3281 | 1023 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.24 | 0.09 | | 0.05 | 0.26 | | 0.03 | 0.27 | 0.03 | 0.21 | 0.20 | 0.11 |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 10.4
 Intersection Capacity Utilization 57.6%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

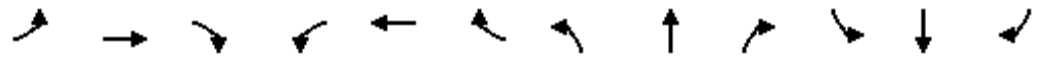
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
1307: Higley Road & Germann Road

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 53 | 438 | 161 | 81 | 443 | 186 | 181 | 796 | 74 | 152 | 615 | 45 |
| Future Volume (vph) | 53 | 438 | 161 | 81 | 443 | 186 | 181 | 796 | 74 | 152 | 615 | 45 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.956 | | | 0.987 | | | 0.990 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4699 | 0 | 1711 | 4852 | 0 | 1711 | 4867 | 0 |
| Flt Permitted | 0.255 | | | 0.382 | | | 0.330 | | | 0.230 | | |
| Satd. Flow (perm) | 459 | 4916 | 1531 | 688 | 4699 | 0 | 594 | 4852 | 0 | 414 | 4867 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 192 | | 101 | | | 16 | | | 12 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 63 | 521 | 192 | 90 | 492 | 207 | 201 | 884 | 82 | 167 | 676 | 49 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 63 | 521 | 192 | 90 | 699 | 0 | 201 | 966 | 0 | 167 | 725 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Maximum Green (s) | 6.5 | 25.0 | 25.0 | 6.5 | 25.0 | | 13.5 | 34.0 | | 13.5 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 29.0 | 21.8 | 21.8 | 29.0 | 21.8 | | 55.0 | 43.3 | | 55.0 | 43.3 | |
| Actuated g/C Ratio | 0.29 | 0.22 | 0.22 | 0.29 | 0.22 | | 0.55 | 0.43 | | 0.55 | 0.43 | |
| v/c Ratio | 0.31 | 0.49 | 0.40 | 0.35 | 0.63 | | 0.46 | 0.46 | | 0.46 | 0.34 | |
| Control Delay | 31.9 | 47.7 | 21.5 | 29.1 | 32.5 | | 20.1 | 22.8 | | 23.0 | 20.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 31.9 | 47.7 | 21.5 | 29.1 | 32.5 | | 20.1 | 22.8 | | 23.0 | 20.8 | |
| LOS | C | D | C | C | C | | C | C | | C | C | |
| Approach Delay | | 39.9 | | | 32.1 | | | 22.4 | | | 21.2 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 27 | 123 | 27 | 39 | 126 | | 79 | 204 | | 48 | 113 | |
| Queue Length 95th (ft) | 53 | 148 | 98 | 73 | 162 | | 136 | 248 | | 87 | 162 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 218 | 1229 | 526 | 271 | 1250 | | 497 | 2109 | | 416 | 2114 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.29 | 0.42 | 0.37 | 0.33 | 0.56 | | 0.40 | 0.46 | | 0.40 | 0.34 | |

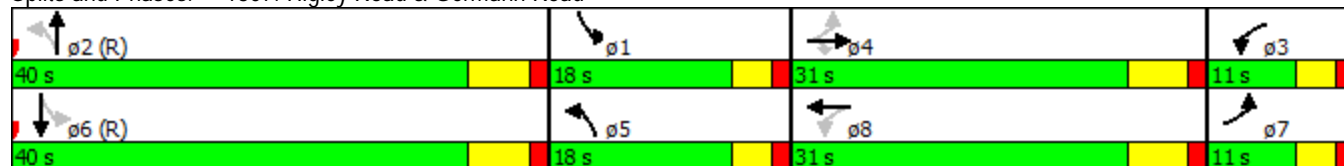
Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.63 |
| Intersection Signal Delay: | 28.0 |
| Intersection LOS: | C |
| Intersection Capacity Utilization | 59.8% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road
























Existing Saturday MIDDAY

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

Existing Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 49 | 23 | 47 | 16 | 25 | 41 | 34 | 216 | 23 | 37 | 201 | 31 |
| Future Volume (vph) | 49 | 23 | 47 | 16 | 25 | 41 | 34 | 216 | 23 | 37 | 201 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.899 | | | | 0.850 | | 0.986 | | | 0.980 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1675 | 0 | 1770 | 1863 | 1583 | 1770 | 3490 | 0 | 1770 | 3468 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 1770 | 1675 | 0 | 1770 | 1863 | 1583 | 1770 | 3490 | 0 | 1770 | 3468 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 26.5 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.78 | 0.78 | 0.78 | 0.82 | 0.82 | 0.82 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Area Type: | Other | | | | | | | | | | | |

| Intersection | | | | | | | | | | | | |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Intersection Delay, s/veh | 10.2 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBU | NBL | NBT | NBR |
| Traffic Vol, veh/h | 0 | 49 | 23 | 47 | 0 | 16 | 25 | 41 | 0 | 34 | 216 | 23 |
| Future Vol, veh/h | 0 | 49 | 23 | 47 | 0 | 16 | 25 | 41 | 0 | 34 | 216 | 23 |
| Peak Hour Factor | 0.92 | 0.78 | 0.78 | 0.78 | 0.92 | 0.82 | 0.82 | 0.82 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 63 | 29 | 60 | 0 | 20 | 30 | 50 | 0 | 37 | 235 | 25 |
| Number of Lanes | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 0 |
| Approach | EB | | | WB | | | NB | | | | | |
| Opposing Approach | WB | | | EB | | | SB | | | | | |
| Opposing Lanes | 3 | | | 2 | | | 3 | | | | | |
| Conflicting Approach Left | SB | | | NB | | | EB | | | | | |
| Conflicting Lanes Left | 3 | | | 3 | | | 2 | | | | | |
| Conflicting Approach Right | NB | | | SB | | | WB | | | | | |
| Conflicting Lanes Right | 3 | | | 3 | | | 3 | | | | | |
| HCM Control Delay | 10.2 | | | 9.6 | | | 10.4 | | | | | |
| HCM LOS | B | | | A | | | B | | | | | |
| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 | |
| Vol Left, % | 100% | 0% | 0% | 100% | 0% | 100% | 0% | 0% | 100% | 0% | 0% | |
| Vol Thru, % | 0% | 100% | 76% | 0% | 33% | 0% | 100% | 0% | 0% | 100% | 68% | |
| Vol Right, % | 0% | 0% | 24% | 0% | 67% | 0% | 0% | 100% | 0% | 0% | 32% | |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | |
| Traffic Vol by Lane | 34 | 144 | 95 | 49 | 70 | 16 | 25 | 41 | 37 | 134 | 98 | |
| LT Vol | 34 | 0 | 0 | 49 | 0 | 16 | 0 | 0 | 37 | 0 | 0 | |
| Through Vol | 0 | 144 | 72 | 0 | 23 | 0 | 25 | 0 | 0 | 134 | 67 | |
| RT Vol | 0 | 0 | 23 | 0 | 47 | 0 | 0 | 41 | 0 | 0 | 31 | |
| Lane Flow Rate | 37 | 157 | 103 | 63 | 90 | 20 | 30 | 50 | 41 | 149 | 109 | |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| Degree of Util (X) | 0.067 | 0.264 | 0.169 | 0.121 | 0.149 | 0.039 | 0.056 | 0.082 | 0.075 | 0.251 | 0.177 | |
| Departure Headway (Hd) | 6.575 | 6.072 | 5.901 | 6.96 | 5.99 | 7.136 | 6.635 | 5.933 | 6.573 | 6.07 | 5.848 | |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Cap | 545 | 592 | 608 | 515 | 599 | 501 | 539 | 603 | 546 | 593 | 614 | |
| Service Time | 4.31 | 3.807 | 3.637 | 4.702 | 3.732 | 4.884 | 4.382 | 3.68 | 4.307 | 3.805 | 3.582 | |
| HCM Lane V/C Ratio | 0.068 | 0.265 | 0.169 | 0.122 | 0.15 | 0.04 | 0.056 | 0.083 | 0.075 | 0.251 | 0.178 | |
| HCM Control Delay | 9.8 | 11 | 9.8 | 10.7 | 9.8 | 10.2 | 9.8 | 9.2 | 9.8 | 10.8 | 9.8 | |
| HCM Lane LOS | A | B | A | B | A | B | A | A | A | B | A | |
| HCM 95th-tile Q | 0.2 | 1.1 | 0.6 | 0.4 | 0.5 | 0.1 | 0.2 | 0.3 | 0.2 | 1 | 0.6 | |

| Intersection | | | | |
|----------------------------|------|------|------|------|
| Intersection Delay, s/veh | | | | |
| Intersection LOS | | | | |
| Movement | SBU | SBL | SBT | SBR |
| Traffic Vol, veh/h | 0 | 37 | 201 | 31 |
| Future Vol, veh/h | 0 | 37 | 201 | 31 |
| Peak Hour Factor | 0.92 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 41 | 223 | 34 |
| Number of Lanes | 0 | 1 | 2 | 0 |
| Approach | | SB | | |
| Opposing Approach | | NB | | |
| Opposing Lanes | | 3 | | |
| Conflicting Approach Left | | WB | | |
| Conflicting Lanes Left | | 3 | | |
| Conflicting Approach Right | | EB | | |
| Conflicting Lanes Right | | 2 | | |
| HCM Control Delay | | 10.3 | | |
| HCM LOS | | B | | |
| Lane | | | | |

Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

Existing Saturday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 15 | 169 | 826 | 21 | 165 | 750 |
| Future Volume (vph) | 15 | 169 | 826 | 21 | 165 | 750 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 3.4

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 15 | 169 | 826 | 21 | 165 | 750 |
| Future Vol, veh/h | 15 | 169 | 826 | 21 | 165 | 750 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 184 | 898 | 23 | 172 | 781 |

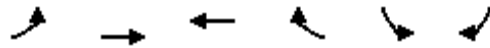
| Major/Minor | Minor1 | | Major1 | | Major2 | |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 1554 | 449 | 0 | 0 | 898 | 0 |
| Stage 1 | 898 | - | - | - | - | - |
| Stage 2 | 656 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 161 | 477 | - | - | 438 | - |
| Stage 1 | 279 | - | - | - | - | - |
| Stage 2 | 435 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | |
| Mov Cap-1 Maneuver | 98 | 477 | - | - | 438 | - |
| Mov Cap-2 Maneuver | 98 | - | - | - | - | - |
| Stage 1 | 279 | - | - | - | - | - |
| Stage 2 | 264 | - | - | - | - | - |

| Approach | WB | | NB | | SB |
|----------------------|------|--|----|--|-----|
| HCM Control Delay, s | 19.8 | | 0 | | 3.3 |
| HCM LOS | C | | | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 98 | 477 | 438 | - |
| HCM Lane V/C Ratio | - | - | 0.166 | 0.385 | 0.392 | - |
| HCM Control Delay (s) | - | - | 48.9 | 17.2 | 18.4 | - |
| HCM Lane LOS | - | - | E | C | C | - |
| HCM 95th %tile Q(veh) | - | - | 0.6 | 1.8 | 1.8 | - |

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

Existing Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↷↷ | ↷↷ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 74 | 599 | 668 | 24 | 19 | 54 |
| Future Volume (vph) | 74 | 599 | 668 | 24 | 19 | 54 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.95 | 0.95 | 0.76 | 0.76 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |
| Intersection Summary | | | | | | |
| Area Type: | Other | | | | | |

Intersection

| | |
|------------------|-----|
| Int Delay, s/veh | 1.5 |
|------------------|-----|

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 74 | 599 | 668 | 24 | 19 | 54 |
| Future Vol, veh/h | 74 | 599 | 668 | 24 | 19 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 91 | 91 | 95 | 95 | 76 | 76 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 81 | 658 | 703 | 25 | 25 | 71 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 703 | 0 | 1195 |
| Stage 1 | - | - | 703 |
| Stage 2 | - | - | 492 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 890 | - | 179 |
| Stage 1 | - | - | 452 |
| Stage 2 | - | - | 580 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 890 | - | 163 |
| Mov Cap-2 Maneuver | - | - | 163 |
| Stage 1 | - | - | 452 |
| Stage 2 | - | - | 527 |

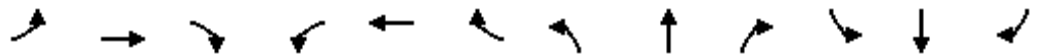
| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 1 | 0 | 16.4 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 890 | - | - | - | 163 | 644 |
| HCM Lane V/C Ratio | 0.091 | - | - | - | 0.153 | 0.11 |
| HCM Control Delay (s) | 9.5 | - | - | - | 31 | 11.3 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.5 | 0.4 |

Lanes, Volumes, Timings

Existing Saturday PM

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 24 | 500 | 88 | 47 | 459 | 100 | 48 | 255 | 56 | 168 | 300 | 25 |
| Future Volume (vph) | 24 | 500 | 88 | 47 | 459 | 100 | 48 | 255 | 56 | 168 | 300 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.977 | | | 0.973 | | | 0.973 | | | 0.988 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3343 | 0 | 1888 | 3329 | 0 | 1888 | 3329 | 0 | 1652 | 3380 | 0 |
| Flt Permitted | 0.385 | | | 0.386 | | | 0.410 | | | 0.442 | | |
| Satd. Flow (perm) | 669 | 3343 | 0 | 767 | 3329 | 0 | 815 | 3329 | 0 | 768 | 3380 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 28 | | | 27 | | | 9 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 25 | 515 | 91 | 51 | 499 | 109 | 53 | 280 | 62 | 189 | 337 | 28 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 25 | 606 | 0 | 51 | 608 | 0 | 53 | 342 | 0 | 189 | 365 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | 13 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Existing Saturday PM











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-----|
| Permitted Phases | 4 | | 8 | | | | 2 | | 6 | | | |
| Detector Phase | 7 | 4 | 3 | | 8 | 5 | | 2 | 1 | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | | 10.0 | 5.0 | | 10.0 | 5.0 | | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | 9.0 | | 16.0 | 9.0 | | 16.0 | 9.0 | | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | 14.0 | | 39.0 | 12.0 | | 35.0 | 12.0 | | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | 14.0% | | 39.0% | 12.0% | | 35.0% | 12.0% | | 35.0% | |
| Maximum Green (s) | 10.0 | 33.0 | 10.0 | | 33.0 | 8.0 | | 29.0 | 8.0 | | 29.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | | 4.5 | 3.0 | | 4.5 | 3.0 | | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.0 | | 1.5 | 1.0 | | 1.5 | 1.0 | | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 4.0 | | 6.0 | 4.0 | | 6.0 | 4.0 | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | | 4.0 | 3.0 | | 4.0 | 3.0 | | 4.0 | |
| Recall Mode | None | C-Max | None | | C-Max | None | | None | None | | None | |
| Act Effct Green (s) | 59.8 | 52.2 | 59.8 | | 52.2 | 26.1 | | 16.9 | 26.1 | | 16.9 | |
| Actuated g/C Ratio | 0.60 | 0.52 | 0.60 | | 0.52 | 0.26 | | 0.17 | 0.26 | | 0.17 | |
| v/c Ratio | 0.05 | 0.35 | 0.10 | | 0.35 | 0.18 | | 0.58 | 0.72 | | 0.63 | |
| Control Delay | 2.3 | 3.0 | 3.1 | | 3.1 | 26.1 | | 38.8 | 47.2 | | 36.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | |
| Total Delay | 2.3 | 3.0 | 3.1 | | 3.1 | 26.1 | | 38.8 | 47.2 | | 36.1 | |
| LOS | A | A | A | | A | C | | D | D | | D | |
| Approach Delay | 3.0 | | | | 3.1 | | | 37.1 | | | 39.9 | |
| Approach LOS | A | | | | A | | | D | | | D | |
| Queue Length 50th (ft) | 1 | 13 | 3 | | 18 | 25 | | 98 | 111 | | 120 | |
| Queue Length 95th (ft) | 4 | 28 | m7 | | 32 | 47 | | 136 | 160 | | 158 | |
| Internal Link Dist (ft) | 400 | | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | | 210 | | | 200 | | | 170 | |
| Base Capacity (vph) | 528 | 1756 | 604 | | 1752 | 311 | | 984 | 283 | | 986 | |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Reduced v/c Ratio | 0.05 | 0.35 | 0.08 | | 0.35 | 0.17 | | 0.35 | 0.67 | | 0.37 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 18.2 Intersection LOS: B
 Intersection Capacity Utilization 55.6% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

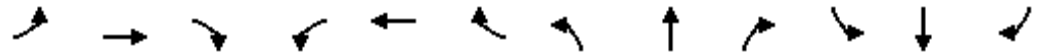
1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

| | | | |
|--|--|--|--|
|  $\phi 2$ |  $\phi 1$ |  $\phi 4 (R)$ |  $\phi 3$ |
| 35 s | 12 s | 39 s | 14 s |
|  $\phi 6$ |  $\phi 5$ |  $\phi 8 (R)$ |  $\phi 7$ |
| 35 s | 12 s | 39 s | 14 s |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 367 | 292 | 70 | 357 | 143 | 228 | 569 | 68 | 147 | 547 | 65 |
| Future Volume (vph) | 56 | 367 | 292 | 70 | 357 | 143 | 228 | 569 | 68 | 147 | 547 | 65 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4837 | 0 |
| Flt Permitted | 0.395 | | | 0.404 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 687 | 3421 | 1478 | 702 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4837 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 311 | | | 148 | | | 142 | | | 20 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 60 | 390 | 311 | 78 | 397 | 159 | 262 | 654 | 78 | 152 | 564 | 67 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 60 | 390 | 311 | 78 | 397 | 159 | 262 | 654 | 78 | 152 | 631 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Maximum Green (s) | 11.0 | 26.0 | 26.0 | 11.0 | 26.0 | 26.0 | 13.0 | 28.0 | 28.0 | 13.0 | 28.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 28.4 | 19.4 | 19.4 | 28.4 | 19.4 | 19.4 | 12.7 | 41.1 | 41.1 | 12.7 | 41.1 | |
| Actuated g/C Ratio | 0.28 | 0.19 | 0.19 | 0.28 | 0.19 | 0.19 | 0.13 | 0.41 | 0.41 | 0.13 | 0.41 | |
| v/c Ratio | 0.23 | 0.59 | 0.58 | 0.29 | 0.60 | 0.39 | 0.65 | 0.32 | 0.11 | 0.37 | 0.32 | |
| Control Delay | 36.7 | 45.8 | 17.0 | 27.7 | 39.9 | 9.4 | 44.8 | 18.0 | 0.4 | 36.7 | 9.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 36.7 | 45.8 | 17.0 | 27.7 | 39.9 | 9.4 | 44.8 | 18.0 | 0.4 | 36.7 | 9.9 | |
| LOS | D | D | B | C | D | A | D | B | A | D | A | |
| Approach Delay | | 33.3 | | | 30.8 | | | 23.7 | | | 15.1 | |
| Approach LOS | | C | | | C | | | C | | | B | |
| Queue Length 50th (ft) | 26 | 117 | 66 | 35 | 122 | 6 | 83 | 76 | 0 | 51 | 30 | |
| Queue Length 95th (ft) | m53 | 168 | 116 | 63 | 157 | 55 | 121 | 98 | 0 | 78 | 50 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 329 | 889 | 614 | 332 | 889 | 493 | 416 | 2018 | 712 | 416 | 1997 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.18 | 0.44 | 0.51 | 0.23 | 0.45 | 0.32 | 0.63 | 0.32 | 0.11 | 0.37 | 0.32 | |

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 25.3

Intersection LOS: C

Intersection Capacity Utilization 52.8%

ICU Level of Service A

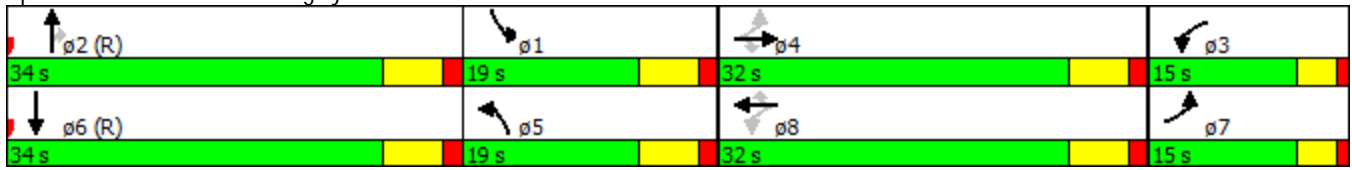
Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

























Existing Saturday PM

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

Existing Saturday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 33 | 1 | 8 | 47 | 2 | 45 | 2 | 701 | 43 | 52 | 718 | 32 |
| Future Volume (vph) | 33 | 1 | 8 | 47 | 2 | 45 | 2 | 701 | 43 | 52 | 718 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.991 | | | 0.994 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3390 | 0 | 1711 | 4886 | 0 |
| Fl _t Permitted | 0.756 | | | 0.756 | | | 0.349 | | | 0.322 | | |
| Satd. Flow (perm) | 1455 | 3421 | 1531 | 1408 | 1801 | 1478 | 737 | 3390 | 0 | 580 | 4886 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 8 | | | 9 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.66 | 0.66 | 0.66 | 0.62 | 0.62 | 0.62 | 0.90 | 0.90 | 0.90 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 50 | 2 | 12 | 76 | 3 | 73 | 2 | 779 | 48 | 53 | 733 | 33 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 50 | 2 | 12 | 76 | 3 | 73 | 2 | 827 | 0 | 53 | 766 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

Existing Saturday PM



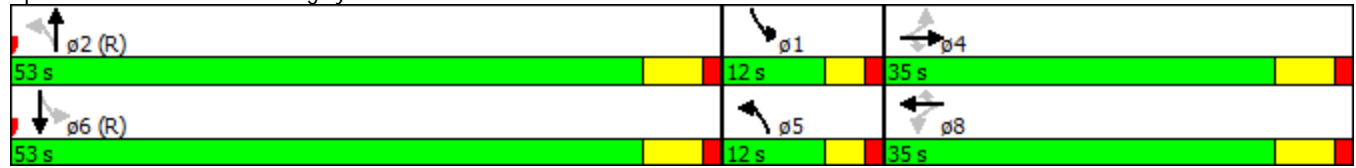
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 7.5 | 47.0 | | 7.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | | | | | | | | | | | | 5.0 |
| Flash Dont Walk (s) | | | | | | | | | | | | 11.0 |
| Pedestrian Calls (#/hr) | | | | | | | | | | | | 0 |
| Act Effct Green (s) | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 77.3 | 73.0 | | 77.3 | 73.0 | |
| Actuated g/C Ratio | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.77 | 0.73 | | 0.77 | 0.73 | |
| v/c Ratio | 0.29 | 0.00 | 0.05 | 0.46 | 0.01 | 0.30 | 0.00 | 0.33 | | 0.10 | 0.21 | |
| Control Delay | 44.1 | 37.0 | 0.4 | 49.9 | 37.5 | 10.8 | 3.0 | 7.1 | | 1.8 | 5.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 44.1 | 37.0 | 0.4 | 49.9 | 37.5 | 10.8 | 3.0 | 7.1 | | 1.8 | 5.8 | |
| LOS | D | D | A | D | D | B | A | A | | A | A | |
| Approach Delay | | 35.7 | | | 30.9 | | | 7.1 | | | 5.6 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 30 | 0 | 0 | 46 | 2 | 0 | 0 | 103 | | 3 | 25 | |
| Queue Length 95th (ft) | 46 | 3 | 0 | 59 | 7 | 8 | 2 | 158 | | m5 | 91 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 421 | 992 | 502 | 408 | 522 | 486 | 680 | 2478 | | 545 | 3571 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.12 | 0.00 | 0.02 | 0.19 | 0.01 | 0.15 | 0.00 | 0.33 | | 0.10 | 0.21 | |

Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 50 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.46 |
| Intersection Signal Delay: | 9.3 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 52.4% |
| ICU Level of Service: | A |
| Analysis Period (min): | 15 |

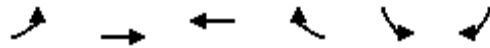
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

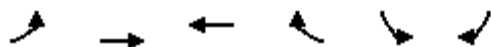
Existing Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 25 | 415 | 424 | 211 | 323 | 41 |
| Future Volume (vph) | 25 | 415 | 424 | 211 | 323 | 41 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.950 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3362 | 0 | 1770 | 1583 |
| Flt Permitted | 0.276 | | | | 0.950 | |
| Satd. Flow (perm) | 514 | 3539 | 3362 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 131 | | | 45 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.81 | 0.81 | 0.91 | 0.91 |
| Adj. Flow (vph) | 28 | 461 | 523 | 260 | 355 | 45 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 28 | 461 | 783 | 0 | 355 | 45 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Existing Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Maximum Green (s) | 7.0 | 44.0 | 33.0 | | 24.0 | 24.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | | 0 | | 0 | 0 |
| Act Effct Green (s) | 48.7 | 46.7 | 42.5 | | 21.3 | 21.3 |
| Actuated g/C Ratio | 0.61 | 0.58 | 0.53 | | 0.27 | 0.27 |
| v/c Ratio | 0.07 | 0.22 | 0.42 | | 0.76 | 0.10 |
| Control Delay | 7.4 | 8.5 | 8.0 | | 37.6 | 7.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 7.4 | 8.5 | 8.0 | | 37.6 | 7.4 |
| LOS | A | A | A | | D | A |
| Approach Delay | | 8.5 | 8.0 | | 34.2 | |
| Approach LOS | | A | A | | C | |
| Queue Length 50th (ft) | 6 | 58 | 77 | | 159 | 0 |
| Queue Length 95th (ft) | 15 | 80 | 104 | | 247 | 22 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 423 | 2067 | 1846 | | 531 | 506 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.07 | 0.22 | 0.42 | | 0.67 | 0.09 |

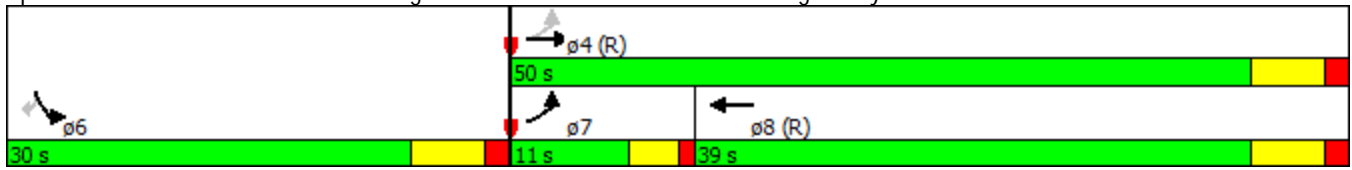
Intersection Summary

| | |
|------------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.76 |
| Intersection Signal Delay: | 14.4 |
| Intersection LOS: | B |
| Intersection Capacity Utilization: | 48.7% |
| ICU Level of Service: | A |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

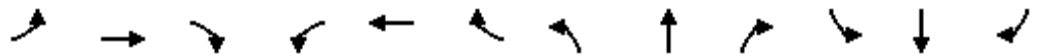
Existing Saturday PM

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 242 | 349 | 140 | 101 | 320 | 112 | 134 | 365 | 55 | 158 | 476 | 113 |
| Future Volume (vph) | 242 | 349 | 140 | 101 | 320 | 112 | 134 | 365 | 55 | 158 | 476 | 113 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.957 | | | 0.961 | | | 0.980 | | | 0.971 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3274 | 0 | 1652 | 3288 | 0 | 1652 | 4817 | 0 | 1652 | 4773 | 0 |
| Flt Permitted | 0.424 | | | 0.390 | | | 0.345 | | | 0.477 | | |
| Satd. Flow (perm) | 737 | 3274 | 0 | 678 | 3288 | 0 | 600 | 4817 | 0 | 829 | 4773 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 77 | | | 63 | | | 35 | | | 71 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 252 | 364 | 146 | 110 | 348 | 122 | 147 | 401 | 60 | 178 | 535 | 127 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 252 | 510 | 0 | 110 | 470 | 0 | 147 | 461 | 0 | 178 | 662 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | | |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|------|-------|-------|-----|--|--|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | | | |
| Switch Phase | | | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | | | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | | |
| Maximum Green (s) | 5.5 | 24.0 | | 5.5 | 24.0 | | 5.5 | 24.0 | | 5.5 | 24.0 | | | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | | |
| Lead/Lag | | | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | | 3.0 | 4.0 | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | | | |
| Walk Time (s) | | | | | | | | | 4.0 | | | | | |
| Flash Dont Walk (s) | | | | | | | | | 18.0 | | | | | |
| Pedestrian Calls (#/hr) | | | | | | | | | 0 | | | | | |
| Act Effct Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | | |
| v/c Ratio | 0.72 | 0.49 | | 0.33 | 0.46 | | 0.48 | 0.31 | | 0.47 | 0.45 | | | |
| Control Delay | 42.7 | 24.3 | | 18.7 | 21.2 | | 25.4 | 21.7 | | 21.2 | 21.2 | | | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | | |
| Total Delay | 42.7 | 24.3 | | 18.7 | 21.2 | | 25.4 | 21.7 | | 21.2 | 21.2 | | | |
| LOS | D | C | | B | C | | C | C | | C | C | | | |
| Approach Delay | | | | | 30.4 | | | | | 20.7 | | | | |
| Approach LOS | | | | | C | | | | | C | | | | |
| Queue Length 50th (ft) | 106 | 104 | | 32 | 85 | | 45 | 62 | | 53 | 86 | | | |
| Queue Length 95th (ft) | m#208 | 158 | | 62 | 128 | | 88 | 91 | | 94 | 117 | | | |
| Internal Link Dist (ft) | | | | | 546 | | | | | 1487 | | | | |
| Turn Bay Length (ft) | | | | | 205 | | | | | 200 | | | | |
| Base Capacity (vph) | 348 | 1036 | | 329 | 1030 | | 304 | 1469 | | 377 | 1481 | | | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | | |
| Reduced v/c Ratio | 0.72 | 0.49 | | 0.33 | 0.46 | | 0.48 | 0.31 | | 0.47 | 0.45 | | | |

Intersection Summary

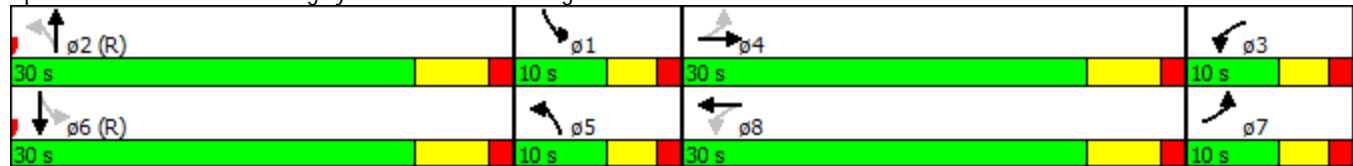
| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.72 |
| Intersection Signal Delay: | 23.9 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 62.5% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

Existing Saturday PM

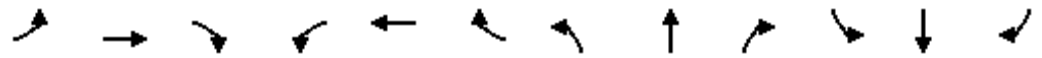
- # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

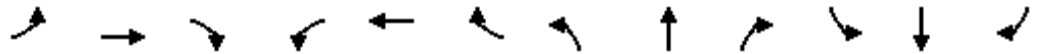
Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 676 | 32 | 144 | 629 | 91 |
| Future Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 676 | 32 | 144 | 629 | 91 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.880 | | | 0.864 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1530 | 0 | 1711 | 1502 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.357 | | | 0.702 | | | 0.377 | | | 0.345 | | |
| Satd. Flow (perm) | 643 | 1530 | 0 | 1264 | 1502 | 0 | 655 | 4916 | 1478 | 600 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 67 | | | 193 | | | | 82 | | | 100 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.76 | 0.76 | 0.76 | 0.86 | 0.86 | 0.86 | 0.88 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 71 | 17 | 67 | 33 | 20 | 193 | 35 | 768 | 36 | 158 | 691 | 100 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 71 | 84 | 0 | 33 | 213 | 0 | 35 | 768 | 36 | 158 | 691 | 100 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 6.5 | 44.0 | 44.0 | 6.5 | 44.0 | 44.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | | 12.0 | 12.0 | | 12.0 | 12.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 13.2 | 13.2 | | 13.2 | 13.2 | | 71.8 | 64.3 | 64.3 | 71.8 | 64.3 | 64.3 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.72 | 0.64 | 0.64 | 0.72 | 0.64 | 0.64 |
| v/c Ratio | 0.84 | 0.32 | | 0.20 | 0.58 | | 0.07 | 0.24 | 0.04 | 0.32 | 0.22 | 0.10 |
| Control Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.3 | 3.0 | 0.2 | 15.8 | 14.5 | 8.3 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.3 | 3.0 | 0.2 | 15.8 | 14.5 | 8.3 |
| LOS | F | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 56.2 | | | 17.7 | | | 2.8 | | | 14.1 | |
| Approach LOS | | E | | | B | | | A | | | B | |
| Queue Length 50th (ft) | 45 | 10 | | 19 | 12 | | 1 | 17 | 0 | 56 | 135 | 22 |
| Queue Length 95th (ft) | 75 | 36 | | 43 | 65 | | 5 | 40 | 0 | 127 | 163 | 70 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 212 | 549 | | 417 | 624 | | 538 | 3161 | 979 | 502 | 3161 | 986 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.33 | 0.15 | | 0.08 | 0.34 | | 0.07 | 0.24 | 0.04 | 0.31 | 0.22 | 0.10 |







Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 13.2
 Intersection Capacity Utilization 59.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

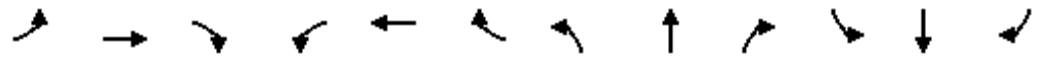
Existing Saturday PM

Splits and Phases: 1211: Higley Road & Arrowhead Trail

| | | |
|---|---|--|
|  $\phi 2$ (R) |  $\phi 1$ |  $\phi 4$ |
| 50 s | 11 s | 39 s |
|  $\phi 6$ (R) |  $\phi 5$ |  $\phi 8$ |
| 50 s | 11 s | 39 s |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 37 | 419 | 151 | 84 | 389 | 149 | 155 | 704 | 65 | 208 | 672 | 34 |
| Future Volume (vph) | 37 | 419 | 151 | 84 | 389 | 149 | 155 | 704 | 65 | 208 | 672 | 34 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.958 | | | 0.987 | | | 0.993 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4709 | 0 | 1711 | 4852 | 0 | 1711 | 4881 | 0 |
| Fl _t Permitted | 0.278 | | | 0.420 | | | 0.271 | | | 0.265 | | |
| Satd. Flow (perm) | 501 | 4916 | 1531 | 756 | 4709 | 0 | 488 | 4852 | 0 | 477 | 4881 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 170 | | 93 | | | 16 | | | 8 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.82 | 0.82 | 0.82 | 0.90 | 0.90 | 0.90 | 0.84 | 0.84 | 0.84 |
| Adj. Flow (vph) | 42 | 471 | 170 | 102 | 474 | 182 | 172 | 782 | 72 | 248 | 800 | 40 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 42 | 471 | 170 | 102 | 656 | 0 | 172 | 854 | 0 | 248 | 840 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

Existing Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Maximum Green (s) | 6.5 | 25.0 | 25.0 | 6.5 | 25.0 | | 13.5 | 34.0 | | 13.5 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 28.4 | 21.2 | 21.2 | 28.4 | 21.2 | | 55.6 | 40.5 | | 55.6 | 40.5 | |
| Actuated g/C Ratio | 0.28 | 0.21 | 0.21 | 0.28 | 0.21 | | 0.56 | 0.40 | | 0.56 | 0.40 | |
| v/c Ratio | 0.20 | 0.45 | 0.37 | 0.38 | 0.61 | | 0.39 | 0.43 | | 0.58 | 0.42 | |
| Control Delay | 29.2 | 49.4 | 23.8 | 29.9 | 32.6 | | 20.0 | 23.7 | | 26.3 | 23.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 29.2 | 49.4 | 23.8 | 29.9 | 32.6 | | 20.0 | 23.7 | | 26.3 | 23.7 | |
| LOS | C | D | C | C | C | | B | C | | C | C | |
| Approach Delay | | 41.8 | | | 32.2 | | | 23.1 | | | 24.3 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 18 | 113 | 27 | 46 | 118 | | 62 | 184 | | 73 | 145 | |
| Queue Length 95th (ft) | 43 | 146 | 108 | 73 | 134 | | 120 | 221 | | 117 | 181 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 224 | 1229 | 510 | 282 | 1247 | | 453 | 1997 | | 449 | 2004 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.19 | 0.38 | 0.33 | 0.36 | 0.53 | | 0.38 | 0.43 | | 0.55 | 0.42 | |

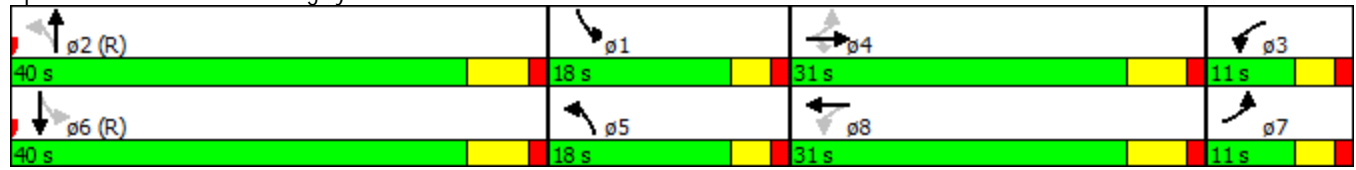
Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.61 |
| Intersection Signal Delay: | 29.0 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 59.1% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

Existing Saturday PM

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

Existing Saturday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|-------|-------|------|-------|------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 39 | 29 | 34 | 27 | 24 | 44 | 37 | 195 | 32 | 47 | 267 | 16 |
| Future Volume (vph) | 39 | 29 | 34 | 27 | 24 | 44 | 37 | 195 | 32 | 47 | 267 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.919 | | | | 0.850 | | 0.979 | | | 0.992 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1712 | 0 | 1770 | 1863 | 1583 | 1770 | 3465 | 0 | 1770 | 3511 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 1770 | 1712 | 0 | 1770 | 1863 | 1583 | 1770 | 3465 | 0 | 1770 | 3511 | 0 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 26.5 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.75 | 0.75 | 0.75 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Area Type: | Other | | | | | | | | | | | |

| Intersection | | | | | | | | | | | | |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Intersection Delay, s/veh | 11.1 | | | | | | | | | | | |
| Intersection LOS | B | | | | | | | | | | | |
| Movement | EBU | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBU | NBL | NBT | NBR |
| Traffic Vol, veh/h | 0 | 39 | 29 | 34 | 0 | 27 | 24 | 44 | 0 | 37 | 195 | 32 |
| Future Vol, veh/h | 0 | 39 | 29 | 34 | 0 | 27 | 24 | 44 | 0 | 37 | 195 | 32 |
| Peak Hour Factor | 0.92 | 0.94 | 0.94 | 0.94 | 0.92 | 0.85 | 0.85 | 0.85 | 0.92 | 0.85 | 0.85 | 0.85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 41 | 31 | 36 | 0 | 32 | 28 | 52 | 0 | 44 | 229 | 38 |
| Number of Lanes | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 0 |
| Approach | EB | | | WB | | | | NB | | | | |
| Opposing Approach | WB | | | EB | | | | SB | | | | |
| Opposing Lanes | 3 | | | 2 | | | | 3 | | | | |
| Conflicting Approach Left | SB | | | NB | | | | EB | | | | |
| Conflicting Lanes Left | 3 | | | 3 | | | | 2 | | | | |
| Conflicting Approach Right | NB | | | SB | | | | WB | | | | |
| Conflicting Lanes Right | 3 | | | 3 | | | | 3 | | | | |
| HCM Control Delay | 10.4 | | | 10 | | | | 10.8 | | | | |
| HCM LOS | B | | | A | | | | B | | | | |
| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 | |
| Vol Left, % | 100% | 0% | 0% | 100% | 0% | 100% | 0% | 0% | 100% | 0% | 0% | |
| Vol Thru, % | 0% | 100% | 67% | 0% | 46% | 0% | 100% | 0% | 0% | 100% | 85% | |
| Vol Right, % | 0% | 0% | 33% | 0% | 54% | 0% | 0% | 100% | 0% | 0% | 15% | |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | |
| Traffic Vol by Lane | 37 | 130 | 97 | 39 | 63 | 27 | 24 | 44 | 47 | 178 | 105 | |
| LT Vol | 37 | 0 | 0 | 39 | 0 | 27 | 0 | 0 | 47 | 0 | 0 | |
| Through Vol | 0 | 130 | 65 | 0 | 29 | 0 | 24 | 0 | 0 | 178 | 89 | |
| RT Vol | 0 | 0 | 32 | 0 | 34 | 0 | 0 | 44 | 0 | 0 | 16 | |
| Lane Flow Rate | 44 | 153 | 114 | 41 | 67 | 32 | 28 | 52 | 63 | 237 | 140 | |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| Degree of Util (X) | 0.082 | 0.268 | 0.192 | 0.085 | 0.121 | 0.066 | 0.054 | 0.09 | 0.114 | 0.399 | 0.231 | |
| Departure Headway (Hd) | 6.805 | 6.302 | 6.07 | 7.384 | 6.506 | 7.439 | 6.937 | 6.235 | 6.559 | 6.057 | 5.949 | |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Cap | 526 | 569 | 590 | 485 | 550 | 481 | 515 | 573 | 546 | 593 | 603 | |
| Service Time | 4.552 | 4.049 | 3.817 | 5.139 | 4.261 | 5.198 | 4.697 | 3.994 | 4.301 | 3.798 | 3.691 | |
| HCM Lane V/C Ratio | 0.084 | 0.269 | 0.193 | 0.085 | 0.122 | 0.067 | 0.054 | 0.091 | 0.115 | 0.4 | 0.232 | |
| HCM Control Delay | 10.2 | 11.4 | 10.3 | 10.8 | 10.2 | 10.7 | 10.1 | 9.6 | 10.1 | 12.8 | 10.5 | |
| HCM Lane LOS | B | B | B | B | B | B | B | A | B | B | B | |
| HCM 95th-tile Q | 0.3 | 1.1 | 0.7 | 0.3 | 0.4 | 0.2 | 0.2 | 0.3 | 0.4 | 1.9 | 0.9 | |

| Intersection | | | | |
|----------------------------|------|------|------|------|
| Intersection Delay, s/veh | | | | |
| Intersection LOS | | | | |
| Movement | SBU | SBL | SBT | SBR |
| Traffic Vol, veh/h | 0 | 47 | 267 | 16 |
| Future Vol, veh/h | 0 | 47 | 267 | 16 |
| Peak Hour Factor | 0.92 | 0.75 | 0.75 | 0.75 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 63 | 356 | 21 |
| Number of Lanes | 0 | 1 | 2 | 0 |
| Approach | | SB | | |
| Opposing Approach | | NB | | |
| Opposing Lanes | | 3 | | |
| Conflicting Approach Left | | WB | | |
| Conflicting Lanes Left | | 3 | | |
| Conflicting Approach Right | | EB | | |
| Conflicting Lanes Right | | 2 | | |
| HCM Control Delay | | 11.7 | | |
| HCM LOS | | B | | |
| Lane | | | | |

Lanes and Geometrics
4: Higley Road & Bridges Boulevard

Existing Saturday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 19 | 137 | 751 | 43 | 138 | 788 |
| Future Volume (vph) | 19 | 137 | 751 | 43 | 138 | 788 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.89 | 0.89 | 0.98 | 0.98 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 2.7

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 19 | 137 | 751 | 43 | 138 | 788 |
| Future Vol, veh/h | 19 | 137 | 751 | 43 | 138 | 788 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 91 | 91 | 89 | 89 | 98 | 98 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 151 | 844 | 48 | 141 | 804 |

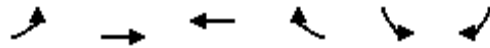
| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|------------|
| Conflicting Flow All | 1447 | 422 | 0 0 844 0 |
| Stage 1 | 844 | - | - - - - |
| Stage 2 | 603 | - | - - - - |
| Critical Hdwy | 5.74 | 7.14 | - - 5.34 - |
| Critical Hdwy Stg 1 | 6.64 | - | - - - - |
| Critical Hdwy Stg 2 | 6.04 | - | - - - - |
| Follow-up Hdwy | 3.82 | 3.92 | - - 3.12 - |
| Pot Cap-1 Maneuver | 184 | 496 | - - 465 - |
| Stage 1 | 301 | - | - - - - |
| Stage 2 | 464 | - | - - - - |
| Platoon blocked, % | | | - - - - |
| Mov Cap-1 Maneuver | 128 | 496 | - - 465 - |
| Mov Cap-2 Maneuver | 128 | - | - - - - |
| Stage 1 | 301 | - | - - - - |
| Stage 2 | 323 | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 18.2 | 0 | 2.4 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 128 | 496 | 465 | - |
| HCM Lane V/C Ratio | - | - | 0.163 | 0.304 | 0.303 | - |
| HCM Control Delay (s) | - | - | 38.5 | 15.4 | 16.1 | - |
| HCM Lane LOS | - | - | E | C | C | - |
| HCM 95th %tile Q(veh) | - | - | 0.6 | 1.3 | 1.3 | - |

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

Existing Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↷↷ | ↶↶ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 41 | 698 | 603 | 15 | 14 | 29 |
| Future Volume (vph) | 41 | 698 | 603 | 15 | 14 | 29 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.94 | 0.94 | 0.95 | 0.95 | 0.90 | 0.90 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

| | |
|------------------|-----|
| Int Delay, s/veh | 0.8 |
|------------------|-----|

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 41 | 698 | 603 | 15 | 14 | 29 |
| Future Vol, veh/h | 41 | 698 | 603 | 15 | 14 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 95 | 95 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 44 | 743 | 635 | 16 | 16 | 32 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 635 | 0 | 1094 |
| Stage 1 | - | - | 635 |
| Stage 2 | - | - | 459 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 944 | - | 679 |
| Stage 1 | - | - | 490 |
| Stage 2 | - | - | 603 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 944 | - | 679 |
| Mov Cap-2 Maneuver | - | - | 198 |
| Stage 1 | - | - | 490 |
| Stage 2 | - | - | 575 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 15.2 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 944 | - | - | - | 198 | 679 |
| HCM Lane V/C Ratio | 0.046 | - | - | - | 0.079 | 0.047 |
| HCM Control Delay (s) | 9 | - | - | - | 24.7 | 10.6 |
| HCM Lane LOS | A | - | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 | 0.1 |

APPENDIX D

GROWTH RATE CALCULATIONS



New Regional Park Growth Rate Calculations

| Road | Between | 2015 Daily Volume | 2015-2020 Avg Annual Growth Rate | 2020 Daily Volume | 2020-2025 Avg Annual Growth Rate | 2025 Daily Volume | 2025-2030 Avg Annual Growth Rate | 2030 Daily Volume | 2025-2030 Avg Annual Growth Rate | 2035 Daily Volume |
|------------------|-------------------------------|-------------------|----------------------------------|-------------------|----------------------------------|-------------------|----------------------------------|-------------------|----------------------------------|-------------------|
| Higley | Germann and Queen Creek | 31,000 | 1.3% | 33,000 | -1.2% | 31,000 | 0.0% | 31,000 | 0.0% | 31,000 |
| Queen Creek | Greenfield and Higley | 25,000 | 1.6% | 27,000 | -1.5% | 25,000 | 0.0% | 25,000 | 0.0% | 25,000 |
| Greenfield | Queen Creek and Ocotillo | 13,000 | 1.5% | 14,000 | -1.5% | 13,000 | 0.0% | 13,000 | 0.0% | 13,000 |
| Greenfield | Ocotillo and Chandler Heights | 8,000 | 6.6% | 11,000 | 0.0% | 11,000 | 0.0% | 11,000 | 0.0% | 11,000 |
| Higley | Queen Creek and Ocotillo | 23,000 | 5.5% | 30,000 | -1.4% | 28,000 | 0.0% | 28,000 | 0.0% | 28,000 |
| Higley | Ocotillo and Chandler Heights | 21,000 | 1.8% | 23,000 | 0.9% | 24,000 | 0.8% | 25,000 | 0.8% | 26,000 |
| Chandler Heights | Greenfield and Higley | 21,000 | 3.5% | 25,000 | -1.7% | 23,000 | 0.0% | 23,000 | 0.0% | 23,000 |
| Ocotillo | Greenfield and Higley | 2,000 | 0.0% | 2,000 | 38.0% | 10,000 | 1.9% | 11,000 | 1.8% | 12,000 |
| Germann | Higley and Ranch House | 22,000 | 4.9% | 28,000 | 2.7% | 32,000 | 1.2% | 34,000 | 0.0% | 34,000 |
| Germann | Greenfield and Higley | 22,000 | 4.9% | 28,000 | 2.7% | 32,000 | 1.2% | 34,000 | 0.0% | 34,000 |
| Higley | Pecos and Germann | 32,000 | 1.8% | 35,000 | -0.6% | 34,000 | 0.0% | 34,000 | 0.0% | 34,000 |
| Queen Creek | Higley and Recker | 16,000 | 4.6% | 20,000 | 1.0% | 21,000 | 0.9% | 22,000 | 0.9% | 23,000 |
| Ocotillo | Higley and Recker | 2,000 | 20.1% | 5,000 | 14.9% | 10,000 | 0.0% | 10,000 | 0.0% | 10,000 |
| Chandler Heights | Higley and Recker | 16,000 | 4.6% | 20,000 | 1.0% | 21,000 | 0.9% | 22,000 | 0.9% | 23,000 |
| Higley | Chandler Heights and Riggs | 14,000 | 6.3% | 19,000 | 2.0% | 21,000 | 1.8% | 23,000 | 0.0% | 23,000 |
| Chandler Heights | Val Vista and Greenfield | 16,000 | 3.5% | 19,000 | -1.1% | 18,000 | 1.1% | 19,000 | 0.0% | 19,000 |
| Queen Creek | Val Vista and Greenfield | 19,000 | 3.9% | 23,000 | 0.9% | 24,000 | 0.0% | 24,000 | 0.0% | 24,000 |
| Ocotillo | Val Vista and Greenfield | 4,000 | 0.0% | 4,000 | 20.1% | 10,000 | 1.9% | 11,000 | 1.8% | 12,000 |
| Greenfield | Germann and Queen Creek | 11,000 | 6.4% | 15,000 | 0.0% | 15,000 | 0.0% | 15,000 | 0.0% | 15,000 |
| Arrowhead | Higley and Soboba | 5,000 | 0.0% | 5,000 | 0.0% | 5,000 | 0.0% | 5,000 | 0.0% | 5,000 |
| Bridges | Higley and Soboba | 5,000 | 14.9% | 10,000 | 0.0% | 10,000 | 0.0% | 10,000 | 0.0% | 10,000 |
| Total | | 328,000 | 3.8% | 396,000 | 1.1% | 418,000 | 0.6% | 430,000 | 0.2% | 435,000 |

* Assumes Ocotillo Road is connected between Greenfield Road and Higley Road in 2021-2024 timeframe.

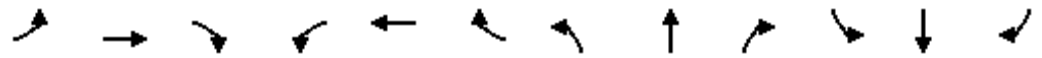
APPENDIX E

2020 BACKGROUND TRAFFIC CAPACITY ANALYSIS



Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 38 | 26 | 43 | 15 | 25 | 35 | 27 | 201 | 15 | 36 | 277 | 33 |
| Future Volume (vph) | 38 | 26 | 43 | 15 | 25 | 35 | 27 | 201 | 15 | 36 | 277 | 33 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.907 | | | | 0.850 | | 0.989 | | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1690 | 0 | 1770 | 1863 | 1583 | 1770 | 3500 | 0 | 1770 | 3483 | 0 |
| Flt Permitted | 0.734 | | | 0.701 | | | 0.534 | | | 0.587 | | |
| Satd. Flow (perm) | 1367 | 1690 | 0 | 1306 | 1863 | 1583 | 995 | 3500 | 0 | 1093 | 3483 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 54 | | | | 87 | | 12 | | | 20 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.72 | 0.72 | 0.72 | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 |
| Adj. Flow (vph) | 48 | 33 | 54 | 21 | 35 | 49 | 33 | 248 | 19 | 42 | 326 | 39 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 48 | 87 | 0 | 21 | 35 | 49 | 33 | 267 | 0 | 42 | 365 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 13 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|------|-------|-----|------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 4.0 | 24.0 | | 4.0 | 24.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 8.0 | 30.0 | | 8.0 | 30.0 | |
| Total Split (s) | 32.0 | 32.0 | | 32.0 | 32.0 | 32.0 | 8.0 | 48.0 | | 8.0 | 48.0 | |
| Total Split (%) | 36.4% | 36.4% | | 36.4% | 36.4% | 36.4% | 9.1% | 54.5% | | 9.1% | 54.5% | |
| Maximum Green (s) | 26.0 | 26.0 | | 26.0 | 26.0 | 26.0 | 4.0 | 42.0 | | 4.0 | 42.0 | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.5 | 4.5 | | 3.5 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 0.5 | 1.5 | | 0.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | None | None | None | None | C-Min | | None | C-Min | |
| Walk Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | 5.0 | |
| Flash Dont Walk (s) | 11.0 | 11.0 | | 11.0 | 11.0 | 11.0 | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | | 0 | | | 0 | |
| Act Effct Green (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 58.7 | 53.4 | | 58.7 | 53.4 | |
| Actuated g/C Ratio | 0.27 | 0.27 | | 0.27 | 0.27 | 0.27 | 0.67 | 0.61 | | 0.67 | 0.61 | |
| v/c Ratio | 0.13 | 0.17 | | 0.06 | 0.07 | 0.10 | 0.05 | 0.13 | | 0.05 | 0.17 | |
| Control Delay | 25.4 | 12.5 | | 24.3 | 24.3 | 2.2 | 6.9 | 10.6 | | 6.9 | 10.7 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 25.4 | 12.5 | | 24.3 | 24.3 | 2.2 | 6.9 | 10.6 | | 6.9 | 10.7 | |
| LOS | C | B | | C | C | A | A | B | | A | B | |
| Approach Delay | | 17.1 | | | 14.0 | | | 10.2 | | | 10.3 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Queue Length 50th (ft) | 20 | 14 | | 9 | 14 | 0 | 7 | 39 | | 8 | 55 | |
| Queue Length 95th (ft) | 42 | 39 | | 21 | 29 | 1 | 15 | 55 | | 19 | 77 | |
| Internal Link Dist (ft) | | 5241 | | | 397 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 403 | 537 | | 385 | 550 | 529 | 712 | 2130 | | 771 | 2123 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.12 | 0.16 | | 0.05 | 0.06 | 0.09 | 0.05 | 0.13 | | 0.05 | 0.17 | |

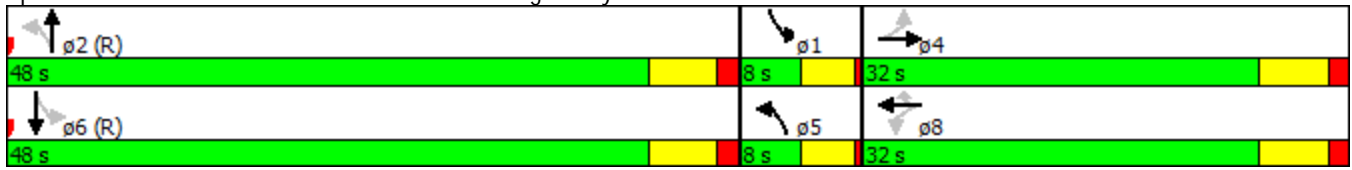
Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 88 |
| Actuated Cycle Length: | 88 |
| Offset: | 64 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.17 |
| Intersection Signal Delay: | 11.6 |
| Intersection LOS: | B |
| Intersection Capacity Utilization: | 75.0% |
| ICU Level of Service: | D |
| Analysis Period (min): | 15 |

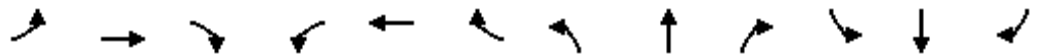
Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Weekday MIDDAY

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road



1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 48 | 462 | 81 | 45 | 602 | 172 | 76 | 303 | 55 | 114 | 218 | 36 |
| Future Volume (vph) | 48 | 462 | 81 | 45 | 602 | 172 | 76 | 303 | 55 | 114 | 218 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frnt | | 0.978 | | | 0.967 | | | 0.977 | | | 0.979 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3346 | 0 | 1888 | 3308 | 0 | 1888 | 3343 | 0 | 1652 | 3349 | 0 |
| Flt Permitted | 0.275 | | | 0.390 | | | 0.521 | | | 0.388 | | |
| Satd. Flow (perm) | 478 | 3346 | 0 | 775 | 3308 | 0 | 1035 | 3343 | 0 | 675 | 3349 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 39 | | | 21 | | | 19 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 53 | 513 | 90 | 49 | 654 | 187 | 82 | 326 | 59 | 130 | 248 | 41 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 53 | 603 | 0 | 49 | 841 | 0 | 82 | 385 | 0 | 130 | 289 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | 13 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



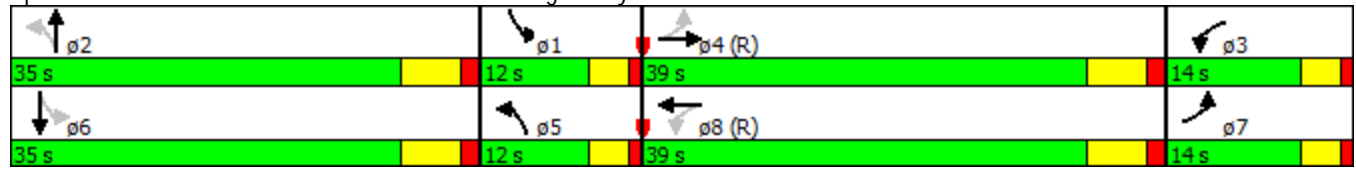
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-----|-------|-----|-------|-------|-------|-----|-------|-----|
| Permitted Phases | 4 | | 8 | | | | 2 | | 6 | | | |
| Detector Phase | 7 | 4 | 3 | | 8 | | 5 | 2 | 1 | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | | 10.0 | | 5.0 | 10.0 | 5.0 | | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | 9.0 | | 16.0 | | 9.0 | 16.0 | 9.0 | | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | 14.0 | | 39.0 | | 12.0 | 35.0 | 12.0 | | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | 14.0% | | 39.0% | | 12.0% | 35.0% | 12.0% | | 35.0% | |
| Maximum Green (s) | 10.0 | 33.0 | 10.0 | | 33.0 | | 8.0 | 29.0 | 8.0 | | 29.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | | 4.5 | | 3.0 | 4.5 | 3.0 | | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.0 | | 1.5 | | 1.0 | 1.5 | 1.0 | | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 4.0 | | 6.0 | | 4.0 | 6.0 | 4.0 | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | | 4.0 | | 3.0 | 4.0 | 3.0 | | 4.0 | |
| Recall Mode | None | C-Max | None | | C-Max | | None | None | None | | None | |
| Act Effct Green (s) | 60.8 | 53.2 | 60.8 | | 53.2 | | 25.1 | 17.3 | 25.1 | | 17.3 | |
| Actuated g/C Ratio | 0.61 | 0.53 | 0.61 | | 0.53 | | 0.25 | 0.17 | 0.25 | | 0.17 | |
| v/c Ratio | 0.15 | 0.34 | 0.09 | | 0.47 | | 0.27 | 0.65 | 0.58 | | 0.49 | |
| Control Delay | 2.9 | 3.0 | 3.4 | | 4.5 | | 28.7 | 41.1 | 38.9 | | 28.6 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | |
| Total Delay | 2.9 | 3.0 | 3.4 | | 4.5 | | 28.7 | 41.1 | 38.9 | | 28.6 | |
| LOS | A | A | A | | A | | C | D | D | | C | |
| Approach Delay | 3.0 | | 4.4 | | | | 39.0 | | 31.8 | | | |
| Approach LOS | A | | A | | | | D | | C | | | |
| Queue Length 50th (ft) | 2 | 16 | 4 | | 36 | | 39 | 114 | 77 | | 89 | |
| Queue Length 95th (ft) | 8 | 32 | m8 | | 57 | | 69 | 154 | 120 | | 123 | |
| Internal Link Dist (ft) | 400 | | 115 | | | | 607 | | 560 | | | |
| Turn Bay Length (ft) | 175 | | 210 | | | | 200 | | 170 | | | |
| Base Capacity (vph) | 428 | 1789 | 616 | | 1777 | | 351 | 984 | 262 | | 984 | |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | | 0 | |
| Reduced v/c Ratio | 0.12 | 0.34 | 0.08 | | 0.47 | | 0.23 | 0.39 | 0.50 | | 0.29 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 15.4 Intersection LOS: B
 Intersection Capacity Utilization 59.4% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

























1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 60 | 445 | 243 | 91 | 424 | 199 | 239 | 642 | 84 | 195 | 595 | 66 |
| Future Volume (vph) | 60 | 445 | 243 | 91 | 424 | 199 | 239 | 642 | 84 | 195 | 595 | 66 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4842 | 0 |
| Flt Permitted | 0.347 | | | 0.325 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 603 | 3421 | 1478 | 565 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4842 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 270 | | | 178 | | | 142 | | | 19 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 67 | 494 | 270 | 101 | 471 | 221 | 246 | 662 | 87 | 212 | 647 | 72 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 67 | 494 | 270 | 101 | 471 | 221 | 246 | 662 | 87 | 212 | 719 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Weekday MIDDAY

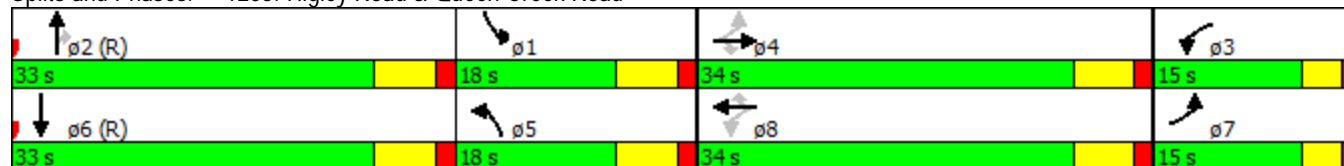


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 34.0 | 34.0 | 15.0 | 34.0 | 34.0 | 18.0 | 33.0 | 33.0 | 18.0 | 33.0 | |
| Total Split (%) | 15.0% | 34.0% | 34.0% | 15.0% | 34.0% | 34.0% | 18.0% | 33.0% | 33.0% | 18.0% | 33.0% | |
| Maximum Green (s) | 11.0 | 28.0 | 28.0 | 11.0 | 28.0 | 28.0 | 12.0 | 27.0 | 27.0 | 12.0 | 27.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 31.7 | 22.7 | 22.7 | 31.7 | 22.7 | 22.7 | 11.8 | 38.6 | 38.6 | 11.8 | 38.6 | |
| Actuated g/C Ratio | 0.32 | 0.23 | 0.23 | 0.32 | 0.23 | 0.23 | 0.12 | 0.39 | 0.39 | 0.12 | 0.39 | |
| v/c Ratio | 0.25 | 0.64 | 0.50 | 0.40 | 0.61 | 0.47 | 0.65 | 0.35 | 0.13 | 0.56 | 0.38 | |
| Control Delay | 34.0 | 44.5 | 15.6 | 29.7 | 37.6 | 11.1 | 46.2 | 20.1 | 0.6 | 46.1 | 17.6 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 34.0 | 44.5 | 15.6 | 29.7 | 37.6 | 11.1 | 46.2 | 20.1 | 0.6 | 46.1 | 17.6 | |
| LOS | C | D | B | C | D | B | D | C | A | D | B | |
| Approach Delay | | 34.3 | | | 29.2 | | | 24.8 | | | 24.1 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 30 | 150 | 48 | 43 | 141 | 22 | 78 | 81 | 0 | 71 | 151 | |
| Queue Length 95th (ft) | 59 | 205 | 103 | 74 | 181 | 81 | 119 | 106 | 3 | 104 | 198 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 330 | 957 | 608 | 321 | 957 | 542 | 384 | 1899 | 678 | 384 | 1882 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.20 | 0.52 | 0.44 | 0.31 | 0.49 | 0.41 | 0.64 | 0.35 | 0.13 | 0.55 | 0.38 | |

Intersection Summary

























| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.65 |
| Intersection Signal Delay: | 27.8 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 56.3% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2020 - Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 18 | 1 | 1 | 38 | 1 | 54 | 1 | 893 | 87 | 85 | 604 | 25 |
| Future Volume (vph) | 18 | 1 | 1 | 38 | 1 | 54 | 1 | 893 | 87 | 85 | 604 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.987 | | | 0.994 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3377 | 0 | 1711 | 4886 | 0 |
| Fl _t Permitted | 0.757 | | | 0.756 | | | 0.386 | | | 0.245 | | |
| Satd. Flow (perm) | 1457 | 3421 | 1531 | 1408 | 1801 | 1478 | 815 | 3377 | 0 | 441 | 4886 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 14 | | | 8 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.62 | 0.62 | 0.62 | 0.80 | 0.80 | 0.80 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 29 | 2 | 2 | 48 | 1 | 68 | 1 | 960 | 94 | 90 | 643 | 27 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 29 | 2 | 2 | 48 | 1 | 68 | 1 | 1054 | 0 | 90 | 670 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2020 - Weekday MIDDAY

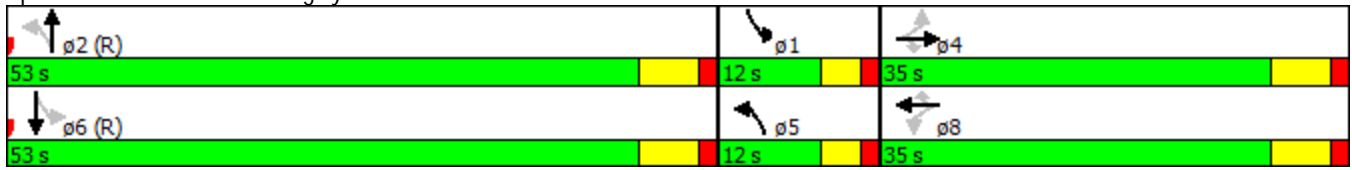


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 7.5 | 47.0 | | 7.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | | | | | | | | | | | | 5.0 |
| Flash Dont Walk (s) | | | | | | | | | | | | 11.0 |
| Pedestrian Calls (#/hr) | | | | | | | | | | | | 0 |
| Act Effct Green (s) | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 | 10.6 | 78.5 | 74.2 | | 78.5 | 74.2 | |
| Actuated g/C Ratio | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.78 | 0.74 | | 0.78 | 0.74 | |
| v/c Ratio | 0.19 | 0.01 | 0.01 | 0.32 | 0.01 | 0.30 | 0.00 | 0.42 | | 0.22 | 0.18 | |
| Control Delay | 43.6 | 39.0 | 0.0 | 47.4 | 39.0 | 10.4 | 3.0 | 7.1 | | 2.9 | 6.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 43.6 | 39.0 | 0.0 | 47.4 | 39.0 | 10.4 | 3.0 | 7.1 | | 2.9 | 6.2 | |
| LOS | D | D | A | D | D | B | A | A | | A | A | |
| Approach Delay | | 40.6 | | | 25.8 | | | 7.1 | | | 5.8 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 17 | 0 | 0 | 29 | 1 | 0 | 0 | 140 | | 5 | 24 | |
| Queue Length 95th (ft) | 30 | 3 | 0 | 56 | 5 | 22 | 1 | 197 | | 7 | 87 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 422 | 992 | 502 | 408 | 522 | 486 | 745 | 2510 | | 450 | 3628 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.07 | 0.00 | 0.00 | 0.12 | 0.00 | 0.14 | 0.00 | 0.42 | | 0.20 | 0.18 | |

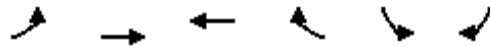
Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 55 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.42 |
| Intersection Signal Delay: | 8.3 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 59.1% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Splits and Phases: 1207: Higley Road & Ocotillo Road



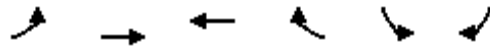
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 33 | 420 | 445 | 282 | 245 | 42 |
| Future Volume (vph) | 33 | 420 | 445 | 282 | 245 | 42 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.942 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3334 | 0 | 1770 | 1583 |
| Flt Permitted | 0.278 | | | | 0.950 | |
| Satd. Flow (perm) | 518 | 3539 | 3334 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 215 | | | 55 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.94 | 0.94 | 0.76 | 0.76 |
| Adj. Flow (vph) | 37 | 467 | 473 | 300 | 322 | 55 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 37 | 467 | 773 | 0 | 322 | 55 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2020 - Weekday MIDDAY



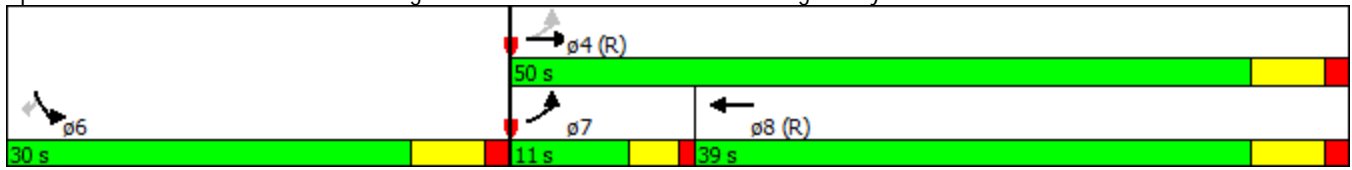
| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Maximum Green (s) | 7.0 | 44.0 | 33.0 | | 24.0 | 24.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | | 0 | | 0 | 0 |
| Act Effct Green (s) | 49.5 | 47.5 | 41.2 | | 20.5 | 20.5 |
| Actuated g/C Ratio | 0.62 | 0.59 | 0.52 | | 0.26 | 0.26 |
| v/c Ratio | 0.09 | 0.22 | 0.42 | | 0.71 | 0.12 |
| Control Delay | 7.3 | 8.2 | 6.1 | | 35.9 | 7.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 7.3 | 8.2 | 6.1 | | 35.9 | 7.0 |
| LOS | A | A | A | | D | A |
| Approach Delay | | 8.2 | 6.1 | | 31.7 | |
| Approach LOS | | A | A | | C | |
| Queue Length 50th (ft) | 8 | 57 | 61 | | 144 | 0 |
| Queue Length 95th (ft) | 19 | 81 | 76 | | 177 | 18 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 430 | 2103 | 1821 | | 531 | 513 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.09 | 0.22 | 0.42 | | 0.61 | 0.11 |

Intersection Summary

| | |
|------------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.71 |
| Intersection Signal Delay: | 12.6 |
| Intersection LOS: | B |
| Intersection Capacity Utilization: | 51.0% |
| ICU Level of Service: | A |
| Analysis Period (min): | 15 |

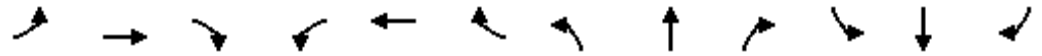
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 169 | 386 | 117 | 145 | 387 | 177 | 141 | 441 | 70 | 152 | 479 | 106 |
| Future Volume (vph) | 169 | 386 | 117 | 145 | 387 | 177 | 141 | 441 | 70 | 152 | 479 | 106 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.965 | | | 0.953 | | | 0.979 | | | 0.973 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3301 | 0 | 1652 | 3260 | 0 | 1652 | 4813 | 0 | 1652 | 4783 | 0 |
| Flt Permitted | 0.280 | | | 0.356 | | | 0.369 | | | 0.405 | | |
| Satd. Flow (perm) | 487 | 3301 | 0 | 619 | 3260 | 0 | 642 | 4813 | 0 | 704 | 4783 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 51 | | | 95 | | | 39 | | | 63 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 186 | 424 | 129 | 169 | 450 | 206 | 157 | 490 | 78 | 162 | 510 | 113 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 186 | 553 | 0 | 169 | 656 | 0 | 157 | 568 | 0 | 162 | 623 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
|-------------------------|-------|-------|-------|-----|-------|-----|-------|-------|-------|------|-------|-----|--|
| Permitted Phases | 4 | | 8 | | | | 2 | | 6 | | | | |
| Detector Phase | 7 | 4 | 3 | | 8 | | 5 | 2 | 1 | | 6 | | |
| Switch Phase | | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | | 10.0 | | 5.0 | 10.0 | 5.0 | | 10.0 | | |
| Minimum Split (s) | 9.5 | 16.0 | 9.5 | | 16.0 | | 9.5 | 28.0 | 9.5 | | 28.0 | | |
| Total Split (s) | 10.0 | 30.0 | 10.0 | | 30.0 | | 10.0 | 30.0 | 10.0 | | 30.0 | | |
| Total Split (%) | 12.5% | 37.5% | 12.5% | | 37.5% | | 12.5% | 37.5% | 12.5% | | 37.5% | | |
| Maximum Green (s) | 5.5 | 24.0 | 5.5 | | 24.0 | | 5.5 | 24.0 | 5.5 | | 24.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | | 4.5 | | 3.0 | 4.5 | 3.0 | | 4.5 | | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | | 1.5 | | 1.5 | 1.5 | 1.5 | | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | | |
| Total Lost Time (s) | 4.5 | 6.0 | 4.5 | | 6.0 | | 4.5 | 6.0 | 4.5 | | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | | 4.0 | | 3.0 | 4.0 | 3.0 | | 4.0 | | |
| Recall Mode | None | Max | None | | Max | | None | C-Max | None | | C-Max | | |
| Walk Time (s) | | | | | | | | | 4.0 | 4.0 | | | |
| Flash Dont Walk (s) | | | | | | | | | 18.0 | 18.0 | | | |
| Pedestrian Calls (#/hr) | | | | | | | | | 0 | 0 | | | |
| Act Effct Green (s) | 31.0 | 24.0 | 31.0 | | 24.0 | | 31.0 | 24.0 | 31.0 | | 24.0 | | |
| Actuated g/C Ratio | 0.39 | 0.30 | 0.39 | | 0.30 | | 0.39 | 0.30 | 0.39 | | 0.30 | | |
| v/c Ratio | 0.69 | 0.54 | 0.55 | | 0.63 | | 0.49 | 0.39 | 0.48 | | 0.42 | | |
| Control Delay | 45.5 | 26.2 | 25.9 | | 23.6 | | 25.0 | 22.5 | 22.5 | | 21.1 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | | |
| Total Delay | 45.5 | 26.2 | 25.9 | | 23.6 | | 25.0 | 22.5 | 22.5 | | 21.1 | | |
| LOS | D | C | C | | C | | C | C | C | | C | | |
| Approach Delay | 31.1 | | | | | | 24.1 | | 23.0 | | 21.4 | | |
| Approach LOS | C | | | | | | C | | C | | C | | |
| Queue Length 50th (ft) | 72 | 126 | 50 | | 125 | | 48 | 78 | 48 | | 80 | | |
| Queue Length 95th (ft) | #157 | 181 | 86 | | 170 | | 92 | 111 | 87 | | 112 | | |
| Internal Link Dist (ft) | 546 | | | | | | 1487 | | 692 | | 712 | | |
| Turn Bay Length (ft) | 205 | | 200 | | | | 210 | | 210 | | | | |
| Base Capacity (vph) | 268 | 1026 | 310 | | 1044 | | 318 | 1471 | 337 | | 1479 | | |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | | 0 | | |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | | 0 | | |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | | 0 | | |
| Reduced v/c Ratio | 0.69 | 0.54 | 0.55 | | 0.63 | | 0.49 | 0.39 | 0.48 | | 0.42 | | |

Intersection Summary

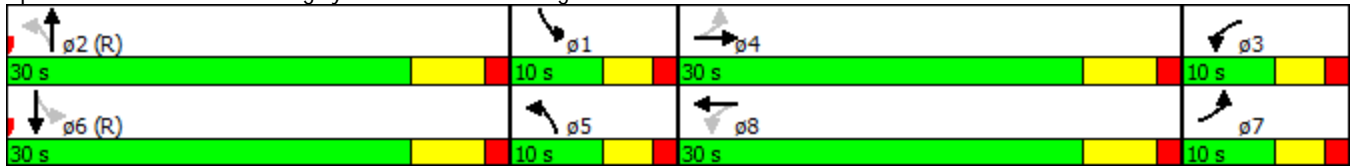
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 24.8
 Intersection Capacity Utilization 62.7%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service B

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Weekday MIDDAY

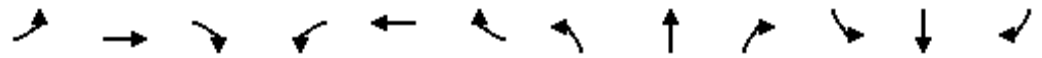
95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 780 | 27 | 98 | 585 | 65 |
| Future Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 780 | 27 | 98 | 585 | 65 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.876 | | | 0.859 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1523 | 0 | 1711 | 1493 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.483 | | | 0.711 | | | 0.388 | | | 0.326 | | |
| Satd. Flow (perm) | 870 | 1523 | 0 | 1280 | 1493 | 0 | 675 | 4916 | 1478 | 567 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 58 | | | 158 | | | | 82 | | | 82 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 61 | 12 | 58 | 25 | 10 | 158 | 25 | 821 | 28 | 111 | 665 | 74 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 61 | 70 | 0 | 25 | 168 | 0 | 25 | 821 | 28 | 111 | 665 | 74 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2020 - Weekday MIDDAY



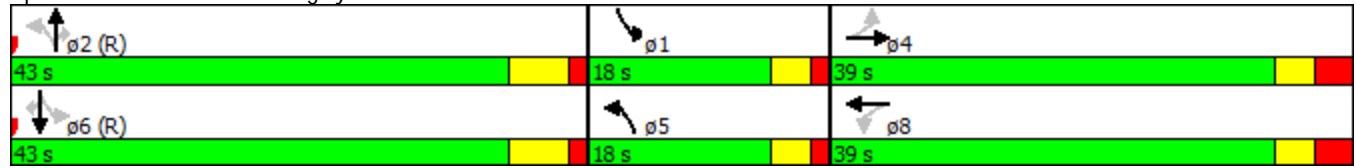
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 18.0 | 43.0 | 43.0 | 18.0 | 43.0 | 43.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 18.0% | 43.0% | 43.0% | 18.0% | 43.0% | 43.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 13.5 | 37.0 | 37.0 | 13.5 | 37.0 | 37.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | | 12.0 | 12.0 | | 12.0 | 12.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 11.9 | 11.9 | | 11.9 | 11.9 | | 73.1 | 65.6 | 65.6 | 73.1 | 65.6 | 65.6 |
| Actuated g/C Ratio | 0.12 | 0.12 | | 0.12 | 0.12 | | 0.73 | 0.66 | 0.66 | 0.73 | 0.66 | 0.66 |
| v/c Ratio | 0.59 | 0.30 | | 0.16 | 0.53 | | 0.05 | 0.25 | 0.03 | 0.23 | 0.21 | 0.07 |
| Control Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 0.8 | 4.2 | 0.1 | 10.2 | 8.6 | 3.5 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 0.8 | 4.2 | 0.1 | 10.2 | 8.6 | 3.5 |
| LOS | E | B | | D | B | | A | A | A | B | A | A |
| Approach Delay | | 38.9 | | | 17.6 | | | 4.0 | | | 8.3 | |
| Approach LOS | | D | | | B | | | A | | | A | |
| Queue Length 50th (ft) | 38 | 7 | | 15 | 6 | | 1 | 28 | 0 | 45 | 112 | 12 |
| Queue Length 95th (ft) | 72 | 39 | | 35 | 51 | | m1 | 43 | m0 | 60 | 120 | 18 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 287 | 541 | | 422 | 598 | | 675 | 3223 | 997 | 603 | 3223 | 997 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.21 | 0.13 | | 0.06 | 0.28 | | 0.04 | 0.25 | 0.03 | 0.18 | 0.21 | 0.07 |

Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 50 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.59 |
| Intersection Signal Delay: | 9.3 |
| Intersection LOS: | A |
| Intersection Capacity Utilization | 56.1% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

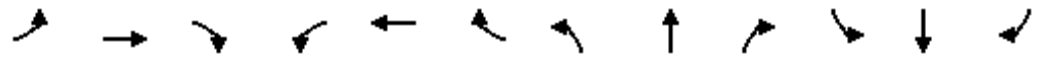
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 26 | 414 | 130 | 70 | 445 | 162 | 182 | 742 | 94 | 185 | 612 | 46 |
| Future Volume (vph) | 26 | 414 | 130 | 70 | 445 | 162 | 182 | 742 | 94 | 185 | 612 | 46 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frnt | | | 0.850 | | 0.960 | | | 0.983 | | | 0.990 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4719 | 0 | 1711 | 4832 | 0 | 1711 | 4867 | 0 |
| Flt Permitted | 0.250 | | | 0.393 | | | 0.322 | | | 0.229 | | |
| Satd. Flow (perm) | 450 | 4916 | 1531 | 708 | 4719 | 0 | 580 | 4832 | 0 | 412 | 4867 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 160 | | 88 | | | 24 | | | 13 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 | 0.88 | 0.88 | 0.88 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 32 | 511 | 160 | 82 | 524 | 191 | 207 | 843 | 107 | 206 | 680 | 51 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 32 | 511 | 160 | 82 | 715 | 0 | 207 | 950 | 0 | 206 | 731 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Maximum Green (s) | 6.5 | 25.0 | 25.0 | 6.5 | 25.0 | | 13.5 | 34.0 | | 13.5 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 29.6 | 22.4 | 22.4 | 29.6 | 22.4 | | 54.4 | 41.2 | | 54.4 | 41.2 | |
| Actuated g/C Ratio | 0.30 | 0.22 | 0.22 | 0.30 | 0.22 | | 0.54 | 0.41 | | 0.54 | 0.41 | |
| v/c Ratio | 0.16 | 0.46 | 0.34 | 0.31 | 0.64 | | 0.46 | 0.47 | | 0.55 | 0.36 | |
| Control Delay | 27.3 | 48.9 | 22.8 | 27.5 | 33.1 | | 20.6 | 27.6 | | 27.1 | 22.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 27.3 | 48.9 | 22.8 | 27.5 | 33.1 | | 20.6 | 27.6 | | 27.1 | 22.1 | |
| LOS | C | D | C | C | C | | C | C | | C | C | |
| Approach Delay | | 42.0 | | | 32.5 | | | 26.3 | | | 23.2 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 0 | 123 | 13 | 35 | 131 | | 80 | 208 | | 61 | 120 | |
| Queue Length 95th (ft) | 32 | 142 | 89 | 63 | 156 | | 117 | 236 | | 106 | 163 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 218 | 1233 | 503 | 279 | 1249 | | 479 | 2005 | | 407 | 2013 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.15 | 0.41 | 0.32 | 0.29 | 0.57 | | 0.43 | 0.47 | | 0.51 | 0.36 | |









Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.64 |
| Intersection Signal Delay: | 29.9 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 60.6% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2020 - Weekday Midday

Splits and Phases: 1307: Higley Road & Germann Road

| | | | |
|---|---|---|---|
|  ø2 (R) |  ø1 |  ø4 |  ø3 |
| 40 s | 18 s | 31 s | 11 s |
|  ø6 (R) |  ø5 |  ø8 |  ø7 |
| 40 s | 18 s | 31 s | 11 s |

Lanes and Geometrics
4: Higley Road & Bridges Boulevard

2020 - Weekday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 44 | 288 | 924 | 60 | 254 | 745 |
| Future Volume (vph) | 44 | 288 | 924 | 60 | 254 | 745 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.85 | 0.85 | 0.95 | 0.95 | 0.97 | 0.97 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 15.4

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 44 | 288 | 924 | 60 | 254 | 745 |
| Future Vol, veh/h | 44 | 288 | 924 | 60 | 254 | 745 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 85 | 85 | 95 | 95 | 97 | 97 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 339 | 973 | 63 | 262 | 768 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 1804 | 486 | 0 | 0 | 973 | 0 |
| Stage 1 | 973 | - | - | - | - | - |
| Stage 2 | 831 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 119 | 451 | - | - | 403 | - |
| Stage 1 | 251 | - | - | - | - | - |
| Stage 2 | 352 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | |
| Mov Cap-1 Maneuver | ~ 42 | 451 | - | - | 403 | - |
| Mov Cap-2 Maneuver | ~ 42 | - | - | - | - | - |
| Stage 1 | 251 | - | - | - | - | - |
| Stage 2 | 123 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 77.6 | 0 | 7.4 |
| HCM LOS | F | | |

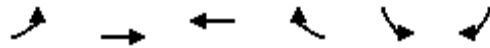
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|----------|-------|------|-----|
| Capacity (veh/h) | - | - | 42 | 451 | 403 | - |
| HCM Lane V/C Ratio | - | - | 1.232 | 0.751 | 0.65 | - |
| HCM Control Delay (s) | - | - | \$ 367.2 | 33.4 | 29.1 | - |
| HCM Lane LOS | - | - | F | D | D | - |
| HCM 95th %tile Q(veh) | - | - | 5.1 | 6.3 | 4.4 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2020 - Weekday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↕↕ | ↕↕ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 30 | 615 | 705 | 23 | 22 | 32 |
| Future Volume (vph) | 30 | 615 | 705 | 23 | 22 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.68 | 0.68 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |
| Intersection Summary | | | | | | |
| Area Type: | Other | | | | | |

Intersection

Int Delay, s/veh 1.1

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 30 | 615 | 705 | 23 | 22 | 32 |
| Future Vol, veh/h | 30 | 615 | 705 | 23 | 22 | 32 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 68 | 68 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 683 | 783 | 26 | 32 | 47 |

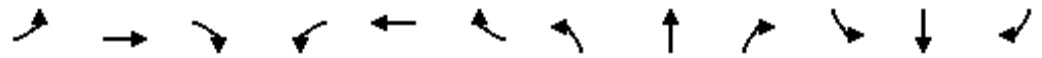
| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 783 | 0 | 1191 |
| Stage 1 | - | - | 783 |
| Stage 2 | - | - | 408 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 831 | - | 180 |
| Stage 1 | - | - | 411 |
| Stage 2 | - | - | 640 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 831 | - | 173 |
| Mov Cap-2 Maneuver | - | - | 173 |
| Stage 1 | - | - | 411 |
| Stage 2 | - | - | 615 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.4 | 0 | 19.2 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 831 | - | - | - | 173 | 607 |
| HCM Lane V/C Ratio | 0.04 | - | - | - | 0.187 | 0.078 |
| HCM Control Delay (s) | 9.5 | - | - | - | 30.5 | 11.4 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.7 | 0.3 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 53 | 45 | 85 | 26 | 27 | 45 | 38 | 210 | 31 | 53 | 416 | 33 |
| Future Volume (vph) | 53 | 45 | 85 | 26 | 27 | 45 | 38 | 210 | 31 | 53 | 416 | 33 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.902 | | | | 0.850 | | 0.981 | | | 0.989 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1680 | 0 | 1770 | 1863 | 1583 | 1770 | 3472 | 0 | 1770 | 3500 | 0 |
| Flt Permitted | 0.736 | | | 0.575 | | | 0.461 | | | 0.581 | | |
| Satd. Flow (perm) | 1371 | 1680 | 0 | 1071 | 1863 | 1583 | 859 | 3472 | 0 | 1082 | 3500 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 83 | | | | 76 | | 29 | | | 14 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 4608 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 69.8 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.84 | 0.84 | 0.84 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Adj. Flow (vph) | 58 | 49 | 92 | 31 | 32 | 54 | 44 | 241 | 36 | 61 | 478 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 58 | 141 | 0 | 31 | 32 | 54 | 44 | 277 | 0 | 61 | 516 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 13 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | 4.0 | 24.0 | | 4.0 | 24.0 | |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | 16.0 | 8.0 | 35.5 | | 8.0 | 30.0 | |
| Total Split (s) | 25.0 | 25.0 | | 25.0 | 25.0 | 25.0 | 10.0 | 65.0 | | 10.0 | 65.0 | |
| Total Split (%) | 25.0% | 25.0% | | 25.0% | 25.0% | 25.0% | 10.0% | 65.0% | | 10.0% | 65.0% | |
| Maximum Green (s) | 19.0 | 19.0 | | 19.0 | 19.0 | 19.0 | 6.0 | 59.0 | | 6.0 | 59.0 | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | 5.0 | |
| Flash Dont Walk (s) | 11.0 | 11.0 | | 11.0 | 11.0 | 11.0 | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | | 0 | | | 0 | |
| Act Effct Green (s) | 11.2 | 11.2 | | 11.2 | 11.2 | 11.2 | 76.7 | 69.1 | | 76.7 | 69.1 | |
| Actuated g/C Ratio | 0.11 | 0.11 | | 0.11 | 0.11 | 0.11 | 0.77 | 0.69 | | 0.77 | 0.69 | |
| v/c Ratio | 0.38 | 0.54 | | 0.26 | 0.15 | 0.22 | 0.06 | 0.12 | | 0.07 | 0.21 | |
| Control Delay | 48.1 | 26.6 | | 45.5 | 41.1 | 7.0 | 3.0 | 5.3 | | 2.9 | 6.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 48.1 | 26.6 | | 45.5 | 41.1 | 7.0 | 3.0 | 5.3 | | 2.9 | 6.2 | |
| LOS | D | C | | D | D | A | A | A | | A | A | |
| Approach Delay | | 32.9 | | | 26.5 | | | 5.0 | | | 5.9 | |
| Approach LOS | | C | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 35 | 35 | | 19 | 19 | 0 | 4 | 25 | | 6 | 54 | |
| Queue Length 95th (ft) | 72 | 91 | | 43 | 43 | 17 | 13 | 43 | | 17 | 85 | |
| Internal Link Dist (ft) | | 5241 | | | 397 | | | 3971 | | | 4528 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 260 | 386 | | 203 | 353 | 362 | 716 | 2408 | | 875 | 2423 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.22 | 0.37 | | 0.15 | 0.09 | 0.15 | 0.06 | 0.12 | | 0.07 | 0.21 | |

Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 68 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.54 |
| Intersection Signal Delay: | 12.1 |
| Intersection LOS: | B |
| Intersection Capacity Utilization: | 58.3% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road



1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 70 | 1023 | 131 | 56 | 670 | 143 | 57 | 344 | 81 | 260 | 366 | 34 |
| Future Volume (vph) | 70 | 1023 | 131 | 56 | 670 | 143 | 57 | 344 | 81 | 260 | 366 | 34 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Fr _t | | 0.983 | | | 0.974 | | | 0.971 | | | 0.987 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3363 | 0 | 1888 | 3332 | 0 | 1888 | 3322 | 0 | 1652 | 3377 | 0 |
| Fl _t Permitted | 0.224 | | | 0.104 | | | 0.336 | | | 0.282 | | |
| Satd. Flow (perm) | 389 | 3363 | 0 | 207 | 3332 | 0 | 668 | 3322 | 0 | 490 | 3377 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 29 | | | 22 | | | 7 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 74 | 1077 | 138 | 61 | 728 | 155 | 63 | 382 | 90 | 277 | 389 | 36 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 74 | 1215 | 0 | 61 | 883 | 0 | 63 | 472 | 0 | 277 | 425 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | 13 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

2020 - Weekday PM



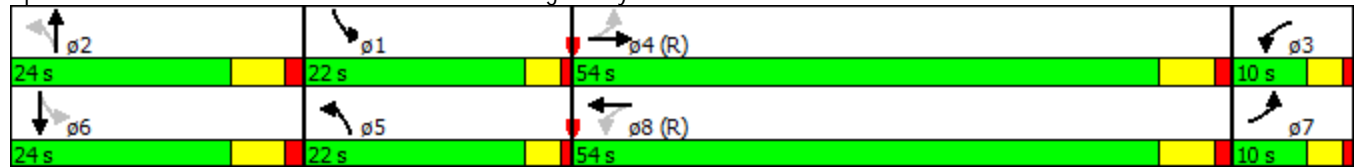
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | |
| Detector Phase | 7 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | | |
| Minimum Split (s) | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | | |
| Total Split (s) | 10.0 | 54.0 | 10.0 | 54.0 | 22.0 | 24.0 | 22.0 | 24.0 | 22.0 | 24.0 | | |
| Total Split (%) | 9.1% | 49.1% | 9.1% | 49.1% | 20.0% | 21.8% | 20.0% | 21.8% | 20.0% | 21.8% | | |
| Maximum Green (s) | 6.0 | 48.0 | 6.0 | 48.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | | |
| All-Red Time (s) | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | | |
| Recall Mode | None | C-Max | None | C-Max | None | Max | None | Max | None | Max | | |
| Act Effct Green (s) | 58.1 | 50.4 | 58.1 | 50.4 | 37.8 | 20.2 | 37.8 | 20.2 | 37.8 | 20.2 | | |
| Actuated g/C Ratio | 0.53 | 0.46 | 0.53 | 0.46 | 0.34 | 0.18 | 0.34 | 0.18 | 0.34 | 0.18 | | |
| v/c Ratio | 0.27 | 0.78 | 0.31 | 0.57 | 0.16 | 0.75 | 0.83 | 0.68 | 0.83 | 0.68 | | |
| Control Delay | 17.9 | 30.0 | 24.6 | 23.5 | 25.2 | 49.8 | 59.1 | 48.2 | 59.1 | 48.2 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 17.9 | 30.0 | 24.6 | 23.5 | 25.2 | 49.8 | 59.1 | 48.2 | 59.1 | 48.2 | | |
| LOS | B | C | C | C | C | D | E | D | E | D | | |
| Approach Delay | 29.3 | | 23.5 | | 46.9 | | 52.5 | | | | | |
| Approach LOS | C | | C | | D | | D | | | | | |
| Queue Length 50th (ft) | 24 | 384 | 19 | 237 | 28 | 163 | 142 | 149 | 142 | 149 | | |
| Queue Length 95th (ft) | 47 | 478 | 40 | 303 | 57 | #246 | #249 | 206 | #249 | 206 | | |
| Internal Link Dist (ft) | 400 | | 115 | | 607 | | 560 | | | | | |
| Turn Bay Length (ft) | 175 | | 210 | | 200 | | 170 | | | | | |
| Base Capacity (vph) | 275 | 1549 | 201 | 1542 | 443 | 629 | 369 | 626 | 369 | 626 | | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Reduced v/c Ratio | 0.27 | 0.78 | 0.30 | 0.57 | 0.14 | 0.75 | 0.75 | 0.68 | 0.75 | 0.68 | | |

Intersection Summary

| | |
|---|---|
| Area Type: | Other |
| Cycle Length: | 110 |
| Actuated Cycle Length: | 110 |
| Offset: | 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green |
| Natural Cycle: | 80 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.83 |
| Intersection Signal Delay: | 35.1 |
| Intersection LOS: | D |
| Intersection Capacity Utilization: | 79.8% |
| ICU Level of Service: | D |
| Analysis Period (min): | 15 |
| # 95th percentile volume exceeds capacity, queue may be longer. | |
| Queue shown is maximum after two cycles. | |

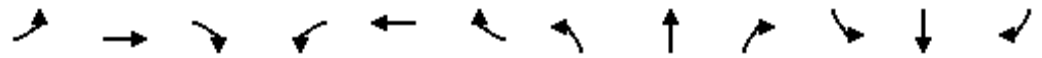
1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 111 | 826 | 610 | 144 | 427 | 190 | 279 | 693 | 143 | 237 | 1019 | 101 |
| Future Volume (vph) | 111 | 826 | 610 | 144 | 427 | 190 | 279 | 693 | 143 | 237 | 1019 | 101 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4847 | 0 |
| Flt Permitted | 0.416 | | | 0.151 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 723 | 3421 | 1478 | 263 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4847 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 361 | | | 179 | | | 161 | | 15 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1834 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 27.8 | | | 17.6 | |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.94 | 0.94 | 0.94 | 0.89 | 0.89 | 0.89 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 113 | 843 | 622 | 153 | 454 | 202 | 313 | 779 | 161 | 242 | 1040 | 103 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 113 | 843 | 622 | 153 | 454 | 202 | 313 | 779 | 161 | 242 | 1143 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Weekday PM











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.5 | 16.0 | 16.0 | 11.5 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 13.0 | 38.0 | 38.0 | 13.0 | 38.0 | 38.0 | 19.0 | 30.0 | 30.0 | 19.0 | 30.0 | |
| Total Split (%) | 13.0% | 38.0% | 38.0% | 13.0% | 38.0% | 38.0% | 19.0% | 30.0% | 30.0% | 19.0% | 30.0% | |
| Maximum Green (s) | 8.5 | 32.0 | 32.0 | 8.5 | 32.0 | 32.0 | 13.0 | 24.0 | 24.0 | 13.0 | 24.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 39.8 | 30.5 | 30.5 | 39.8 | 30.5 | 30.5 | 12.3 | 26.9 | 26.9 | 12.3 | 26.9 | |
| Actuated g/C Ratio | 0.40 | 0.30 | 0.30 | 0.40 | 0.30 | 0.30 | 0.12 | 0.27 | 0.27 | 0.12 | 0.27 | |
| v/c Ratio | 0.31 | 0.81 | 0.89 | 0.72 | 0.44 | 0.35 | 0.79 | 0.59 | 0.30 | 0.61 | 0.87 | |
| Control Delay | 20.8 | 38.8 | 29.6 | 51.8 | 29.0 | 7.2 | 54.6 | 45.3 | 16.5 | 33.4 | 33.3 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 20.8 | 38.8 | 29.6 | 51.8 | 29.0 | 7.2 | 54.6 | 45.3 | 16.5 | 33.4 | 33.3 | |
| LOS | C | D | C | D | C | A | D | D | B | C | C | |
| Approach Delay | | 33.9 | | | 27.9 | | | 43.9 | | | 33.3 | |
| Approach LOS | | C | | | C | | | D | | | C | |
| Queue Length 50th (ft) | 41 | 253 | 168 | 56 | 118 | 10 | 89 | 177 | 14 | 77 | 172 | |
| Queue Length 95th (ft) | 73 | 327 | #394 | #111 | 164 | 61 | #152 | 228 | 78 | 118 | #345 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1754 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 371 | 1094 | 718 | 224 | 1094 | 594 | 416 | 1320 | 529 | 416 | 1312 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.30 | 0.77 | 0.87 | 0.68 | 0.41 | 0.34 | 0.75 | 0.59 | 0.30 | 0.58 | 0.87 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 18 (18%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 35.3
 Intersection LOS: D
 Intersection Capacity Utilization 81.4%
 ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1205: Higley Road & Queen Creek Road

| | | | |
|---|---|---|---|
|  ø2 (R) |  ø1 |  ø4 |  ø3 |
| 30 s | 19 s | 38 s | 13 s |
|  ø6 (R) |  ø5 |  ø8 |  ø7 |
| 30 s | 19 s | 38 s | 13 s |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2020 - Weekday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 40 | 3 | 4 | 42 | 2 | 65 | 3 | 1069 | 97 | 152 | 1076 | 44 |
| Future Volume (vph) | 40 | 3 | 4 | 42 | 2 | 65 | 3 | 1069 | 97 | 152 | 1076 | 44 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.988 | | | 0.994 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3380 | 0 | 1711 | 4886 | 0 |
| Fl _t Permitted | 0.757 | | | 0.755 | | | 0.208 | | | 0.190 | | |
| Satd. Flow (perm) | 1457 | 3421 | 1531 | 1406 | 1801 | 1478 | 439 | 3380 | 0 | 342 | 4886 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 76 | | | 78 | | 16 | | | 10 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3506 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 53.1 | |
| Peak Hour Factor | 0.69 | 0.69 | 0.69 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 58 | 4 | 6 | 51 | 2 | 78 | 3 | 1125 | 102 | 163 | 1157 | 47 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 58 | 4 | 6 | 51 | 2 | 78 | 3 | 1227 | 0 | 163 | 1204 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 10.0 | 65.0 | | 10.0 | 65.0 | |
| Total Split (%) | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 10.0% | 65.0% | | 10.0% | 65.0% | |
| Maximum Green (s) | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 | 6.0 | 59.0 | | 6.0 | 59.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 | 4.0 | | 3.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 77.7 | 70.1 | | 77.9 | 70.1 | |
| Actuated g/C Ratio | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.78 | 0.70 | | 0.78 | 0.70 | |
| v/c Ratio | 0.35 | 0.01 | 0.03 | 0.32 | 0.01 | 0.33 | 0.01 | 0.52 | | 0.47 | 0.35 | |
| Control Delay | 46.8 | 38.0 | 0.2 | 46.0 | 38.0 | 13.3 | 3.0 | 8.9 | | 8.1 | 2.6 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 46.8 | 38.0 | 0.2 | 46.0 | 38.0 | 13.3 | 3.0 | 8.9 | | 8.1 | 2.6 | |
| LOS | D | D | A | D | D | B | A | A | | A | A | |
| Approach Delay | | 42.1 | | | 26.4 | | | 8.9 | | | 3.3 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 35 | 1 | 0 | 31 | 1 | 0 | 0 | 181 | | 10 | 46 | |
| Queue Length 95th (ft) | 54 | 4 | 0 | 60 | 7 | 34 | 2 | 265 | | m18 | m63 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3426 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 276 | 649 | 352 | 267 | 342 | 344 | 436 | 2372 | | 349 | 3426 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.21 | 0.01 | 0.02 | 0.19 | 0.01 | 0.23 | 0.01 | 0.52 | | 0.47 | 0.35 | |

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 68 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 7.7

Intersection LOS: A

Intersection Capacity Utilization 64.3%

ICU Level of Service C

Analysis Period (min) 15

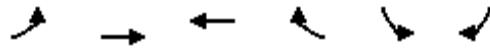
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

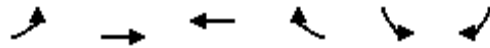
2020 - Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 48 | 867 | 520 | 319 | 432 | 39 |
| Future Volume (vph) | 48 | 867 | 520 | 319 | 432 | 39 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.943 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3337 | 0 | 1770 | 1583 |
| Flt Permitted | 0.192 | | | | 0.950 | |
| Satd. Flow (perm) | 358 | 3539 | 3337 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 180 | | | 48 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.95 | 0.95 | 0.81 | 0.81 |
| Adj. Flow (vph) | 49 | 894 | 547 | 336 | 533 | 48 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 49 | 894 | 883 | 0 | 533 | 48 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2020 - Weekday PM



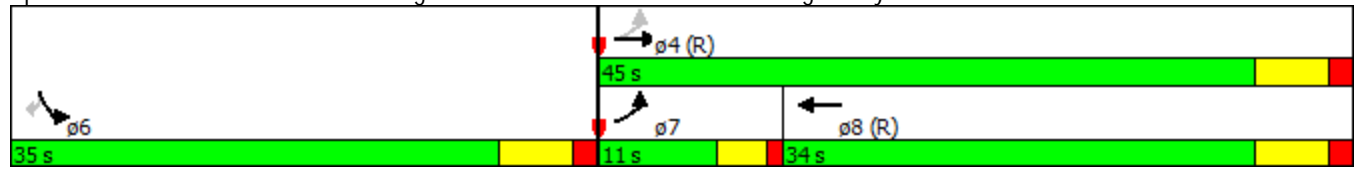
| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 30.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 45.0 | 34.0 | | 35.0 | 35.0 |
| Total Split (%) | 13.8% | 56.3% | 42.5% | | 43.8% | 43.8% |
| Maximum Green (s) | 7.0 | 39.0 | 28.0 | | 29.0 | 29.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | | | | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | 20.0 | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 42.3 | 40.3 | 33.8 | | 27.7 | 27.7 |
| Actuated g/C Ratio | 0.53 | 0.50 | 0.42 | | 0.35 | 0.35 |
| v/c Ratio | 0.16 | 0.50 | 0.58 | | 0.87 | 0.08 |
| Control Delay | 10.6 | 12.5 | 18.6 | | 41.1 | 5.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 10.6 | 12.5 | 18.6 | | 41.1 | 5.9 |
| LOS | B | B | B | | D | A |
| Approach Delay | | 12.4 | 18.6 | | 38.2 | |
| Approach LOS | | B | B | | D | |
| Queue Length 50th (ft) | 11 | 120 | 171 | | 238 | 0 |
| Queue Length 95th (ft) | m20 | 153 | m234 | | 312 | 17 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 313 | 1782 | 1512 | | 641 | 604 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.16 | 0.50 | 0.58 | | 0.83 | 0.08 |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 14 (18%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 20.9
 Intersection LOS: C
 Intersection Capacity Utilization 66.0%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

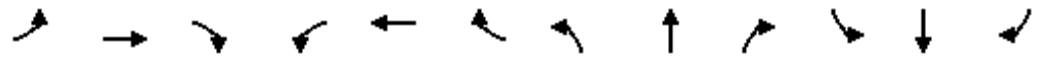
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

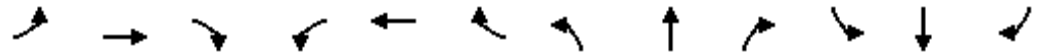
2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 243 | 631 | 314 | 202 | 493 | 133 | 163 | 476 | 89 | 250 | 916 | 137 |
| Future Volume (vph) | 243 | 631 | 314 | 202 | 493 | 133 | 163 | 476 | 89 | 250 | 916 | 137 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.950 | | | 0.968 | | | 0.976 | | | 0.981 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3250 | 0 | 1652 | 3312 | 0 | 1652 | 4798 | 0 | 1652 | 4822 | 0 |
| Flt Permitted | 0.233 | | | 0.178 | | | 0.182 | | | 0.366 | | |
| Satd. Flow (perm) | 405 | 3250 | 0 | 309 | 3312 | 0 | 316 | 4798 | 0 | 636 | 4822 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 106 | | | 42 | | | 47 | | | 34 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.89 | 0.89 | 0.89 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 251 | 651 | 324 | 227 | 554 | 149 | 177 | 517 | 97 | 263 | 964 | 144 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 251 | 975 | 0 | 227 | 703 | 0 | 177 | 614 | 0 | 263 | 1108 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | |
| Detector Phase | 7 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | | |
| Minimum Split (s) | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 28.0 | 9.0 | 28.0 | 9.0 | 28.0 | | |
| Total Split (s) | 12.0 | 28.0 | 12.0 | 28.0 | 12.0 | 28.0 | 12.0 | 28.0 | 12.0 | 28.0 | | |
| Total Split (%) | 15.0% | 35.0% | 15.0% | 35.0% | 15.0% | 35.0% | 15.0% | 35.0% | 15.0% | 35.0% | | |
| Maximum Green (s) | 8.0 | 22.0 | 8.0 | 22.0 | 8.0 | 22.0 | 8.0 | 22.0 | 8.0 | 22.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | | |
| All-Red Time (s) | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | | |
| Recall Mode | None | Max | None | Max | None | C-Max | None | C-Max | None | C-Max | | |
| Walk Time (s) | | | | | | | | | 4.0 | 4.0 | | |
| Flash Dont Walk (s) | | | | | | | | | 18.0 | 18.0 | | |
| Pedestrian Calls (#/hr) | | | | | | | | | 0 | 0 | | |
| Act Effct Green (s) | 32.5 | 22.5 | 32.5 | 22.5 | 31.5 | 22.0 | 31.5 | 22.0 | 31.5 | 22.0 | | |
| Actuated g/C Ratio | 0.41 | 0.28 | 0.41 | 0.28 | 0.39 | 0.28 | 0.39 | 0.28 | 0.39 | 0.28 | | |
| v/c Ratio | 0.87 | 0.99 | 0.88 | 0.73 | 0.71 | 0.45 | 0.76 | 0.82 | | | | |
| Control Delay | 47.0 | 54.2 | 61.6 | 29.9 | 46.0 | 24.3 | 37.9 | 32.4 | | | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay | 47.0 | 54.2 | 61.6 | 29.9 | 46.0 | 24.3 | 37.9 | 32.4 | | | | |
| LOS | D | D | E | C | D | C | D | C | | | | |
| Approach Delay | 52.8 | | | | 37.6 | | | | 29.2 | | | |
| Approach LOS | D | | | | D | | | | C | | | |
| Queue Length 50th (ft) | 64 | -245 | 70 | 158 | 64 | 95 | 83 | 183 | | | | |
| Queue Length 95th (ft) | m#150 | m#310 | #185 | 217 | #141 | 128 | #165 | 235 | | | | |
| Internal Link Dist (ft) | 546 | | | | 1487 | | | | 692 | | | |
| Turn Bay Length (ft) | 205 | | | | 200 | | | | 210 | | | |
| Base Capacity (vph) | 288 | 988 | 259 | 960 | 260 | 1353 | 356 | 1350 | | | | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Reduced v/c Ratio | 0.87 | 0.99 | 0.88 | 0.73 | 0.68 | 0.45 | 0.74 | 0.82 | | | | |

Intersection Summary

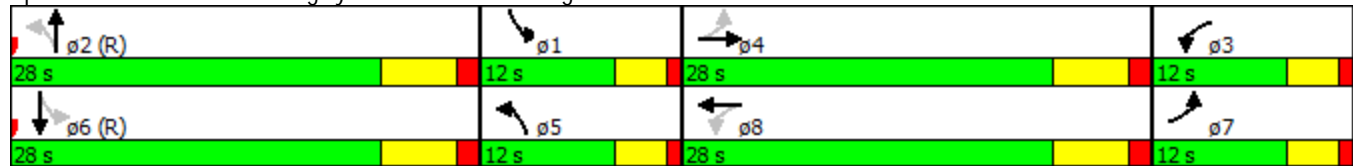
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.99
 Intersection Signal Delay: 39.1
 Intersection LOS: D
 Intersection Capacity Utilization 85.1%
 ICU Level of Service E
 Analysis Period (min) 15

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Weekday PM

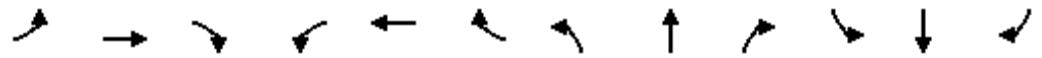
- ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 884 | 51 | 235 | 919 | 106 |
| Future Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 884 | 51 | 235 | 919 | 106 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.895 | | | 0.876 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1556 | 0 | 1711 | 1523 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.445 | | | 0.696 | | | 0.259 | | | 0.271 | | |
| Satd. Flow (perm) | 801 | 1556 | 0 | 1253 | 1523 | 0 | 450 | 4916 | 1478 | 471 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 66 | | | 159 | | | | 76 | | | 87 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.86 | 0.86 | 0.86 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 78 | 28 | 66 | 36 | 33 | 159 | 52 | 961 | 55 | 255 | 999 | 115 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 94 | 0 | 36 | 192 | 0 | 52 | 961 | 55 | 255 | 999 | 115 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2020 - Weekday PM









| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 17.0 | 17.0 | | 17.0 | 17.0 | | 10.0 | 22.0 | 22.0 | 10.0 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 12.0 | 49.0 | 49.0 | 12.0 | 49.0 | 49.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 12.0% | 49.0% | 49.0% | 12.0% | 49.0% | 49.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 8.0 | 43.0 | 43.0 | 8.0 | 43.0 | 43.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effct Green (s) | 14.1 | 14.1 | | 14.1 | 14.1 | | 71.7 | 62.2 | 62.2 | 71.9 | 62.2 | 62.2 |
| Actuated g/C Ratio | 0.14 | 0.14 | | 0.14 | 0.14 | | 0.72 | 0.62 | 0.62 | 0.72 | 0.62 | 0.62 |
| v/c Ratio | 0.70 | 0.34 | | 0.20 | 0.55 | | 0.13 | 0.31 | 0.06 | 0.59 | 0.33 | 0.12 |
| Control Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.5 | 2.6 | 0.4 | 18.9 | 4.2 | 1.0 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.5 | 2.6 | 0.4 | 18.9 | 4.2 | 1.0 |
| LOS | E | B | | D | B | | A | A | A | B | A | A |
| Approach Delay | | 41.6 | | | 19.3 | | | 2.5 | | | 6.7 | |
| Approach LOS | | D | | | B | | | A | | | A | |
| Queue Length 50th (ft) | 48 | 16 | | 21 | 19 | | 3 | 33 | 0 | 43 | 47 | 1 |
| Queue Length 95th (ft) | 94 | 58 | | 45 | 71 | | m9 | 51 | m1 | m137 | 69 | m6 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 264 | 557 | | 413 | 609 | | 421 | 3057 | 947 | 434 | 3057 | 952 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.30 | 0.17 | | 0.09 | 0.32 | | 0.12 | 0.31 | 0.06 | 0.59 | 0.33 | 0.12 |

Intersection Summary

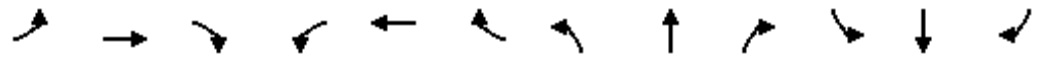
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 17 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 8.2 Intersection LOS: A
 Intersection Capacity Utilization 66.7% ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail

| | | |
|--|--|---|
|  ø2 (R) |  ø1 |  ø4 |
| 49 s | 12 s | 39 s |
|  ø6 (R) |  ø5 |  ø8 |
| 49 s | 12 s | 39 s |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 58 | 939 | 244 | 147 | 485 | 219 | 227 | 882 | 126 | 329 | 914 | 56 |
| Future Volume (vph) | 58 | 939 | 244 | 147 | 485 | 219 | 227 | 882 | 126 | 329 | 914 | 56 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.953 | | | 0.981 | | | 0.991 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4685 | 0 | 1711 | 4822 | 0 | 1711 | 4872 | 0 |
| Fl _t Permitted | 0.217 | | | 0.182 | | | 0.188 | | | 0.135 | | |
| Satd. Flow (perm) | 391 | 4916 | 1531 | 328 | 4685 | 0 | 339 | 4822 | 0 | 243 | 4872 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 236 | | 105 | | | 28 | | | 10 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2550 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 38.6 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 60 | 968 | 252 | 160 | 527 | 238 | 261 | 1014 | 145 | 339 | 942 | 58 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 60 | 968 | 252 | 160 | 765 | 0 | 261 | 1159 | 0 | 339 | 1000 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2020 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | | 7.0 | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | | 11.0 | 16.0 | | 11.0 | 16.0 | |
| Total Split (s) | 12.0 | 28.0 | 28.0 | 12.0 | 28.0 | | 20.0 | 40.0 | | 20.0 | 40.0 | |
| Total Split (%) | 12.0% | 28.0% | 28.0% | 12.0% | 28.0% | | 20.0% | 40.0% | | 20.0% | 40.0% | |
| Maximum Green (s) | 8.0 | 22.0 | 22.0 | 8.0 | 22.0 | | 16.0 | 34.0 | | 16.0 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 31.8 | 22.0 | 22.0 | 31.8 | 22.0 | | 52.2 | 34.2 | | 52.2 | 34.2 | |
| Actuated g/C Ratio | 0.32 | 0.22 | 0.22 | 0.32 | 0.22 | | 0.52 | 0.34 | | 0.52 | 0.34 | |
| v/c Ratio | 0.26 | 0.90 | 0.48 | 0.75 | 0.69 | | 0.66 | 0.70 | | 0.94 | 0.60 | |
| Control Delay | 20.1 | 38.1 | 5.7 | 58.9 | 34.4 | | 37.6 | 38.8 | | 69.2 | 28.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 20.1 | 38.1 | 5.7 | 58.9 | 34.4 | | 37.6 | 38.8 | | 69.2 | 28.8 | |
| LOS | C | D | A | E | C | | D | D | | E | C | |
| Approach Delay | | 30.9 | | | 38.7 | | | 38.6 | | | 39.0 | |
| Approach LOS | | C | | | D | | | D | | | D | |
| Queue Length 50th (ft) | 22 | 229 | 39 | 71 | 142 | | 90 | 266 | | 153 | 190 | |
| Queue Length 95th (ft) | m25 | #278 | 14 | #153 | 187 | | 139 | 261 | | #327 | 235 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2470 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 230 | 1081 | 520 | 215 | 1112 | | 396 | 1667 | | 361 | 1673 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.26 | 0.90 | 0.48 | 0.74 | 0.69 | | 0.66 | 0.70 | | 0.94 | 0.60 | |

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 48 (48%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 36.7

Intersection LOS: D

Intersection Capacity Utilization 81.0%

ICU Level of Service D









Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1307: Higley Road & Germann Road

| | | | |
|---|---|---|---|
|  ø2 (R) |  ø1 |  ø4 |  ø3 |
| 40 s | 20 s | 28 s | 12 s |
|  ø6 (R) |  ø5 |  ø8 |  ø7 |
| 40 s | 20 s | 28 s | 12 s |

Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

2020 - Weekday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 32 | 378 | 1174 | 48 | 463 | 1404 |
| Future Volume (vph) | 32 | 378 | 1174 | 48 | 463 | 1404 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3506 | | | 1834 |
| Travel Time (s) | 20.8 | | 53.1 | | | 27.8 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.97 | 0.97 | 0.92 | 0.92 | 0.91 | 0.91 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 67

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 32 | 378 | 1174 | 48 | 463 | 1404 |
| Future Vol, veh/h | 32 | 378 | 1174 | 48 | 463 | 1404 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 97 | 97 | 92 | 92 | 91 | 91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 390 | 1276 | 52 | 509 | 1543 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|----------------------|--------|-------|--------|---|--------|---|
| Conflicting Flow All | 2911 | 638 | 0 | 0 | 1276 | 0 |
| Stage 1 | 1276 | - | - | - | - | - |
| Stage 2 | 1635 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | ~ 29 | ~ 359 | - | - | ~ 287 | - |
| Stage 1 | 163 | - | - | - | - | - |
| Stage 2 | 128 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | ~ 29 | ~ 359 | - | - | ~ 287 | - |
| Mov Cap-2 Maneuver | ~ 29 | - | - | - | - | - |
| Stage 1 | 163 | - | - | - | - | - |
| Stage 2 | 128 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-------|----|------|
| HCM Control Delay, s | 130.8 | 0 | 97.2 |
| HCM LOS | F | | |

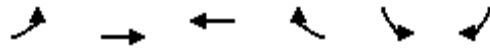
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|----------|-------|--------|-----|
| Capacity (veh/h) | - | - | 29 | 359 | ~ 287 | - |
| HCM Lane V/C Ratio | - | - | 1.138 | 1.085 | 1.773 | - |
| HCM Control Delay (s) | - | - | \$ 414.1 | 106.8 | \$ 392 | - |
| HCM Lane LOS | - | - | F | F | F | - |
| HCM 95th %tile Q(veh) | - | - | 3.8 | 14.2 | 33.4 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2020 - Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↷↷ | ↷↷ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 50 | 1334 | 745 | 12 | 8 | 36 |
| Future Volume (vph) | 50 | 1334 | 745 | 12 | 8 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 30 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 8.1 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.89 | 0.89 | 0.85 | 0.85 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 0.7

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 50 | 1334 | 745 | 12 | 8 | 36 |
| Future Vol, veh/h | 50 | 1334 | 745 | 12 | 8 | 36 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 89 | 89 | 85 | 85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 1390 | 837 | 13 | 9 | 42 |

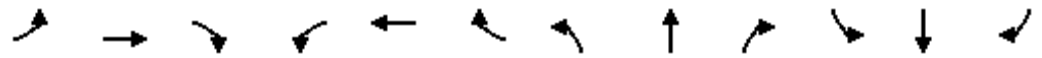
| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 837 | 0 | 1636 |
| Stage 1 | - | - | 837 |
| Stage 2 | - | - | 799 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 793 | - | 92 |
| Stage 1 | - | - | 385 |
| Stage 2 | - | - | 403 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 793 | - | 86 |
| Mov Cap-2 Maneuver | - | - | 86 |
| Stage 1 | - | - | 385 |
| Stage 2 | - | - | 377 |

| Approach | EB | WB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 0.4 | 0 | 19 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 793 | - | - | - | 86 | 583 |
| HCM Lane V/C Ratio | 0.066 | - | - | - | 0.109 | 0.073 |
| HCM Control Delay (s) | 9.9 | - | - | - | 51.9 | 11.7 |
| HCM Lane LOS | A | - | - | - | F | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.4 | 0.2 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 49 | 23 | 47 | 16 | 25 | 41 | 34 | 233 | 23 | 37 | 277 | 31 |
| Future Volume (vph) | 49 | 23 | 47 | 16 | 25 | 41 | 34 | 233 | 23 | 37 | 277 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.899 | | | | 0.850 | | 0.987 | | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1675 | 0 | 1770 | 1863 | 1583 | 1770 | 3493 | 0 | 1770 | 3486 | 0 |
| Flt Permitted | 0.741 | | | 0.741 | | | 0.546 | | | 0.581 | | |
| Satd. Flow (perm) | 1380 | 1675 | 0 | 1380 | 1863 | 1583 | 1017 | 3493 | 0 | 1082 | 3486 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 60 | | | | 71 | | 14 | | | 16 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.78 | 0.78 | 0.78 | 0.82 | 0.82 | 0.82 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 63 | 29 | 60 | 20 | 30 | 50 | 37 | 253 | 25 | 41 | 308 | 34 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 63 | 89 | 0 | 20 | 30 | 50 | 37 | 278 | 0 | 41 | 342 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 13 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 8.5 | 30.0 | | 8.5 | 30.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | | 29.0 | 29.0 | 29.0 | 8.5 | 47.0 | | 8.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 0.5 | 1.5 | | 0.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | None | None | None | None | Min | | None | Min | |
| Walk Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | 5.0 | |
| Flash Dont Walk (s) | 11.0 | 11.0 | | 11.0 | 11.0 | 11.0 | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | | 0 | | | 0 | |
| Act Effect Green (s) | 10.7 | 10.7 | | 10.7 | 10.7 | 10.7 | 20.5 | 18.0 | | 20.5 | 18.0 | |
| Actuated g/C Ratio | 0.34 | 0.34 | | 0.34 | 0.34 | 0.34 | 0.66 | 0.58 | | 0.66 | 0.58 | |
| v/c Ratio | 0.13 | 0.14 | | 0.04 | 0.05 | 0.08 | 0.05 | 0.14 | | 0.05 | 0.17 | |
| Control Delay | 10.9 | 6.3 | | 10.7 | 10.4 | 3.5 | 3.6 | 8.2 | | 3.6 | 8.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 10.9 | 6.3 | | 10.7 | 10.4 | 3.5 | 3.6 | 8.2 | | 3.6 | 8.2 | |
| LOS | B | A | | B | B | A | A | A | | A | A | |
| Approach Delay | | 8.2 | | | 7.0 | | | 7.7 | | | 7.7 | |
| Approach LOS | | A | | | A | | | A | | | A | |
| Queue Length 50th (ft) | 7 | 3 | | 2 | 3 | 0 | 1 | 16 | | 1 | 21 | |
| Queue Length 95th (ft) | 29 | 24 | | 14 | 18 | 11 | 12 | 48 | | 13 | 59 | |
| Internal Link Dist (ft) | | 5241 | | | 397 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 1224 | 1492 | | 1224 | 1652 | 1412 | 939 | 3493 | | 966 | 3486 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.05 | 0.06 | | 0.02 | 0.02 | 0.04 | 0.04 | 0.08 | | 0.04 | 0.10 | |

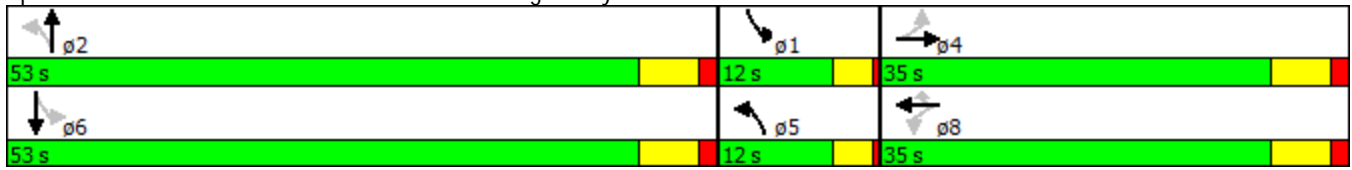
Intersection Summary

| | |
|------------------------------------|------------------------|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 31.2 |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Uncoordinated |
| Maximum v/c Ratio: | 0.17 |
| Intersection Signal Delay: | 7.7 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 40.0% |
| ICU Level of Service: | A |
| Analysis Period (min): | 15 |

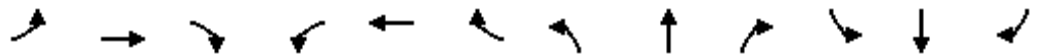
Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Saturday MIDDAY

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road



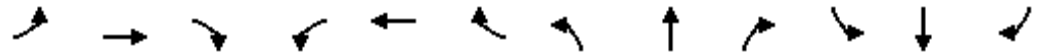
1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 60 | 559 | 76 | 56 | 670 | 175 | 75 | 319 | 77 | 175 | 253 | 45 |
| Future Volume (vph) | 60 | 559 | 76 | 56 | 670 | 175 | 75 | 319 | 77 | 175 | 253 | 45 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frnt | | 0.982 | | | 0.969 | | | 0.971 | | | 0.977 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3360 | 0 | 1888 | 3315 | 0 | 1888 | 3322 | 0 | 1652 | 3343 | 0 |
| Flt Permitted | 0.222 | | | 0.338 | | | 0.463 | | | 0.340 | | |
| Satd. Flow (perm) | 386 | 3360 | 0 | 672 | 3315 | 0 | 920 | 3322 | 0 | 591 | 3343 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 35 | | | 30 | | | 20 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 64 | 595 | 81 | 62 | 736 | 192 | 83 | 354 | 86 | 199 | 288 | 51 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 64 | 676 | 0 | 62 | 928 | 0 | 83 | 440 | 0 | 199 | 339 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | 13 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

2020 - Saturday MIDDAY











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|------|-------|-------|-----|-------|-----|
| Permitted Phases | 4 | | 8 | | | | 2 | | 6 | | | |
| Detector Phase | 7 | 4 | 3 | | 8 | 5 | | 2 | 1 | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | | 10.0 | 5.0 | | 10.0 | 5.0 | | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | 9.0 | | 16.0 | 9.0 | | 16.0 | 9.0 | | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | 14.0 | | 39.0 | 12.0 | | 35.0 | 12.0 | | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | 14.0% | | 39.0% | 12.0% | | 35.0% | 12.0% | | 35.0% | |
| Maximum Green (s) | 10.0 | 33.0 | 10.0 | | 33.0 | 8.0 | | 29.0 | 8.0 | | 29.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | | 4.5 | 3.0 | | 4.5 | 3.0 | | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.0 | | 1.5 | 1.0 | | 1.5 | 1.0 | | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 4.0 | | 6.0 | 4.0 | | 6.0 | 4.0 | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | | 4.0 | 3.0 | | 4.0 | 3.0 | | 4.0 | |
| Recall Mode | None | C-Max | None | | C-Max | None | | None | None | | None | |
| Act Effct Green (s) | 56.7 | 48.6 | 56.7 | | 48.6 | 29.2 | | 18.9 | 29.2 | | 18.9 | |
| Actuated g/C Ratio | 0.57 | 0.49 | 0.57 | | 0.49 | 0.29 | | 0.19 | 0.29 | | 0.19 | |
| v/c Ratio | 0.22 | 0.41 | 0.14 | | 0.57 | 0.24 | | 0.67 | 0.77 | | 0.52 | |
| Control Delay | 8.4 | 7.2 | 5.7 | | 8.4 | 24.6 | | 40.0 | 54.1 | | 31.0 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | |
| Total Delay | 8.4 | 7.2 | 5.7 | | 8.4 | 24.6 | | 40.0 | 54.1 | | 31.0 | |
| LOS | A | A | A | | A | C | | D | D | | C | |
| Approach Delay | 7.3 | | 8.2 | | | | 37.5 | | 39.5 | | | |
| Approach LOS | A | | A | | | | D | | D | | | |
| Queue Length 50th (ft) | 5 | 32 | 6 | | 56 | 37 | | 129 | 116 | | 105 | |
| Queue Length 95th (ft) | 21 | 58 | m16 | | 206 | 62 | | 170 | 163 | | 140 | |
| Internal Link Dist (ft) | 400 | | 115 | | | | 607 | | 560 | | | |
| Turn Bay Length (ft) | 175 | | 210 | | | | 200 | | 170 | | | |
| Base Capacity (vph) | 360 | 1642 | 529 | | 1630 | 362 | | 984 | 272 | | 983 | |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Reduced v/c Ratio | 0.18 | 0.41 | 0.12 | | 0.57 | 0.23 | | 0.45 | 0.73 | | 0.34 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.5
 Intersection LOS: B
 Intersection Capacity Utilization 65.9%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

























1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

| | | | |
|--|--|--|--|
|  $\phi 2$ |  $\phi 1$ |  $\phi 4 (R)$ |  $\phi 3$ |
| 35 s | 12 s | 39 s | 14 s |
|  $\phi 6$ |  $\phi 5$ |  $\phi 8 (R)$ |  $\phi 7$ |
| 35 s | 12 s | 39 s | 14 s |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 74 | 401 | 311 | 106 | 459 | 188 | 276 | 689 | 98 | 184 | 723 | 69 |
| Future Volume (vph) | 74 | 401 | 311 | 106 | 459 | 188 | 276 | 689 | 98 | 184 | 723 | 69 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Flt Permitted | 0.329 | | | 0.373 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 572 | 3421 | 1478 | 648 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 334 | | | 152 | | | 142 | | | 15 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.97 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 80 | 431 | 334 | 109 | 473 | 194 | 297 | 741 | 105 | 198 | 777 | 74 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 80 | 431 | 334 | 109 | 473 | 194 | 297 | 741 | 105 | 198 | 851 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 21.0 | 32.0 | 32.0 | 21.0 | 32.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 21.0% | 32.0% | 32.0% | 21.0% | 32.0% | |
| Maximum Green (s) | 11.0 | 26.0 | 26.0 | 11.0 | 26.0 | 26.0 | 15.0 | 26.0 | 26.0 | 15.0 | 26.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 30.1 | 21.1 | 21.1 | 30.1 | 21.1 | 21.1 | 14.4 | 35.5 | 35.5 | 14.4 | 35.5 | |
| Actuated g/C Ratio | 0.30 | 0.21 | 0.21 | 0.30 | 0.21 | 0.21 | 0.14 | 0.36 | 0.36 | 0.14 | 0.36 | |
| v/c Ratio | 0.32 | 0.60 | 0.58 | 0.41 | 0.65 | 0.45 | 0.64 | 0.43 | 0.17 | 0.43 | 0.49 | |
| Control Delay | 38.4 | 45.4 | 16.1 | 30.7 | 40.1 | 12.2 | 42.2 | 22.4 | 1.8 | 39.9 | 17.6 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 38.4 | 45.4 | 16.1 | 30.7 | 40.1 | 12.2 | 42.2 | 22.4 | 1.8 | 39.9 | 17.6 | |
| LOS | D | D | B | C | D | B | D | C | A | D | B | |
| Approach Delay | | 33.2 | | | 31.8 | | | 25.7 | | | 21.8 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 37 | 134 | 68 | 48 | 145 | 22 | 93 | 94 | 0 | 63 | 71 | |
| Queue Length 95th (ft) | m67 | 180 | m136 | 82 | 187 | 79 | 137 | 127 | 11 | 95 | 94 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 313 | 889 | 631 | 331 | 889 | 496 | 480 | 1743 | 634 | 480 | 1730 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.26 | 0.48 | 0.53 | 0.33 | 0.53 | 0.39 | 0.62 | 0.43 | 0.17 | 0.41 | 0.49 | |

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 27.5

Intersection LOS: C

Intersection Capacity Utilization 60.2%

ICU Level of Service B

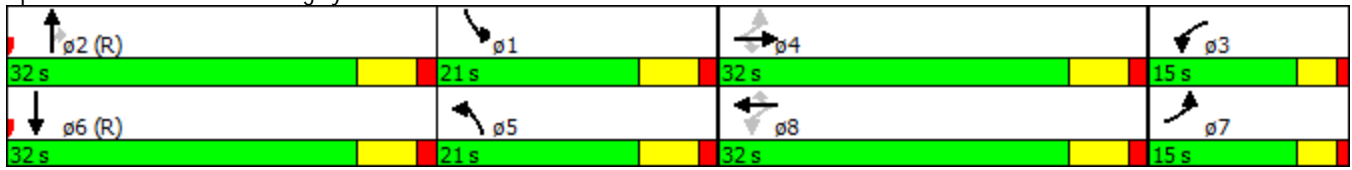
Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

























2020 - Saturday MIDDAY

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2020 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 28 | 1 | 3 | 38 | 2 | 63 | 5 | 1013 | 107 | 100 | 719 | 25 |
| Future Volume (vph) | 28 | 1 | 3 | 38 | 2 | 63 | 5 | 1013 | 107 | 100 | 719 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.986 | | | 0.995 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3373 | 0 | 1711 | 4891 | 0 |
| Fl _t Permitted | 0.757 | | | 0.757 | | | 0.320 | | | 0.208 | | |
| Satd. Flow (perm) | 1457 | 3421 | 1531 | 1410 | 1801 | 1478 | 676 | 3373 | 0 | 375 | 4891 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 15 | | | 7 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.73 | 0.73 | 0.73 | 0.85 | 0.85 | 0.85 | 0.96 | 0.96 | 0.96 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 38 | 1 | 4 | 45 | 2 | 74 | 5 | 1055 | 111 | 114 | 817 | 28 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 38 | 1 | 4 | 45 | 2 | 74 | 5 | 1166 | 0 | 114 | 845 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2020 - Saturday MIDDAY

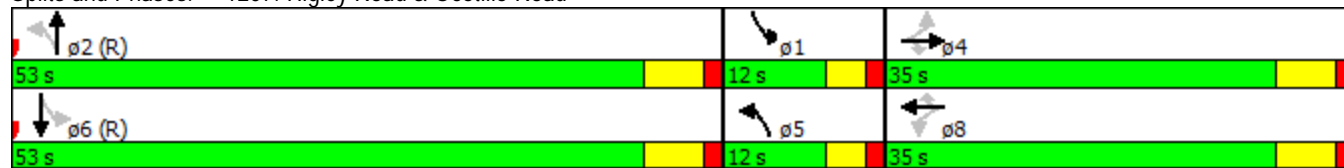


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 7.5 | 47.0 | | 7.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | | | | | | | | | | | | 5.0 |
| Flash Dont Walk (s) | | | | | | | | | | | | 11.0 |
| Pedestrian Calls (#/hr) | | | | | | | | | | | | 0 |
| Act Effct Green (s) | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 77.5 | 70.5 | | 77.8 | 70.5 | |
| Actuated g/C Ratio | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.78 | 0.70 | | 0.78 | 0.70 | |
| v/c Ratio | 0.25 | 0.00 | 0.02 | 0.31 | 0.01 | 0.33 | 0.01 | 0.49 | | 0.31 | 0.24 | |
| Control Delay | 45.3 | 39.0 | 0.0 | 47.0 | 39.5 | 12.2 | 2.6 | 8.3 | | 4.3 | 8.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 45.3 | 39.0 | 0.0 | 47.0 | 39.5 | 12.2 | 2.6 | 8.3 | | 4.3 | 8.2 | |
| LOS | D | D | A | D | D | B | A | A | | A | A | |
| Approach Delay | | 41.0 | | | 25.6 | | | 8.3 | | | 7.7 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 23 | 0 | 0 | 27 | 1 | 0 | 1 | 163 | | 7 | 56 | |
| Queue Length 95th (ft) | 43 | 2 | 0 | 57 | 8 | 31 | 3 | 245 | | 10 | 117 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 422 | 992 | 502 | 408 | 522 | 486 | 637 | 2383 | | 398 | 3450 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.09 | 0.00 | 0.01 | 0.11 | 0.00 | 0.15 | 0.01 | 0.49 | | 0.29 | 0.24 | |

Intersection Summary

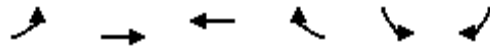
| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.49 |
| Intersection Signal Delay: | 9.6 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 63.1% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

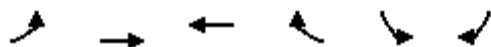
2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 40 | 428 | 491 | 312 | 254 | 34 |
| Future Volume (vph) | 40 | 428 | 491 | 312 | 254 | 34 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.942 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3334 | 0 | 1770 | 1583 |
| Flt Permitted | 0.227 | | | | 0.950 | |
| Satd. Flow (perm) | 423 | 3539 | 3334 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 217 | | | 41 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.89 | 0.89 | 0.82 | 0.82 |
| Adj. Flow (vph) | 42 | 451 | 552 | 351 | 310 | 41 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 42 | 451 | 903 | 0 | 310 | 41 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2020 - Saturday MIDDAY



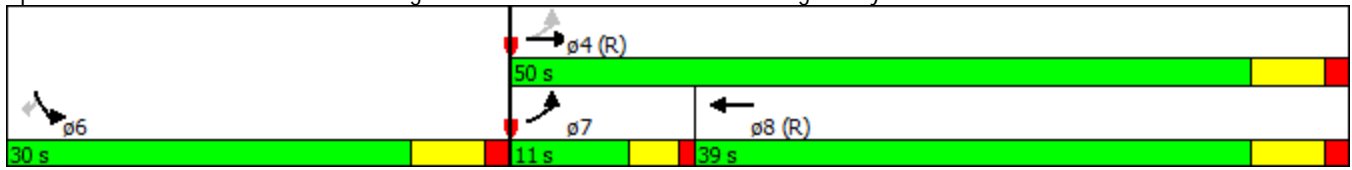
| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Maximum Green (s) | 7.0 | 44.0 | 33.0 | | 24.0 | 24.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | | 0 | | 0 | 0 |
| Act Effct Green (s) | 49.9 | 47.9 | 41.5 | | 20.1 | 20.1 |
| Actuated g/C Ratio | 0.62 | 0.60 | 0.52 | | 0.25 | 0.25 |
| v/c Ratio | 0.11 | 0.21 | 0.49 | | 0.70 | 0.10 |
| Control Delay | 7.5 | 8.0 | 7.5 | | 35.6 | 7.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 7.5 | 8.0 | 7.5 | | 35.6 | 7.7 |
| LOS | A | A | A | | D | A |
| Approach Delay | | 8.0 | 7.5 | | 32.3 | |
| Approach LOS | | A | A | | C | |
| Queue Length 50th (ft) | 9 | 54 | 90 | | 139 | 0 |
| Queue Length 95th (ft) | 21 | 77 | 128 | | 187 | 18 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 381 | 2119 | 1835 | | 531 | 503 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.11 | 0.21 | 0.49 | | 0.58 | 0.08 |

Intersection Summary

| | |
|------------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.70 |
| Intersection Signal Delay: | 12.6 |
| Intersection LOS: | B |
| Intersection Capacity Utilization: | 55.1% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

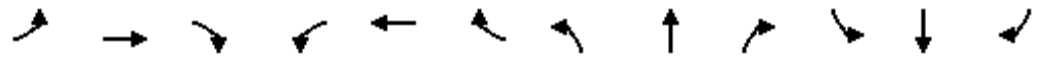
1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

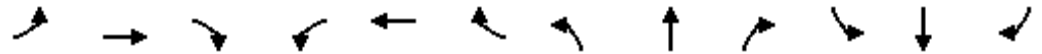
2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 226 | 379 | 143 | 166 | 352 | 136 | 151 | 453 | 71 | 187 | 613 | 125 |
| Future Volume (vph) | 226 | 379 | 143 | 166 | 352 | 136 | 151 | 453 | 71 | 187 | 613 | 125 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| FrT | | 0.959 | | | 0.958 | | | 0.980 | | | 0.975 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3281 | 0 | 1652 | 3278 | 0 | 1652 | 4817 | 0 | 1652 | 4793 | 0 |
| Flt Permitted | 0.373 | | | 0.349 | | | 0.280 | | | 0.386 | | |
| Satd. Flow (perm) | 648 | 3281 | 0 | 607 | 3278 | 0 | 487 | 4817 | 0 | 671 | 4793 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 70 | | | 73 | | | 38 | | | 55 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 243 | 408 | 154 | 180 | 383 | 148 | 172 | 515 | 81 | 197 | 645 | 132 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 243 | 562 | 0 | 180 | 531 | 0 | 172 | 596 | 0 | 197 | 777 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | |
| Detector Phase | 7 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | | |
| Minimum Split (s) | 9.5 | 16.0 | 9.5 | 16.0 | 9.5 | 28.0 | 9.5 | 28.0 | 9.5 | 28.0 | | |
| Total Split (s) | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | | |
| Total Split (%) | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | | |
| Maximum Green (s) | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | | |
| Recall Mode | None | Max | None | Max | None | C-Max | None | C-Max | None | C-Max | | |
| Walk Time (s) | | | | | | | | | 4.0 | 4.0 | | |
| Flash Dont Walk (s) | | | | | | | | | 18.0 | 18.0 | | |
| Pedestrian Calls (#/hr) | | | | | | | | | 0 | 0 | | |
| Act Effct Green (s) | 31.0 | 24.0 | 31.0 | 24.0 | 31.0 | 24.0 | 31.0 | 24.0 | 31.0 | 24.0 | | |
| Actuated g/C Ratio | 0.39 | 0.30 | 0.39 | 0.30 | 0.39 | 0.30 | 0.39 | 0.30 | 0.39 | 0.30 | | |
| v/c Ratio | 0.76 | 0.54 | 0.59 | 0.51 | 0.64 | 0.41 | 0.60 | 0.53 | | | | |
| Control Delay | 46.5 | 25.5 | 27.8 | 21.9 | 34.6 | 22.7 | 27.6 | 23.1 | | | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay | 46.5 | 25.5 | 27.8 | 21.9 | 34.6 | 22.7 | 27.6 | 23.1 | | | | |
| LOS | D | C | C | C | C | C | C | C | | | | |
| Approach Delay | 31.8 | | 23.4 | | 25.4 | | 24.0 | | | | | |
| Approach LOS | C | | C | | C | | C | | | | | |
| Queue Length 50th (ft) | 96 | 122 | 54 | 97 | 53 | 83 | 60 | 108 | | | | |
| Queue Length 95th (ft) | #213 | 179 | 96 | 145 | #105 | 113 | 105 | 146 | | | | |
| Internal Link Dist (ft) | 546 | | 1487 | | 692 | | 712 | | | | | |
| Turn Bay Length (ft) | 205 | | 200 | | 210 | | 210 | | | | | |
| Base Capacity (vph) | 320 | 1033 | 307 | 1034 | 268 | 1471 | 327 | 1476 | | | | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Reduced v/c Ratio | 0.76 | 0.54 | 0.59 | 0.51 | 0.64 | 0.41 | 0.60 | 0.53 | | | | |

Intersection Summary

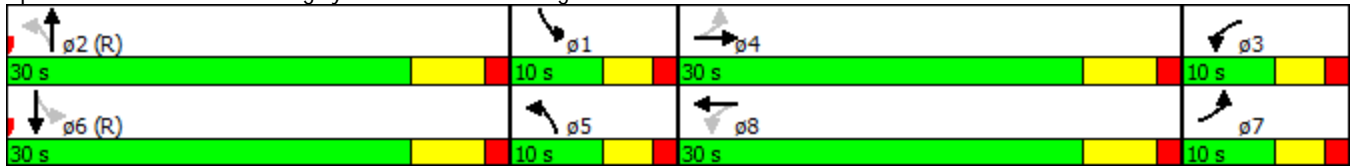
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 26.1 Intersection LOS: C
 Intersection Capacity Utilization 67.1% ICU Level of Service C
 Analysis Period (min) 15

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Saturday MIDDAY

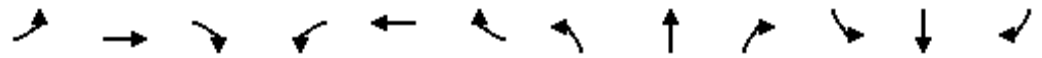
95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 910 | 25 | 96 | 683 | 108 |
| Future Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 910 | 25 | 96 | 683 | 108 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.890 | | | 0.862 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1547 | 0 | 1711 | 1499 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.552 | | | 0.725 | | | 0.375 | | | 0.277 | | |
| Satd. Flow (perm) | 994 | 1547 | 0 | 1305 | 1499 | 0 | 652 | 4916 | 1478 | 482 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 36 | | | 141 | | | | 82 | | | 110 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.93 | 0.93 | 0.93 | 0.95 | 0.95 | 0.95 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 78 | 13 | 36 | 23 | 12 | 141 | 17 | 958 | 26 | 98 | 697 | 110 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 49 | 0 | 23 | 153 | 0 | 17 | 958 | 26 | 98 | 697 | 110 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2020 - Saturday MIDDAY



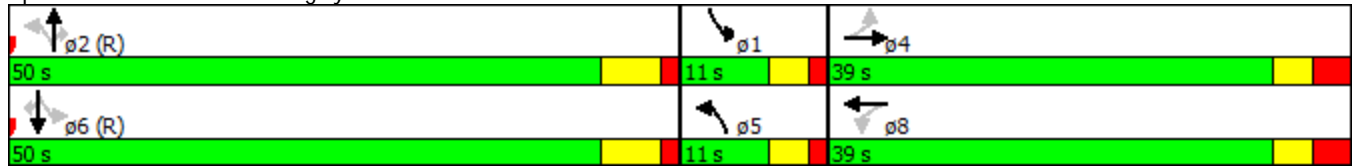
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 6.5 | 44.0 | 44.0 | 6.5 | 44.0 | 44.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | | 12.0 | 12.0 | | 12.0 | 12.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 12.8 | 12.8 | | 12.8 | 12.8 | | 74.3 | 66.8 | 66.8 | 74.3 | 66.8 | 66.8 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.74 | 0.67 | 0.67 | 0.74 | 0.67 | 0.67 |
| v/c Ratio | 0.61 | 0.21 | | 0.14 | 0.49 | | 0.03 | 0.29 | 0.03 | 0.23 | 0.21 | 0.11 |
| Control Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.1 | 2.6 | 0.0 | 13.4 | 10.3 | 5.5 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.1 | 2.6 | 0.0 | 13.4 | 10.3 | 5.5 |
| LOS | E | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 44.7 | | | 16.9 | | | 2.5 | | | 10.0 | |
| Approach LOS | | D | | | B | | | A | | | B | |
| Queue Length 50th (ft) | 48 | 7 | | 13 | 7 | | 1 | 17 | 0 | 36 | 119 | 25 |
| Queue Length 95th (ft) | 84 | 34 | | 35 | 61 | | m2 | 50 | m0 | 78 | 159 | 69 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 328 | 534 | | 430 | 589 | | 552 | 3281 | 1013 | 436 | 3281 | 1023 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.24 | 0.09 | | 0.05 | 0.26 | | 0.03 | 0.29 | 0.03 | 0.22 | 0.21 | 0.11 |

Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 50 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.61 |
| Intersection Signal Delay: | 9.2 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 58.7% |
| ICU Level of Service: | B |
| Analysis Period (min): | 15 |

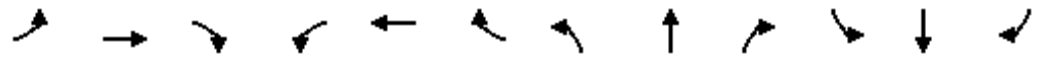
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | ↙ | ↑↑↑ | ↗ | ↙ | ↑↑↑ | | ↙ | ↑↑↑ | | ↙ | ↑↑↑ | |
| Traffic Volume (vph) | 58 | 556 | 172 | 86 | 563 | 203 | 230 | 870 | 94 | 193 | 656 | 57 |
| Future Volume (vph) | 58 | 556 | 172 | 86 | 563 | 203 | 230 | 870 | 94 | 193 | 656 | 57 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.960 | | | 0.985 | | | 0.988 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4719 | 0 | 1711 | 4842 | 0 | 1711 | 4857 | 0 |
| Fl _t Permitted | 0.192 | | | 0.298 | | | 0.290 | | | 0.178 | | |
| Satd. Flow (perm) | 346 | 4916 | 1531 | 537 | 4719 | 0 | 522 | 4842 | 0 | 321 | 4857 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 205 | | 87 | | | 20 | | | 15 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 69 | 662 | 205 | 96 | 626 | 226 | 256 | 967 | 104 | 212 | 721 | 63 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 69 | 662 | 205 | 96 | 852 | 0 | 256 | 1071 | 0 | 212 | 784 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Maximum Green (s) | 6.5 | 25.0 | 25.0 | 6.5 | 25.0 | | 13.5 | 34.0 | | 13.5 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 31.9 | 24.6 | 24.6 | 31.9 | 24.6 | | 52.1 | 38.6 | | 52.1 | 38.6 | |
| Actuated g/C Ratio | 0.32 | 0.25 | 0.25 | 0.32 | 0.25 | | 0.52 | 0.39 | | 0.52 | 0.39 | |
| v/c Ratio | 0.37 | 0.55 | 0.39 | 0.40 | 0.69 | | 0.62 | 0.57 | | 0.64 | 0.42 | |
| Control Delay | 28.7 | 39.8 | 13.9 | 31.0 | 33.9 | | 30.9 | 28.2 | | 35.5 | 24.0 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 28.7 | 39.8 | 13.9 | 31.0 | 33.9 | | 30.9 | 28.2 | | 35.5 | 24.0 | |
| LOS | C | D | B | C | C | | C | C | | D | C | |
| Approach Delay | | 33.3 | | | 33.6 | | | 28.7 | | | 26.5 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 21 | 115 | 3 | 39 | 157 | | 122 | 239 | | 70 | 141 | |
| Queue Length 95th (ft) | 55 | 179 | 87 | 76 | 209 | | 165 | 273 | | 111 | 178 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 201 | 1251 | 542 | 251 | 1265 | | 440 | 1890 | | 359 | 1892 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.34 | 0.53 | 0.38 | 0.38 | 0.67 | | 0.58 | 0.57 | | 0.59 | 0.41 | |

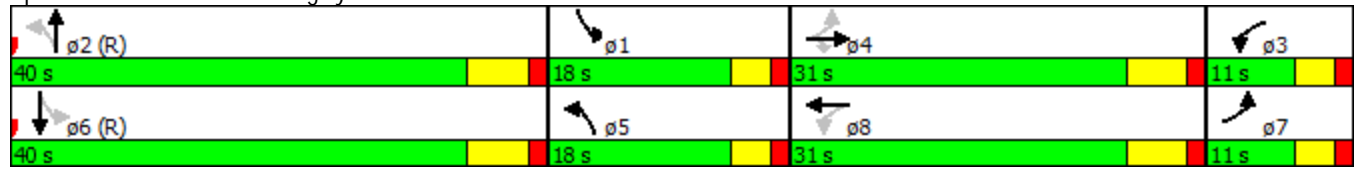
Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.69 |
| Intersection Signal Delay: | 30.3 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 66.7% |
| ICU Level of Service: | C |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2020 - Saturday MIDDAY

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

2020 - Saturday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 30 | 338 | 1080 | 42 | 330 | 980 |
| Future Volume (vph) | 30 | 338 | 1080 | 42 | 330 | 980 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 21.5

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 30 | 338 | 1080 | 42 | 330 | 980 |
| Future Vol, veh/h | 30 | 338 | 1080 | 42 | 330 | 980 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 367 | 1174 | 46 | 344 | 1021 |

| Major/Minor | Minor1 | Minor2 | Major1 | Major2 | Major3 | Major4 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 2270 | 587 | 0 | 0 | 1174 | 0 |
| Stage 1 | 1174 | - | - | - | - | - |
| Stage 2 | 1096 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 67 | 388 | - | - | ~ 322 | - |
| Stage 1 | 189 | - | - | - | - | - |
| Stage 2 | 253 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | |
| Mov Cap-1 Maneuver | 67 | 388 | - | - | ~ 322 | - |
| Mov Cap-2 Maneuver | 67 | - | - | - | - | - |
| Stage 1 | 189 | - | - | - | - | - |
| Stage 2 | 253 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|------|
| HCM Control Delay, s | 69.2 | 0 | 26.8 |
| HCM LOS | F | | |

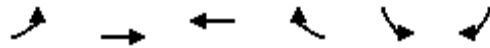
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 67 | 388 | ~ 322 | - |
| HCM Lane V/C Ratio | - | - | 0.487 | 0.947 | 1.068 | - |
| HCM Control Delay (s) | - | - | 101.7 | 66.3 | 106.2 | - |
| HCM Lane LOS | - | - | F | F | F | - |
| HCM 95th %tile Q(veh) | - | - | 2 | 10.5 | 12.8 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2020 - Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 74 | 648 | 723 | 24 | 19 | 54 |
| Future Volume (vph) | 74 | 648 | 723 | 24 | 19 | 54 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.95 | 0.95 | 0.76 | 0.76 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |
| Intersection Summary | | | | | | |
| Area Type: | Other | | | | | |

Intersection

Int Delay, s/veh 1.5

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 74 | 648 | 723 | 24 | 19 | 54 |
| Future Vol, veh/h | 74 | 648 | 723 | 24 | 19 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 91 | 91 | 95 | 95 | 76 | 76 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 81 | 712 | 761 | 25 | 25 | 71 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 761 | 0 | 1280 |
| Stage 1 | - | - | 761 |
| Stage 2 | - | - | 519 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 847 | - | 617 |
| Stage 1 | - | - | 422 |
| Stage 2 | - | - | 562 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 847 | - | 617 |
| Mov Cap-2 Maneuver | - | - | 143 |
| Stage 1 | - | - | 422 |
| Stage 2 | - | - | 508 |

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 1 | 0 | 17.8 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 847 | - | - | - | 143 | 617 |
| HCM Lane V/C Ratio | 0.096 | - | - | - | 0.175 | 0.115 |
| HCM Control Delay (s) | 9.7 | - | - | - | 35.4 | 11.6 |
| HCM Lane LOS | A | - | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.6 | 0.4 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 39 | 29 | 34 | 27 | 24 | 44 | 37 | 210 | 32 | 47 | 368 | 16 |
| Future Volume (vph) | 39 | 29 | 34 | 27 | 24 | 44 | 37 | 210 | 32 | 47 | 368 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.919 | | | | 0.850 | | 0.980 | | | 0.994 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1712 | 0 | 1770 | 1863 | 1583 | 1770 | 3468 | 0 | 1770 | 3518 | 0 |
| Flt Permitted | 0.739 | | | 0.713 | | | 0.463 | | | 0.577 | | |
| Satd. Flow (perm) | 1377 | 1712 | 0 | 1328 | 1863 | 1583 | 862 | 3468 | 0 | 1075 | 3518 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 36 | | | | 82 | | 23 | | | 6 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 477 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 7.2 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.75 | 0.75 | 0.75 |
| Adj. Flow (vph) | 41 | 31 | 36 | 32 | 28 | 52 | 44 | 247 | 38 | 63 | 491 | 21 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 41 | 67 | 0 | 32 | 28 | 52 | 44 | 285 | 0 | 63 | 512 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 13 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2020 - Saturday PM

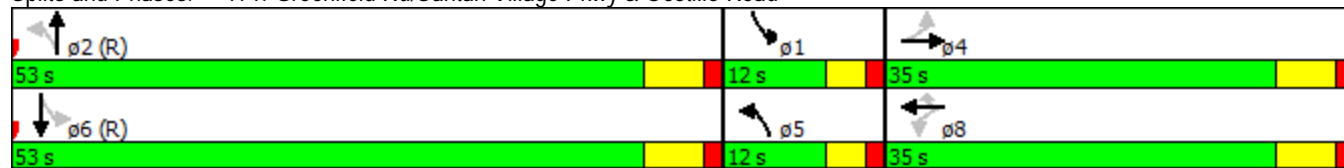


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | | 29.0 | 29.0 | 29.0 | 7.5 | 47.0 | | 7.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | 5.0 | |
| Flash Dont Walk (s) | 11.0 | 11.0 | | 11.0 | 11.0 | 11.0 | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | | 0 | | | 0 | |
| Act Effct Green (s) | 10.4 | 10.4 | | 10.4 | 10.4 | 10.4 | 78.7 | 73.9 | | 78.7 | 73.9 | |
| Actuated g/C Ratio | 0.10 | 0.10 | | 0.10 | 0.10 | 0.10 | 0.79 | 0.74 | | 0.79 | 0.74 | |
| v/c Ratio | 0.29 | 0.32 | | 0.23 | 0.15 | 0.22 | 0.06 | 0.11 | | 0.07 | 0.20 | |
| Control Delay | 46.8 | 27.1 | | 45.4 | 42.4 | 5.9 | 2.7 | 5.0 | | 2.5 | 3.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 46.8 | 27.1 | | 45.4 | 42.4 | 5.9 | 2.7 | 5.0 | | 2.5 | 3.8 | |
| LOS | D | C | | D | D | A | A | A | | A | A | |
| Approach Delay | | 34.6 | | | 26.3 | | | 4.7 | | | 3.6 | |
| Approach LOS | | C | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 25 | 18 | | 19 | 17 | 0 | 5 | 26 | | 4 | 39 | |
| Queue Length 95th (ft) | 58 | 59 | | 45 | 40 | 13 | 11 | 41 | | 13 | 42 | |
| Internal Link Dist (ft) | | 5241 | | | 397 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 399 | 522 | | 385 | 540 | 517 | 759 | 2568 | | 914 | 2601 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.10 | 0.13 | | 0.08 | 0.05 | 0.10 | 0.06 | 0.11 | | 0.07 | 0.20 | |

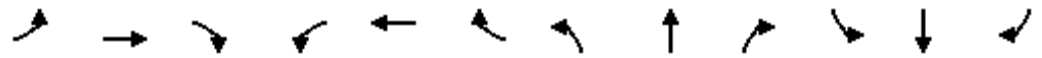
Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.32 |
| Intersection Signal Delay: | 9.2 |
| Intersection LOS: | A |
| Intersection Capacity Utilization: | 40.0% |
| ICU Level of Service: | A |
| Analysis Period (min): | 15 |

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road



1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 33 | 541 | 95 | 51 | 556 | 136 | 58 | 348 | 61 | 182 | 323 | 30 |
| Future Volume (vph) | 33 | 541 | 95 | 51 | 556 | 136 | 58 | 348 | 61 | 182 | 323 | 30 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.978 | | | 0.970 | | | 0.978 | | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3346 | 0 | 1888 | 3319 | 0 | 1888 | 3346 | 0 | 1652 | 3377 | 0 |
| Flt Permitted | 0.299 | | | 0.348 | | | 0.396 | | | 0.337 | | |
| Satd. Flow (perm) | 520 | 3346 | 0 | 691 | 3319 | 0 | 787 | 3346 | 0 | 586 | 3377 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 32 | | | 20 | | | 10 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 34 | 558 | 98 | 55 | 604 | 148 | 64 | 382 | 67 | 204 | 363 | 34 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 34 | 656 | 0 | 55 | 752 | 0 | 64 | 449 | 0 | 204 | 397 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 14 | | | 13 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 0.92 | 1.04 | 1.09 | 0.92 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

2020 - Saturday PM











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | |
| Detector Phase | 7 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | | |
| Minimum Split (s) | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | 9.0 | 16.0 | | |
| Total Split (s) | 14.0 | 39.0 | 14.0 | 39.0 | 12.0 | 35.0 | 12.0 | 35.0 | 12.0 | 35.0 | | |
| Total Split (%) | 14.0% | 39.0% | 14.0% | 39.0% | 12.0% | 35.0% | 12.0% | 35.0% | 12.0% | 35.0% | | |
| Maximum Green (s) | 10.0 | 33.0 | 10.0 | 33.0 | 8.0 | 29.0 | 8.0 | 29.0 | 8.0 | 29.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | | |
| All-Red Time (s) | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | 4.0 | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | | |
| Recall Mode | None | C-Max | None | C-Max | None | None | None | None | None | None | | |
| Act Effct Green (s) | 56.0 | 48.4 | 56.0 | 48.4 | 29.9 | 19.5 | 29.9 | 19.5 | 29.9 | 19.5 | | |
| Actuated g/C Ratio | 0.56 | 0.48 | 0.56 | 0.48 | 0.30 | 0.20 | 0.30 | 0.20 | 0.30 | 0.20 | | |
| v/c Ratio | 0.10 | 0.40 | 0.12 | 0.46 | 0.20 | 0.67 | 0.20 | 0.67 | 0.77 | 0.59 | | |
| Control Delay | 3.9 | 6.0 | 4.7 | 6.0 | 21.0 | 45.2 | 21.0 | 45.2 | 53.8 | 34.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 3.9 | 6.0 | 4.7 | 6.0 | 21.0 | 45.2 | 21.0 | 45.2 | 53.8 | 34.0 | | |
| LOS | A | A | A | A | C | D | C | D | D | C | | |
| Approach Delay | 5.9 | | 5.9 | | 42.2 | | 40.7 | | | | | |
| Approach LOS | A | | A | | D | | D | | | | | |
| Queue Length 50th (ft) | 2 | 24 | 5 | 38 | 25 | 134 | 117 | 127 | | | | |
| Queue Length 95th (ft) | 7 | 45 | m10 | 105 | 42 | 172 | 164 | 165 | | | | |
| Internal Link Dist (ft) | 400 | | 115 | | 607 | | 560 | | | | | |
| Turn Bay Length (ft) | 175 | | 210 | | 200 | | 170 | | | | | |
| Base Capacity (vph) | 427 | 1631 | 537 | 1624 | 341 | 984 | 276 | 986 | | | | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Reduced v/c Ratio | 0.08 | 0.40 | 0.10 | 0.46 | 0.19 | 0.46 | 0.74 | 0.40 | | | | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 21.0 Intersection LOS: C
 Intersection Capacity Utilization 62.2% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

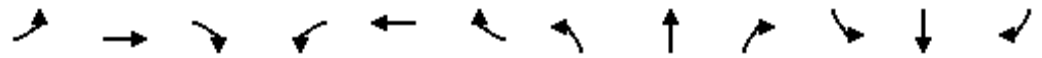
1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

| | | | |
|--|--|--|--|
|  $\phi 2$ |  $\phi 1$ |  $\phi 4 (R)$ |  $\phi 3$ |
| 35 s | 12 s | 39 s | 14 s |
|  $\phi 6$ |  $\phi 5$ |  $\phi 8 (R)$ |  $\phi 7$ |
| 35 s | 12 s | 39 s | 14 s |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 60 | 460 | 382 | 91 | 386 | 153 | 247 | 607 | 85 | 184 | 715 | 70 |
| Future Volume (vph) | 60 | 460 | 382 | 91 | 386 | 153 | 247 | 607 | 85 | 184 | 715 | 70 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Flt Permitted | 0.389 | | | 0.329 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 676 | 3421 | 1478 | 572 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 406 | | | 146 | | | 142 | | | 16 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 64 | 489 | 406 | 101 | 429 | 170 | 284 | 698 | 98 | 190 | 737 | 72 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 64 | 489 | 406 | 101 | 429 | 170 | 284 | 698 | 98 | 190 | 809 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 15 | | | 15 | | | 23 | | | 23 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2020 - Saturday PM











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Maximum Green (s) | 11.0 | 26.0 | 26.0 | 11.0 | 26.0 | 26.0 | 13.0 | 28.0 | 28.0 | 13.0 | 28.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 31.6 | 22.6 | 22.6 | 31.6 | 22.6 | 22.6 | 12.8 | 37.8 | 37.8 | 12.8 | 37.8 | |
| Actuated g/C Ratio | 0.32 | 0.23 | 0.23 | 0.32 | 0.23 | 0.23 | 0.13 | 0.38 | 0.38 | 0.13 | 0.38 | |
| v/c Ratio | 0.23 | 0.63 | 0.63 | 0.39 | 0.55 | 0.38 | 0.69 | 0.38 | 0.15 | 0.46 | 0.44 | |
| Control Delay | 33.5 | 46.4 | 16.2 | 30.0 | 36.6 | 9.9 | 44.9 | 21.2 | 1.9 | 40.9 | 13.3 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 33.5 | 46.4 | 16.2 | 30.0 | 36.6 | 9.9 | 44.9 | 21.2 | 1.9 | 40.9 | 13.3 | |
| LOS | C | D | B | C | D | A | D | C | A | D | B | |
| Approach Delay | | 32.7 | | | 29.2 | | | 25.7 | | | 18.5 | |
| Approach LOS | | C | | | C | | | C | | | B | |
| Queue Length 50th (ft) | 28 | 153 | 82 | 43 | 126 | 12 | 90 | 86 | 0 | 62 | 58 | |
| Queue Length 95th (ft) | m56 | 207 | 160 | 77 | 170 | 64 | 130 | 120 | 11 | 95 | 76 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 348 | 889 | 684 | 322 | 889 | 492 | 416 | 1857 | 666 | 416 | 1843 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.18 | 0.55 | 0.59 | 0.31 | 0.48 | 0.35 | 0.68 | 0.38 | 0.15 | 0.46 | 0.44 | |

Intersection Summary

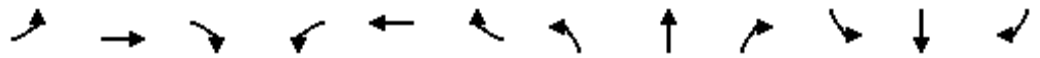
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 26.2 Intersection LOS: C
 Intersection Capacity Utilization 59.3% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1205: Higley Road & Queen Creek Road

| | | | |
|---|---|---|---|
|  ø2 (R) |  ø1 |  ø4 |  ø3 |
| 34 s | 19 s | 32 s | 15 s |
|  ø6 (R) |  ø5 |  ø8 |  ø7 |
| 34 s | 19 s | 32 s | 15 s |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2020 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 33 | 1 | 8 | 51 | 2 | 59 | 2 | 916 | 107 | 130 | 785 | 32 |
| Future Volume (vph) | 33 | 1 | 8 | 51 | 2 | 59 | 2 | 916 | 107 | 130 | 785 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.984 | | | 0.994 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3367 | 0 | 1711 | 4886 | 0 |
| Fl _t Permitted | 0.756 | | | 0.756 | | | 0.321 | | | 0.207 | | |
| Satd. Flow (perm) | 1455 | 3421 | 1531 | 1408 | 1801 | 1478 | 678 | 3367 | 0 | 373 | 4886 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 95 | | 17 | | | 8 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.66 | 0.66 | 0.66 | 0.62 | 0.62 | 0.62 | 0.90 | 0.90 | 0.90 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 50 | 2 | 12 | 82 | 3 | 95 | 2 | 1018 | 119 | 133 | 801 | 33 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 50 | 2 | 12 | 82 | 3 | 95 | 2 | 1137 | 0 | 133 | 834 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 13 | | | 15 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.96 | 1.04 | 1.04 | 1.00 | 1.04 | 1.09 | 0.85 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2020 - Saturday PM

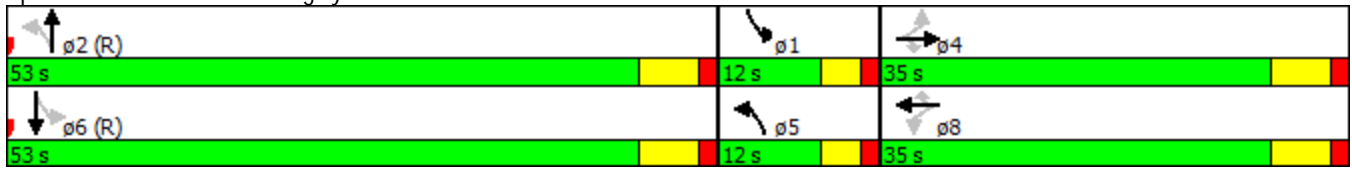


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|------|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Maximum Green (s) | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 7.5 | 47.0 | | 7.5 | 47.0 | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 3.0 | | 2.0 | 3.0 | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Walk Time (s) | | | | | | | | | | | | 5.0 |
| Flash Dont Walk (s) | | | | | | | | | | | | 11.0 |
| Pedestrian Calls (#/hr) | | | | | | | | | | | | 0 |
| Act Effct Green (s) | 12.1 | 12.1 | 12.1 | 12.1 | 12.1 | 12.1 | 72.5 | 65.5 | | 72.9 | 65.5 | |
| Actuated g/C Ratio | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.72 | 0.66 | | 0.73 | 0.66 | |
| v/c Ratio | 0.28 | 0.00 | 0.05 | 0.48 | 0.01 | 0.36 | 0.00 | 0.51 | | 0.38 | 0.26 | |
| Control Delay | 43.4 | 36.0 | 0.4 | 50.2 | 36.5 | 12.3 | 3.5 | 10.3 | | 5.9 | 9.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 43.4 | 36.0 | 0.4 | 50.2 | 36.5 | 12.3 | 3.5 | 10.3 | | 5.9 | 9.9 | |
| LOS | D | D | A | D | D | B | A | B | | A | A | |
| Approach Delay | | 35.1 | | | 30.0 | | | 10.3 | | | | 9.4 |
| Approach LOS | | D | | | C | | | B | | | | A |
| Queue Length 50th (ft) | 30 | 0 | 0 | 50 | 2 | 0 | 0 | 164 | | 8 | 67 | |
| Queue Length 95th (ft) | 45 | 3 | 0 | 62 | 7 | 13 | 2 | 267 | | 17 | 117 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | | 3400 |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 421 | 992 | 502 | 408 | 522 | 496 | 604 | 2211 | | 378 | 3203 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.12 | 0.00 | 0.02 | 0.20 | 0.01 | 0.19 | 0.00 | 0.51 | | 0.35 | 0.26 | |

Intersection Summary

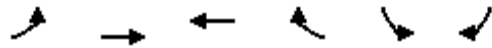
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.51
 Intersection Signal Delay: 12.1
 Intersection LOS: B
 Intersection Capacity Utilization 60.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

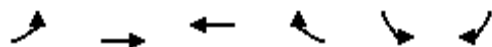
2020 - Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 34 | 493 | 504 | 290 | 384 | 49 |
| Future Volume (vph) | 34 | 493 | 504 | 290 | 384 | 49 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.945 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3345 | 0 | 1770 | 1583 |
| Flt Permitted | 0.185 | | | | 0.950 | |
| Satd. Flow (perm) | 345 | 3539 | 3345 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 174 | | | 54 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.81 | 0.81 | 0.91 | 0.91 |
| Adj. Flow (vph) | 38 | 548 | 622 | 358 | 422 | 54 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 38 | 548 | 980 | 0 | 422 | 54 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(ft) | | 12 | 12 | | 12 | |
| Link Offset(ft) | | 0 | 0 | | 0 | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | |
| Two way Left Turn Lane | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 |
| Number of Detectors | 1 | 2 | 2 | | 1 | 1 |
| Detector Template | Left | Thru | Thru | | Left | Right |
| Leading Detector (ft) | 20 | 100 | 100 | | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | 6 | | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | 94 | | | |
| Detector 2 Size(ft) | | 6 | 6 | | | |
| Detector 2 Type | | Cl+Ex | Cl+Ex | | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | | 0.0 | 0.0 | | | |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2020 - Saturday PM



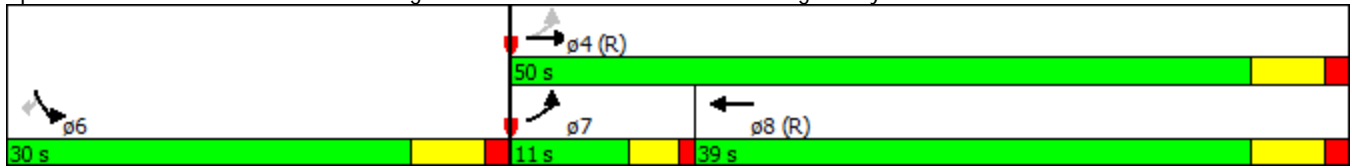
| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|-----|-------|-------|
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Maximum Green (s) | 7.0 | 44.0 | 33.0 | | 24.0 | 24.0 |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Vehicle Extension (s) | 3.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Walk Time (s) | | | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | | | 20.0 | | 18.0 | 18.0 |
| Pedestrian Calls (#/hr) | | | 0 | | 0 | 0 |
| Act Effct Green (s) | 47.2 | 45.2 | 38.9 | | 22.8 | 22.8 |
| Actuated g/C Ratio | 0.59 | 0.56 | 0.49 | | 0.28 | 0.28 |
| v/c Ratio | 0.12 | 0.27 | 0.57 | | 0.84 | 0.11 |
| Control Delay | 8.1 | 9.4 | 9.4 | | 43.1 | 6.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 8.1 | 9.4 | 9.4 | | 43.1 | 6.9 |
| LOS | A | A | A | | D | A |
| Approach Delay | | 9.4 | 9.4 | | 39.0 | |
| Approach LOS | | A | A | | D | |
| Queue Length 50th (ft) | 8 | 72 | 113 | | 192 | 0 |
| Queue Length 95th (ft) | 20 | 96 | 130 | | #336 | 25 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 328 | 2000 | 1714 | | 531 | 512 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.12 | 0.27 | 0.57 | | 0.79 | 0.11 |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 16.3
 Intersection LOS: B
 Intersection Capacity Utilization 59.5%
 ICU Level of Service B
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.

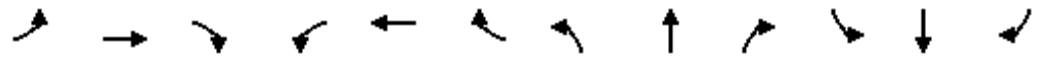
Queue shown is maximum after two cycles.

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

2020 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 265 | 437 | 190 | 137 | 380 | 122 | 159 | 399 | 69 | 198 | 646 | 134 |
| Future Volume (vph) | 265 | 437 | 190 | 137 | 380 | 122 | 159 | 399 | 69 | 198 | 646 | 134 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frnt | | 0.955 | | | 0.963 | | | 0.978 | | | 0.974 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3267 | 0 | 1652 | 3295 | 0 | 1652 | 4808 | 0 | 1652 | 4788 | 0 |
| Flt Permitted | 0.362 | | | 0.282 | | | 0.232 | | | 0.442 | | |
| Satd. Flow (perm) | 629 | 3267 | 0 | 490 | 3295 | 0 | 403 | 4808 | 0 | 768 | 4788 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 87 | | | 56 | | | 44 | | | 57 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 276 | 455 | 198 | 149 | 413 | 133 | 175 | 438 | 76 | 222 | 726 | 151 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 276 | 653 | 0 | 149 | 546 | 0 | 175 | 514 | 0 | 222 | 877 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 14 | | | 14 | | | 15 | | | 15 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | Yes | | | | | | | | |
| Headway Factor | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 | 1.09 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Permitted Phases | 4 | | 8 | | 2 | | 6 | | | | | |
| Detector Phase | 7 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | | | | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 10.0 | | |
| Minimum Split (s) | 9.5 | 16.0 | 9.5 | 16.0 | 9.5 | 28.0 | 9.5 | 28.0 | 9.5 | 28.0 | | |
| Total Split (s) | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | 10.0 | 30.0 | | |
| Total Split (%) | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | 12.5% | 37.5% | | |
| Maximum Green (s) | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | 5.5 | 24.0 | | |
| Yellow Time (s) | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.5 | | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Lost Time (s) | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | 4.5 | 6.0 | | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | 3.0 | 4.0 | | |
| Recall Mode | None | Max | None | Max | None | C-Max | None | C-Max | None | C-Max | | |
| Walk Time (s) | | | | | | | | | 4.0 | 4.0 | | |
| Flash Dont Walk (s) | | | | | | | | | 18.0 | 18.0 | | |
| Pedestrian Calls (#/hr) | | | | | | | | | 0 | 0 | | |
| Act Effct Green (s) | 31.0 | 24.0 | 31.0 | 24.0 | 31.0 | 24.0 | 31.0 | 24.0 | 31.0 | 24.0 | | |
| Actuated g/C Ratio | 0.39 | 0.30 | 0.39 | 0.30 | 0.39 | 0.30 | 0.39 | 0.30 | 0.39 | 0.30 | | |
| v/c Ratio | 0.88 | 0.63 | 0.55 | 0.53 | 0.72 | 0.35 | 0.62 | 0.59 | | | | |
| Control Delay | 59.5 | 26.2 | 28.4 | 23.0 | 43.4 | 21.7 | 27.1 | 24.2 | | | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Total Delay | 59.5 | 26.2 | 28.4 | 23.0 | 43.4 | 21.7 | 27.1 | 24.2 | | | | |
| LOS | E | C | C | C | D | C | C | C | | | | |
| Approach Delay | 36.1 | | 24.2 | | 27.2 | | 24.8 | | | | | |
| Approach LOS | D | | C | | C | | C | | | | | |
| Queue Length 50th (ft) | 123 | 156 | 44 | 105 | 54 | 69 | 69 | 126 | | | | |
| Queue Length 95th (ft) | m#231 | m210 | 81 | 154 | #135 | 99 | 116 | 165 | | | | |
| Internal Link Dist (ft) | 546 | | 1487 | | 692 | | 712 | | | | | |
| Turn Bay Length (ft) | 205 | | 200 | | 210 | | 210 | | | | | |
| Base Capacity (vph) | 314 | 1041 | 269 | 1027 | 242 | 1473 | 358 | 1476 | | | | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Reduced v/c Ratio | 0.88 | 0.63 | 0.55 | 0.53 | 0.72 | 0.35 | 0.62 | 0.59 | | | | |

Intersection Summary

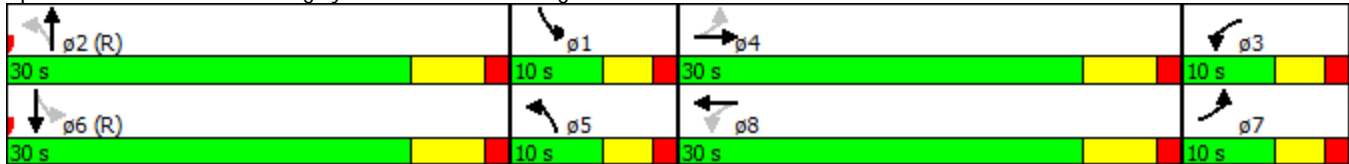
| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 80 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.88 |
| Intersection Signal Delay: | 28.2 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 70.9% |
| ICU Level of Service: | C |
| Analysis Period (min): | 15 |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2020 - Saturday PM

- # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

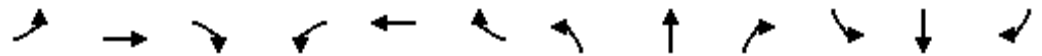
2020 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 721 | 32 | 144 | 671 | 91 |
| Future Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 721 | 32 | 144 | 671 | 91 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.880 | | | 0.864 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1530 | 0 | 1711 | 1502 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.357 | | | 0.702 | | | 0.358 | | | 0.325 | | |
| Satd. Flow (perm) | 643 | 1530 | 0 | 1264 | 1502 | 0 | 622 | 4916 | 1478 | 565 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 67 | | | 193 | | | | 82 | | | 100 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.76 | 0.76 | 0.76 | 0.86 | 0.86 | 0.86 | 0.88 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 71 | 17 | 67 | 33 | 20 | 193 | 35 | 819 | 36 | 158 | 737 | 100 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 71 | 84 | 0 | 33 | 213 | 0 | 35 | 819 | 36 | 158 | 737 | 100 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 11 | | | 11 | | | 16 | | | | 16 |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | | 0 |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.09 | 1.04 | 1.09 | 1.09 | 1.04 | 1.09 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | | 94 |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | | 6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | | 6 |

Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2020 - Saturday PM









| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Maximum Green (s) | 33.0 | 33.0 | | 33.0 | 33.0 | | 6.5 | 44.0 | 44.0 | 6.5 | 44.0 | 44.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | | 4.0 | 4.0 | | 4.0 | 4.0 |
| Flash Dont Walk (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | | 12.0 | 12.0 | | 12.0 | 12.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | 0 | | 0 | 0 |
| Act Effct Green (s) | 13.2 | 13.2 | | 13.2 | 13.2 | | 71.8 | 64.3 | 64.3 | 71.8 | 64.3 | 64.3 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.72 | 0.64 | 0.64 | 0.72 | 0.64 | 0.64 |
| v/c Ratio | 0.84 | 0.32 | | 0.20 | 0.58 | | 0.07 | 0.26 | 0.04 | 0.34 | 0.23 | 0.10 |
| Control Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.3 | 3.6 | 0.2 | 16.7 | 13.0 | 5.5 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.3 | 3.6 | 0.2 | 16.7 | 13.0 | 5.5 |
| LOS | F | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 56.2 | | | 17.7 | | | 3.3 | | | 12.8 | |
| Approach LOS | | E | | | B | | | A | | | B | |
| Queue Length 50th (ft) | 45 | 10 | | 19 | 12 | | 1 | 18 | 0 | 64 | 138 | 20 |
| Queue Length 95th (ft) | 75 | 36 | | 43 | 65 | | 5 | 54 | 0 | 122 | 177 | 67 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 212 | 549 | | 417 | 624 | | 516 | 3161 | 979 | 479 | 3161 | 986 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.33 | 0.15 | | 0.08 | 0.34 | | 0.07 | 0.26 | 0.04 | 0.33 | 0.23 | 0.10 |

Intersection Summary

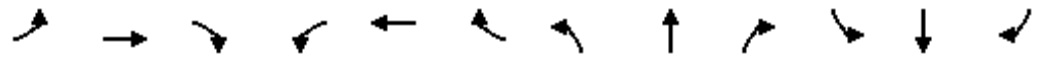
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 12.6
 Intersection Capacity Utilization 60.1%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 1211: Higley Road & Arrowhead Trail

| | | |
|---|---|--|
|  ø2 (R) |  ø1 |  ø4 |
| 50 s | 11 s | 39 s |
|  ø6 (R) |  ø5 |  ø8 |
| 50 s | 11 s | 39 s |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2020 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 40 | 532 | 161 | 90 | 494 | 163 | 197 | 770 | 83 | 264 | 717 | 43 |
| Future Volume (vph) | 40 | 532 | 161 | 90 | 494 | 163 | 197 | 770 | 83 | 264 | 717 | 43 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.963 | | | 0.985 | | | 0.992 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4734 | 0 | 1711 | 4842 | 0 | 1711 | 4876 | 0 |
| Fl _t Permitted | 0.209 | | | 0.334 | | | 0.221 | | | 0.204 | | |
| Satd. Flow (perm) | 376 | 4916 | 1531 | 601 | 4734 | 0 | 398 | 4842 | 0 | 367 | 4876 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 181 | | 80 | | | 20 | | | 10 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.82 | 0.82 | 0.82 | 0.90 | 0.90 | 0.90 | 0.84 | 0.84 | 0.84 |
| Adj. Flow (vph) | 45 | 598 | 181 | 110 | 602 | 199 | 219 | 856 | 92 | 314 | 854 | 51 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 45 | 598 | 181 | 110 | 801 | 0 | 219 | 948 | 0 | 314 | 905 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |

Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2020 - Saturday PM

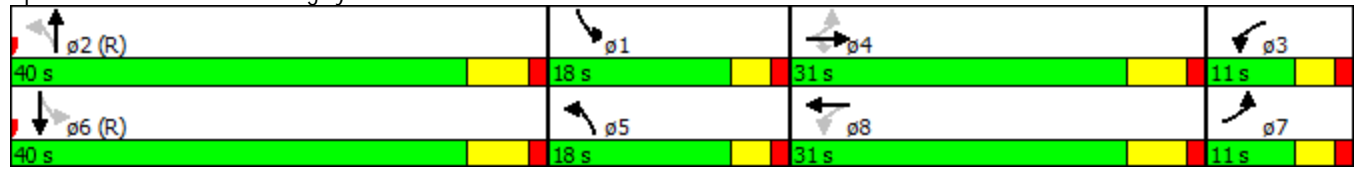


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Maximum Green (s) | 6.5 | 25.0 | 25.0 | 6.5 | 25.0 | | 13.5 | 34.0 | | 13.5 | 34.0 | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 4.0 | 4.0 | 3.0 | 5.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 30.9 | 23.5 | 23.5 | 30.9 | 23.5 | | 51.1 | 33.4 | | 51.1 | 33.4 | |
| Actuated g/C Ratio | 0.31 | 0.24 | 0.24 | 0.31 | 0.24 | | 0.51 | 0.33 | | 0.51 | 0.33 | |
| v/c Ratio | 0.23 | 0.52 | 0.36 | 0.44 | 0.68 | | 0.53 | 0.58 | | 0.78 | 0.55 | |
| Control Delay | 23.9 | 40.9 | 15.2 | 32.1 | 34.3 | | 30.0 | 30.1 | | 43.4 | 28.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 23.9 | 40.9 | 15.2 | 32.1 | 34.3 | | 30.0 | 30.1 | | 43.4 | 28.8 | |
| LOS | C | D | B | C | C | | C | C | | D | C | |
| Approach Delay | | 34.3 | | | 34.0 | | | 30.1 | | | 32.5 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 13 | 104 | 3 | 47 | 150 | | 102 | 212 | | 106 | 181 | |
| Queue Length 95th (ft) | 43 | 177 | 95 | 77 | 172 | | 133 | 240 | | #218 | 192 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 205 | 1229 | 518 | 261 | 1243 | | 415 | 1715 | | 404 | 1720 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.22 | 0.49 | 0.35 | 0.42 | 0.64 | | 0.53 | 0.55 | | 0.78 | 0.53 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 32.5
 Intersection LOS: C
 Intersection Capacity Utilization 66.2%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

2020 - Saturday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 38 | 274 | 982 | 86 | 276 | 1030 |
| Future Volume (vph) | 38 | 274 | 982 | 86 | 276 | 1030 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.89 | 0.89 | 0.98 | 0.98 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 26

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 38 | 274 | 982 | 86 | 276 | 1030 |
| Future Vol, veh/h | 38 | 274 | 982 | 86 | 276 | 1030 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 91 | 91 | 89 | 89 | 98 | 98 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 301 | 1103 | 97 | 282 | 1051 |

| Major/Minor | Minor1 | Minor2 | Major1 | Major2 | Major3 | Major4 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 2087 | 552 | 0 | 0 | 1103 | 0 |
| Stage 1 | 1103 | - | - | - | - | - |
| Stage 2 | 984 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 84 | 409 | - | - | 349 | - |
| Stage 1 | 209 | - | - | - | - | - |
| Stage 2 | 291 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | ~ 16 | 409 | - | - | 349 | - |
| Mov Cap-2 Maneuver | ~ 16 | - | - | - | - | - |
| Stage 1 | 209 | - | - | - | - | - |
| Stage 2 | 56 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-------|----|-----|
| HCM Control Delay, s | 179.2 | 0 | 9.9 |
| HCM LOS | F | | |

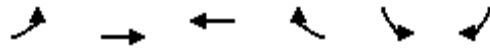
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|--------|-------|-------|-----|
| Capacity (veh/h) | - | - | 16 | 409 | 349 | - |
| HCM Lane V/C Ratio | - | - | 2.61 | 0.736 | 0.807 | - |
| HCM Control Delay (s) | - | \$ | 1221.1 | 34.7 | 46.9 | - |
| HCM Lane LOS | - | - | F | D | E | - |
| HCM 95th %tile Q(veh) | - | - | 5.9 | 5.8 | 6.9 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2020 - Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 41 | 756 | 653 | 15 | 14 | 29 |
| Future Volume (vph) | 41 | 756 | 653 | 15 | 14 | 29 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.94 | 0.94 | 0.95 | 0.95 | 0.90 | 0.90 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 0.8

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 41 | 756 | 653 | 15 | 14 | 29 |
| Future Vol, veh/h | 41 | 756 | 653 | 15 | 14 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 95 | 95 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 44 | 804 | 687 | 16 | 16 | 32 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 687 | 0 | 1176 |
| Stage 1 | - | - | 687 |
| Stage 2 | - | - | 489 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 903 | - | 184 |
| Stage 1 | - | - | 461 |
| Stage 2 | - | - | 582 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 903 | - | 175 |
| Mov Cap-2 Maneuver | - | - | 175 |
| Stage 1 | - | - | 461 |
| Stage 2 | - | - | 554 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 16.3 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 903 | - | - | - | 175 | 652 |
| HCM Lane V/C Ratio | 0.048 | - | - | - | 0.089 | 0.049 |
| HCM Control Delay (s) | 9.2 | - | - | - | 27.6 | 10.8 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.3 | 0.2 |

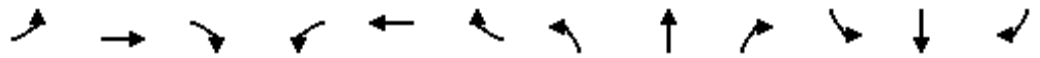
APPENDIX F

2025 BACKGROUND TRAFFIC CAPACITY ANALYSIS



Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 55 | 178 | 63 | 15 | 88 | 12 | 94 | 166 | 82 | 208 | 217 | 100 |
| Future Volume (vph) | 55 | 178 | 63 | 15 | 88 | 12 | 94 | 166 | 82 | 208 | 217 | 100 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.961 | | | | 0.850 | | 0.950 | | | 0.953 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1790 | 0 | 1770 | 1863 | 1583 | 1770 | 3362 | 0 | 1770 | 3373 | 0 |
| Flt Permitted | 0.679 | | | 0.447 | | | 0.530 | | | 0.565 | | |
| Satd. Flow (perm) | 1265 | 1790 | 0 | 833 | 1863 | 1583 | 987 | 3362 | 0 | 1052 | 3373 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 24 | | | | 89 | | 101 | | | 109 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 3718 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 56.3 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.72 | 0.72 | 0.72 | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 |
| Adj. Flow (vph) | 70 | 225 | 80 | 21 | 122 | 17 | 116 | 205 | 101 | 245 | 255 | 118 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 70 | 305 | 0 | 21 | 122 | 17 | 116 | 306 | 0 | 245 | 373 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 4.0 | 24.0 | | 4.0 | 24.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 8.0 | 30.0 | | 8.0 | 30.0 | |
| Total Split (s) | 32.0 | 32.0 | | 32.0 | 32.0 | 32.0 | 12.0 | 36.0 | | 12.0 | 36.0 | |
| Total Split (%) | 40.0% | 40.0% | | 40.0% | 40.0% | 40.0% | 15.0% | 45.0% | | 15.0% | 45.0% | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 0.5 | 1.5 | | 0.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 24.2 | 24.2 | | 24.2 | 24.2 | 24.2 | 42.7 | 34.2 | | 42.8 | 34.2 | |
| Actuated g/C Ratio | 0.30 | 0.30 | | 0.30 | 0.30 | 0.30 | 0.53 | 0.43 | | 0.54 | 0.43 | |
| v/c Ratio | 0.18 | 0.55 | | 0.08 | 0.22 | 0.03 | 0.20 | 0.20 | | 0.40 | 0.25 | |
| Control Delay | 21.9 | 25.6 | | 20.9 | 22.0 | 0.1 | 7.2 | 4.2 | | 11.9 | 10.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 21.9 | 25.6 | | 20.9 | 22.0 | 0.1 | 7.2 | 4.2 | | 11.9 | 10.8 | |
| LOS | C | C | | C | C | A | A | A | | B | B | |
| Approach Delay | | 24.9 | | | 19.5 | | | 5.1 | | | 11.2 | |
| Approach LOS | | C | | | B | | | A | | | B | |
| Stops (vph) | 39 | 185 | | 12 | 63 | 0 | 39 | 71 | | 100 | 136 | |
| Fuel Used(gal) | 3 | 12 | | 1 | 4 | 0 | 4 | 10 | | 9 | 13 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Weekday MIDDAY

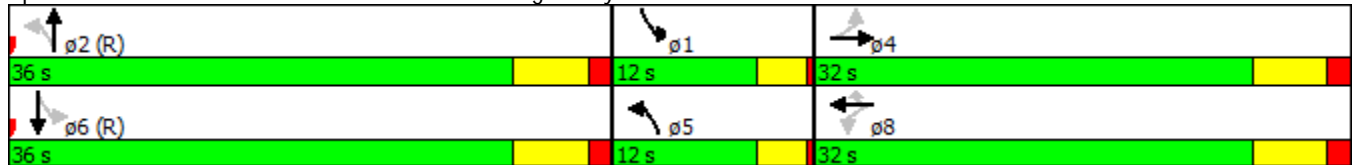


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 184 | 831 | | 51 | 295 | 29 | 273 | 682 | | 622 | 928 | |
| NOx Emissions (g/hr) | 36 | 162 | | 10 | 57 | 6 | 53 | 133 | | 121 | 181 | |
| VOC Emissions (g/hr) | 43 | 192 | | 12 | 68 | 7 | 63 | 158 | | 144 | 215 | |
| Dilemma Vehicles (#) | 0 | 11 | | 0 | 4 | 0 | 0 | 6 | | 0 | 20 | |
| Queue Length 50th (ft) | 26 | 122 | | 8 | 45 | 0 | 26 | 25 | | 54 | 41 | |
| Queue Length 95th (ft) | 47 | 153 | | 19 | 66 | 0 | 28 | 20 | | 88 | 65 | |
| Internal Link Dist (ft) | | 5241 | | | 3638 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 411 | 597 | | 270 | 605 | 574 | 641 | 1496 | | 670 | 1505 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.17 | 0.51 | | 0.08 | 0.20 | 0.03 | 0.18 | 0.20 | | 0.37 | 0.25 | |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 13.7
 Intersection LOS: B
 Intersection Capacity Utilization 75.0%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

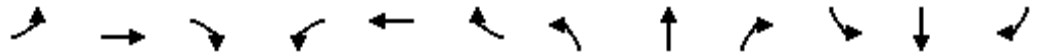


1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 48 | 428 | 75 | 42 | 630 | 172 | 79 | 303 | 51 | 106 | 202 | 38 |
| Future Volume (vph) | 48 | 428 | 75 | 42 | 630 | 172 | 79 | 303 | 51 | 106 | 202 | 38 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.978 | | | 0.968 | | | 0.978 | | | 0.976 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3346 | 0 | 1888 | 3312 | 0 | 1888 | 3346 | 0 | 1652 | 3339 | 0 |
| Flt Permitted | 0.261 | | | 0.415 | | | 0.544 | | | 0.392 | | |
| Satd. Flow (perm) | 454 | 3346 | 0 | 825 | 3312 | 0 | 1081 | 3346 | 0 | 682 | 3339 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 37 | | | 19 | | | 22 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 53 | 476 | 83 | 46 | 685 | 187 | 85 | 326 | 55 | 120 | 230 | 43 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 53 | 559 | 0 | 46 | 872 | 0 | 85 | 381 | 0 | 120 | 273 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | | 14.0 | 39.0 | | 12.0 | 35.0 | | 12.0 | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | | 14.0% | 39.0% | | 12.0% | 35.0% | | 12.0% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | None | | None | None | |
| Act Effect Green (s) | 60.9 | 53.2 | | 60.9 | 53.2 | | 25.0 | 17.2 | | 25.0 | 17.2 | |
| Actuated g/C Ratio | 0.61 | 0.53 | | 0.61 | 0.53 | | 0.25 | 0.17 | | 0.25 | 0.17 | |
| v/c Ratio | 0.15 | 0.31 | | 0.08 | 0.49 | | 0.27 | 0.64 | | 0.53 | 0.46 | |
| Control Delay | 2.7 | 2.3 | | 3.8 | 5.8 | | 28.7 | 41.4 | | 36.1 | 27.1 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 2.7 | 2.3 | | 3.8 | 5.8 | | 28.7 | 41.4 | | 36.1 | 27.1 | |
| LOS | A | A | | A | A | | C | D | | D | C | |
| Approach Delay | | 2.3 | | | 5.7 | | | 39.1 | | | 29.9 | |
| Approach LOS | | A | | | A | | | D | | | C | |
| Stops (vph) | 5 | 31 | | 6 | 158 | | 56 | 302 | | 98 | 207 | |

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

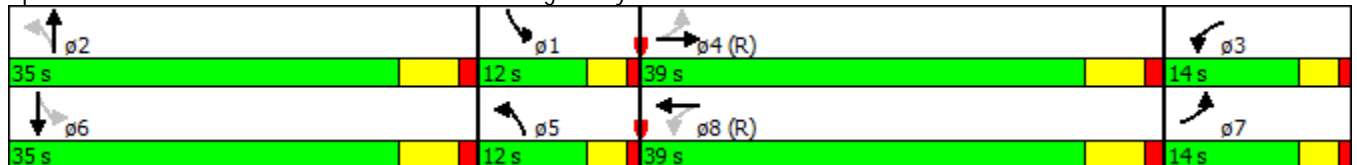


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 1 | 13 | | 1 | 26 | | 4 | 19 | | 6 | 12 | |
| CO Emissions (g/hr) | 86 | 886 | | 93 | 1838 | | 271 | 1321 | | 394 | 849 | |
| NOx Emissions (g/hr) | 17 | 172 | | 18 | 358 | | 53 | 257 | | 77 | 165 | |
| VOC Emissions (g/hr) | 20 | 205 | | 22 | 426 | | 63 | 306 | | 91 | 197 | |
| Dilemma Vehicles (#) | 0 | 5 | | 0 | 25 | | 0 | 14 | | 0 | 6 | |
| Queue Length 50th (ft) | 2 | 9 | | 4 | 52 | | 40 | 114 | | 72 | 83 | |
| Queue Length 95th (ft) | 6 | 23 | | m10 | 75 | | 72 | 153 | | 114 | 117 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 416 | 1790 | | 644 | 1780 | | 358 | 983 | | 263 | 983 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.13 | 0.31 | | 0.07 | 0.49 | | 0.24 | 0.39 | | 0.46 | 0.28 | |

Intersection Summary

























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 15.3
 Intersection LOS: B
 Intersection Capacity Utilization 59.6%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



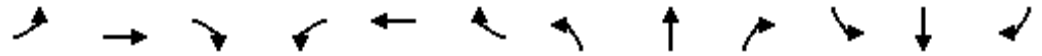
Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2025 - Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 56 | 468 | 226 | 85 | 393 | 187 | 222 | 604 | 88 | 205 | 554 | 61 |
| Future Volume (vph) | 56 | 468 | 226 | 85 | 393 | 187 | 222 | 604 | 88 | 205 | 554 | 61 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4842 | 0 |
| Flt Permitted | 0.382 | | | 0.302 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 664 | 3421 | 1478 | 525 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4842 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 241 | | | 176 | | | 142 | | | 18 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 62 | 520 | 251 | 94 | 437 | 208 | 229 | 623 | 91 | 223 | 602 | 66 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 62 | 520 | 251 | 94 | 437 | 208 | 229 | 623 | 91 | 223 | 668 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 31.8 | 22.8 | 22.8 | 31.8 | 22.8 | 22.8 | 12.5 | 37.9 | 37.9 | 12.5 | 37.9 | |
| Actuated g/C Ratio | 0.32 | 0.23 | 0.23 | 0.32 | 0.23 | 0.23 | 0.12 | 0.38 | 0.38 | 0.12 | 0.38 | |
| v/c Ratio | 0.22 | 0.67 | 0.48 | 0.38 | 0.56 | 0.44 | 0.57 | 0.33 | 0.14 | 0.56 | 0.36 | |
| Control Delay | 32.5 | 45.7 | 16.0 | 30.2 | 36.7 | 10.3 | 42.7 | 20.0 | 0.7 | 44.7 | 16.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 32.5 | 45.7 | 16.0 | 30.2 | 36.7 | 10.3 | 42.7 | 20.0 | 0.7 | 44.7 | 16.1 | |
| LOS | C | D | B | C | D | B | D | C | A | D | B | |
| Approach Delay | | 35.8 | | | 28.4 | | | 23.7 | | | 23.3 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Stops (vph) | 38 | 440 | 156 | 56 | 335 | 38 | 207 | 327 | 1 | 190 | 481 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2025 - Weekday MIDDAY

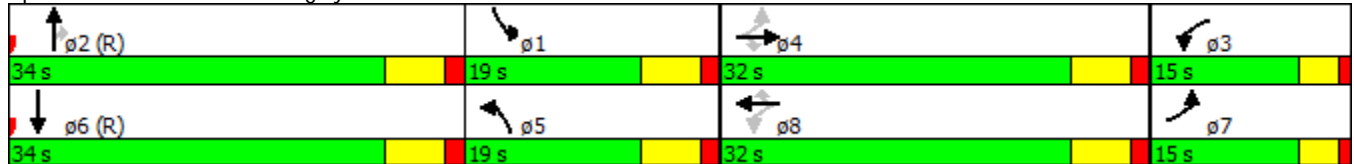


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 1 | 12 | 4 | 6 | 27 | 10 | 7 | 14 | 1 | 6 | 13 | |
| CO Emissions (g/hr) | 80 | 862 | 272 | 386 | 1889 | 723 | 502 | 966 | 76 | 404 | 884 | |
| NOx Emissions (g/hr) | 16 | 168 | 53 | 75 | 368 | 141 | 98 | 188 | 15 | 79 | 172 | |
| VOC Emissions (g/hr) | 19 | 200 | 63 | 90 | 438 | 168 | 116 | 224 | 18 | 94 | 205 | |
| Dilemma Vehicles (#) | 0 | 10 | 0 | 0 | 17 | 0 | 0 | 32 | 0 | 0 | 15 | |
| Queue Length 50th (ft) | 28 | 167 | 41 | 40 | 128 | 16 | 72 | 86 | 0 | 74 | 143 | |
| Queue Length 95th (ft) | 56 | 220 | 96 | 73 | 173 | 74 | 111 | 112 | 3 | 106 | 131 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 346 | 889 | 562 | 311 | 889 | 514 | 416 | 1864 | 668 | 416 | 1847 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.18 | 0.58 | 0.45 | 0.30 | 0.49 | 0.40 | 0.55 | 0.33 | 0.14 | 0.54 | 0.36 | |

Intersection Summary





























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 27.6
 Intersection Capacity Utilization 55.5%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service B

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2025 - Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|---|--|---|---|---|---|--|--|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   |  |  |  |  |  |   |  |  |    |  |
| Traffic Volume (vph) | 67 | 162 | 16 | 22 | 130 | 25 | 25 | 662 | 114 | 130 | 558 | 182 |
| Future Volume (vph) | 67 | 162 | 16 | 22 | 130 | 25 | 25 | 662 | 114 | 130 | 558 | 182 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.978 | | | 0.963 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3346 | 0 | 1711 | 4734 | 0 |
| Fl _t Permitted | 0.546 | | | 0.550 | | | 0.336 | | | 0.307 | | |
| Satd. Flow (perm) | 1051 | 3421 | 1531 | 1025 | 1801 | 1478 | 709 | 3346 | 0 | 553 | 4734 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 26 | | | 112 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.62 | 0.62 | 0.62 | 0.80 | 0.80 | 0.80 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 108 | 261 | 26 | 28 | 163 | 31 | 27 | 712 | 123 | 138 | 594 | 194 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 108 | 261 | 26 | 28 | 163 | 31 | 27 | 835 | 0 | 138 | 788 | 0 |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 70.0 | 63.5 | | 70.0 | 63.5 | |
| Actuated g/C Ratio | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.70 | 0.64 | | 0.70 | 0.64 | |
| v/c Ratio | 0.68 | 0.51 | 0.09 | 0.18 | 0.60 | 0.11 | 0.05 | 0.39 | | 0.31 | 0.26 | |
| Control Delay | 61.1 | 41.8 | 0.6 | 37.8 | 48.4 | 0.7 | 4.8 | 9.8 | | 4.9 | 8.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 61.1 | 41.8 | 0.6 | 37.8 | 48.4 | 0.7 | 4.8 | 9.8 | | 4.9 | 8.2 | |
| LOS | E | D | A | D | D | A | A | A | | A | A | |
| Approach Delay | | 44.4 | | | 40.4 | | | 9.6 | | | 7.7 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Stops (vph) | 63 | 143 | 0 | 20 | 118 | 0 | 6 | 352 | | 30 | 205 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2025 - Weekday MIDDAY

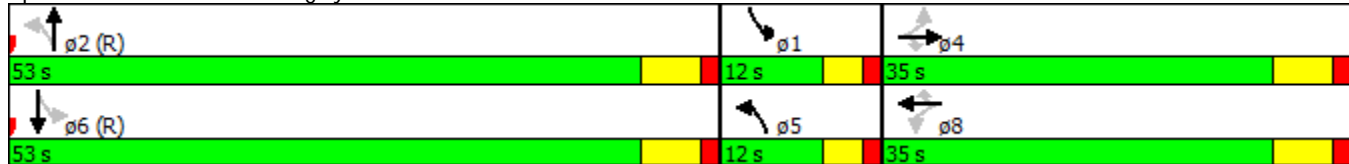


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 4 | 9 | 1 | 1 | 4 | 0 | 1 | 33 | | 3 | 21 | |
| CO Emissions (g/hr) | 275 | 613 | 39 | 49 | 312 | 23 | 67 | 2295 | | 240 | 1435 | |
| NOx Emissions (g/hr) | 54 | 119 | 8 | 10 | 61 | 5 | 13 | 447 | | 47 | 279 | |
| VOC Emissions (g/hr) | 64 | 142 | 9 | 11 | 72 | 5 | 16 | 532 | | 56 | 333 | |
| Dilemma Vehicles (#) | 0 | 6 | 0 | 0 | 5 | 0 | 0 | 39 | | 0 | 91 | |
| Queue Length 50th (ft) | 67 | 82 | 0 | 16 | 99 | 0 | 4 | 116 | | 11 | 42 | |
| Queue Length 95th (ft) | 75 | 74 | 0 | 34 | 133 | 0 | 13 | 190 | | 20 | 91 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 304 | 992 | 502 | 297 | 522 | 486 | 610 | 2133 | | 487 | 3045 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.36 | 0.26 | 0.05 | 0.09 | 0.31 | 0.06 | 0.04 | 0.39 | | 0.28 | 0.26 | |

Intersection Summary

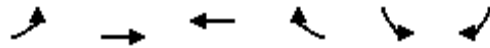
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 17.4
 Intersection Capacity Utilization 64.6%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

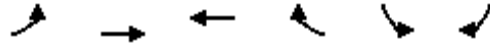
2025 - Weekday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 33 | 385 | 421 | 282 | 225 | 44 |
| Future Volume (vph) | 33 | 385 | 421 | 282 | 225 | 44 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.940 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3327 | 0 | 1770 | 1583 |
| Flt Permitted | 0.292 | | | | 0.950 | |
| Satd. Flow (perm) | 544 | 3539 | 3327 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 244 | | | 58 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.94 | 0.94 | 0.76 | 0.76 |
| Adj. Flow (vph) | 37 | 428 | 448 | 300 | 296 | 58 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 37 | 428 | 748 | 0 | 296 | 58 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 50.3 | 48.3 | 42.0 | | 19.7 | 19.7 |
| Actuated g/C Ratio | 0.63 | 0.60 | 0.52 | | 0.25 | 0.25 |
| v/c Ratio | 0.08 | 0.20 | 0.40 | | 0.68 | 0.13 |
| Control Delay | 7.1 | 7.8 | 5.6 | | 40.9 | 11.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 7.1 | 7.8 | 5.6 | | 40.9 | 11.8 |
| LOS | A | A | A | | D | B |
| Approach Delay | | 7.7 | 5.6 | | 36.1 | |
| Approach LOS | | A | A | | D | |
| Stops (vph) | 14 | 169 | 185 | | 206 | 19 |
| Fuel Used(gal) | 1 | 16 | 28 | | 12 | 2 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2025 - Weekday MIDDAY

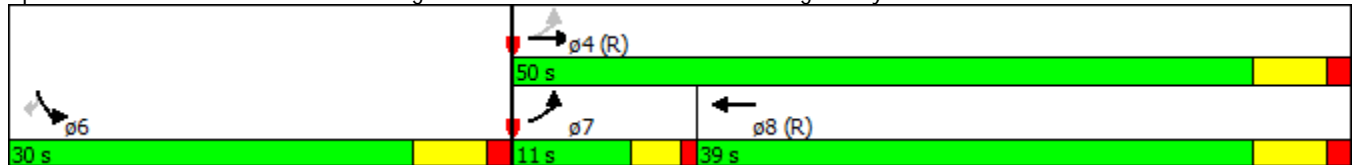


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 95 | 1122 | 1942 | | 860 | 131 |
| NOx Emissions (g/hr) | 19 | 218 | 378 | | 167 | 26 |
| VOC Emissions (g/hr) | 22 | 260 | 450 | | 199 | 30 |
| Dilemma Vehicles (#) | 0 | 16 | 18 | | 0 | 0 |
| Queue Length 50th (ft) | 8 | 51 | 57 | | 150 | 1 |
| Queue Length 95th (ft) | 19 | 73 | 72 | | 180 | 27 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 449 | 2138 | 1862 | | 531 | 515 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.08 | 0.20 | 0.40 | | 0.56 | 0.11 |

Intersection Summary

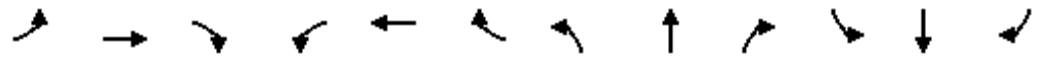
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 13.1
 Intersection LOS: B
 Intersection Capacity Utilization 49.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2025 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | ↖ | ↕ | | ↖ | ↕ | | ↖ | ↕ | | ↖ | ↕ | ↖ |
| Traffic Volume (vph) | 177 | 406 | 129 | 160 | 355 | 185 | 129 | 461 | 74 | 160 | 529 | 97 |
| Future Volume (vph) | 177 | 406 | 129 | 160 | 355 | 185 | 129 | 461 | 74 | 160 | 529 | 97 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.964 | | | 0.949 | | | 0.979 | | | 0.977 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3298 | 0 | 1652 | 3247 | 0 | 1652 | 4813 | 0 | 1652 | 4803 | 0 |
| Flt Permitted | 0.300 | | | 0.329 | | | 0.342 | | | 0.387 | | |
| Satd. Flow (perm) | 522 | 3298 | 0 | 572 | 3247 | 0 | 595 | 4813 | 0 | 673 | 4803 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 55 | | | 119 | | | 39 | | | 47 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 195 | 446 | 142 | 186 | 413 | 215 | 143 | 512 | 82 | 170 | 563 | 103 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 195 | 588 | 0 | 186 | 628 | 0 | 143 | 594 | 0 | 170 | 666 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | |
| v/c Ratio | 0.70 | 0.57 | | 0.63 | 0.59 | | 0.47 | 0.40 | | 0.52 | 0.45 | |
| Control Delay | 44.8 | 27.0 | | 30.8 | 21.8 | | 24.8 | 22.7 | | 24.1 | 22.1 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 44.8 | 27.0 | | 30.8 | 21.8 | | 24.8 | 22.7 | | 24.1 | 22.1 | |
| LOS | D | C | | C | C | | C | C | | C | C | |
| Approach Delay | | 31.4 | | | 23.8 | | | 23.1 | | | 22.6 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Stops (vph) | 162 | 611 | | 109 | 365 | | 82 | 392 | | 105 | 451 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2025 - Weekday MIDDAY

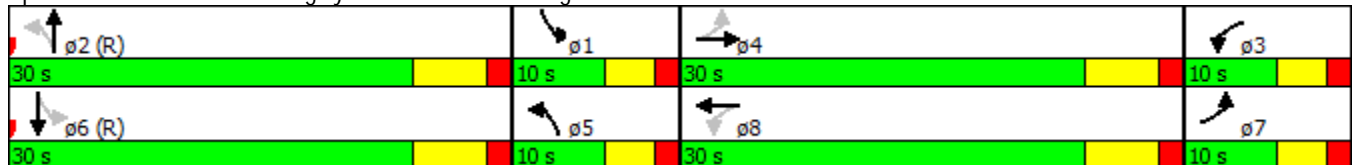


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 10 | 29 | | 4 | 12 | | 4 | 16 | | 8 | 30 | |
| CO Emissions (g/hr) | 688 | 2049 | | 279 | 869 | | 270 | 1147 | | 534 | 2105 | |
| NOx Emissions (g/hr) | 134 | 399 | | 54 | 169 | | 52 | 223 | | 104 | 410 | |
| VOC Emissions (g/hr) | 159 | 475 | | 65 | 201 | | 62 | 266 | | 124 | 488 | |
| Dilemma Vehicles (#) | 0 | 15 | | 0 | 34 | | 0 | 30 | | 0 | 39 | |
| Queue Length 50th (ft) | 74 | 137 | | 56 | 112 | | 44 | 83 | | 51 | 90 | |
| Queue Length 95th (ft) | #164 | 193 | | 94 | 154 | | 85 | 116 | | 91 | 124 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 279 | 1027 | | 295 | 1057 | | 303 | 1471 | | 328 | 1473 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.70 | 0.57 | | 0.63 | 0.59 | | 0.47 | 0.40 | | 0.52 | 0.45 | |

Intersection Summary
























Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 25.2
 Intersection LOS: C
 Intersection Capacity Utilization 62.6%
 ICU Level of Service B
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2025 - Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 734 | 27 | 98 | 551 | 65 | |
| Future Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 734 | 27 | 98 | 551 | 65 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 | |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 | |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 | |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 | |
| Frt | | 0.876 | | | 0.859 | | | | 0.850 | | | 0.850 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | | |
| Satd. Flow (prot) | 1711 | 1523 | 0 | 1711 | 1493 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 | |
| Flt Permitted | 0.483 | | | 0.711 | | | 0.403 | | | 0.345 | | | |
| Satd. Flow (perm) | 870 | 1523 | 0 | 1280 | 1493 | 0 | 701 | 4916 | 1478 | 600 | 4916 | 1478 | |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes | |
| Satd. Flow (RTOR) | | 58 | | | 158 | | | | 82 | | | 82 | |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 | |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 | |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 | |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.88 | 0.88 | 0.88 | |
| Adj. Flow (vph) | 61 | 12 | 58 | 25 | 10 | 158 | 25 | 773 | 28 | 111 | 626 | 74 | |
| Shared Lane Traffic (%) | | | | | | | | | | | | | |
| Lane Group Flow (vph) | 61 | 70 | 0 | 25 | 168 | 0 | 25 | 773 | 28 | 111 | 626 | 74 | |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 | |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 | |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 13.0 | 48.0 | 48.0 | 13.0 | 48.0 | 48.0 | |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 13.0% | 48.0% | 48.0% | 13.0% | 48.0% | 48.0% | |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max | |
| Act Effect Green (s) | 11.9 | 11.9 | | 11.9 | 11.9 | | 73.1 | 65.6 | 65.6 | 73.1 | 65.6 | 65.6 | |
| Actuated g/C Ratio | 0.12 | 0.12 | | 0.12 | 0.12 | | 0.73 | 0.66 | 0.66 | 0.73 | 0.66 | 0.66 | |
| v/c Ratio | 0.59 | 0.30 | | 0.16 | 0.53 | | 0.04 | 0.24 | 0.03 | 0.22 | 0.19 | 0.07 | |
| Control Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 0.9 | 3.8 | 0.1 | 11.5 | 10.4 | 5.1 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 0.9 | 3.8 | 0.1 | 11.5 | 10.4 | 5.1 | |
| LOS | E | B | | D | B | | A | A | A | B | B | A | |
| Approach Delay | | 38.9 | | | 17.6 | | | 3.6 | | | 10.0 | | |
| Approach LOS | | D | | | B | | | A | | | B | | |
| Stops (vph) | 48 | 18 | | 20 | 26 | | 2 | 126 | 0 | 57 | 369 | 28 | |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2025 - Weekday MIDDAY

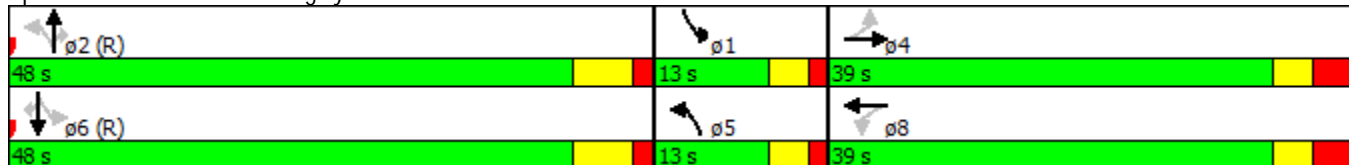


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 1 | 0 | | 0 | 1 | | 0 | 8 | 0 | 4 | 20 | 2 |
| CO Emissions (g/hr) | 71 | 32 | | 25 | 84 | | 15 | 537 | 14 | 248 | 1430 | 150 |
| NOx Emissions (g/hr) | 14 | 6 | | 5 | 16 | | 3 | 104 | 3 | 48 | 278 | 29 |
| VOC Emissions (g/hr) | 16 | 7 | | 6 | 19 | | 3 | 124 | 3 | 58 | 331 | 35 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 39 | 0 | 0 | 12 | 0 |
| Queue Length 50th (ft) | 38 | 7 | | 15 | 6 | | 1 | 20 | 0 | 48 | 110 | 13 |
| Queue Length 95th (ft) | 72 | 39 | | 35 | 51 | | m1 | 50 | m1 | 83 | 132 | 45 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 287 | 541 | | 422 | 598 | | 610 | 3223 | 997 | 543 | 3223 | 997 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.21 | 0.13 | | 0.06 | 0.28 | | 0.04 | 0.24 | 0.03 | 0.20 | 0.19 | 0.07 |

Intersection Summary

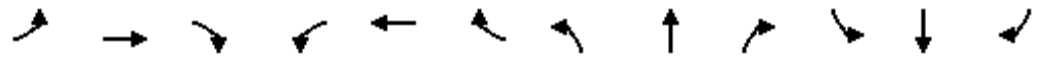
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 10.0 Intersection LOS: A
 Intersection Capacity Utilization 55.2% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2025 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | ↖ | ↑↑↑ | ↗ | ↖ | ↑↑↑ | | ↖ | ↑↑↑ | | ↖ | ↑↑↑ | |
| Traffic Volume (vph) | 25 | 473 | 122 | 66 | 508 | 157 | 208 | 720 | 107 | 211 | 576 | 53 |
| Future Volume (vph) | 25 | 473 | 122 | 66 | 508 | 157 | 208 | 720 | 107 | 211 | 576 | 53 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.965 | | | 0.981 | | | 0.987 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4744 | 0 | 1711 | 4822 | 0 | 1711 | 4852 | 0 |
| Fl _t Permitted | 0.222 | | | 0.345 | | | 0.332 | | | 0.225 | | |
| Satd. Flow (perm) | 400 | 4916 | 1531 | 621 | 4744 | 0 | 598 | 4822 | 0 | 405 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 151 | | 75 | | | 30 | | | 16 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 | 0.88 | 0.88 | 0.88 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 31 | 584 | 151 | 78 | 598 | 185 | 236 | 818 | 122 | 234 | 640 | 59 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 31 | 584 | 151 | 78 | 783 | 0 | 236 | 940 | 0 | 234 | 699 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 31.0 | 23.8 | 23.8 | 31.0 | 23.8 | | 53.0 | 38.8 | | 53.0 | 38.8 | |
| Actuated g/C Ratio | 0.31 | 0.24 | 0.24 | 0.31 | 0.24 | | 0.53 | 0.39 | | 0.53 | 0.39 | |
| v/c Ratio | 0.16 | 0.50 | 0.32 | 0.31 | 0.66 | | 0.52 | 0.50 | | 0.61 | 0.37 | |
| Control Delay | 24.2 | 42.8 | 16.5 | 27.4 | 33.7 | | 23.1 | 26.2 | | 31.2 | 23.4 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 24.2 | 42.8 | 16.5 | 27.4 | 33.7 | | 23.1 | 26.2 | | 31.2 | 23.4 | |
| LOS | C | D | B | C | C | | C | C | | C | C | |
| Approach Delay | | 36.9 | | | 33.2 | | | 25.6 | | | 25.4 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Stops (vph) | 15 | 398 | 69 | 44 | 529 | | 146 | 663 | | 137 | 433 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2025 - Weekday MIDDAY

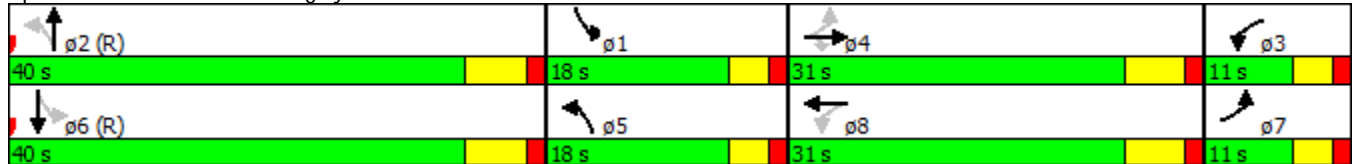


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 1 | 25 | 5 | 3 | 32 | | 8 | 35 | | 7 | 19 | |
| CO Emissions (g/hr) | 82 | 1769 | 381 | 209 | 2240 | | 583 | 2427 | | 466 | 1340 | |
| NOx Emissions (g/hr) | 16 | 344 | 74 | 41 | 436 | | 113 | 472 | | 91 | 261 | |
| VOC Emissions (g/hr) | 19 | 410 | 88 | 48 | 519 | | 135 | 563 | | 108 | 311 | |
| Dilemma Vehicles (#) | 0 | 52 | 0 | 0 | 30 | | 0 | 14 | | 0 | 31 | |
| Queue Length 50th (ft) | 10 | 112 | 3 | 32 | 146 | | 101 | 204 | | 75 | 120 | |
| Queue Length 95th (ft) | 31 | 158 | 78 | 61 | 177 | | 132 | 229 | | 121 | 155 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 212 | 1246 | 501 | 268 | 1259 | | 478 | 1914 | | 401 | 1917 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.15 | 0.47 | 0.30 | 0.29 | 0.62 | | 0.49 | 0.49 | | 0.58 | 0.36 | |

Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.66 |
| Intersection Signal Delay: | 29.6 |
| Intersection LOS: | C |
| Intersection Capacity Utilization | 63.0% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

2025 - Weekday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 44 | 288 | 861 | 60 | 254 | 694 |
| Future Volume (vph) | 44 | 288 | 861 | 60 | 254 | 694 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.85 | 0.85 | 0.95 | 0.95 | 0.97 | 0.97 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 12.4

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 44 | 288 | 861 | 60 | 254 | 694 |
| Future Vol, veh/h | 44 | 288 | 861 | 60 | 254 | 694 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 85 | 85 | 95 | 95 | 97 | 97 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 339 | 906 | 63 | 262 | 715 |

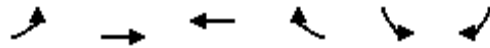
| Major/Minor | Minor1 | | Major1 | | Major2 | |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 1716 | 453 | 0 | 0 | 906 | 0 |
| Stage 1 | 906 | - | - | - | - | - |
| Stage 2 | 810 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 133 | 474 | - | - | 434 | - |
| Stage 1 | 276 | - | - | - | - | - |
| Stage 2 | 361 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | |
| Mov Cap-1 Maneuver | 53 | 474 | - | - | 434 | - |
| Mov Cap-2 Maneuver | 53 | - | - | - | - | - |
| Stage 1 | 276 | - | - | - | - | - |
| Stage 2 | 143 | - | - | - | - | - |

| Approach | WB | | NB | | SB |
|----------------------|------|--|----|--|-----|
| HCM Control Delay, s | 57.4 | | 0 | | 6.7 |
| HCM LOS | F | | | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 53 | 474 | 434 | - |
| HCM Lane V/C Ratio | - | - | 0.977 | 0.715 | 0.603 | - |
| HCM Control Delay (s) | - | - | 240.5 | 29.4 | 25.1 | - |
| HCM Lane LOS | - | - | F | D | D | - |
| HCM 95th %tile Q(veh) | - | - | 4.3 | 5.6 | 3.9 | - |

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2025 - Weekday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↷↷ | ↷↷ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 30 | 570 | 654 | 23 | 22 | 32 |
| Future Volume (vph) | 30 | 570 | 654 | 23 | 22 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.68 | 0.68 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 1.2

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 30 | 570 | 654 | 23 | 22 | 32 |
| Future Vol, veh/h | 30 | 570 | 654 | 23 | 22 | 32 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 68 | 68 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 633 | 727 | 26 | 32 | 47 |

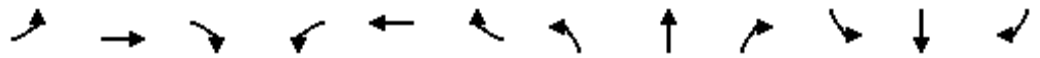
| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 727 | 0 | 1110 |
| Stage 1 | - | - | 727 |
| Stage 2 | - | - | 383 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 872 | - | 203 |
| Stage 1 | - | - | 439 |
| Stage 2 | - | - | 659 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 872 | - | 195 |
| Mov Cap-2 Maneuver | - | - | 195 |
| Stage 1 | - | - | 439 |
| Stage 2 | - | - | 634 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 17.6 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 872 | - | - | - | 195 | 634 |
| HCM Lane V/C Ratio | 0.038 | - | - | - | 0.166 | 0.074 |
| HCM Control Delay (s) | 9.3 | - | - | - | 27.1 | 11.1 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.6 | 0.2 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | ↗ | ↖ | ↕ | | ↖ | ↗ | |
| Traffic Volume (vph) | 99 | 299 | 110 | 11 | 79 | 7 | 104 | 175 | 155 | 291 | 371 | 145 |
| Future Volume (vph) | 99 | 299 | 110 | 11 | 79 | 7 | 104 | 175 | 155 | 291 | 371 | 145 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.960 | | | | 0.850 | | 0.930 | | | 0.958 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1788 | 0 | 1770 | 1863 | 1583 | 1770 | 3291 | 0 | 1770 | 3391 | 0 |
| Flt Permitted | 0.696 | | | 0.210 | | | 0.376 | | | 0.517 | | |
| Satd. Flow (perm) | 1296 | 1788 | 0 | 391 | 1863 | 1583 | 700 | 3291 | 0 | 963 | 3391 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 20 | | | | 76 | | 178 | | | 59 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 2374 | | | 4051 | | | 4608 | |
| Travel Time (s) | | 80.6 | | | 36.0 | | | 61.4 | | | 69.8 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.84 | 0.84 | 0.84 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Adj. Flow (vph) | 108 | 325 | 120 | 13 | 94 | 8 | 120 | 201 | 178 | 334 | 426 | 167 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 108 | 445 | 0 | 13 | 94 | 8 | 120 | 379 | 0 | 334 | 593 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 9.0 | 30.0 | | 9.5 | 30.0 | |
| Total Split (s) | 40.0 | 40.0 | | 40.0 | 40.0 | 40.0 | 24.0 | 36.0 | | 24.0 | 36.0 | |
| Total Split (%) | 40.0% | 40.0% | | 40.0% | 40.0% | 40.0% | 24.0% | 36.0% | | 24.0% | 36.0% | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 29.4 | 29.4 | | 29.4 | 29.4 | 29.4 | 56.6 | 45.0 | | 56.6 | 45.0 | |
| Actuated g/C Ratio | 0.29 | 0.29 | | 0.29 | 0.29 | 0.29 | 0.57 | 0.45 | | 0.57 | 0.45 | |
| v/c Ratio | 0.28 | 0.82 | | 0.11 | 0.17 | 0.02 | 0.24 | 0.24 | | 0.54 | 0.38 | |
| Control Delay | 27.3 | 43.9 | | 20.9 | 21.0 | 0.0 | 13.1 | 11.0 | | 18.2 | 19.3 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 27.3 | 43.9 | | 20.9 | 21.0 | 0.0 | 13.1 | 11.0 | | 18.2 | 19.3 | |
| LOS | C | D | | C | C | A | B | B | | B | B | |
| Approach Delay | | 40.7 | | | 19.5 | | | 11.5 | | | 18.9 | |
| Approach LOS | | D | | | B | | | B | | | B | |
| Stops (vph) | 71 | 354 | | 7 | 42 | 0 | 47 | 111 | | 155 | 312 | |
| Fuel Used(gal) | 5 | 22 | | 1 | 4 | 0 | 4 | 14 | | 13 | 24 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 339 | 1551 | | 36 | 251 | 17 | 314 | 954 | | 909 | 1653 | |
| NOx Emissions (g/hr) | 66 | 302 | | 7 | 49 | 3 | 61 | 186 | | 177 | 322 | |
| VOC Emissions (g/hr) | 79 | 359 | | 8 | 58 | 4 | 73 | 221 | | 211 | 383 | |
| Dilemma Vehicles (#) | 0 | 17 | | 0 | 3 | 0 | 0 | 16 | | 0 | 26 | |
| Queue Length 50th (ft) | 52 | 250 | | 5 | 40 | 0 | 30 | 37 | | 97 | 111 | |
| Queue Length 95th (ft) | 87 | 328 | | m8 | m45 | m0 | 65 | 83 | | 175 | 196 | |
| Internal Link Dist (ft) | | 5241 | | | 2294 | | | 3971 | | | 4528 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 450 | 635 | | 135 | 648 | 600 | 683 | 1580 | | 806 | 1559 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.24 | 0.70 | | 0.10 | 0.15 | 0.01 | 0.18 | 0.24 | | 0.41 | 0.38 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 68 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 22.9
 Intersection LOS: C
 Intersection Capacity Utilization 61.7%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road



1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 70 | 949 | 121 | 52 | 701 | 143 | 60 | 344 | 75 | 241 | 339 | 36 |
| Future Volume (vph) | 70 | 949 | 121 | 52 | 701 | 143 | 60 | 344 | 75 | 241 | 339 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.983 | | | 0.975 | | | 0.973 | | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3363 | 0 | 1888 | 3336 | 0 | 1888 | 3329 | 0 | 1652 | 3373 | 0 |
| Flt Permitted | 0.214 | | | 0.137 | | | 0.368 | | | 0.291 | | |
| Satd. Flow (perm) | 372 | 3363 | 0 | 272 | 3336 | 0 | 731 | 3329 | 0 | 506 | 3373 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 27 | | | 20 | | | 9 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 74 | 999 | 127 | 57 | 762 | 155 | 67 | 382 | 83 | 256 | 361 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 74 | 1126 | 0 | 57 | 917 | 0 | 67 | 465 | 0 | 256 | 399 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 10.0 | 54.0 | | 10.0 | 54.0 | | 22.0 | 24.0 | | 22.0 | 24.0 | |
| Total Split (%) | 9.1% | 49.1% | | 9.1% | 49.1% | | 20.0% | 21.8% | | 20.0% | 21.8% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | Max | | None | Max | |
| Act Effect Green (s) | 59.0 | 51.4 | | 59.0 | 51.4 | | 36.9 | 20.3 | | 36.9 | 20.3 | |
| Actuated g/C Ratio | 0.54 | 0.47 | | 0.54 | 0.47 | | 0.34 | 0.18 | | 0.34 | 0.18 | |
| v/c Ratio | 0.28 | 0.71 | | 0.25 | 0.58 | | 0.17 | 0.74 | | 0.80 | 0.64 | |
| Control Delay | 18.1 | 27.0 | | 19.1 | 23.4 | | 25.4 | 49.4 | | 55.5 | 46.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 18.1 | 27.0 | | 19.1 | 23.4 | | 25.4 | 49.4 | | 55.5 | 46.5 | |
| LOS | B | C | | B | C | | C | D | | E | D | |
| Approach Delay | | 26.4 | | | 23.1 | | | 46.3 | | | 50.0 | |
| Approach LOS | | C | | | C | | | D | | | D | |
| Stops (vph) | 32 | 831 | | 24 | 590 | | 39 | 361 | | 230 | 335 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

2025 - Weekday PM

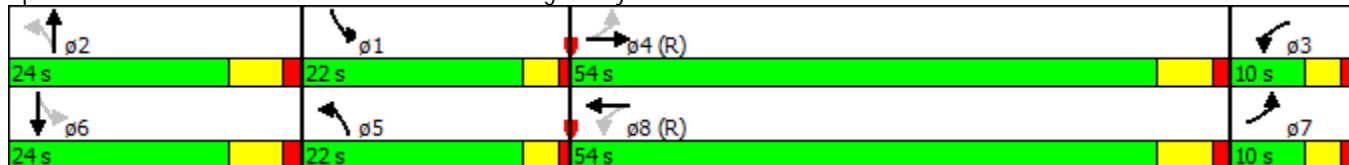


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 2 | 35 | | 2 | 36 | | 3 | 23 | | 14 | 21 | |
| CO Emissions (g/hr) | 130 | 2420 | | 141 | 2513 | | 200 | 1612 | | 969 | 1439 | |
| NOx Emissions (g/hr) | 25 | 471 | | 27 | 489 | | 39 | 314 | | 189 | 280 | |
| VOC Emissions (g/hr) | 30 | 561 | | 33 | 582 | | 46 | 374 | | 225 | 334 | |
| Dilemma Vehicles (#) | 0 | 49 | | 0 | 39 | | 0 | 19 | | 0 | 17 | |
| Queue Length 50th (ft) | 23 | 334 | | 18 | 245 | | 30 | 161 | | 132 | 138 | |
| Queue Length 95th (ft) | 47 | 426 | | 38 | 318 | | 60 | #239 | | #204 | 192 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 270 | 1578 | | 235 | 1571 | | 456 | 629 | | 372 | 628 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.27 | 0.71 | | 0.24 | 0.58 | | 0.15 | 0.74 | | 0.69 | 0.64 | |

Intersection Summary

























Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 33.2
 Intersection LOS: C
 Intersection Capacity Utilization 76.2%
 ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2025 - Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 104 | 868 | 568 | 134 | 396 | 179 | 259 | 652 | 150 | 249 | 950 | 94 |
| Future Volume (vph) | 104 | 868 | 568 | 134 | 396 | 179 | 259 | 652 | 150 | 249 | 950 | 94 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4847 | 0 |
| Flt Permitted | 0.446 | | | 0.133 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 775 | 3421 | 1478 | 231 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4847 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 356 | | | 181 | | | 169 | | | 15 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1834 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 27.8 | | | 17.6 | |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.94 | 0.94 | 0.94 | 0.89 | 0.89 | 0.89 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 106 | 886 | 580 | 143 | 421 | 190 | 291 | 733 | 169 | 254 | 969 | 96 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 106 | 886 | 580 | 143 | 421 | 190 | 291 | 733 | 169 | 254 | 1065 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.5 | 16.0 | 16.0 | 11.5 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 13.0 | 38.0 | 38.0 | 13.0 | 38.0 | 38.0 | 19.0 | 30.0 | 30.0 | 19.0 | 30.0 | |
| Total Split (%) | 13.0% | 38.0% | 38.0% | 13.0% | 38.0% | 38.0% | 19.0% | 30.0% | 30.0% | 19.0% | 30.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 40.3 | 31.0 | 31.0 | 40.3 | 31.0 | 31.0 | 12.0 | 26.7 | 26.7 | 12.0 | 26.7 | |
| Actuated g/C Ratio | 0.40 | 0.31 | 0.31 | 0.40 | 0.31 | 0.31 | 0.12 | 0.27 | 0.27 | 0.12 | 0.27 | |
| v/c Ratio | 0.28 | 0.84 | 0.83 | 0.70 | 0.40 | 0.33 | 0.76 | 0.56 | 0.32 | 0.66 | 0.82 | |
| Control Delay | 19.7 | 40.2 | 23.1 | 51.6 | 28.2 | 6.1 | 54.5 | 43.3 | 14.7 | 36.0 | 29.3 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 19.7 | 40.2 | 23.1 | 51.6 | 28.2 | 6.1 | 54.5 | 43.3 | 14.7 | 36.0 | 29.3 | |
| LOS | B | D | C | D | C | A | D | D | B | D | C | |
| Approach Delay | | 32.5 | | | 27.1 | | | 42.0 | | | 30.6 | |
| Approach LOS | | C | | | C | | | D | | | C | |
| Stops (vph) | 60 | 779 | 229 | 102 | 300 | 24 | 226 | 587 | 39 | 235 | 682 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2025 - Weekday PM

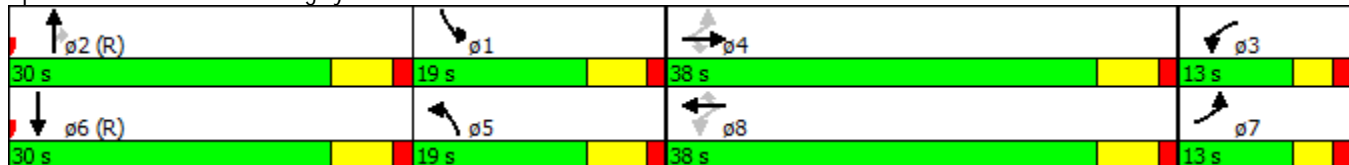


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 2 | 21 | 9 | 9 | 26 | 10 | 9 | 21 | 3 | 7 | 23 | |
| CO Emissions (g/hr) | 120 | 1499 | 598 | 662 | 1823 | 671 | 613 | 1455 | 190 | 463 | 1580 | |
| NOx Emissions (g/hr) | 23 | 292 | 116 | 129 | 355 | 130 | 119 | 283 | 37 | 90 | 307 | |
| VOC Emissions (g/hr) | 28 | 347 | 139 | 153 | 423 | 155 | 142 | 337 | 44 | 107 | 366 | |
| Dilemma Vehicles (#) | 0 | 40 | 0 | 0 | 16 | 0 | 0 | 23 | 0 | 0 | 100 | |
| Queue Length 50th (ft) | 38 | 271 | 135 | 52 | 108 | 4 | 77 | 163 | 17 | 81 | 157 | |
| Queue Length 95th (ft) | 70 | 348 | #337 | #115 | 152 | 52 | 125 | 204 | 72 | 124 | #304 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1754 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 392 | 1094 | 715 | 215 | 1094 | 596 | 416 | 1310 | 532 | 416 | 1303 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.27 | 0.81 | 0.81 | 0.67 | 0.38 | 0.32 | 0.70 | 0.56 | 0.32 | 0.61 | 0.82 | |

Intersection Summary





























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 18 (18%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 33.5
 Intersection LOS: C
 Intersection Capacity Utilization 78.0%
 ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2025 - Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|---|--|---|---|---|---|--|--|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   |  |  |  |  |  |   |  |  |    |  |
| Traffic Volume (vph) | 62 | 191 | 69 | 26 | 176 | 36 | 46 | 831 | 164 | 249 | 871 | 297 |
| Future Volume (vph) | 62 | 191 | 69 | 26 | 176 | 36 | 46 | 831 | 164 | 249 | 871 | 297 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.975 | | | 0.962 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3336 | 0 | 1711 | 4729 | 0 |
| Fl _t Permitted | 0.432 | | | 0.534 | | | 0.185 | | | 0.224 | | |
| Satd. Flow (perm) | 832 | 3421 | 1531 | 995 | 1801 | 1478 | 391 | 3336 | 0 | 403 | 4729 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 100 | | | 76 | | 40 | | | 150 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 2961 | | | 528 | | | 298 | | | 3506 | |
| Travel Time (s) | | 44.9 | | | 8.0 | | | 4.5 | | | 53.1 | |
| Peak Hour Factor | 0.69 | 0.69 | 0.69 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 90 | 277 | 100 | 31 | 212 | 43 | 48 | 875 | 173 | 268 | 937 | 319 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 90 | 277 | 100 | 31 | 212 | 43 | 48 | 1048 | 0 | 268 | 1256 | 0 |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 10.0 | 65.0 | | 10.0 | 65.0 | |
| Total Split (%) | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 10.0% | 65.0% | | 10.0% | 65.0% | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 69.2 | 61.4 | | 69.4 | 61.4 | |
| Actuated g/C Ratio | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.69 | 0.61 | | 0.69 | 0.61 | |
| v/c Ratio | 0.65 | 0.49 | 0.30 | 0.19 | 0.71 | 0.14 | 0.13 | 0.51 | | 0.75 | 0.42 | |
| Control Delay | 54.6 | 36.0 | 9.2 | 37.6 | 52.7 | 3.5 | 5.9 | 11.8 | | 22.1 | 3.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 54.6 | 36.0 | 9.2 | 37.6 | 52.7 | 3.5 | 5.9 | 11.8 | | 22.1 | 3.9 | |
| LOS | D | D | A | D | D | A | A | B | | C | A | |
| Approach Delay | | 33.8 | | | 43.7 | | | 11.5 | | | 7.1 | |
| Approach LOS | | C | | | D | | | B | | | A | |
| Stops (vph) | 56 | 163 | 21 | 23 | 163 | 3 | 13 | 514 | | 118 | 260 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2025 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 4 | 10 | 3 | 1 | 6 | 1 | 2 | 43 | | 8 | 31 | |
| CO Emissions (g/hr) | 247 | 702 | 194 | 58 | 436 | 38 | 127 | 3025 | | 577 | 2149 | |
| NOx Emissions (g/hr) | 48 | 137 | 38 | 11 | 85 | 7 | 25 | 589 | | 112 | 418 | |
| VOC Emissions (g/hr) | 57 | 163 | 45 | 13 | 101 | 9 | 29 | 701 | | 134 | 498 | |
| Dilemma Vehicles (#) | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 50 | | 0 | 21 | |
| Queue Length 50th (ft) | 53 | 82 | 9 | 17 | 127 | 0 | 7 | 180 | | 36 | 66 | |
| Queue Length 95th (ft) | 68 | 84 | 16 | 40 | 184 | 7 | 18 | 240 | | m73 | 71 | |
| Internal Link Dist (ft) | | 2881 | | | 448 | | | 218 | | | 3426 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 158 | 649 | 371 | 189 | 342 | 342 | 368 | 2064 | | 358 | 2962 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.57 | 0.43 | 0.27 | 0.16 | 0.62 | 0.13 | 0.13 | 0.51 | | 0.75 | 0.42 | |

Intersection Summary

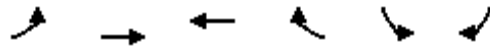
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 68 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 15.3
 Intersection LOS: B
 Intersection Capacity Utilization 77.9%
 ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

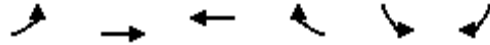
2025 - Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 48 | 796 | 492 | 319 | 396 | 41 |
| Future Volume (vph) | 48 | 796 | 492 | 319 | 396 | 41 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.941 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3330 | 0 | 1770 | 1583 |
| Flt Permitted | 0.210 | | | | 0.950 | |
| Satd. Flow (perm) | 391 | 3539 | 3330 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 206 | | | 51 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.95 | 0.95 | 0.81 | 0.81 |
| Adj. Flow (vph) | 49 | 821 | 518 | 336 | 489 | 51 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 49 | 821 | 854 | 0 | 489 | 51 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 30.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 45.0 | 34.0 | | 35.0 | 35.0 |
| Total Split (%) | 13.8% | 56.3% | 42.5% | | 43.8% | 43.8% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 43.3 | 41.3 | 34.8 | | 26.7 | 26.7 |
| Actuated g/C Ratio | 0.54 | 0.52 | 0.44 | | 0.33 | 0.33 |
| v/c Ratio | 0.15 | 0.45 | 0.55 | | 0.83 | 0.09 |
| Control Delay | 10.2 | 11.6 | 17.2 | | 37.6 | 5.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 10.2 | 11.6 | 17.2 | | 37.6 | 5.8 |
| LOS | B | B | B | | D | A |
| Approach Delay | | 11.5 | 17.2 | | 34.6 | |
| Approach LOS | | B | B | | C | |
| Stops (vph) | 21 | 362 | 638 | | 344 | 9 |
| Fuel Used(gal) | 2 | 34 | 39 | | 21 | 2 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2025 - Weekday PM

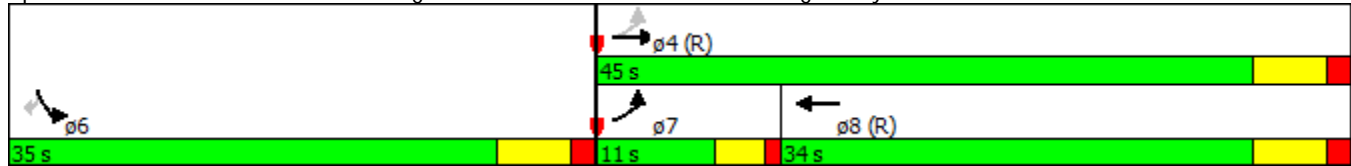


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 142 | 2377 | 2743 | | 1478 | 111 |
| NOx Emissions (g/hr) | 28 | 462 | 534 | | 288 | 22 |
| VOC Emissions (g/hr) | 33 | 551 | 636 | | 343 | 26 |
| Dilemma Vehicles (#) | 0 | 17 | 47 | | 0 | 0 |
| Queue Length 50th (ft) | 11 | 107 | 158 | | 211 | 0 |
| Queue Length 95th (ft) | m20 | 138 | m216 | | 280 | 18 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 332 | 1827 | 1564 | | 641 | 606 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.15 | 0.45 | 0.55 | | 0.76 | 0.08 |

Intersection Summary

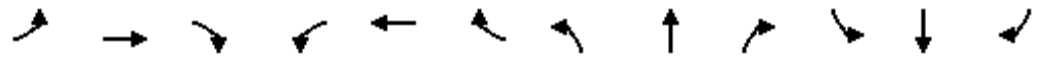
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 14 (18%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 19.2
 Intersection LOS: B
 Intersection Capacity Utilization 63.3%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

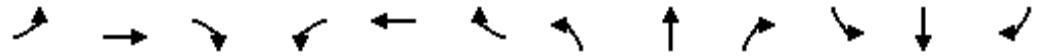
2025 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 254 | 663 | 347 | 223 | 452 | 139 | 150 | 498 | 94 | 263 | 1011 | 126 |
| Future Volume (vph) | 254 | 663 | 347 | 223 | 452 | 139 | 150 | 498 | 94 | 263 | 1011 | 126 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.948 | | | 0.965 | | | 0.976 | | | 0.983 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3243 | 0 | 1652 | 3301 | 0 | 1652 | 4798 | 0 | 1652 | 4832 | 0 |
| Flt Permitted | 0.257 | | | 0.180 | | | 0.182 | | | 0.347 | | |
| Satd. Flow (perm) | 447 | 3243 | 0 | 313 | 3301 | 0 | 316 | 4798 | 0 | 603 | 4832 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 117 | | | 50 | | | 47 | | | 27 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.89 | 0.89 | 0.89 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 262 | 684 | 358 | 251 | 508 | 156 | 163 | 541 | 102 | 277 | 1064 | 133 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 262 | 1042 | 0 | 251 | 664 | 0 | 163 | 643 | 0 | 277 | 1197 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 28.0 | | 9.0 | 28.0 | |
| Total Split (s) | 12.0 | 28.0 | | 12.0 | 28.0 | | 12.0 | 28.0 | | 12.0 | 28.0 | |
| Total Split (%) | 15.0% | 35.0% | | 15.0% | 35.0% | | 15.0% | 35.0% | | 15.0% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 32.2 | 22.2 | | 32.2 | 22.2 | | 31.8 | 22.0 | | 31.8 | 22.0 | |
| Actuated g/C Ratio | 0.40 | 0.28 | | 0.40 | 0.28 | | 0.40 | 0.28 | | 0.40 | 0.28 | |
| v/c Ratio | 0.87 | 1.06 | | 0.97 | 0.70 | | 0.64 | 0.48 | | 0.81 | 0.89 | |
| Control Delay | 48.0 | 72.5 | | 79.4 | 28.5 | | 41.1 | 24.7 | | 43.5 | 36.9 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 48.0 | 72.5 | | 79.4 | 28.5 | | 41.1 | 24.7 | | 43.5 | 36.9 | |
| LOS | D | E | | E | C | | D | C | | D | D | |
| Approach Delay | | 67.6 | | | 42.4 | | | 28.0 | | | 38.2 | |
| Approach LOS | | E | | | D | | | C | | | D | |
| Stops (vph) | 219 | 1210 | | 163 | 478 | | 128 | 466 | | 191 | 995 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2025 - Weekday PM



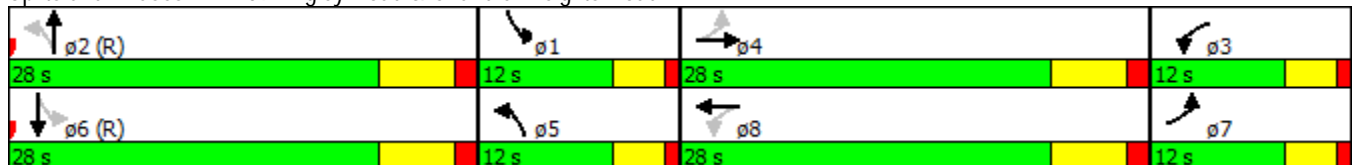
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 14 | 65 | | 8 | 15 | | 5 | 18 | | 14 | 60 | |
| CO Emissions (g/hr) | 987 | 4575 | | 552 | 1075 | | 362 | 1255 | | 965 | 4215 | |
| NOx Emissions (g/hr) | 192 | 890 | | 107 | 209 | | 70 | 244 | | 188 | 820 | |
| VOC Emissions (g/hr) | 229 | 1060 | | 128 | 249 | | 84 | 291 | | 224 | 977 | |
| Dilemma Vehicles (#) | 0 | 116 | | 0 | 37 | | 0 | 23 | | 0 | 69 | |
| Queue Length 50th (ft) | 72 | ~197 | | 78 | 144 | | 58 | 100 | | 88 | 205 | |
| Queue Length 95th (ft) | m#168 | #368 | | #215 | 201 | | #120 | 134 | | #191 | #285 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 300 | 985 | | 260 | 954 | | 260 | 1353 | | 346 | 1348 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.87 | 1.06 | | 0.97 | 0.70 | | 0.63 | 0.48 | | 0.80 | 0.89 | |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 45.7
 Intersection LOS: D
 Intersection Capacity Utilization 89.1%
 ICU Level of Service E
 Analysis Period (min) 15























- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



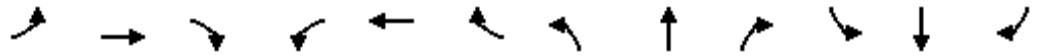
Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2025 - Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 832 | 51 | 235 | 865 | 106 |
| Future Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 832 | 51 | 235 | 865 | 106 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.895 | | | 0.876 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1556 | 0 | 1711 | 1523 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.445 | | | 0.696 | | | 0.278 | | | 0.291 | | |
| Satd. Flow (perm) | 801 | 1556 | 0 | 1253 | 1523 | 0 | 483 | 4916 | 1478 | 506 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 66 | | | 159 | | | | 76 | | | 93 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.86 | 0.86 | 0.86 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 78 | 28 | 66 | 36 | 33 | 159 | 52 | 904 | 55 | 255 | 940 | 115 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 94 | 0 | 36 | 192 | 0 | 52 | 904 | 55 | 255 | 940 | 115 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 17.0 | 17.0 | | 17.0 | 17.0 | | 10.0 | 22.0 | 22.0 | 10.0 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 12.0 | 49.0 | 49.0 | 12.0 | 49.0 | 49.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 12.0% | 49.0% | 49.0% | 12.0% | 49.0% | 49.0% |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effect Green (s) | 14.1 | 14.1 | | 14.1 | 14.1 | | 71.8 | 62.4 | 62.4 | 71.9 | 62.4 | 62.4 |
| Actuated g/C Ratio | 0.14 | 0.14 | | 0.14 | 0.14 | | 0.72 | 0.62 | 0.62 | 0.72 | 0.62 | 0.62 |
| v/c Ratio | 0.70 | 0.34 | | 0.20 | 0.55 | | 0.12 | 0.29 | 0.06 | 0.57 | 0.31 | 0.12 |
| Control Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.4 | 2.6 | 0.4 | 16.8 | 4.3 | 0.9 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.4 | 2.6 | 0.4 | 16.8 | 4.3 | 0.9 |
| LOS | E | B | | D | B | | A | A | A | B | A | A |
| Approach Delay | | 41.6 | | | 19.3 | | | 2.5 | | | 6.4 | |
| Approach LOS | | D | | | B | | | A | | | A | |
| Stops (vph) | 66 | 29 | | 28 | 40 | | 7 | 128 | 1 | 121 | 186 | 6 |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2025 - Weekday PM

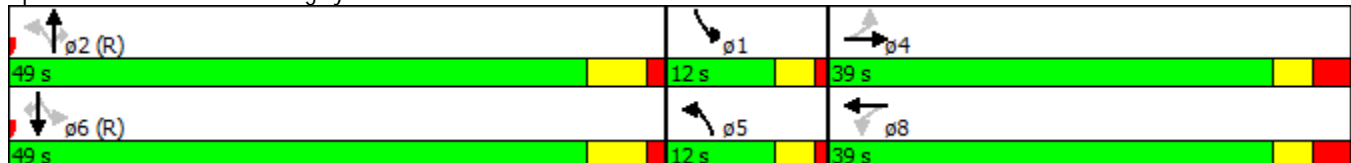


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 1 | 1 | | 1 | 2 | | 0 | 8 | 0 | 9 | 26 | 3 |
| CO Emissions (g/hr) | 104 | 49 | | 36 | 105 | | 33 | 581 | 28 | 600 | 1829 | 204 |
| NOx Emissions (g/hr) | 20 | 10 | | 7 | 21 | | 6 | 113 | 5 | 117 | 356 | 40 |
| VOC Emissions (g/hr) | 24 | 11 | | 8 | 24 | | 8 | 135 | 7 | 139 | 424 | 47 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 12 | 0 | 0 | 8 | 0 |
| Queue Length 50th (ft) | 48 | 16 | | 21 | 19 | | 3 | 30 | 0 | 38 | 45 | 0 |
| Queue Length 95th (ft) | 94 | 58 | | 45 | 71 | | m10 | 50 | m0 | m130 | 67 | m5 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 264 | 557 | | 413 | 609 | | 443 | 3069 | 951 | 458 | 3069 | 957 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.30 | 0.17 | | 0.09 | 0.32 | | 0.12 | 0.29 | 0.06 | 0.56 | 0.31 | 0.12 |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 17 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 8.3
 Intersection LOS: A
 Intersection Capacity Utilization 65.7%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



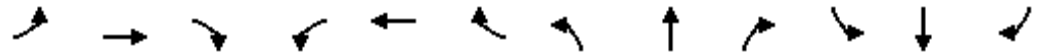
Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2025 - Weekday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 1073 | 230 | 138 | 554 | 213 | 259 | 856 | 144 | 376 | 860 | 64 |
| Future Volume (vph) | 56 | 1073 | 230 | 138 | 554 | 213 | 259 | 856 | 144 | 376 | 860 | 64 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.958 | | | 0.978 | | | 0.990 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4709 | 0 | 1711 | 4808 | 0 | 1711 | 4867 | 0 |
| Flt Permitted | 0.182 | | | 0.182 | | | 0.206 | | | 0.138 | | |
| Satd. Flow (perm) | 328 | 4916 | 1531 | 328 | 4709 | 0 | 371 | 4808 | 0 | 248 | 4867 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 194 | | 89 | | | 36 | | | 13 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2550 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 38.6 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 58 | 1106 | 237 | 150 | 602 | 232 | 298 | 984 | 166 | 388 | 887 | 66 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 58 | 1106 | 237 | 150 | 834 | 0 | 298 | 1150 | 0 | 388 | 953 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | | 7.0 | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | | 11.0 | 16.0 | | 11.0 | 16.0 | |
| Total Split (s) | 12.0 | 28.0 | 28.0 | 12.0 | 28.0 | | 20.0 | 40.0 | | 20.0 | 40.0 | |
| Total Split (%) | 12.0% | 28.0% | 28.0% | 12.0% | 28.0% | | 20.0% | 40.0% | | 20.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 31.7 | 22.0 | 22.0 | 31.7 | 22.0 | | 52.3 | 34.3 | | 52.3 | 34.3 | |
| Actuated g/C Ratio | 0.32 | 0.22 | 0.22 | 0.32 | 0.22 | | 0.52 | 0.34 | | 0.52 | 0.34 | |
| v/c Ratio | 0.28 | 1.02 | 0.49 | 0.71 | 0.75 | | 0.73 | 0.69 | | 1.07 | 0.57 | |
| Control Delay | 22.9 | 62.9 | 6.7 | 54.9 | 37.5 | | 39.6 | 38.1 | | 101.1 | 28.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 22.9 | 62.9 | 6.7 | 54.9 | 37.5 | | 39.6 | 38.1 | | 101.1 | 28.1 | |
| LOS | C | E | A | D | D | | D | D | | F | C | |
| Approach Delay | | 51.7 | | | 40.1 | | | 38.4 | | | 49.2 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Stops (vph) | 36 | 920 | 48 | 116 | 630 | | 296 | 902 | | 235 | 718 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2025 - Weekday PM



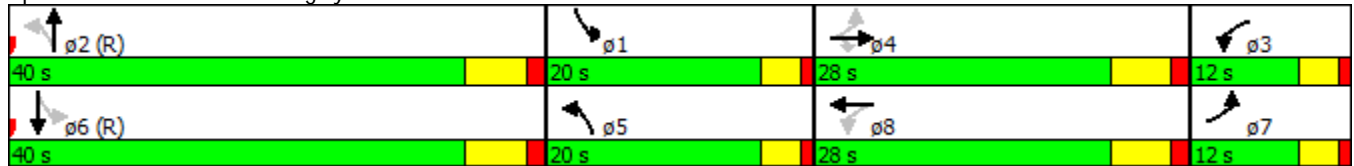
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 3 | 62 | 9 | 7 | 38 | | 13 | 46 | | 17 | 30 | |
| CO Emissions (g/hr) | 184 | 4333 | 615 | 511 | 2638 | | 886 | 3192 | | 1180 | 2063 | |
| NOx Emissions (g/hr) | 36 | 843 | 120 | 99 | 513 | | 172 | 621 | | 230 | 401 | |
| VOC Emissions (g/hr) | 43 | 1004 | 143 | 118 | 611 | | 205 | 740 | | 274 | 478 | |
| Dilemma Vehicles (#) | 0 | 36 | 0 | 0 | 37 | | 0 | 22 | | 0 | 46 | |
| Queue Length 50th (ft) | 21 | -279 | 32 | 66 | 164 | | 100 | 260 | | -214 | 178 | |
| Queue Length 95th (ft) | m26 | #349 | 18 | #135 | 212 | | 156 | 259 | | #399 | 222 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2470 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 215 | 1081 | 488 | 215 | 1105 | | 408 | 1671 | | 364 | 1676 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.27 | 1.02 | 0.49 | 0.70 | 0.75 | | 0.73 | 0.69 | | 1.07 | 0.57 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 48 (48%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.07
 Intersection Signal Delay: 45.1
 Intersection LOS: D
 Intersection Capacity Utilization 85.6%
 ICU Level of Service E
 Analysis Period (min) 15

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
4: Higley Road & Bridges Boulevard

2025 - Weekday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Future Volume (vph) | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3506 | | | 1834 |
| Travel Time (s) | 20.8 | | 53.1 | | | 27.8 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.97 | 0.97 | 0.92 | 0.92 | 0.91 | 0.91 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 56.4

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Future Vol, veh/h | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 97 | 97 | 92 | 92 | 91 | 91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 390 | 1189 | 52 | 509 | 1437 |

| Major/Minor | Minor1 | Minor2 | Major1 | Major2 | Major3 | Major4 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 2782 | 595 | 0 | 0 | 1189 | 0 |
| Stage 1 | 1189 | - | - | - | - | - |
| Stage 2 | 1593 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 35 | ~ 383 | - | - | ~ 317 | - |
| Stage 1 | 185 | - | - | - | - | - |
| Stage 2 | 135 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | |
| Mov Cap-1 Maneuver | 35 | ~ 383 | - | - | ~ 317 | - |
| Mov Cap-2 Maneuver | 35 | - | - | - | - | - |
| Stage 1 | 185 | - | - | - | - | - |
| Stage 2 | 135 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-------|----|------|
| HCM Control Delay, s | 101.3 | 0 | 82.6 |
| HCM LOS | F | | |

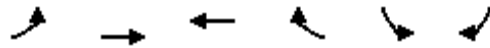
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|----------|-------|--------|-----|
| Capacity (veh/h) | - | - | 35 | 383 | ~ 317 | - |
| HCM Lane V/C Ratio | - | - | 0.943 | 1.017 | 1.605 | - |
| HCM Control Delay (s) | - | - | \$ 304.2 | 84.1 | \$ 316 | - |
| HCM Lane LOS | - | - | F | F | F | - |
| HCM 95th %tile Q(veh) | - | - | 3.4 | 12.5 | 30.3 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
 7: Queen Creek Road & Middle Drive

2025 - Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↶↶ | ↶↶ | ↷ | ↷ | ↷ |
| Traffic Volume (vph) | 50 | 1237 | 691 | 12 | 8 | 36 |
| Future Volume (vph) | 50 | 1237 | 691 | 12 | 8 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 30 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 8.1 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.89 | 0.89 | 0.85 | 0.85 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 0.7

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 50 | 1237 | 691 | 12 | 8 | 36 |
| Future Vol, veh/h | 50 | 1237 | 691 | 12 | 8 | 36 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 89 | 89 | 85 | 85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 1289 | 776 | 13 | 9 | 42 |

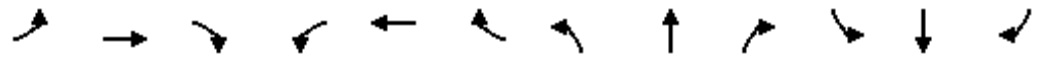
| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 776 | 0 | 388 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | 4.14 | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | 2.22 | - | 3.32 |
| Pot Cap-1 Maneuver | 836 | - | 611 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 836 | - | 611 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.4 | 0 | 17.2 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 836 | - | - | - | 102 | 611 |
| HCM Lane V/C Ratio | 0.062 | - | - | - | 0.092 | 0.069 |
| HCM Control Delay (s) | 9.6 | - | - | - | 43.9 | 11.3 |
| HCM Lane LOS | A | - | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.3 | 0.2 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 105 | 231 | 72 | 31 | 138 | 38 | 93 | 231 | 141 | 203 | 292 | 140 |
| Future Volume (vph) | 105 | 231 | 72 | 31 | 138 | 38 | 93 | 231 | 141 | 203 | 292 | 140 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.964 | | | | 0.850 | | 0.943 | | | 0.951 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1796 | 0 | 1770 | 1863 | 1583 | 1770 | 3337 | 0 | 1770 | 3366 | 0 |
| Flt Permitted | 0.612 | | | 0.246 | | | 0.459 | | | 0.508 | | |
| Satd. Flow (perm) | 1140 | 1796 | 0 | 458 | 1863 | 1583 | 855 | 3337 | 0 | 946 | 3366 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 17 | | | | 82 | | 137 | | | 86 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 3718 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 56.3 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.78 | 0.78 | 0.78 | 0.82 | 0.82 | 0.82 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 135 | 296 | 92 | 38 | 168 | 46 | 101 | 251 | 153 | 226 | 324 | 156 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 135 | 388 | 0 | 38 | 168 | 46 | 101 | 404 | 0 | 226 | 480 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 14.5 | 30.0 | | 9.5 | 30.0 | |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | 39.0 | 22.0 | 39.0 | | 22.0 | 39.0 | |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | 39.0% | 22.0% | 39.0% | | 22.0% | 39.0% | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 26.4 | 26.4 | | 26.4 | 26.4 | 26.4 | 58.6 | 50.8 | | 58.6 | 50.8 | |
| Actuated g/C Ratio | 0.26 | 0.26 | | 0.26 | 0.26 | 0.26 | 0.59 | 0.51 | | 0.59 | 0.51 | |
| v/c Ratio | 0.45 | 0.80 | | 0.32 | 0.34 | 0.10 | 0.18 | 0.23 | | 0.37 | 0.27 | |
| Control Delay | 34.1 | 44.8 | | 30.5 | 24.8 | 2.3 | 10.5 | 10.3 | | 10.6 | 8.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 34.1 | 44.8 | | 30.5 | 24.8 | 2.3 | 10.5 | 10.3 | | 10.6 | 8.5 | |
| LOS | C | D | | C | C | A | B | B | | B | A | |
| Approach Delay | | 42.0 | | | 21.6 | | | 10.4 | | | 9.2 | |
| Approach LOS | | D | | | C | | | B | | | A | |
| Stops (vph) | 84 | 262 | | 25 | 103 | 4 | 40 | 137 | | 77 | 138 | |
| Fuel Used(gal) | 5 | 16 | | 2 | 7 | 1 | 4 | 15 | | 8 | 17 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Saturday MIDDAY

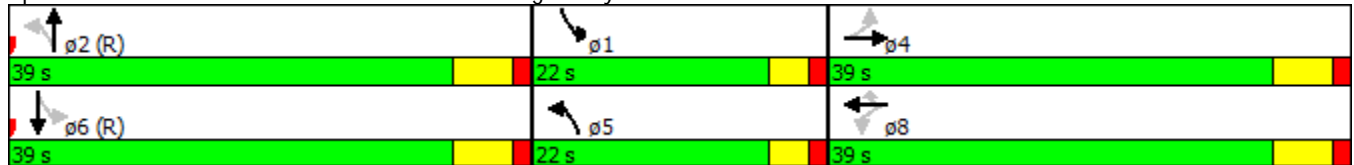


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 378 | 1152 | | 110 | 472 | 97 | 276 | 1082 | | 585 | 1210 | |
| NOx Emissions (g/hr) | 73 | 224 | | 21 | 92 | 19 | 54 | 211 | | 114 | 235 | |
| VOC Emissions (g/hr) | 88 | 267 | | 26 | 109 | 22 | 64 | 251 | | 136 | 280 | |
| Dilemma Vehicles (#) | 0 | 12 | | 0 | 9 | 0 | 0 | 18 | | 0 | 13 | |
| Queue Length 50th (ft) | 72 | 222 | | 14 | 64 | 0 | 23 | 45 | | 47 | 47 | |
| Queue Length 95th (ft) | 97 | 239 | | 40 | 103 | 5 | 55 | 90 | | 91 | 88 | |
| Internal Link Dist (ft) | | 5241 | | | 3638 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 381 | 611 | | 153 | 622 | 583 | 757 | 1763 | | 804 | 1753 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.35 | 0.64 | | 0.25 | 0.27 | 0.08 | 0.13 | 0.23 | | 0.28 | 0.27 | |

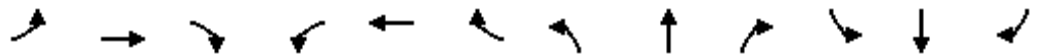
Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 19.7
 Intersection LOS: B
 Intersection Capacity Utilization 65.8%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

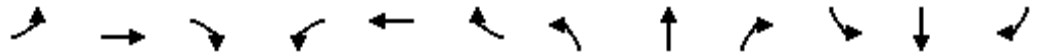


1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 60 | 518 | 70 | 52 | 701 | 175 | 78 | 319 | 71 | 162 | 235 | 47 |
| Future Volume (vph) | 60 | 518 | 70 | 52 | 701 | 175 | 78 | 319 | 71 | 162 | 235 | 47 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.982 | | | 0.970 | | | 0.973 | | | 0.975 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3360 | 0 | 1888 | 3319 | 0 | 1888 | 3329 | 0 | 1652 | 3336 | 0 |
| Flt Permitted | 0.211 | | | 0.368 | | | 0.487 | | | 0.347 | | |
| Satd. Flow (perm) | 367 | 3360 | 0 | 731 | 3319 | 0 | 968 | 3329 | 0 | 603 | 3336 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 33 | | | 27 | | | 23 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 64 | 551 | 74 | 57 | 770 | 192 | 87 | 354 | 79 | 184 | 267 | 53 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 64 | 625 | 0 | 57 | 962 | 0 | 87 | 433 | 0 | 184 | 320 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | | 14.0 | 39.0 | | 12.0 | 35.0 | | 12.0 | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | | 14.0% | 39.0% | | 12.0% | 35.0% | | 12.0% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | None | | None | None | |
| Act Effect Green (s) | 57.6 | 49.3 | | 57.6 | 49.3 | | 28.3 | 18.8 | | 28.3 | 18.8 | |
| Actuated g/C Ratio | 0.58 | 0.49 | | 0.58 | 0.49 | | 0.28 | 0.19 | | 0.28 | 0.19 | |
| v/c Ratio | 0.22 | 0.38 | | 0.12 | 0.58 | | 0.25 | 0.67 | | 0.74 | 0.50 | |
| Control Delay | 7.7 | 5.4 | | 5.7 | 9.4 | | 25.0 | 40.1 | | 51.7 | 29.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 7.7 | 5.4 | | 5.7 | 9.4 | | 25.0 | 40.1 | | 51.7 | 29.6 | |
| LOS | A | A | | A | A | | C | D | | D | C | |
| Approach Delay | | 5.6 | | | 9.2 | | | 37.6 | | | 37.6 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Stops (vph) | 16 | 178 | | 11 | 358 | | 47 | 331 | | 184 | 242 | |

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

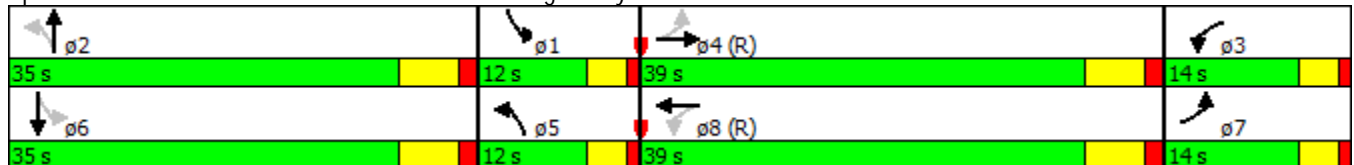


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 2 | 17 | | 2 | 32 | | 4 | 21 | | 10 | 14 | |
| CO Emissions (g/hr) | 119 | 1164 | | 120 | 2211 | | 256 | 1448 | | 668 | 1006 | |
| NOx Emissions (g/hr) | 23 | 227 | | 23 | 430 | | 50 | 282 | | 130 | 196 | |
| VOC Emissions (g/hr) | 28 | 270 | | 28 | 513 | | 59 | 335 | | 155 | 233 | |
| Dilemma Vehicles (#) | 0 | 9 | | 0 | 26 | | 0 | 11 | | 0 | 7 | |
| Queue Length 50th (ft) | 3 | 23 | | 7 | 70 | | 30 | 129 | | 109 | 97 | |
| Queue Length 95th (ft) | 22 | 44 | | m15 | 224 | | 56 | 176 | | 156 | 132 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 353 | 1665 | | 564 | 1654 | | 363 | 984 | | 267 | 983 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.18 | 0.38 | | 0.10 | 0.58 | | 0.24 | 0.44 | | 0.69 | 0.33 | |

Intersection Summary

























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 19.0
 Intersection LOS: B
 Intersection Capacity Utilization 65.9%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2025 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 70 | 421 | 290 | 99 | 426 | 177 | 256 | 649 | 103 | 193 | 674 | 64 |
| Future Volume (vph) | 70 | 421 | 290 | 99 | 426 | 177 | 256 | 649 | 103 | 193 | 674 | 64 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Flt Permitted | 0.368 | | | 0.353 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 640 | 3421 | 1478 | 614 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 312 | | | 153 | | | 142 | | | 16 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.97 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 75 | 453 | 312 | 102 | 439 | 182 | 275 | 698 | 111 | 208 | 725 | 69 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 75 | 453 | 312 | 102 | 439 | 182 | 275 | 698 | 111 | 208 | 794 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 30.4 | 21.4 | 21.4 | 30.4 | 21.4 | 21.4 | 12.8 | 39.0 | 39.0 | 12.8 | 39.0 | |
| Actuated g/C Ratio | 0.30 | 0.21 | 0.21 | 0.30 | 0.21 | 0.21 | 0.13 | 0.39 | 0.39 | 0.13 | 0.39 | |
| v/c Ratio | 0.28 | 0.62 | 0.56 | 0.39 | 0.60 | 0.42 | 0.67 | 0.36 | 0.16 | 0.51 | 0.42 | |
| Control Delay | 35.5 | 45.5 | 15.3 | 30.3 | 38.5 | 10.7 | 42.7 | 24.2 | 6.2 | 43.7 | 15.5 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 35.5 | 45.5 | 15.3 | 30.3 | 38.5 | 10.7 | 42.7 | 24.2 | 6.2 | 43.7 | 15.5 | |
| LOS | D | D | B | C | D | B | D | C | A | D | B | |
| Approach Delay | | 33.4 | | | 30.3 | | | 27.1 | | | 21.3 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Stops (vph) | 49 | 385 | 131 | 67 | 369 | 37 | 237 | 388 | 15 | 180 | 527 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2025 - Saturday MIDDAY

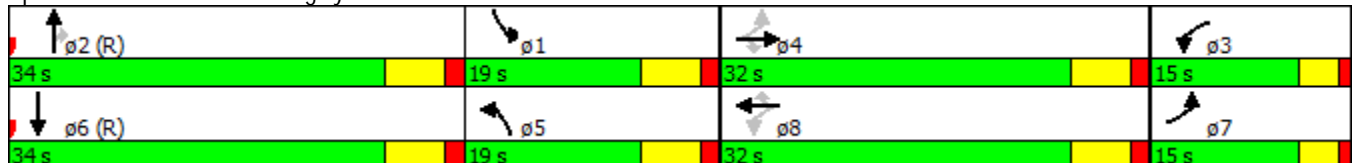


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 1 | 11 | 4 | 6 | 30 | 10 | 8 | 16 | 2 | 5 | 14 | |
| CO Emissions (g/hr) | 104 | 765 | 286 | 452 | 2064 | 686 | 578 | 1109 | 109 | 378 | 1010 | |
| NOx Emissions (g/hr) | 20 | 149 | 56 | 88 | 401 | 134 | 112 | 216 | 21 | 74 | 197 | |
| VOC Emissions (g/hr) | 24 | 177 | 66 | 105 | 478 | 159 | 134 | 257 | 25 | 88 | 234 | |
| Dilemma Vehicles (#) | 0 | 12 | 0 | 0 | 18 | 0 | 0 | 48 | 0 | 0 | 17 | |
| Queue Length 50th (ft) | 33 | 141 | 57 | 45 | 132 | 15 | 88 | 86 | 0 | 68 | 65 | |
| Queue Length 95th (ft) | m63 | 187 | 109 | 78 | 174 | 69 | 119 | 164 | 37 | 100 | 86 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 331 | 889 | 615 | 325 | 889 | 497 | 416 | 1917 | 683 | 416 | 1902 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.23 | 0.51 | 0.51 | 0.31 | 0.49 | 0.37 | 0.66 | 0.36 | 0.16 | 0.50 | 0.42 | |

Intersection Summary































Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 27.6 Intersection LOS: C
 Intersection Capacity Utilization 57.7% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2025 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|---|--|---|---|---|---|--|--|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   |  |  |  |  |  |   |  |    |    |  |
| Traffic Volume (vph) | 106 | 212 | 18 | 27 | 181 | 39 | 32 | 874 | 164 | 160 | 763 | 232 |
| Future Volume (vph) | 106 | 212 | 18 | 27 | 181 | 39 | 32 | 874 | 164 | 160 | 763 | 232 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.976 | | | 0.965 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3339 | 0 | 1711 | 4744 | 0 |
| Fl _t Permitted | 0.470 | | | 0.531 | | | 0.212 | | | 0.202 | | |
| Satd. Flow (perm) | 905 | 3421 | 1531 | 989 | 1801 | 1478 | 448 | 3339 | 0 | 364 | 4744 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 29 | | | 104 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.73 | 0.73 | 0.73 | 0.85 | 0.85 | 0.85 | 0.96 | 0.96 | 0.96 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 145 | 290 | 25 | 32 | 213 | 46 | 33 | 910 | 171 | 182 | 867 | 264 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 145 | 290 | 25 | 32 | 213 | 46 | 33 | 1081 | 0 | 182 | 1131 | 0 |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 65.6 | 57.7 | | 65.6 | 57.7 | |
| Actuated g/C Ratio | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.66 | 0.58 | | 0.66 | 0.58 | |
| v/c Ratio | 0.83 | 0.44 | 0.07 | 0.17 | 0.61 | 0.13 | 0.08 | 0.56 | | 0.56 | 0.41 | |
| Control Delay | 65.8 | 31.8 | 0.8 | 32.4 | 43.3 | 2.5 | 7.5 | 15.6 | | 14.5 | 12.3 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 65.8 | 31.8 | 0.8 | 32.4 | 43.3 | 2.5 | 7.5 | 15.6 | | 14.5 | 12.3 | |
| LOS | E | C | A | C | D | A | A | B | | B | B | |
| Approach Delay | | 40.8 | | | 35.7 | | | 15.3 | | | 12.6 | |
| Approach LOS | | D | | | D | | | B | | | B | |
| Stops (vph) | 103 | 176 | 1 | 22 | 159 | 2 | 12 | 624 | | 63 | 396 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2025 - Saturday MIDDAY

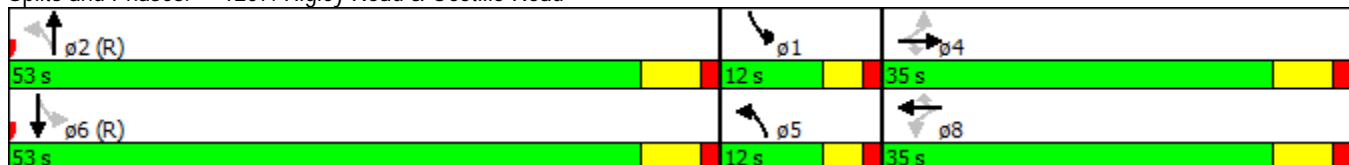


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 6 | 11 | 1 | 1 | 6 | 1 | 1 | 47 | | 5 | 30 | |
| CO Emissions (g/hr) | 445 | 762 | 45 | 56 | 417 | 39 | 91 | 3285 | | 340 | 2090 | |
| NOx Emissions (g/hr) | 87 | 148 | 9 | 11 | 81 | 8 | 18 | 639 | | 66 | 407 | |
| VOC Emissions (g/hr) | 103 | 177 | 10 | 13 | 97 | 9 | 21 | 761 | | 79 | 484 | |
| Dilemma Vehicles (#) | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 52 | | 0 | 101 | |
| Queue Length 50th (ft) | 96 | 87 | 0 | 17 | 126 | 0 | 6 | 206 | | 20 | 84 | |
| Queue Length 95th (ft) | 98 | 82 | m0 | 37 | 167 | 6 | 19 | 335 | | 38 | 191 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 262 | 992 | 502 | 286 | 522 | 486 | 415 | 1938 | | 343 | 2781 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.55 | 0.29 | 0.05 | 0.11 | 0.41 | 0.09 | 0.08 | 0.56 | | 0.53 | 0.41 | |

Intersection Summary

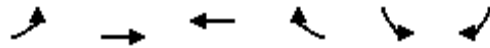
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 19.8
 Intersection LOS: B
 Intersection Capacity Utilization 74.9%
 ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

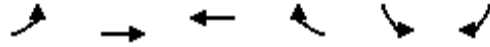
2025 - Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 40 | 393 | 465 | 312 | 233 | 36 |
| Future Volume (vph) | 40 | 393 | 465 | 312 | 233 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.940 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3327 | 0 | 1770 | 1583 |
| Flt Permitted | 0.242 | | | | 0.950 | |
| Satd. Flow (perm) | 451 | 3539 | 3327 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 249 | | | 44 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.89 | 0.89 | 0.82 | 0.82 |
| Adj. Flow (vph) | 42 | 414 | 522 | 351 | 284 | 44 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 42 | 414 | 873 | 0 | 284 | 44 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 50.7 | 48.7 | 42.4 | | 19.3 | 19.3 |
| Actuated g/C Ratio | 0.63 | 0.61 | 0.53 | | 0.24 | 0.24 |
| v/c Ratio | 0.11 | 0.19 | 0.46 | | 0.67 | 0.11 |
| Control Delay | 7.2 | 7.5 | 6.8 | | 35.0 | 7.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 7.2 | 7.5 | 6.8 | | 35.0 | 7.6 |
| LOS | A | A | A | | C | A |
| Approach Delay | | 7.5 | 6.8 | | 31.3 | |
| Approach LOS | | A | A | | C | |
| Stops (vph) | 16 | 172 | 277 | | 202 | 9 |
| Fuel Used(gal) | 2 | 16 | 32 | | 12 | 1 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2025 - Saturday MIDDAY

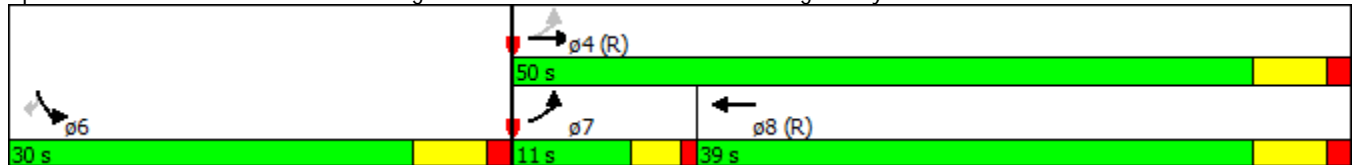


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 115 | 1144 | 2222 | | 861 | 100 |
| NOx Emissions (g/hr) | 22 | 223 | 432 | | 167 | 19 |
| VOC Emissions (g/hr) | 27 | 265 | 515 | | 199 | 23 |
| Dilemma Vehicles (#) | 0 | 16 | 23 | | 0 | 0 |
| Queue Length 50th (ft) | 9 | 48 | 84 | | 128 | 0 |
| Queue Length 95th (ft) | 21 | 71 | 118 | | 171 | 19 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 401 | 2156 | 1878 | | 531 | 505 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.10 | 0.19 | 0.46 | | 0.53 | 0.09 |

Intersection Summary

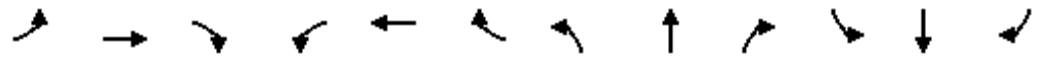
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 11.8
 Intersection LOS: B
 Intersection Capacity Utilization 53.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

2025 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 236 | 398 | 158 | 183 | 323 | 142 | 139 | 474 | 75 | 197 | 677 | 115 |
| Future Volume (vph) | 236 | 398 | 158 | 183 | 323 | 142 | 139 | 474 | 75 | 197 | 677 | 115 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.957 | | | 0.954 | | | 0.980 | | | 0.978 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3274 | 0 | 1652 | 3264 | 0 | 1652 | 4817 | 0 | 1652 | 4808 | 0 |
| Flt Permitted | 0.394 | | | 0.322 | | | 0.252 | | | 0.368 | | |
| Satd. Flow (perm) | 685 | 3274 | 0 | 560 | 3264 | 0 | 438 | 4817 | 0 | 640 | 4808 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 75 | | | 88 | | | 38 | | | 42 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 254 | 428 | 170 | 199 | 351 | 154 | 158 | 539 | 85 | 207 | 713 | 121 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 254 | 598 | 0 | 199 | 505 | 0 | 158 | 624 | 0 | 207 | 834 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | |
| v/c Ratio | 0.77 | 0.58 | | 0.68 | 0.49 | | 0.62 | 0.42 | | 0.65 | 0.57 | |
| Control Delay | 45.7 | 26.1 | | 34.4 | 20.6 | | 34.8 | 23.0 | | 30.9 | 24.1 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 45.7 | 26.1 | | 34.4 | 20.6 | | 34.8 | 23.0 | | 30.9 | 24.1 | |
| LOS | D | C | | C | C | | C | C | | C | C | |
| Approach Delay | | 31.9 | | | 24.5 | | | 25.4 | | | 25.5 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Stops (vph) | 211 | 480 | | 125 | 303 | | 99 | 406 | | 136 | 611 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2025 - Saturday MIDDAY

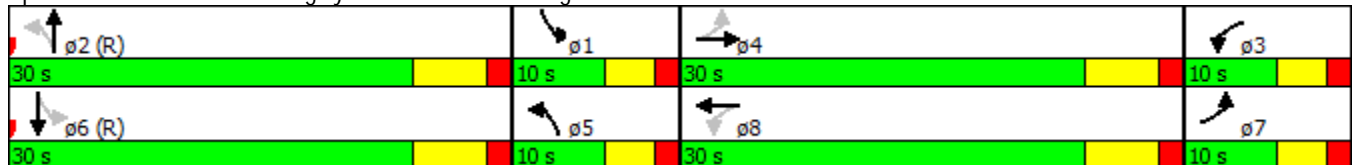


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 13 | 28 | | 5 | 10 | | 5 | 17 | | 10 | 39 | |
| CO Emissions (g/hr) | 916 | 1988 | | 328 | 730 | | 320 | 1182 | | 682 | 2721 | |
| NOx Emissions (g/hr) | 178 | 387 | | 64 | 142 | | 62 | 230 | | 133 | 529 | |
| VOC Emissions (g/hr) | 212 | 461 | | 76 | 169 | | 74 | 274 | | 158 | 631 | |
| Dilemma Vehicles (#) | 0 | 17 | | 0 | 29 | | 0 | 31 | | 0 | 50 | |
| Queue Length 50th (ft) | 98 | 132 | | 60 | 87 | | 48 | 88 | | 63 | 121 | |
| Queue Length 95th (ft) | #216 | 188 | | #123 | 133 | | #95 | 118 | | #117 | 160 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 331 | 1034 | | 292 | 1040 | | 253 | 1471 | | 317 | 1471 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.77 | 0.58 | | 0.68 | 0.49 | | 0.62 | 0.42 | | 0.65 | 0.57 | |

Intersection Summary























Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 26.9
 Intersection LOS: C
 Intersection Capacity Utilization 67.4%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2025 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 857 | 25 | 96 | 643 | 108 |
| Future Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 857 | 25 | 96 | 643 | 108 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.890 | | | 0.862 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1547 | 0 | 1711 | 1499 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.552 | | | 0.725 | | | 0.391 | | | 0.296 | | |
| Satd. Flow (perm) | 994 | 1547 | 0 | 1305 | 1499 | 0 | 680 | 4916 | 1478 | 515 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 36 | | | 141 | | | | 82 | | | 110 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.93 | 0.93 | 0.93 | 0.95 | 0.95 | 0.95 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 78 | 13 | 36 | 23 | 12 | 141 | 17 | 902 | 26 | 98 | 656 | 110 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 49 | 0 | 23 | 153 | 0 | 17 | 902 | 26 | 98 | 656 | 110 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effect Green (s) | 12.8 | 12.8 | | 12.8 | 12.8 | | 74.3 | 66.8 | 66.8 | 74.3 | 66.8 | 66.8 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.74 | 0.67 | 0.67 | 0.74 | 0.67 | 0.67 |
| v/c Ratio | 0.61 | 0.21 | | 0.14 | 0.49 | | 0.03 | 0.27 | 0.03 | 0.22 | 0.20 | 0.11 |
| Control Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.1 | 3.9 | 0.1 | 12.7 | 9.8 | 5.4 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.1 | 3.9 | 0.1 | 12.7 | 9.8 | 5.4 |
| LOS | E | B | | D | B | | A | A | A | B | A | A |
| Approach Delay | | 44.7 | | | 16.9 | | | 3.7 | | | 9.6 | |
| Approach LOS | | D | | | B | | | A | | | A | |
| Stops (vph) | 61 | 16 | | 19 | 28 | | 3 | 155 | 0 | 59 | 421 | 48 |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2025 - Saturday MIDDAY

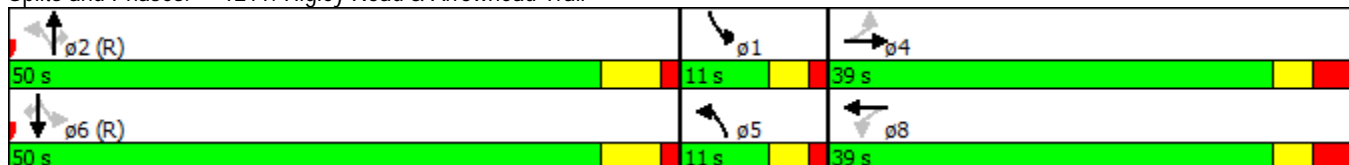


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 1 | 0 | | 0 | 1 | | 0 | 9 | 0 | 4 | 24 | 4 |
| CO Emissions (g/hr) | 88 | 25 | | 24 | 85 | | 11 | 634 | 13 | 248 | 1656 | 251 |
| NOx Emissions (g/hr) | 17 | 5 | | 5 | 17 | | 2 | 123 | 3 | 48 | 322 | 49 |
| VOC Emissions (g/hr) | 20 | 6 | | 6 | 20 | | 3 | 147 | 3 | 57 | 384 | 58 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 57 | 0 | 0 | 16 | 0 |
| Queue Length 50th (ft) | 48 | 7 | | 13 | 7 | | 1 | 35 | 0 | 34 | 111 | 24 |
| Queue Length 95th (ft) | 84 | 34 | | 35 | 61 | | m2 | 59 | 1 | 79 | 151 | 68 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 328 | 534 | | 430 | 589 | | 571 | 3281 | 1013 | 458 | 3281 | 1023 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.24 | 0.09 | | 0.05 | 0.26 | | 0.03 | 0.27 | 0.03 | 0.21 | 0.20 | 0.11 |

Intersection Summary

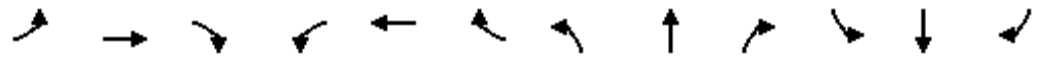
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 9.7
 Intersection LOS: A
 Intersection Capacity Utilization 57.6%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2025 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 635 | 162 | 81 | 643 | 197 | 263 | 844 | 107 | 221 | 618 | 65 |
| Future Volume (vph) | 56 | 635 | 162 | 81 | 643 | 197 | 263 | 844 | 107 | 221 | 618 | 65 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.965 | | | 0.983 | | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4744 | 0 | 1711 | 4832 | 0 | 1711 | 4847 | 0 |
| Flt Permitted | 0.160 | | | 0.247 | | | 0.301 | | | 0.176 | | |
| Satd. Flow (perm) | 288 | 4916 | 1531 | 445 | 4744 | 0 | 542 | 4832 | 0 | 317 | 4847 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 193 | | 74 | | | 24 | | | 19 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 67 | 756 | 193 | 90 | 714 | 219 | 292 | 938 | 119 | 243 | 679 | 71 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 67 | 756 | 193 | 90 | 933 | 0 | 292 | 1057 | 0 | 243 | 750 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 32.6 | 25.2 | 25.2 | 32.6 | 25.2 | | 51.4 | 36.9 | | 51.4 | 36.9 | |
| Actuated g/C Ratio | 0.33 | 0.25 | 0.25 | 0.33 | 0.25 | | 0.51 | 0.37 | | 0.51 | 0.37 | |
| v/c Ratio | 0.38 | 0.61 | 0.36 | 0.41 | 0.75 | | 0.68 | 0.59 | | 0.71 | 0.42 | |
| Control Delay | 30.3 | 40.5 | 13.3 | 32.7 | 35.9 | | 33.0 | 29.9 | | 40.3 | 24.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 30.3 | 40.5 | 13.3 | 32.7 | 35.9 | | 33.0 | 29.9 | | 40.3 | 24.7 | |
| LOS | C | D | B | C | D | | C | C | | D | C | |
| Approach Delay | | 34.6 | | | 35.6 | | | 30.6 | | | 28.5 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Stops (vph) | 32 | 525 | 71 | 57 | 697 | | 241 | 789 | | 146 | 485 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2025 - Saturday MIDDAY

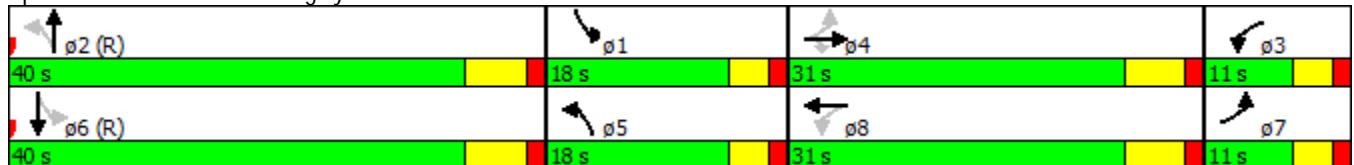


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 3 | 34 | 7 | 4 | 41 | | 12 | 41 | | 7 | 21 | |
| CO Emissions (g/hr) | 186 | 2345 | 481 | 265 | 2876 | | 823 | 2865 | | 519 | 1479 | |
| NOx Emissions (g/hr) | 36 | 456 | 94 | 52 | 560 | | 160 | 557 | | 101 | 288 | |
| VOC Emissions (g/hr) | 43 | 543 | 111 | 61 | 667 | | 191 | 664 | | 120 | 343 | |
| Dilemma Vehicles (#) | 0 | 50 | 0 | 0 | 39 | | 0 | 15 | | 0 | 34 | |
| Queue Length 50th (ft) | 21 | 136 | 2 | 37 | 183 | | 127 | 233 | | 80 | 134 | |
| Queue Length 95th (ft) | 53 | 203 | 76 | 72 | 236 | | 176 | 267 | | #169 | 168 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 188 | 1260 | 536 | 230 | 1271 | | 443 | 1818 | | 356 | 1820 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.36 | 0.60 | 0.36 | 0.39 | 0.73 | | 0.66 | 0.58 | | 0.68 | 0.41 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 32.2
 Intersection LOS: C
 Intersection Capacity Utilization 69.4%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

2025 - Saturday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 30 | 338 | 1006 | 42 | 330 | 913 |
| Future Volume (vph) | 30 | 338 | 1006 | 42 | 330 | 913 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 134.2

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 30 | 338 | 1006 | 42 | 330 | 913 |
| Future Vol, veh/h | 30 | 338 | 1006 | 42 | 330 | 913 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 367 | 1093 | 46 | 344 | 951 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|------------|
| Conflicting Flow All | 2161 | 547 | 0 0 1093 0 |
| Stage 1 | 1093 | - | - - - - |
| Stage 2 | 1068 | - | - - - - |
| Critical Hdwy | 5.74 | 7.14 | - - 5.34 - |
| Critical Hdwy Stg 1 | 6.64 | - | - - - - |
| Critical Hdwy Stg 2 | 6.04 | - | - - - - |
| Follow-up Hdwy | 3.82 | 3.92 | - - 3.12 - |
| Pot Cap-1 Maneuver | 77 | 412 | - - 353 - |
| Stage 1 | 212 | - | - - - - |
| Stage 2 | 263 | - | - - - - |
| Platoon blocked, % | | | - - - - |
| Mov Cap-1 Maneuver | ~ 2 | 412 | - - 353 - |
| Mov Cap-2 Maneuver | ~ 2 | - | - - - - |
| Stage 1 | 212 | - | - - - - |
| Stage 2 | ~ 7 | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|--------|----|------|
| HCM Control Delay, s | \$ 885 | 0 | 20.3 |
| HCM LOS | F | | |

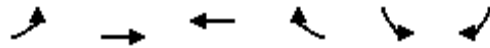
| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|------------|--------------|-----|-----|
| Capacity (veh/h) | - | - | 2 412 | 353 | - |
| HCM Lane V/C Ratio | - | -16.304 | 0.892 0.974 | - | - |
| HCM Control Delay (s) | - | \$ 10254.9 | 53.4 76.4 | - | - |
| HCM Lane LOS | - | - | F F F | - | - |
| HCM 95th %tile Q(veh) | - | - | 5.9 9.3 10.8 | - | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2025 - Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↘ | ↑↑ | ↑↑ | ↗ | ↘ | ↗ |
| Traffic Volume (vph) | 74 | 601 | 670 | 24 | 19 | 54 |
| Future Volume (vph) | 74 | 601 | 670 | 24 | 19 | 54 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.95 | 0.95 | 0.76 | 0.76 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 1.5

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 74 | 601 | 670 | 24 | 19 | 54 |
| Future Vol, veh/h | 74 | 601 | 670 | 24 | 19 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 91 | 91 | 95 | 95 | 76 | 76 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 81 | 660 | 705 | 25 | 25 | 71 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 705 | 0 | 1198 |
| Stage 1 | - | - | 705 |
| Stage 2 | - | - | 493 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 889 | - | 178 |
| Stage 1 | - | - | 451 |
| Stage 2 | - | - | 579 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 889 | - | 162 |
| Mov Cap-2 Maneuver | - | - | 162 |
| Stage 1 | - | - | 451 |
| Stage 2 | - | - | 526 |

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 1 | 0 | 16.5 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 889 | - | - | - | 162 | 643 |
| HCM Lane V/C Ratio | 0.091 | - | - | - | 0.154 | 0.111 |
| HCM Control Delay (s) | 9.5 | - | - | - | 31.2 | 11.3 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.5 | 0.4 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 91 | 249 | 74 | 7 | 86 | 41 | 131 | 155 | 121 | 238 | 328 | 104 |
| Future Volume (vph) | 91 | 249 | 74 | 7 | 86 | 41 | 131 | 155 | 121 | 238 | 328 | 104 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.966 | | | | 0.850 | | 0.934 | | | 0.964 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1799 | 0 | 1770 | 1863 | 1583 | 1770 | 3306 | 0 | 1770 | 3412 | 0 |
| Flt Permitted | 0.692 | | | 0.309 | | | 0.398 | | | 0.556 | | |
| Satd. Flow (perm) | 1289 | 1799 | 0 | 576 | 1863 | 1583 | 741 | 3306 | 0 | 1036 | 3412 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 15 | | | | 82 | | 142 | | | 44 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 3718 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 56.3 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.75 | 0.75 | 0.75 |
| Adj. Flow (vph) | 97 | 265 | 79 | 8 | 101 | 48 | 154 | 182 | 142 | 317 | 437 | 139 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 97 | 344 | 0 | 8 | 101 | 48 | 154 | 324 | 0 | 317 | 576 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 4.0 | 24.0 | | 4.0 | 24.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 8.5 | 30.0 | | 8.5 | 30.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | 35.0 | 28.0 | 37.0 | | 28.0 | 37.0 | |
| Total Split (%) | 35.0% | 35.0% | | 35.0% | 35.0% | 35.0% | 28.0% | 37.0% | | 28.0% | 37.0% | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 26.0 | 26.0 | | 26.0 | 26.0 | 26.0 | 59.0 | 49.5 | | 59.0 | 49.5 | |
| Actuated g/C Ratio | 0.26 | 0.26 | | 0.26 | 0.26 | 0.26 | 0.59 | 0.50 | | 0.59 | 0.50 | |
| v/c Ratio | 0.29 | 0.72 | | 0.05 | 0.21 | 0.10 | 0.30 | 0.19 | | 0.47 | 0.34 | |
| Control Delay | 31.4 | 41.0 | | 29.1 | 33.3 | 8.6 | 11.3 | 9.0 | | 15.1 | 14.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 31.4 | 41.0 | | 29.1 | 33.3 | 8.6 | 11.3 | 9.0 | | 15.1 | 14.8 | |
| LOS | C | D | | C | C | A | B | A | | B | B | |
| Approach Delay | | 38.9 | | | 25.5 | | | 9.7 | | | 14.9 | |
| Approach LOS | | D | | | C | | | A | | | B | |
| Stops (vph) | 69 | 275 | | 8 | 77 | 20 | 54 | 85 | | 143 | 285 | |
| Fuel Used(gal) | 5 | 17 | | 0 | 5 | 2 | 6 | 11 | | 11 | 20 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2025 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 320 | 1207 | | 27 | 316 | 122 | 388 | 781 | | 747 | 1376 | |
| NOx Emissions (g/hr) | 62 | 235 | | 5 | 61 | 24 | 75 | 152 | | 145 | 268 | |
| VOC Emissions (g/hr) | 74 | 280 | | 6 | 73 | 28 | 90 | 181 | | 173 | 319 | |
| Dilemma Vehicles (#) | 0 | 13 | | 0 | 2 | 0 | 0 | 14 | | 0 | 14 | |
| Queue Length 50th (ft) | 51 | 197 | | 5 | 65 | 4 | 33 | 28 | | 118 | 126 | |
| Queue Length 95th (ft) | 88 | 270 | | m11 | 98 | 24 | 68 | 63 | | 156 | 160 | |
| Internal Link Dist (ft) | | 5241 | | | 3638 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 380 | 541 | | 170 | 549 | 524 | 793 | 1707 | | 944 | 1710 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.26 | 0.64 | | 0.05 | 0.18 | 0.09 | 0.19 | 0.19 | | 0.34 | 0.34 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 19.8
 Intersection LOS: B
 Intersection Capacity Utilization 75.0%
 ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

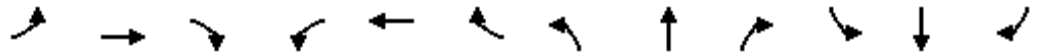


1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 33 | 502 | 88 | 47 | 581 | 136 | 61 | 348 | 57 | 169 | 299 | 31 |
| Future Volume (vph) | 33 | 502 | 88 | 47 | 581 | 136 | 61 | 348 | 57 | 169 | 299 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.978 | | | 0.972 | | | 0.979 | | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3346 | 0 | 1888 | 3325 | 0 | 1888 | 3349 | 0 | 1652 | 3373 | 0 |
| Flt Permitted | 0.289 | | | 0.377 | | | 0.426 | | | 0.339 | | |
| Satd. Flow (perm) | 502 | 3346 | 0 | 749 | 3325 | 0 | 846 | 3349 | 0 | 589 | 3373 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 30 | | | 19 | | | 11 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 34 | 518 | 91 | 51 | 632 | 148 | 67 | 382 | 63 | 190 | 336 | 35 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 34 | 609 | 0 | 51 | 780 | 0 | 67 | 445 | 0 | 190 | 371 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | | 14.0 | 39.0 | | 12.0 | 35.0 | | 12.0 | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | | 14.0% | 39.0% | | 12.0% | 35.0% | | 12.0% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | None | | None | None | |
| Act Effect Green (s) | 56.9 | 49.3 | | 56.9 | 49.3 | | 29.0 | 19.3 | | 29.0 | 19.3 | |
| Actuated g/C Ratio | 0.57 | 0.49 | | 0.57 | 0.49 | | 0.29 | 0.19 | | 0.29 | 0.19 | |
| v/c Ratio | 0.10 | 0.37 | | 0.10 | 0.47 | | 0.21 | 0.67 | | 0.75 | 0.56 | |
| Control Delay | 3.2 | 4.1 | | 5.0 | 7.1 | | 30.8 | 42.7 | | 52.3 | 32.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 3.2 | 4.1 | | 5.0 | 7.1 | | 30.8 | 42.7 | | 52.3 | 32.8 | |
| LOS | A | A | | A | A | | C | D | | D | C | |
| Approach Delay | | 4.0 | | | 6.9 | | | 41.2 | | | 39.4 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Stops (vph) | 4 | 115 | | 9 | 194 | | 46 | 359 | | 191 | 295 | |

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

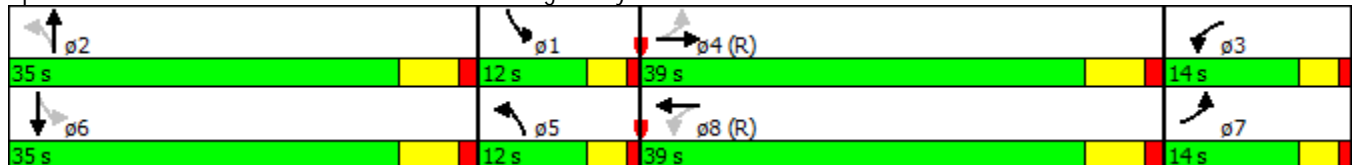


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 1 | 16 | | 2 | 24 | | 3 | 22 | | 10 | 17 | |
| CO Emissions (g/hr) | 60 | 1113 | | 107 | 1704 | | 213 | 1531 | | 698 | 1203 | |
| NOx Emissions (g/hr) | 12 | 217 | | 21 | 332 | | 41 | 298 | | 136 | 234 | |
| VOC Emissions (g/hr) | 14 | 258 | | 25 | 395 | | 49 | 355 | | 162 | 279 | |
| Dilemma Vehicles (#) | 0 | 8 | | 0 | 22 | | 0 | 11 | | 0 | 9 | |
| Queue Length 50th (ft) | 2 | 15 | | 5 | 51 | | 33 | 137 | | 110 | 118 | |
| Queue Length 95th (ft) | 6 | 32 | | m12 | 121 | | 66 | 185 | | 157 | 156 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 423 | 1661 | | 573 | 1655 | | 344 | 984 | | 269 | 985 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.08 | 0.37 | | 0.09 | 0.47 | | 0.19 | 0.45 | | 0.71 | 0.38 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 20.2
 Intersection LOS: C
 Intersection Capacity Utilization 62.0%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2025 - Saturday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 483 | 356 | 85 | 358 | 144 | 229 | 571 | 89 | 193 | 666 | 65 |
| Future Volume (vph) | 56 | 483 | 356 | 85 | 358 | 144 | 229 | 571 | 89 | 193 | 666 | 65 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Flt Permitted | 0.424 | | | 0.309 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 737 | 3421 | 1478 | 537 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 367 | | | 149 | | | 142 | | 16 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 60 | 514 | 379 | 94 | 398 | 160 | 263 | 656 | 102 | 199 | 687 | 67 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 60 | 514 | 379 | 94 | 398 | 160 | 263 | 656 | 102 | 199 | 754 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 32.0 | 23.0 | 23.0 | 32.0 | 23.0 | 23.0 | 12.7 | 37.5 | 37.5 | 12.7 | 37.5 | |
| Actuated g/C Ratio | 0.32 | 0.23 | 0.23 | 0.32 | 0.23 | 0.23 | 0.13 | 0.38 | 0.38 | 0.13 | 0.38 | |
| v/c Ratio | 0.20 | 0.65 | 0.61 | 0.38 | 0.51 | 0.35 | 0.65 | 0.36 | 0.15 | 0.49 | 0.41 | |
| Control Delay | 31.9 | 46.0 | 16.3 | 29.6 | 35.5 | 8.4 | 41.4 | 24.6 | 5.4 | 41.8 | 13.4 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 31.9 | 46.0 | 16.3 | 29.6 | 35.5 | 8.4 | 41.4 | 24.6 | 5.4 | 41.8 | 13.4 | |
| LOS | C | D | B | C | D | A | D | C | A | D | B | |
| Approach Delay | | 33.3 | | | 28.0 | | | 27.0 | | | 19.3 | |
| Approach LOS | | C | | | C | | | C | | | B | |
| Stops (vph) | 39 | 443 | 230 | 55 | 300 | 25 | 212 | 340 | 11 | 179 | 484 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2025 - Saturday PM

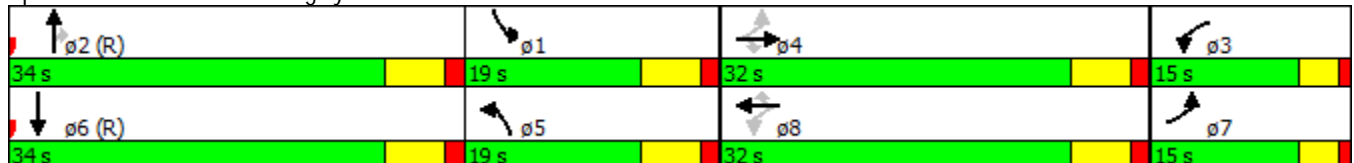


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 1 | 13 | 6 | 6 | 24 | 8 | 7 | 14 | 1 | 5 | 14 | |
| CO Emissions (g/hr) | 80 | 882 | 416 | 385 | 1710 | 549 | 512 | 977 | 92 | 372 | 946 | |
| NOx Emissions (g/hr) | 16 | 172 | 81 | 75 | 333 | 107 | 100 | 190 | 18 | 72 | 184 | |
| VOC Emissions (g/hr) | 19 | 204 | 96 | 89 | 396 | 127 | 119 | 227 | 21 | 86 | 219 | |
| Dilemma Vehicles (#) | 0 | 21 | 0 | 0 | 14 | 0 | 0 | 42 | 0 | 0 | 12 | |
| Queue Length 50th (ft) | 24 | 158 | 73 | 39 | 114 | 5 | 84 | 84 | 0 | 65 | 77 | |
| Queue Length 95th (ft) | m53 | 217 | 128 | 73 | 157 | 55 | 107 | 147 | m29 | 98 | 71 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 365 | 889 | 655 | 315 | 889 | 494 | 416 | 1844 | 663 | 416 | 1830 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.16 | 0.58 | 0.58 | 0.30 | 0.45 | 0.32 | 0.63 | 0.36 | 0.15 | 0.48 | 0.41 | |

Intersection Summary





























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 26.8
 Intersection LOS: C
 Intersection Capacity Utilization 58.4%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2025 - Saturday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|---|--|---|---|---|---|--|--|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   |  |  |  |  |  |   |  |  |    |  |
| Traffic Volume (vph) | 86 | 167 | 53 | 25 | 156 | 35 | 46 | 754 | 139 | 220 | 754 | 236 |
| Future Volume (vph) | 86 | 167 | 53 | 25 | 156 | 35 | 46 | 754 | 139 | 220 | 754 | 236 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.977 | | | 0.964 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3343 | 0 | 1711 | 4739 | 0 |
| Fl _t Permitted | 0.394 | | | 0.584 | | | 0.246 | | | 0.229 | | |
| Satd. Flow (perm) | 758 | 3421 | 1531 | 1088 | 1801 | 1478 | 519 | 3343 | 0 | 412 | 4739 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 82 | | | 82 | | 28 | | | 107 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.66 | 0.66 | 0.66 | 0.62 | 0.62 | 0.62 | 0.90 | 0.90 | 0.90 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 130 | 253 | 80 | 40 | 252 | 56 | 51 | 838 | 154 | 224 | 769 | 241 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 130 | 253 | 80 | 40 | 252 | 56 | 51 | 992 | 0 | 224 | 1010 | 0 |
| Turn Type | Perm | NA | Perm | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 16.5 | 16.5 | 16.5 | 16.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Yellow Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 | 64.7 | 56.6 | | 64.8 | 56.6 | |
| Actuated g/C Ratio | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.65 | 0.57 | | 0.65 | 0.57 | |
| v/c Ratio | 0.85 | 0.37 | 0.21 | 0.18 | 0.69 | 0.15 | 0.12 | 0.52 | | 0.63 | 0.37 | |
| Control Delay | 78.9 | 37.1 | 11.2 | 32.3 | 46.5 | 3.8 | 7.9 | 15.4 | | 16.4 | 12.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 78.9 | 37.1 | 11.2 | 32.3 | 46.5 | 3.8 | 7.9 | 15.4 | | 16.4 | 12.7 | |
| LOS | E | D | B | C | D | A | A | B | | B | B | |
| Approach Delay | | 44.4 | | | 38.0 | | | 15.0 | | | 13.4 | |
| Approach LOS | | D | | | D | | | B | | | B | |
| Stops (vph) | 77 | 125 | 18 | 19 | 139 | 3 | 17 | 526 | | 97 | 390 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2025 - Saturday PM

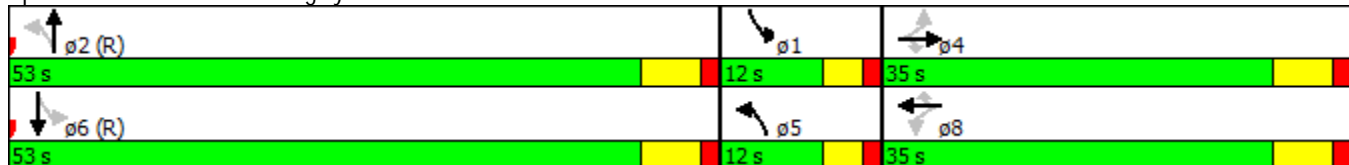


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 5 | 9 | 2 | 1 | 5 | 1 | 2 | 40 | | 7 | 30 | |
| CO Emissions (g/hr) | 372 | 601 | 152 | 51 | 368 | 37 | 131 | 2814 | | 483 | 2081 | |
| NOx Emissions (g/hr) | 72 | 117 | 30 | 10 | 72 | 7 | 26 | 548 | | 94 | 405 | |
| VOC Emissions (g/hr) | 86 | 139 | 35 | 12 | 85 | 9 | 30 | 652 | | 112 | 482 | |
| Dilemma Vehicles (#) | 0 | 13 | 0 | 0 | 6 | 0 | 0 | 45 | | 0 | 120 | |
| Queue Length 50th (ft) | 68 | 66 | 8 | 22 | 152 | 0 | 9 | 186 | | 31 | 85 | |
| Queue Length 95th (ft) | 86 | 73 | 18 | 30 | 134 | 0 | 27 | 301 | | #56 | 167 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 219 | 992 | 502 | 315 | 522 | 486 | 452 | 1904 | | 367 | 2728 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.59 | 0.26 | 0.16 | 0.13 | 0.48 | 0.12 | 0.11 | 0.52 | | 0.61 | 0.37 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 21.3
 Intersection LOS: C
 Intersection Capacity Utilization 72.9%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

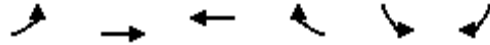
2025 - Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 34 | 452 | 477 | 290 | 352 | 52 |
| Future Volume (vph) | 34 | 452 | 477 | 290 | 352 | 52 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.943 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3337 | 0 | 1770 | 1583 |
| Flt Permitted | 0.200 | | | | 0.950 | |
| Satd. Flow (perm) | 373 | 3539 | 3337 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 196 | | | 57 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.81 | 0.81 | 0.91 | 0.91 |
| Adj. Flow (vph) | 38 | 502 | 589 | 358 | 387 | 57 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 38 | 502 | 947 | 0 | 387 | 57 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 47.9 | 45.9 | 39.5 | | 22.1 | 22.1 |
| Actuated g/C Ratio | 0.60 | 0.57 | 0.49 | | 0.28 | 0.28 |
| v/c Ratio | 0.11 | 0.25 | 0.54 | | 0.79 | 0.12 |
| Control Delay | 8.0 | 9.0 | 8.8 | | 39.5 | 6.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 8.0 | 9.0 | 8.8 | | 39.5 | 6.9 |
| LOS | A | A | A | | D | A |
| Approach Delay | | 9.0 | 8.8 | | 35.3 | |
| Approach LOS | | A | A | | D | |
| Stops (vph) | 14 | 212 | 343 | | 312 | 12 |
| Fuel Used(gal) | 1 | 19 | 33 | | 19 | 2 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2025 - Saturday PM

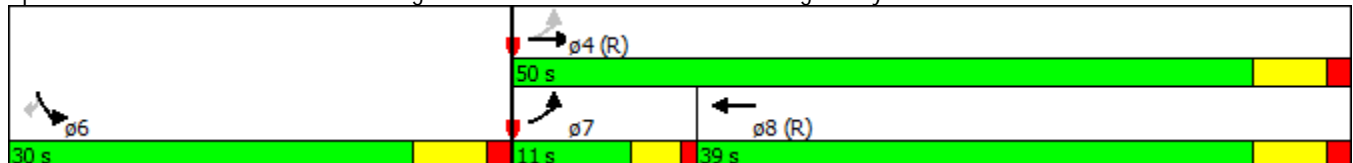


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 98 | 1340 | 2276 | | 1329 | 143 |
| NOx Emissions (g/hr) | 19 | 261 | 443 | | 259 | 28 |
| VOC Emissions (g/hr) | 23 | 311 | 527 | | 308 | 33 |
| Dilemma Vehicles (#) | 0 | 20 | 23 | | 0 | 0 |
| Queue Length 50th (ft) | 8 | 65 | 107 | | 172 | 0 |
| Queue Length 95th (ft) | 19 | 87 | 124 | | #283 | 25 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 345 | 2030 | 1748 | | 531 | 514 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.11 | 0.25 | 0.54 | | 0.73 | 0.11 |

Intersection Summary

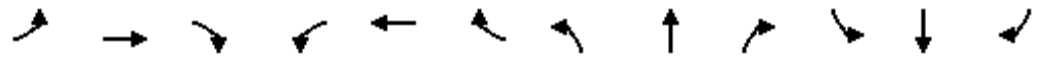
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 14.9
 Intersection LOS: B
 Intersection Capacity Utilization 57.8%
 ICU Level of Service B
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2025 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 277 | 459 | 210 | 151 | 349 | 128 | 146 | 417 | 73 | 208 | 713 | 123 |
| Future Volume (vph) | 277 | 459 | 210 | 151 | 349 | 128 | 146 | 417 | 73 | 208 | 713 | 123 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.953 | | | 0.960 | | | 0.978 | | | 0.978 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3260 | 0 | 1652 | 3284 | 0 | 1652 | 4808 | 0 | 1652 | 4808 | 0 |
| Flt Permitted | 0.384 | | | 0.252 | | | 0.204 | | | 0.425 | | |
| Satd. Flow (perm) | 668 | 3260 | 0 | 438 | 3284 | 0 | 355 | 4808 | 0 | 739 | 4808 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 95 | | | 67 | | | 44 | | | | 43 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | | 45 |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | | 792 |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | | 12.0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 289 | 478 | 219 | 164 | 379 | 139 | 160 | 458 | 80 | 234 | 801 | 138 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 289 | 697 | 0 | 164 | 518 | 0 | 160 | 538 | 0 | 234 | 939 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | |
| v/c Ratio | 0.89 | 0.67 | | 0.65 | 0.50 | | 0.71 | 0.37 | | 0.67 | 0.64 | |
| Control Delay | 59.9 | 27.2 | | 35.2 | 21.9 | | 44.0 | 22.0 | | 30.3 | 25.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 59.9 | 27.2 | | 35.2 | 21.9 | | 44.0 | 22.0 | | 30.3 | 25.4 | |
| LOS | E | C | | D | C | | D | C | | C | C | |
| Approach Delay | | 36.8 | | | 25.1 | | | 27.0 | | | 26.4 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Stops (vph) | 259 | 865 | | 103 | 332 | | 107 | 350 | | 143 | 664 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2025 - Saturday PM

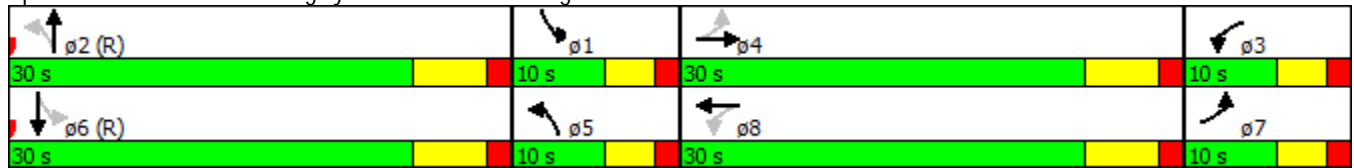


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 16 | 38 | | 4 | 11 | | 5 | 15 | | 10 | 42 | |
| CO Emissions (g/hr) | 1141 | 2652 | | 273 | 776 | | 357 | 1037 | | 718 | 2903 | |
| NOx Emissions (g/hr) | 222 | 516 | | 53 | 151 | | 70 | 202 | | 140 | 565 | |
| VOC Emissions (g/hr) | 264 | 615 | | 63 | 180 | | 83 | 240 | | 166 | 673 | |
| Dilemma Vehicles (#) | 0 | 19 | | 0 | 30 | | 0 | 27 | | 0 | 52 | |
| Queue Length 50th (ft) | 126 | 165 | | 49 | 96 | | 49 | 73 | | 73 | 141 | |
| Queue Length 95th (ft) | m#258 | 223 | | #101 | 143 | | #124 | 104 | | #129 | 181 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 326 | 1044 | | 253 | 1032 | | 226 | 1473 | | 349 | 1472 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.89 | 0.67 | | 0.65 | 0.50 | | 0.71 | 0.37 | | 0.67 | 0.64 | |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 29.2
 Intersection LOS: C
 Intersection Capacity Utilization 71.2%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

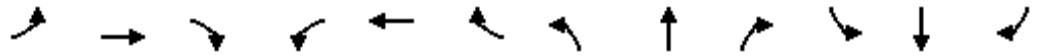
2025 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 679 | 32 | 144 | 632 | 91 |
| Future Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 679 | 32 | 144 | 632 | 91 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.880 | | | 0.864 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1530 | 0 | 1711 | 1502 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.357 | | | 0.702 | | | 0.376 | | | 0.344 | | |
| Satd. Flow (perm) | 643 | 1530 | 0 | 1264 | 1502 | 0 | 654 | 4916 | 1478 | 598 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 67 | | | 193 | | | | 82 | | | 100 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.76 | 0.76 | 0.76 | 0.86 | 0.86 | 0.86 | 0.88 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 71 | 17 | 67 | 33 | 20 | 193 | 35 | 772 | 36 | 158 | 695 | 100 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 71 | 84 | 0 | 33 | 213 | 0 | 35 | 772 | 36 | 158 | 695 | 100 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effect Green (s) | 13.2 | 13.2 | | 13.2 | 13.2 | | 71.8 | 64.3 | 64.3 | 71.8 | 64.3 | 64.3 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.72 | 0.64 | 0.64 | 0.72 | 0.64 | 0.64 |
| v/c Ratio | 0.84 | 0.32 | | 0.20 | 0.58 | | 0.07 | 0.24 | 0.04 | 0.32 | 0.22 | 0.10 |
| Control Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.4 | 4.2 | 0.2 | 15.6 | 12.3 | 5.3 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.4 | 4.2 | 0.2 | 15.6 | 12.3 | 5.3 |
| LOS | F | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 56.2 | | | 17.7 | | | 3.9 | | | 12.1 | |
| Approach LOS | | E | | | B | | | A | | | B | |
| Stops (vph) | 51 | 20 | | 26 | 35 | | 4 | 127 | 1 | 96 | 493 | 45 |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2025 - Saturday PM

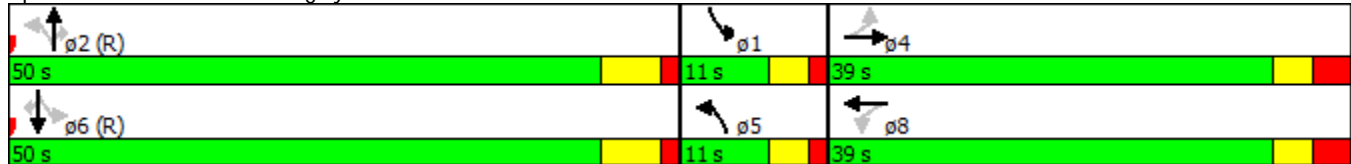


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 2 | 0 | | 0 | 2 | | 0 | 7 | 0 | 5 | 25 | 3 |
| CO Emissions (g/hr) | 106 | 35 | | 33 | 111 | | 20 | 510 | 18 | 384 | 1718 | 216 |
| NOx Emissions (g/hr) | 21 | 7 | | 6 | 22 | | 4 | 99 | 3 | 75 | 334 | 42 |
| VOC Emissions (g/hr) | 24 | 8 | | 8 | 26 | | 5 | 118 | 4 | 89 | 398 | 50 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 49 | 0 | 0 | 24 | 0 |
| Queue Length 50th (ft) | 45 | 10 | | 19 | 12 | | 1 | 29 | 0 | 67 | 128 | 22 |
| Queue Length 95th (ft) | 75 | 36 | | 43 | 65 | | 6 | 52 | 0 | 126 | 168 | 67 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 212 | 549 | | 417 | 624 | | 537 | 3161 | 979 | 501 | 3161 | 986 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.33 | 0.15 | | 0.08 | 0.34 | | 0.07 | 0.24 | 0.04 | 0.32 | 0.22 | 0.10 |

Intersection Summary

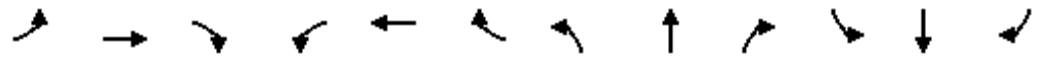
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 12.7
 Intersection Capacity Utilization 59.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2025 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | ↖ | ↑↑↑ | ↗ | ↖ | ↑↑↑ | | ↖ | ↑↑↑ | | ↖ | ↑↑↑ | |
| Traffic Volume (vph) | 39 | 608 | 152 | 85 | 564 | 158 | 225 | 747 | 95 | 302 | 675 | 49 |
| Future Volume (vph) | 39 | 608 | 152 | 85 | 564 | 158 | 225 | 747 | 95 | 302 | 675 | 49 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.967 | | | 0.983 | | | 0.990 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4754 | 0 | 1711 | 4832 | 0 | 1711 | 4867 | 0 |
| Flt Permitted | 0.177 | | | 0.284 | | | 0.229 | | | 0.197 | | |
| Satd. Flow (perm) | 319 | 4916 | 1531 | 511 | 4754 | 0 | 412 | 4832 | 0 | 355 | 4867 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 171 | | 68 | | | 24 | | | 12 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.82 | 0.82 | 0.82 | 0.90 | 0.90 | 0.90 | 0.84 | 0.84 | 0.84 |
| Adj. Flow (vph) | 44 | 683 | 171 | 104 | 688 | 193 | 250 | 830 | 106 | 360 | 804 | 58 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 44 | 683 | 171 | 104 | 881 | 0 | 250 | 936 | 0 | 360 | 862 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 31.7 | 24.4 | 24.4 | 31.7 | 24.4 | | 52.3 | 32.1 | | 52.3 | 32.1 | |
| Actuated g/C Ratio | 0.32 | 0.24 | 0.24 | 0.32 | 0.24 | | 0.52 | 0.32 | | 0.52 | 0.32 | |
| v/c Ratio | 0.24 | 0.57 | 0.34 | 0.45 | 0.73 | | 0.55 | 0.60 | | 0.82 | 0.55 | |
| Control Delay | 25.2 | 40.6 | 14.3 | 33.6 | 35.9 | | 31.1 | 31.1 | | 47.3 | 29.4 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 25.2 | 40.6 | 14.3 | 33.6 | 35.9 | | 31.1 | 31.1 | | 47.3 | 29.4 | |
| LOS | C | D | B | C | D | | C | C | | D | C | |
| Approach Delay | | 34.9 | | | 35.6 | | | 31.1 | | | 34.7 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Stops (vph) | 23 | 503 | 73 | 59 | 597 | | 272 | 715 | | 174 | 571 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2025 - Saturday PM

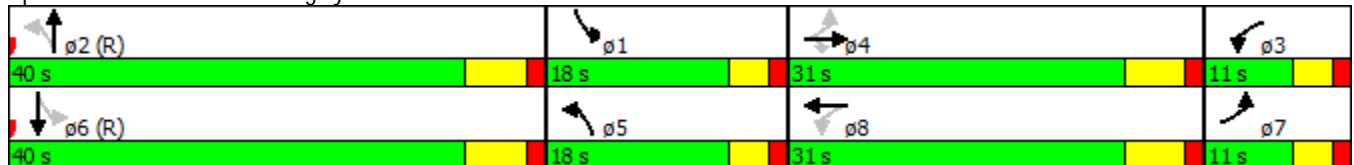


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 2 | 32 | 7 | 4 | 35 | | 11 | 37 | | 10 | 24 | |
| CO Emissions (g/hr) | 127 | 2247 | 459 | 278 | 2470 | | 756 | 2565 | | 717 | 1668 | |
| NOx Emissions (g/hr) | 25 | 437 | 89 | 54 | 481 | | 147 | 499 | | 139 | 325 | |
| VOC Emissions (g/hr) | 30 | 521 | 106 | 64 | 573 | | 175 | 594 | | 166 | 387 | |
| Dilemma Vehicles (#) | 0 | 64 | 0 | 0 | 35 | | 0 | 34 | | 0 | 36 | |
| Queue Length 50th (ft) | 13 | 120 | 2 | 44 | 173 | | 110 | 206 | | 141 | 170 | |
| Queue Length 95th (ft) | 42 | 198 | 84 | 73 | 195 | | 146 | 234 | | #289 | 181 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 193 | 1229 | 511 | 243 | 1239 | | 457 | 1717 | | 438 | 1721 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.23 | 0.56 | 0.33 | 0.43 | 0.71 | | 0.55 | 0.55 | | 0.82 | 0.50 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 34.0
 Intersection LOS: C
 Intersection Capacity Utilization 69.4%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

2025 - Saturday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | ↶ | ↶ | ↑↑↑ | ↷ | ↷ | ↓↓↓ |
| Traffic Volume (vph) | 38 | 274 | 915 | 86 | 276 | 960 |
| Future Volume (vph) | 38 | 274 | 915 | 86 | 276 | 960 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.89 | 0.89 | 0.98 | 0.98 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 17.3

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 38 | 274 | 915 | 86 | 276 | 960 |
| Future Vol, veh/h | 38 | 274 | 915 | 86 | 276 | 960 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 91 | 91 | 89 | 89 | 98 | 98 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 301 | 1028 | 97 | 282 | 980 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 1983 | 514 | 0 | 0 | 1028 | 0 |
| Stage 1 | 1028 | - | - | - | - | - |
| Stage 2 | 955 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 96 | 433 | - | - | 379 | - |
| Stage 1 | 232 | - | - | - | - | - |
| Stage 2 | 302 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | ~ 25 | 433 | - | - | 379 | - |
| Mov Cap-2 Maneuver | ~ 25 | - | - | - | - | - |
| Stage 1 | 232 | - | - | - | - | - |
| Stage 2 | 77 | - | - | - | - | - |

| Approach | WB | | NB | | SB |
|----------------------|-------|--|----|--|-----|
| HCM Control Delay, s | 107.1 | | 0 | | 8.4 |
| HCM LOS | F | | | | |

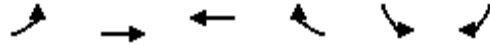
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|----------|-------|-------|-----|
| Capacity (veh/h) | - | - | 25 | 433 | 379 | - |
| HCM Lane V/C Ratio | - | - | 1.67 | 0.695 | 0.743 | - |
| HCM Control Delay (s) | - | - | \$ 661.7 | 30.2 | 37.4 | - |
| HCM Lane LOS | - | - | F | D | E | - |
| HCM 95th %tile Q(veh) | - | - | 5.1 | 5.2 | 5.9 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
 7: Queen Creek Road & Middle Drive

2025 - Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↷↷ | ↷↷ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 41 | 701 | 605 | 15 | 14 | 29 |
| Future Volume (vph) | 41 | 701 | 605 | 15 | 14 | 29 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.94 | 0.94 | 0.95 | 0.95 | 0.90 | 0.90 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

| | |
|------------------|-----|
| Int Delay, s/veh | 0.8 |
|------------------|-----|

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 41 | 701 | 605 | 15 | 14 | 29 |
| Future Vol, veh/h | 41 | 701 | 605 | 15 | 14 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 95 | 95 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 44 | 746 | 637 | 16 | 16 | 32 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 637 | 0 | 1097 |
| Stage 1 | - | - | 637 |
| Stage 2 | - | - | 460 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 943 | - | 678 |
| Stage 1 | - | - | 489 |
| Stage 2 | - | - | 602 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 943 | - | 678 |
| Mov Cap-2 Maneuver | - | - | 197 |
| Stage 1 | - | - | 489 |
| Stage 2 | - | - | 574 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 15.2 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 943 | - | - | - | 197 | 678 |
| HCM Lane V/C Ratio | 0.046 | - | - | - | 0.079 | 0.048 |
| HCM Control Delay (s) | 9 | - | - | - | 24.8 | 10.6 |
| HCM Lane LOS | A | - | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 | 0.1 |

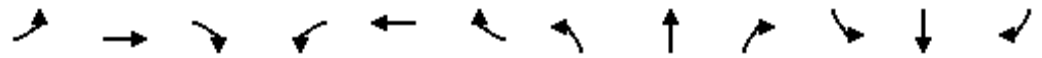
APPENDIX G

2030 BACKGROUND TRAFFIC CAPACITY ANALYSIS



Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 55 | 213 | 63 | 15 | 108 | 12 | 94 | 166 | 82 | 208 | 217 | 100 |
| Future Volume (vph) | 55 | 213 | 63 | 15 | 108 | 12 | 94 | 166 | 82 | 208 | 217 | 100 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.966 | | | | 0.850 | | 0.950 | | | 0.953 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1799 | 0 | 1770 | 1863 | 1583 | 1770 | 3362 | 0 | 1770 | 3373 | 0 |
| Flt Permitted | 0.635 | | | 0.259 | | | 0.530 | | | 0.565 | | |
| Satd. Flow (perm) | 1183 | 1799 | 0 | 482 | 1863 | 1583 | 987 | 3362 | 0 | 1052 | 3373 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 15 | | | | 82 | | 101 | | | 103 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 3718 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 56.3 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.72 | 0.72 | 0.72 | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 |
| Adj. Flow (vph) | 70 | 270 | 80 | 21 | 150 | 17 | 116 | 205 | 101 | 245 | 255 | 118 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 70 | 350 | 0 | 21 | 150 | 17 | 116 | 306 | 0 | 245 | 373 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 9.5 | 30.0 | | 9.5 | 30.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 23.5 | 23.5 | | 23.5 | 23.5 | 23.5 | 61.5 | 53.8 | | 61.5 | 53.8 | |
| Actuated g/C Ratio | 0.24 | 0.24 | | 0.24 | 0.24 | 0.24 | 0.62 | 0.54 | | 0.62 | 0.54 | |
| v/c Ratio | 0.25 | 0.80 | | 0.19 | 0.34 | 0.04 | 0.18 | 0.17 | | 0.35 | 0.20 | |
| Control Delay | 31.5 | 48.5 | | 32.9 | 35.3 | 1.7 | 8.7 | 8.8 | | 8.8 | 8.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 31.5 | 48.5 | | 32.9 | 35.3 | 1.7 | 8.7 | 8.8 | | 8.8 | 8.2 | |
| LOS | C | D | | C | D | A | A | A | | A | A | |
| Approach Delay | | 45.7 | | | 32.0 | | | 8.8 | | | 8.5 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Stops (vph) | 42 | 243 | | 11 | 78 | 1 | 36 | 83 | | 75 | 89 | |
| Fuel Used(gal) | 3 | 15 | | 1 | 5 | 0 | 4 | 10 | | 8 | 13 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Weekday MIDDAY

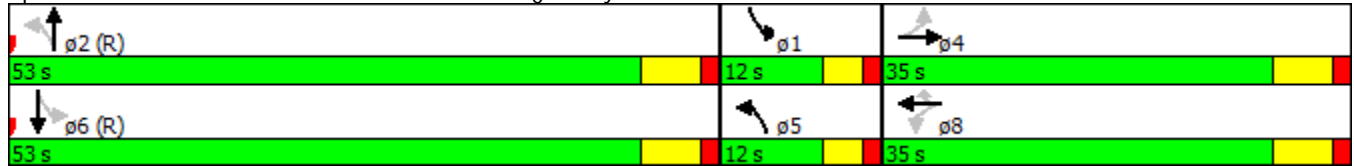


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 194 | 1068 | | 53 | 384 | 30 | 272 | 709 | | 591 | 876 | |
| NOx Emissions (g/hr) | 38 | 208 | | 10 | 75 | 6 | 53 | 138 | | 115 | 170 | |
| VOC Emissions (g/hr) | 45 | 248 | | 12 | 89 | 7 | 63 | 164 | | 137 | 203 | |
| Dilemma Vehicles (#) | 0 | 12 | | 0 | 13 | 0 | 0 | 12 | | 0 | 10 | |
| Queue Length 50th (ft) | 36 | 201 | | 10 | 72 | 0 | 25 | 32 | | 43 | 34 | |
| Queue Length 95th (ft) | 60 | 237 | | m21 | 90 | m2 | 48 | 54 | | 83 | 56 | |
| Internal Link Dist (ft) | | 5241 | | | 3638 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 345 | 535 | | 140 | 543 | 520 | 678 | 1854 | | 714 | 1861 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.20 | 0.65 | | 0.15 | 0.28 | 0.03 | 0.17 | 0.17 | | 0.34 | 0.20 | |

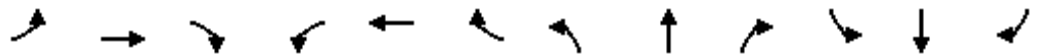
Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 20.7
 Intersection LOS: C
 Intersection Capacity Utilization 48.6%
 ICU Level of Service A
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

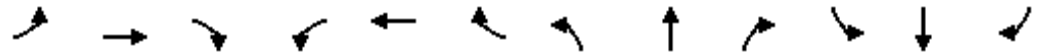


1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 48 | 428 | 75 | 42 | 630 | 172 | 79 | 303 | 51 | 106 | 202 | 38 |
| Future Volume (vph) | 48 | 428 | 75 | 42 | 630 | 172 | 79 | 303 | 51 | 106 | 202 | 38 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.978 | | | 0.968 | | | 0.978 | | | 0.976 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3346 | 0 | 1888 | 3312 | 0 | 1888 | 3346 | 0 | 1652 | 3339 | 0 |
| Flt Permitted | 0.261 | | | 0.415 | | | 0.544 | | | 0.392 | | |
| Satd. Flow (perm) | 454 | 3346 | 0 | 825 | 3312 | 0 | 1081 | 3346 | 0 | 682 | 3339 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 37 | | | 19 | | | 22 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 53 | 476 | 83 | 46 | 685 | 187 | 85 | 326 | 55 | 120 | 230 | 43 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 53 | 559 | 0 | 46 | 872 | 0 | 85 | 381 | 0 | 120 | 273 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | | 14.0 | 39.0 | | 12.0 | 35.0 | | 12.0 | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | | 14.0% | 39.0% | | 12.0% | 35.0% | | 12.0% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | None | | None | None | |
| Act Effect Green (s) | 60.9 | 53.2 | | 60.9 | 53.2 | | 25.0 | 17.2 | | 25.0 | 17.2 | |
| Actuated g/C Ratio | 0.61 | 0.53 | | 0.61 | 0.53 | | 0.25 | 0.17 | | 0.25 | 0.17 | |
| v/c Ratio | 0.15 | 0.31 | | 0.08 | 0.49 | | 0.27 | 0.64 | | 0.53 | 0.46 | |
| Control Delay | 2.7 | 2.3 | | 3.8 | 5.9 | | 31.7 | 41.8 | | 36.1 | 27.1 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 2.7 | 2.3 | | 3.8 | 5.9 | | 31.7 | 41.8 | | 36.1 | 27.1 | |
| LOS | A | A | | A | A | | C | D | | D | C | |
| Approach Delay | | 2.3 | | | 5.8 | | | 39.9 | | | 29.9 | |
| Approach LOS | | A | | | A | | | D | | | C | |
| Stops (vph) | 5 | 31 | | 6 | 162 | | 56 | 282 | | 98 | 207 | |

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

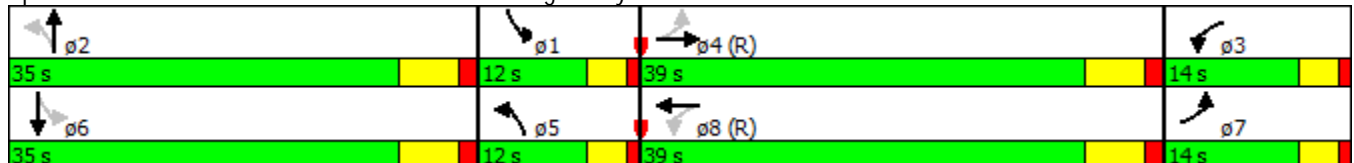


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 1 | 13 | | 1 | 26 | | 4 | 19 | | 6 | 12 | |
| CO Emissions (g/hr) | 86 | 886 | | 93 | 1842 | | 274 | 1306 | | 394 | 849 | |
| NOx Emissions (g/hr) | 17 | 172 | | 18 | 358 | | 53 | 254 | | 77 | 165 | |
| VOC Emissions (g/hr) | 20 | 205 | | 22 | 427 | | 64 | 303 | | 91 | 197 | |
| Dilemma Vehicles (#) | 0 | 5 | | 0 | 25 | | 0 | 10 | | 0 | 6 | |
| Queue Length 50th (ft) | 2 | 9 | | 4 | 53 | | 41 | 105 | | 72 | 84 | |
| Queue Length 95th (ft) | 6 | 23 | | m10 | 75 | | 76 | 145 | | 114 | 117 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 416 | 1790 | | 644 | 1780 | | 358 | 983 | | 263 | 983 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.13 | 0.31 | | 0.07 | 0.49 | | 0.24 | 0.39 | | 0.46 | 0.28 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 15.5
 Intersection LOS: B
 Intersection Capacity Utilization 59.6%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2030 - Weekday MIDDAY

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 489 | 226 | 85 | 393 | 187 | 222 | 604 | 92 | 214 | 554 | 61 |
| Future Volume (vph) | 56 | 489 | 226 | 85 | 393 | 187 | 222 | 604 | 92 | 214 | 554 | 61 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4842 | 0 |
| Flt Permitted | 0.385 | | | 0.284 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 669 | 3421 | 1478 | 494 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4842 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 231 | | | 176 | | | 142 | | 18 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 62 | 543 | 251 | 94 | 437 | 208 | 229 | 623 | 95 | 233 | 602 | 66 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 62 | 543 | 251 | 94 | 437 | 208 | 229 | 623 | 95 | 233 | 668 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 32.1 | 23.1 | 23.1 | 32.1 | 23.1 | 23.1 | 12.5 | 37.6 | 37.6 | 12.5 | 37.6 | |
| Actuated g/C Ratio | 0.32 | 0.23 | 0.23 | 0.32 | 0.23 | 0.23 | 0.12 | 0.38 | 0.38 | 0.12 | 0.38 | |
| v/c Ratio | 0.22 | 0.69 | 0.48 | 0.39 | 0.55 | 0.44 | 0.57 | 0.34 | 0.14 | 0.58 | 0.37 | |
| Control Delay | 32.0 | 46.0 | 16.6 | 30.9 | 36.3 | 10.2 | 59.0 | 26.9 | 6.2 | 45.6 | 15.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 32.0 | 46.0 | 16.6 | 30.9 | 36.3 | 10.2 | 59.0 | 26.9 | 6.2 | 45.6 | 15.7 | |
| LOS | C | D | B | C | D | B | E | C | A | D | B | |
| Approach Delay | | 36.4 | | | 28.3 | | | 32.6 | | | 23.5 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Stops (vph) | 37 | 459 | 159 | 57 | 335 | 38 | 216 | 484 | 18 | 201 | 461 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2030 - Weekday MIDDAY

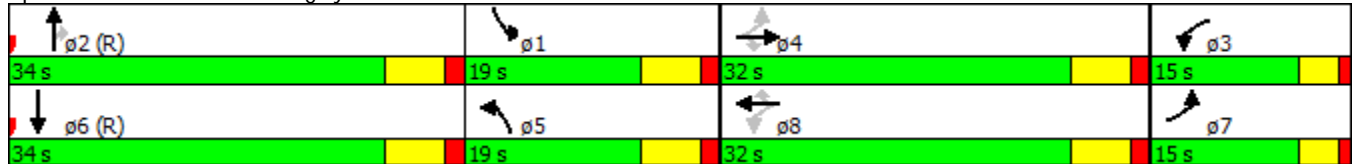


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 1 | 13 | 4 | 6 | 27 | 10 | 8 | 17 | 1 | 6 | 12 | |
| CO Emissions (g/hr) | 79 | 902 | 276 | 388 | 1887 | 723 | 562 | 1162 | 101 | 427 | 863 | |
| NOx Emissions (g/hr) | 15 | 176 | 54 | 76 | 367 | 141 | 109 | 226 | 20 | 83 | 168 | |
| VOC Emissions (g/hr) | 18 | 209 | 64 | 90 | 437 | 168 | 130 | 269 | 24 | 99 | 200 | |
| Dilemma Vehicles (#) | 0 | 11 | 0 | 0 | 17 | 0 | 0 | 23 | 0 | 0 | 15 | |
| Queue Length 50th (ft) | 27 | 175 | 40 | 39 | 127 | 16 | 77 | 124 | 6 | 77 | 124 | |
| Queue Length 95th (ft) | 57 | 230 | 97 | 73 | 173 | 74 | 117 | 173 | 37 | 110 | 71 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 349 | 889 | 555 | 305 | 889 | 514 | 416 | 1847 | 664 | 416 | 1830 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.18 | 0.61 | 0.45 | 0.31 | 0.49 | 0.40 | 0.55 | 0.34 | 0.14 | 0.56 | 0.37 | |

Intersection Summary






























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 30.2
 Intersection LOS: C
 Intersection Capacity Utilization 56.1%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2030 - Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|---|--|---|---|---|---|--|--|--|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   |  |  |  |  |  |   |   |  |    |  |
| Traffic Volume (vph) | 67 | 162 | 41 | 22 | 130 | 25 | 55 | 662 | 114 | 130 | 558 | 182 |
| Future Volume (vph) | 67 | 162 | 41 | 22 | 130 | 25 | 55 | 662 | 114 | 130 | 558 | 182 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.978 | | | 0.963 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3346 | 0 | 1711 | 4734 | 0 |
| Fl _t Permitted | 0.539 | | | 0.547 | | | 0.324 | | | 0.282 | | |
| Satd. Flow (perm) | 1037 | 3421 | 1531 | 1019 | 1801 | 1478 | 684 | 3346 | 0 | 508 | 4734 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 125 | | | 125 | | 25 | | | 104 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.62 | 0.62 | 0.62 | 0.80 | 0.80 | 0.80 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 108 | 261 | 66 | 28 | 163 | 31 | 59 | 712 | 123 | 138 | 594 | 194 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 108 | 261 | 66 | 28 | 163 | 31 | 59 | 835 | 0 | 138 | 788 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 10.0 | 10.0 | 4.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 8.0 | 16.5 | 16.5 | 8.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 12.0 | 23.0 | 23.0 | 12.0 | 23.0 | 23.0 | 16.0 | 49.0 | | 16.0 | 49.0 | |
| Total Split (%) | 12.0% | 23.0% | 23.0% | 12.0% | 23.0% | 23.0% | 16.0% | 49.0% | | 16.0% | 49.0% | |
| Yellow Time (s) | 3.5 | 4.5 | 4.5 | 3.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 0.5 | 1.5 | 1.5 | 0.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 22.1 | 14.4 | 14.4 | 22.1 | 14.4 | 14.4 | 60.9 | 54.1 | | 60.9 | 54.1 | |
| Actuated g/C Ratio | 0.22 | 0.14 | 0.14 | 0.22 | 0.14 | 0.14 | 0.61 | 0.54 | | 0.61 | 0.54 | |
| v/c Ratio | 0.39 | 0.53 | 0.20 | 0.10 | 0.63 | 0.10 | 0.12 | 0.46 | | 0.37 | 0.30 | |
| Control Delay | 38.4 | 40.4 | 5.4 | 27.5 | 50.6 | 0.6 | 8.5 | 15.2 | | 13.6 | 7.8 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 38.4 | 40.4 | 5.4 | 27.5 | 50.6 | 0.6 | 8.5 | 15.2 | | 13.6 | 7.8 | |
| LOS | D | D | A | C | D | A | A | B | | B | A | |
| Approach Delay | | 34.6 | | | 40.7 | | | 14.8 | | | 8.7 | |
| Approach LOS | | C | | | D | | | B | | | A | |
| Stops (vph) | 61 | 155 | 9 | 18 | 119 | 0 | 21 | 448 | | 60 | 245 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2030 - Weekday MIDDAY

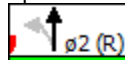
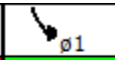

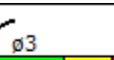

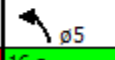
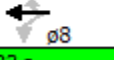
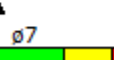


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 4 | 9 | 2 | 1 | 5 | 0 | 2 | 35 | | 4 | 21 | |
| CO Emissions (g/hr) | 252 | 620 | 110 | 45 | 317 | 23 | 158 | 2439 | | 283 | 1465 | |
| NOx Emissions (g/hr) | 49 | 121 | 21 | 9 | 62 | 5 | 31 | 475 | | 55 | 285 | |
| VOC Emissions (g/hr) | 58 | 144 | 26 | 10 | 73 | 5 | 37 | 565 | | 65 | 340 | |
| Dilemma Vehicles (#) | 0 | 3 | 0 | 0 | 5 | 0 | 0 | 39 | | 0 | 16 | |
| Queue Length 50th (ft) | 64 | 90 | 2 | 13 | 99 | 0 | 12 | 155 | | 21 | 45 | |
| Queue Length 95th (ft) | 75 | 82 | 3 | 29 | 137 | 0 | 30 | 236 | | 59 | 71 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 316 | 597 | 371 | 309 | 315 | 361 | 610 | 1820 | | 479 | 2607 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.34 | 0.44 | 0.18 | 0.09 | 0.52 | 0.09 | 0.10 | 0.46 | | 0.29 | 0.30 | |

Intersection Summary

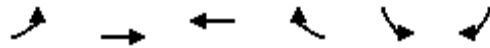
| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.63 |
| Intersection Signal Delay: | 18.3 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 58.3% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1207: Higley Road & Ocotillo Road

| | | | |
|---|---|---|---|
|  |  |  |  |
| 49 s | 16 s | 23 s | 12 s |
|  |  |  |  |
| 49 s | 16 s | 23 s | 12 s |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

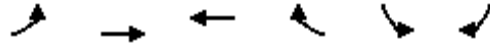
2030 - Weekday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 33 | 385 | 445 | 282 | 225 | 46 |
| Future Volume (vph) | 33 | 385 | 445 | 282 | 225 | 46 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.942 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3334 | 0 | 1770 | 1583 |
| Flt Permitted | 0.281 | | | | 0.950 | |
| Satd. Flow (perm) | 523 | 3539 | 3334 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 215 | | | 61 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.94 | 0.94 | 0.76 | 0.76 |
| Adj. Flow (vph) | 37 | 428 | 473 | 300 | 296 | 61 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 37 | 428 | 773 | 0 | 296 | 61 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 50.3 | 48.3 | 42.0 | | 19.7 | 19.7 |
| Actuated g/C Ratio | 0.63 | 0.60 | 0.52 | | 0.25 | 0.25 |
| v/c Ratio | 0.09 | 0.20 | 0.42 | | 0.68 | 0.14 |
| Control Delay | 7.1 | 7.8 | 5.9 | | 35.2 | 7.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 7.1 | 7.8 | 5.9 | | 35.2 | 7.0 |
| LOS | A | A | A | | D | A |
| Approach Delay | | 7.7 | 5.9 | | 30.4 | |
| Approach LOS | | A | A | | C | |
| Stops (vph) | 14 | 168 | 211 | | 196 | 10 |
| Fuel Used(gal) | 1 | 16 | 29 | | 12 | 2 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2030 - Weekday MIDDAY

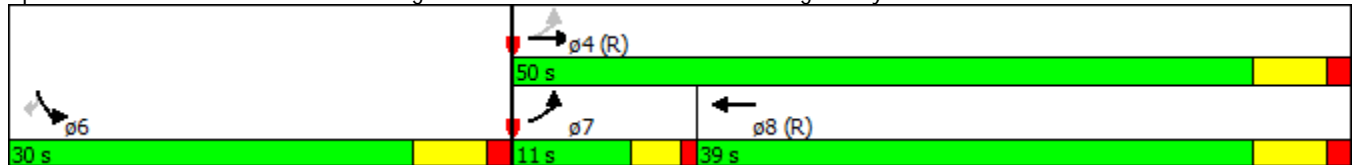


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 95 | 1121 | 2027 | | 833 | 126 |
| NOx Emissions (g/hr) | 19 | 218 | 394 | | 162 | 24 |
| VOC Emissions (g/hr) | 22 | 260 | 470 | | 193 | 29 |
| Dilemma Vehicles (#) | 0 | 16 | 20 | | 0 | 0 |
| Queue Length 50th (ft) | 8 | 51 | 63 | | 133 | 0 |
| Queue Length 95th (ft) | 19 | 73 | 85 | | 162 | 18 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 438 | 2138 | 1852 | | 531 | 517 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.08 | 0.20 | 0.42 | | 0.56 | 0.12 |

Intersection Summary

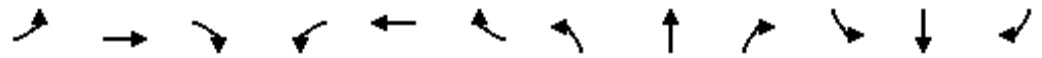
| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 80 |
| Actuated Cycle Length: | 80 |
| Offset: | 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.68 |
| Intersection Signal Delay: | 11.9 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 49.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

2030 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 184 | 425 | 141 | 175 | 355 | 193 | 129 | 480 | 77 | 167 | 578 | 97 |
| Future Volume (vph) | 184 | 425 | 141 | 175 | 355 | 193 | 129 | 480 | 77 | 167 | 578 | 97 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.963 | | | 0.947 | | | 0.979 | | | 0.978 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3295 | 0 | 1652 | 3240 | 0 | 1652 | 4813 | 0 | 1652 | 4808 | 0 |
| Flt Permitted | 0.294 | | | 0.304 | | | 0.312 | | | 0.371 | | |
| Satd. Flow (perm) | 511 | 3295 | 0 | 529 | 3240 | 0 | 542 | 4813 | 0 | 645 | 4808 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 58 | | | 130 | | | 39 | | | 41 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 202 | 467 | 155 | 203 | 413 | 224 | 143 | 533 | 86 | 178 | 615 | 103 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 202 | 622 | 0 | 203 | 637 | 0 | 143 | 619 | 0 | 178 | 718 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | |
| v/c Ratio | 0.73 | 0.60 | | 0.72 | 0.60 | | 0.50 | 0.42 | | 0.56 | 0.49 | |
| Control Delay | 47.3 | 27.5 | | 38.1 | 21.5 | | 26.6 | 22.9 | | 26.0 | 22.9 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 47.3 | 27.5 | | 38.1 | 21.5 | | 26.6 | 22.9 | | 26.0 | 22.9 | |
| LOS | D | C | | D | C | | C | C | | C | C | |
| Approach Delay | | 32.4 | | | 25.5 | | | 23.6 | | | 23.5 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Stops (vph) | 170 | 510 | | 120 | 364 | | 85 | 412 | | 110 | 500 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2030 - Weekday MIDDAY

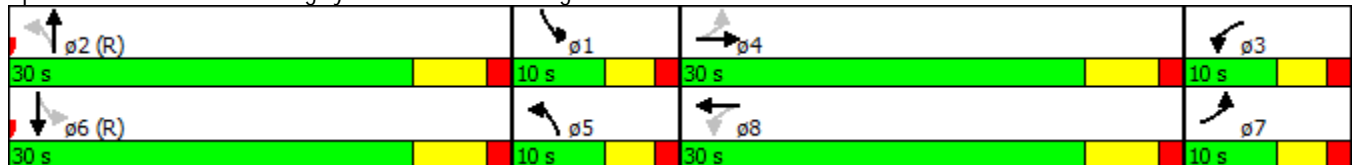


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 10 | 29 | | 5 | 12 | | 4 | 17 | | 8 | 33 | |
| CO Emissions (g/hr) | 723 | 2053 | | 324 | 874 | | 275 | 1199 | | 562 | 2289 | |
| NOx Emissions (g/hr) | 141 | 400 | | 63 | 170 | | 54 | 233 | | 109 | 445 | |
| VOC Emissions (g/hr) | 168 | 476 | | 75 | 202 | | 64 | 278 | | 130 | 530 | |
| Dilemma Vehicles (#) | 0 | 17 | | 0 | 34 | | 0 | 31 | | 0 | 42 | |
| Queue Length 50th (ft) | 76 | 148 | | 62 | 112 | | 43 | 87 | | 53 | 100 | |
| Queue Length 95th (ft) | #175 | 206 | | #119 | 155 | | 85 | 121 | | 95 | 136 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 276 | 1029 | | 282 | 1063 | | 286 | 1471 | | 319 | 1471 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.73 | 0.60 | | 0.72 | 0.60 | | 0.50 | 0.42 | | 0.56 | 0.49 | |

Intersection Summary























Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 26.2
 Intersection LOS: C
 Intersection Capacity Utilization 64.2%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2030 - Weekday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 734 | 27 | 98 | 551 | 65 |
| Future Volume (vph) | 51 | 10 | 48 | 21 | 8 | 131 | 24 | 734 | 27 | 98 | 551 | 65 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.876 | | | 0.859 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1523 | 0 | 1711 | 1493 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.483 | | | 0.711 | | | 0.403 | | | 0.345 | | |
| Satd. Flow (perm) | 870 | 1523 | 0 | 1280 | 1493 | 0 | 701 | 4916 | 1478 | 600 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 58 | | | 158 | | | | 82 | | | 82 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 61 | 12 | 58 | 25 | 10 | 158 | 25 | 773 | 28 | 111 | 626 | 74 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 61 | 70 | 0 | 25 | 168 | 0 | 25 | 773 | 28 | 111 | 626 | 74 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effct Green (s) | 11.9 | 11.9 | | 11.9 | 11.9 | | 73.1 | 65.6 | 65.6 | 73.1 | 65.6 | 65.6 |
| Actuated g/C Ratio | 0.12 | 0.12 | | 0.12 | 0.12 | | 0.73 | 0.66 | 0.66 | 0.73 | 0.66 | 0.66 |
| v/c Ratio | 0.59 | 0.30 | | 0.16 | 0.53 | | 0.04 | 0.24 | 0.03 | 0.22 | 0.19 | 0.07 |
| Control Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 1.0 | 2.9 | 0.1 | 12.4 | 10.8 | 5.7 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 64.0 | 17.0 | | 40.9 | 14.1 | | 1.0 | 2.9 | 0.1 | 12.4 | 10.8 | 5.7 |
| LOS | E | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 38.9 | | | 17.6 | | | 2.8 | | | 10.6 | |
| Approach LOS | | D | | | B | | | A | | | B | |
| Stops (vph) | 48 | 18 | | 20 | 26 | | 2 | 116 | 0 | 60 | 376 | 30 |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2030 - Weekday MIDDAY

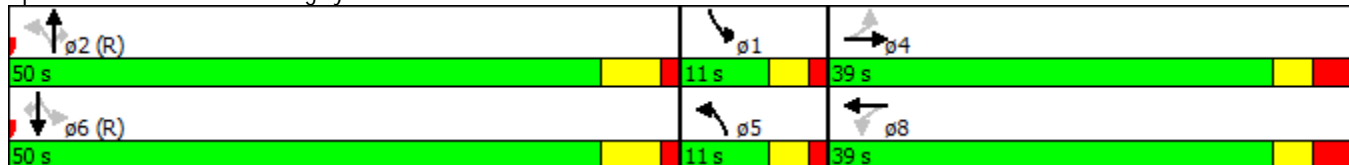


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 1 | 0 | | 0 | 1 | | 0 | 7 | 0 | 4 | 21 | 2 |
| CO Emissions (g/hr) | 71 | 32 | | 25 | 84 | | 15 | 519 | 14 | 252 | 1440 | 153 |
| NOx Emissions (g/hr) | 14 | 6 | | 5 | 16 | | 3 | 101 | 3 | 49 | 280 | 30 |
| VOC Emissions (g/hr) | 16 | 7 | | 6 | 19 | | 3 | 120 | 3 | 58 | 334 | 35 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 36 | 0 | 0 | 12 | 0 |
| Queue Length 50th (ft) | 38 | 7 | | 15 | 6 | | 1 | 20 | 0 | 49 | 111 | 14 |
| Queue Length 95th (ft) | 72 | 39 | | 35 | 51 | | m3 | 33 | m0 | 84 | 135 | 50 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 287 | 541 | | 422 | 598 | | 577 | 3223 | 997 | 509 | 3223 | 997 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.21 | 0.13 | | 0.06 | 0.28 | | 0.04 | 0.24 | 0.03 | 0.22 | 0.19 | 0.07 |

Intersection Summary

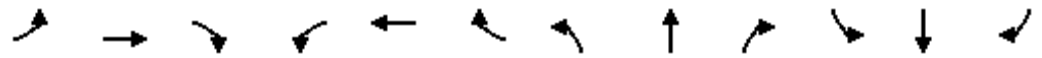
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 9.9 Intersection LOS: A
 Intersection Capacity Utilization 55.2% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2030 - Weekday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | ↖ | ↑↑↑ | ↗ | ↖ | ↑↑↑ | | ↖ | ↑↑↑ | | ↖ | ↑↑↑ | |
| Traffic Volume (vph) | 25 | 502 | 122 | 66 | 539 | 157 | 221 | 720 | 114 | 224 | 576 | 56 |
| Future Volume (vph) | 25 | 502 | 122 | 66 | 539 | 157 | 221 | 720 | 114 | 224 | 576 | 56 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.966 | | | 0.979 | | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4749 | 0 | 1711 | 4813 | 0 | 1711 | 4852 | 0 |
| Flt Permitted | 0.206 | | | 0.324 | | | 0.327 | | | 0.217 | | |
| Satd. Flow (perm) | 371 | 4916 | 1531 | 583 | 4749 | 0 | 589 | 4813 | 0 | 391 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 151 | | 70 | | | 33 | | | 17 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.85 | 0.85 | 0.85 | 0.88 | 0.88 | 0.88 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 31 | 620 | 151 | 78 | 634 | 185 | 251 | 818 | 130 | 249 | 640 | 62 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 31 | 620 | 151 | 78 | 819 | 0 | 251 | 948 | 0 | 249 | 702 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 31.5 | 24.3 | 24.3 | 31.5 | 24.3 | | 52.5 | 37.6 | | 52.5 | 37.6 | |
| Actuated g/C Ratio | 0.32 | 0.24 | 0.24 | 0.32 | 0.24 | | 0.52 | 0.38 | | 0.52 | 0.38 | |
| v/c Ratio | 0.16 | 0.52 | 0.31 | 0.32 | 0.68 | | 0.55 | 0.52 | | 0.65 | 0.38 | |
| Control Delay | 23.6 | 40.0 | 15.7 | 27.8 | 34.3 | | 26.4 | 26.8 | | 33.7 | 24.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 23.6 | 40.0 | 15.7 | 27.8 | 34.3 | | 26.4 | 26.8 | | 33.7 | 24.2 | |
| LOS | C | D | B | C | C | | C | C | | C | C | |
| Approach Delay | | 34.8 | | | 33.7 | | | 26.7 | | | 26.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Stops (vph) | 15 | 402 | 65 | 44 | 561 | | 168 | 677 | | 153 | 443 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2030 - Weekday MIDDAY

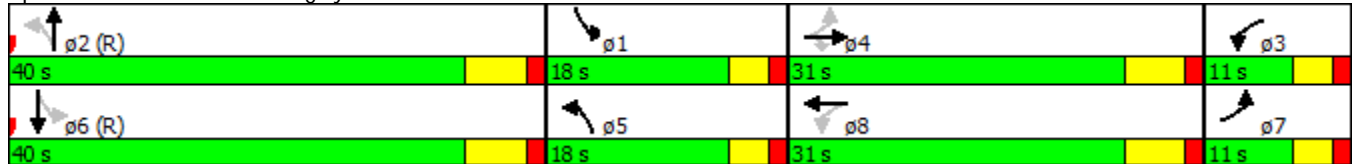


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 1 | 26 | 5 | 3 | 34 | | 9 | 35 | | 7 | 19 | |
| CO Emissions (g/hr) | 81 | 1839 | 376 | 209 | 2353 | | 641 | 2462 | | 509 | 1361 | |
| NOx Emissions (g/hr) | 16 | 358 | 73 | 41 | 458 | | 125 | 479 | | 99 | 265 | |
| VOC Emissions (g/hr) | 19 | 426 | 87 | 48 | 545 | | 149 | 571 | | 118 | 315 | |
| Dilemma Vehicles (#) | 0 | 38 | 0 | 0 | 31 | | 0 | 19 | | 0 | 32 | |
| Queue Length 50th (ft) | 9 | 106 | 2 | 32 | 153 | | 110 | 206 | | 84 | 126 | |
| Queue Length 95th (ft) | 31 | 165 | 75 | 61 | 187 | | 153 | 230 | | 129 | 156 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 206 | 1249 | 502 | 261 | 1259 | | 474 | 1871 | | 397 | 1876 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.15 | 0.50 | 0.30 | 0.30 | 0.65 | | 0.53 | 0.51 | | 0.63 | 0.37 | |

Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 100 |
| Actuated Cycle Length: | 100 |
| Offset: | 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.68 |
| Intersection Signal Delay: | 30.0 |
| Intersection LOS: | C |
| Intersection Capacity Utilization | 64.4% |
| ICU Level of Service | C |
| Analysis Period (min) | 15 |

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
4: Higley Road & Bridges Boulevard

2030 - Weekday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 44 | 288 | 861 | 60 | 254 | 694 |
| Future Volume (vph) | 44 | 288 | 861 | 60 | 254 | 694 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.85 | 0.85 | 0.95 | 0.95 | 0.97 | 0.97 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 12.4

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 44 | 288 | 861 | 60 | 254 | 694 |
| Future Vol, veh/h | 44 | 288 | 861 | 60 | 254 | 694 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 85 | 85 | 95 | 95 | 97 | 97 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 339 | 906 | 63 | 262 | 715 |

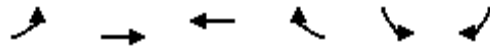
| Major/Minor | Minor1 | Minor2 | Major1 | Major2 | Major3 | Major4 |
|----------------------|--------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 1716 | 453 | 0 | 0 | 906 | 0 |
| Stage 1 | 906 | - | - | - | - | - |
| Stage 2 | 810 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 133 | 474 | - | - | 434 | - |
| Stage 1 | 276 | - | - | - | - | - |
| Stage 2 | 361 | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 53 | 474 | - | - | 434 | - |
| Mov Cap-2 Maneuver | 53 | - | - | - | - | - |
| Stage 1 | 276 | - | - | - | - | - |
| Stage 2 | 143 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 57.4 | 0 | 6.7 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 53 | 474 | 434 | - |
| HCM Lane V/C Ratio | - | - | 0.977 | 0.715 | 0.603 | - |
| HCM Control Delay (s) | - | - | 240.5 | 29.4 | 25.1 | - |
| HCM Lane LOS | - | - | F | D | D | - |
| HCM 95th %tile Q(veh) | - | - | 4.3 | 5.6 | 3.9 | - |

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2030 - Weekday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 30 | 570 | 654 | 23 | 22 | 32 |
| Future Volume (vph) | 30 | 570 | 654 | 23 | 22 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.68 | 0.68 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 1.2

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 30 | 570 | 654 | 23 | 22 | 32 |
| Future Vol, veh/h | 30 | 570 | 654 | 23 | 22 | 32 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 68 | 68 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 633 | 727 | 26 | 32 | 47 |

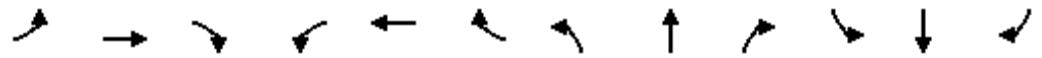
| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 727 | 0 | 1110 |
| Stage 1 | - | - | 727 |
| Stage 2 | - | - | 383 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 872 | - | 203 |
| Stage 1 | - | - | 439 |
| Stage 2 | - | - | 659 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 872 | - | 195 |
| Mov Cap-2 Maneuver | - | - | 195 |
| Stage 1 | - | - | 439 |
| Stage 2 | - | - | 634 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 17.6 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 872 | - | - | - | 195 | 634 |
| HCM Lane V/C Ratio | 0.038 | - | - | - | 0.166 | 0.074 |
| HCM Control Delay (s) | 9.3 | - | - | - | 27.1 | 11.1 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.6 | 0.2 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 99 | 342 | 110 | 11 | 119 | 7 | 104 | 175 | 155 | 291 | 371 | 145 |
| Future Volume (vph) | 99 | 342 | 110 | 11 | 119 | 7 | 104 | 175 | 155 | 291 | 371 | 145 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.963 | | | | 0.850 | | 0.930 | | | 0.958 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1794 | 0 | 1770 | 1863 | 1583 | 1770 | 3291 | 0 | 1770 | 3391 | 0 |
| Flt Permitted | 0.666 | | | 0.169 | | | 0.326 | | | 0.491 | | |
| Satd. Flow (perm) | 1241 | 1794 | 0 | 315 | 1863 | 1583 | 607 | 3291 | 0 | 915 | 3391 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 18 | | | | 120 | | 178 | | | 56 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 3717 | | | 4051 | | | 4608 | |
| Travel Time (s) | | 80.6 | | | 56.3 | | | 61.4 | | | 69.8 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.84 | 0.84 | 0.84 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Adj. Flow (vph) | 108 | 372 | 120 | 13 | 142 | 8 | 120 | 201 | 178 | 334 | 426 | 167 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 108 | 492 | 0 | 13 | 142 | 8 | 120 | 379 | 0 | 334 | 593 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 10.0 | | 4.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 8.0 | 30.0 | | 8.0 | 30.0 | 30.0 | 9.0 | 30.0 | | 9.0 | 30.0 | |
| Total Split (s) | 8.0 | 40.0 | | 8.0 | 40.0 | 40.0 | 20.0 | 32.0 | | 20.0 | 32.0 | |
| Total Split (%) | 8.0% | 40.0% | | 8.0% | 40.0% | 40.0% | 20.0% | 32.0% | | 20.0% | 32.0% | |
| Yellow Time (s) | 3.5 | 4.5 | | 3.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 0.5 | 1.5 | | 0.5 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 37.8 | 30.8 | | 37.8 | 30.8 | 30.8 | 46.2 | 33.6 | | 46.2 | 33.6 | |
| Actuated g/C Ratio | 0.38 | 0.31 | | 0.38 | 0.31 | 0.31 | 0.46 | 0.34 | | 0.46 | 0.34 | |
| v/c Ratio | 0.22 | 0.87 | | 0.07 | 0.25 | 0.01 | 0.30 | 0.31 | | 0.65 | 0.50 | |
| Control Delay | 18.9 | 48.3 | | 17.2 | 32.1 | 0.0 | 19.9 | 15.0 | | 28.6 | 27.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 18.9 | 48.3 | | 17.2 | 32.1 | 0.0 | 19.9 | 15.0 | | 28.6 | 27.4 | |
| LOS | B | D | | B | C | A | B | B | | C | C | |
| Approach Delay | | 43.0 | | | 29.4 | | | 16.2 | | | 27.8 | |
| Approach LOS | | D | | | C | | | B | | | C | |
| Stops (vph) | 60 | 394 | | 5 | 83 | 0 | 56 | 131 | | 202 | 374 | |
| Fuel Used(gal) | 5 | 25 | | 0 | 6 | 0 | 5 | 14 | | 14 | 25 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Weekday PM

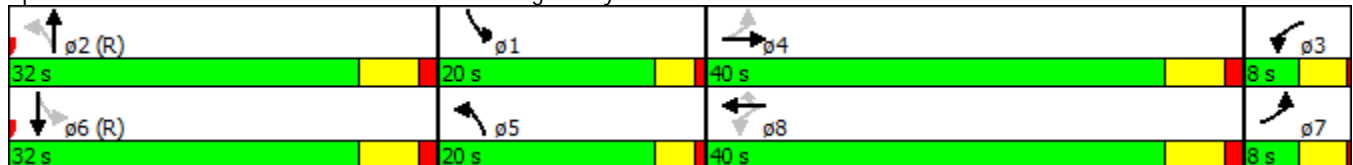


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 318 | 1748 | | 34 | 415 | 17 | 332 | 991 | | 993 | 1766 | |
| NOx Emissions (g/hr) | 62 | 340 | | 7 | 81 | 3 | 65 | 193 | | 193 | 344 | |
| VOC Emissions (g/hr) | 74 | 405 | | 8 | 96 | 4 | 77 | 230 | | 230 | 409 | |
| Dilemma Vehicles (#) | 0 | 19 | | 0 | 8 | 0 | 0 | 16 | | 0 | 26 | |
| Queue Length 50th (ft) | 40 | 279 | | 3 | 63 | 0 | 41 | 48 | | 131 | 146 | |
| Queue Length 95th (ft) | 74 | #431 | | m6 | 97 | m0 | 71 | 88 | | 191 | 210 | |
| Internal Link Dist (ft) | | 5241 | | | 3637 | | | 3971 | | | 4528 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 496 | 628 | | 191 | 640 | 623 | 499 | 1222 | | 608 | 1175 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.22 | 0.78 | | 0.07 | 0.22 | 0.01 | 0.24 | 0.31 | | 0.55 | 0.50 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 29.5 Intersection LOS: C
 Intersection Capacity Utilization 64.0% ICU Level of Service B
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road



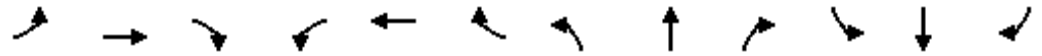
1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 70 | 949 | 121 | 52 | 701 | 143 | 60 | 344 | 75 | 241 | 339 | 36 |
| Future Volume (vph) | 70 | 949 | 121 | 52 | 701 | 143 | 60 | 344 | 75 | 241 | 339 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.983 | | | 0.975 | | | 0.973 | | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3363 | 0 | 1888 | 3336 | 0 | 1888 | 3329 | 0 | 1652 | 3373 | 0 |
| Flt Permitted | 0.214 | | | 0.137 | | | 0.368 | | | 0.291 | | |
| Satd. Flow (perm) | 372 | 3363 | 0 | 272 | 3336 | 0 | 731 | 3329 | 0 | 506 | 3373 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 27 | | | 20 | | | 9 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph) | 74 | 999 | 127 | 57 | 762 | 155 | 67 | 382 | 83 | 256 | 361 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 74 | 1126 | 0 | 57 | 917 | 0 | 67 | 465 | 0 | 256 | 399 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 10.0 | 54.0 | | 10.0 | 54.0 | | 22.0 | 24.0 | | 22.0 | 24.0 | |
| Total Split (%) | 9.1% | 49.1% | | 9.1% | 49.1% | | 20.0% | 21.8% | | 20.0% | 21.8% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | Max | | None | Max | |
| Act Effect Green (s) | 59.0 | 51.4 | | 59.0 | 51.4 | | 36.9 | 20.3 | | 36.9 | 20.3 | |
| Actuated g/C Ratio | 0.54 | 0.47 | | 0.54 | 0.47 | | 0.34 | 0.18 | | 0.34 | 0.18 | |
| v/c Ratio | 0.28 | 0.71 | | 0.25 | 0.58 | | 0.17 | 0.74 | | 0.80 | 0.64 | |
| Control Delay | 18.1 | 27.0 | | 19.1 | 23.4 | | 25.4 | 49.4 | | 55.5 | 46.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 18.1 | 27.0 | | 19.1 | 23.4 | | 25.4 | 49.4 | | 55.5 | 46.5 | |
| LOS | B | C | | B | C | | C | D | | E | D | |
| Approach Delay | | 26.4 | | | 23.1 | | | 46.3 | | | 50.0 | |
| Approach LOS | | C | | | C | | | D | | | D | |
| Stops (vph) | 32 | 831 | | 24 | 590 | | 39 | 361 | | 230 | 335 | |

Lanes, Volumes, Timings
 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

2030 - Weekday PM

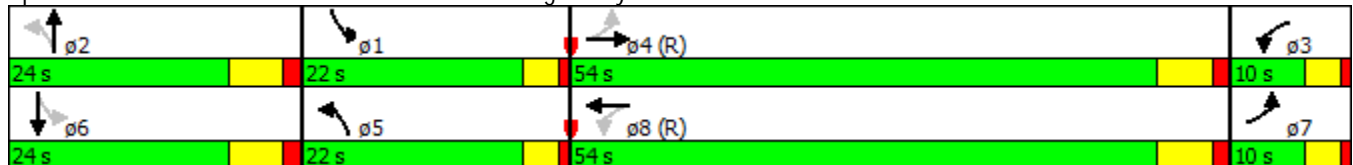


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 2 | 35 | | 2 | 36 | | 3 | 23 | | 14 | 21 | |
| CO Emissions (g/hr) | 130 | 2420 | | 141 | 2513 | | 200 | 1612 | | 969 | 1439 | |
| NOx Emissions (g/hr) | 25 | 471 | | 27 | 489 | | 39 | 314 | | 189 | 280 | |
| VOC Emissions (g/hr) | 30 | 561 | | 33 | 582 | | 46 | 374 | | 225 | 334 | |
| Dilemma Vehicles (#) | 0 | 49 | | 0 | 39 | | 0 | 19 | | 0 | 17 | |
| Queue Length 50th (ft) | 23 | 334 | | 18 | 245 | | 30 | 161 | | 132 | 138 | |
| Queue Length 95th (ft) | 47 | 426 | | 38 | 318 | | 60 | #239 | | #204 | 192 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 270 | 1578 | | 235 | 1571 | | 456 | 629 | | 372 | 628 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.27 | 0.71 | | 0.24 | 0.58 | | 0.15 | 0.74 | | 0.69 | 0.64 | |

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 33.2
 Intersection LOS: C
 Intersection Capacity Utilization 76.2%
 ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



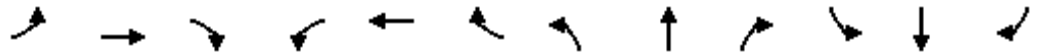
Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2030 - Weekday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 104 | 908 | 568 | 134 | 396 | 179 | 259 | 652 | 157 | 260 | 950 | 94 |
| Future Volume (vph) | 104 | 908 | 568 | 134 | 396 | 179 | 259 | 652 | 157 | 260 | 950 | 94 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4847 | 0 |
| Flt Permitted | 0.448 | | | 0.127 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 779 | 3421 | 1478 | 221 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4847 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 340 | | | 181 | | | 176 | | 15 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1834 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 27.8 | | | 17.6 | |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.94 | 0.94 | 0.94 | 0.89 | 0.89 | 0.89 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 106 | 927 | 580 | 143 | 421 | 190 | 291 | 733 | 176 | 265 | 969 | 96 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 106 | 927 | 580 | 143 | 421 | 190 | 291 | 733 | 176 | 265 | 1065 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.5 | 16.0 | 16.0 | 11.5 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 13.0 | 38.0 | 38.0 | 13.0 | 38.0 | 38.0 | 19.0 | 30.0 | 30.0 | 19.0 | 30.0 | |
| Total Split (%) | 13.0% | 38.0% | 38.0% | 13.0% | 38.0% | 38.0% | 19.0% | 30.0% | 30.0% | 19.0% | 30.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 41.0 | 31.6 | 31.6 | 41.0 | 31.6 | 31.6 | 12.0 | 25.9 | 25.9 | 12.0 | 25.9 | |
| Actuated g/C Ratio | 0.41 | 0.32 | 0.32 | 0.41 | 0.32 | 0.32 | 0.12 | 0.26 | 0.26 | 0.12 | 0.26 | |
| v/c Ratio | 0.27 | 0.86 | 0.83 | 0.70 | 0.39 | 0.32 | 0.76 | 0.58 | 0.33 | 0.69 | 0.84 | |
| Control Delay | 19.3 | 41.3 | 24.3 | 51.9 | 27.8 | 6.0 | 61.6 | 35.0 | 9.4 | 37.3 | 30.9 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 19.3 | 41.3 | 24.3 | 51.9 | 27.8 | 6.0 | 61.6 | 35.0 | 9.4 | 37.3 | 30.9 | |
| LOS | B | D | C | D | C | A | E | C | A | D | C | |
| Approach Delay | | 33.7 | | | 26.9 | | | 37.7 | | | 32.2 | |
| Approach LOS | | C | | | C | | | D | | | C | |
| Stops (vph) | 60 | 809 | 240 | 101 | 298 | 24 | 249 | 608 | 52 | 246 | 696 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2030 - Weekday PM

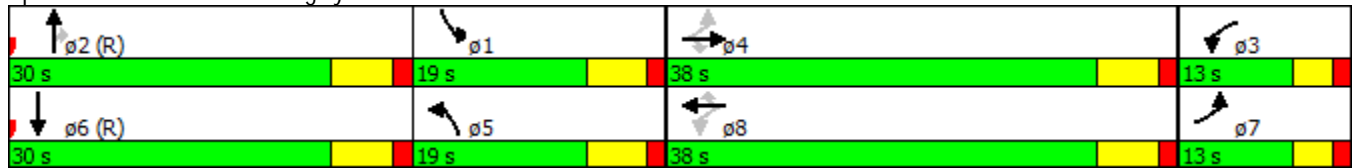


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 2 | 23 | 9 | 9 | 26 | 10 | 9 | 20 | 3 | 7 | 23 | |
| CO Emissions (g/hr) | 120 | 1577 | 618 | 662 | 1819 | 671 | 659 | 1396 | 197 | 489 | 1615 | |
| NOx Emissions (g/hr) | 23 | 307 | 120 | 129 | 354 | 130 | 128 | 272 | 38 | 95 | 314 | |
| VOC Emissions (g/hr) | 28 | 365 | 143 | 153 | 422 | 155 | 153 | 323 | 46 | 113 | 374 | |
| Dilemma Vehicles (#) | 0 | 43 | 0 | 0 | 16 | 0 | 0 | 16 | 0 | 0 | 103 | |
| Queue Length 50th (ft) | 37 | 288 | 147 | 52 | 108 | 4 | 97 | 173 | 31 | 85 | 158 | |
| Queue Length 95th (ft) | 70 | #375 | #353 | #120 | 152 | 52 | 139 | 214 | m81 | 128 | #304 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1754 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 398 | 1102 | 707 | 213 | 1102 | 599 | 416 | 1274 | 527 | 416 | 1267 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.27 | 0.84 | 0.82 | 0.67 | 0.38 | 0.32 | 0.70 | 0.58 | 0.33 | 0.64 | 0.84 | |

Intersection Summary





























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 18 (18%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 33.2 Intersection LOS: C
 Intersection Capacity Utilization 79.1% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2030 - Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|---|--|---|---|---|---|--|--|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   |  |  |  |  |  |   |  |  |    |  |
| Traffic Volume (vph) | 62 | 191 | 124 | 26 | 176 | 36 | 76 | 831 | 164 | 249 | 871 | 297 |
| Future Volume (vph) | 62 | 191 | 124 | 26 | 176 | 36 | 76 | 831 | 164 | 249 | 871 | 297 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.975 | | | 0.962 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3336 | 0 | 1711 | 4729 | 0 |
| Fl _t Permitted | 0.425 | | | 0.532 | | | 0.152 | | | 0.166 | | |
| Satd. Flow (perm) | 818 | 3421 | 1531 | 991 | 1801 | 1478 | 321 | 3336 | 0 | 299 | 4729 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 180 | | | 120 | | 27 | | | 102 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3506 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 53.1 | |
| Peak Hour Factor | 0.69 | 0.69 | 0.69 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 90 | 277 | 180 | 31 | 212 | 43 | 80 | 875 | 173 | 268 | 937 | 319 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 90 | 277 | 180 | 31 | 212 | 43 | 80 | 1048 | 0 | 268 | 1256 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 10.0 | 10.0 | 4.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 8.0 | 16.0 | 16.0 | 8.0 | 16.0 | 16.0 | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 8.0 | 24.0 | 24.0 | 8.0 | 24.0 | 24.0 | 22.0 | 46.0 | | 22.0 | 46.0 | |
| Total Split (%) | 8.0% | 24.0% | 24.0% | 8.0% | 24.0% | 24.0% | 22.0% | 46.0% | | 22.0% | 46.0% | |
| Yellow Time (s) | 3.5 | 4.5 | 4.5 | 3.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 0.5 | 1.5 | 1.5 | 0.5 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 23.2 | 16.2 | 16.2 | 23.2 | 16.2 | 16.2 | 62.3 | 46.6 | | 62.7 | 46.6 | |
| Actuated g/C Ratio | 0.23 | 0.16 | 0.16 | 0.23 | 0.16 | 0.16 | 0.62 | 0.47 | | 0.63 | 0.47 | |
| v/c Ratio | 0.38 | 0.50 | 0.45 | 0.12 | 0.73 | 0.13 | 0.19 | 0.67 | | 0.69 | 0.56 | |
| Control Delay | 32.4 | 41.5 | 11.5 | 28.2 | 54.3 | 0.8 | 11.1 | 24.6 | | 31.7 | 14.7 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 32.4 | 41.5 | 11.5 | 28.2 | 54.3 | 0.8 | 11.1 | 24.6 | | 31.7 | 14.7 | |
| LOS | C | D | B | C | D | A | B | C | | C | B | |
| Approach Delay | | 30.1 | | | 43.4 | | | 23.6 | | | 17.7 | |
| Approach LOS | | C | | | D | | | C | | | B | |
| Stops (vph) | 46 | 162 | 45 | 20 | 163 | 0 | 29 | 753 | | 239 | 779 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2030 - Weekday PM

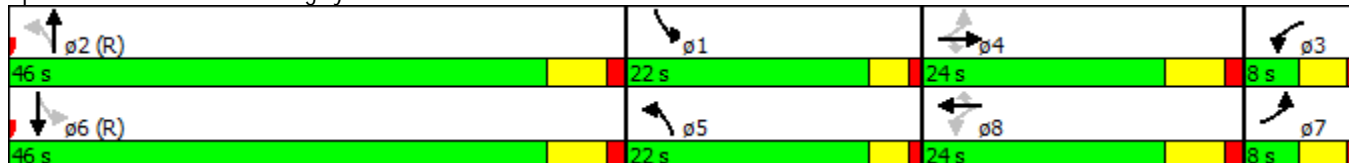


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 3 | 10 | 5 | 1 | 6 | 0 | 3 | 49 | | 10 | 40 | |
| CO Emissions (g/hr) | 219 | 716 | 360 | 52 | 440 | 34 | 221 | 3414 | | 716 | 2779 | |
| NOx Emissions (g/hr) | 43 | 139 | 70 | 10 | 86 | 7 | 43 | 664 | | 139 | 541 | |
| VOC Emissions (g/hr) | 51 | 166 | 83 | 12 | 102 | 8 | 51 | 791 | | 166 | 644 | |
| Dilemma Vehicles (#) | 0 | 14 | 0 | 0 | 8 | 0 | 0 | 50 | | 0 | 21 | |
| Queue Length 50th (ft) | 42 | 83 | 16 | 14 | 127 | 0 | 18 | 284 | | 96 | 172 | |
| Queue Length 95th (ft) | m63 | 98 | 28 | 34 | 186 | 0 | 34 | 375 | | m141 | 297 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3426 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 239 | 617 | 424 | 268 | 325 | 365 | 517 | 1570 | | 453 | 2259 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.38 | 0.45 | 0.42 | 0.12 | 0.65 | 0.12 | 0.15 | 0.67 | | 0.59 | 0.56 | |

Intersection Summary

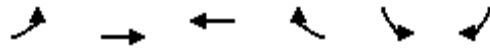
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 23.7
 Intersection LOS: C
 Intersection Capacity Utilization 71.4%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

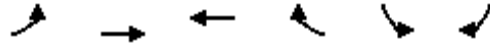
2030 - Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 48 | 796 | 520 | 319 | 396 | 43 |
| Future Volume (vph) | 48 | 796 | 520 | 319 | 396 | 43 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.943 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3337 | 0 | 1770 | 1583 |
| Flt Permitted | 0.198 | | | | 0.950 | |
| Satd. Flow (perm) | 369 | 3539 | 3337 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 180 | | | 53 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.95 | 0.95 | 0.81 | 0.81 |
| Adj. Flow (vph) | 49 | 821 | 547 | 336 | 489 | 53 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 49 | 821 | 883 | 0 | 489 | 53 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 30.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 45.0 | 34.0 | | 35.0 | 35.0 |
| Total Split (%) | 13.8% | 56.3% | 42.5% | | 43.8% | 43.8% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 43.3 | 41.3 | 34.8 | | 26.7 | 26.7 |
| Actuated g/C Ratio | 0.54 | 0.52 | 0.44 | | 0.33 | 0.33 |
| v/c Ratio | 0.16 | 0.45 | 0.57 | | 0.83 | 0.09 |
| Control Delay | 10.3 | 11.6 | 18.8 | | 37.6 | 5.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 10.3 | 11.6 | 18.8 | | 37.6 | 5.8 |
| LOS | B | B | B | | D | A |
| Approach Delay | | 11.5 | 18.8 | | 34.5 | |
| Approach LOS | | B | B | | C | |
| Stops (vph) | 21 | 362 | 695 | | 344 | 9 |
| Fuel Used(gal) | 2 | 34 | 41 | | 21 | 2 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2030 - Weekday PM

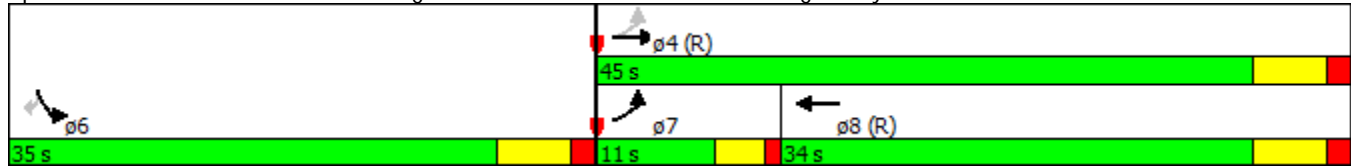


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 142 | 2377 | 2887 | | 1478 | 116 |
| NOx Emissions (g/hr) | 28 | 462 | 562 | | 288 | 23 |
| VOC Emissions (g/hr) | 33 | 551 | 669 | | 343 | 27 |
| Dilemma Vehicles (#) | 0 | 17 | 51 | | 0 | 0 |
| Queue Length 50th (ft) | 11 | 107 | 171 | | 211 | 0 |
| Queue Length 95th (ft) | m20 | 138 | m224 | | 280 | 18 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 322 | 1827 | 1552 | | 641 | 607 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.15 | 0.45 | 0.57 | | 0.76 | 0.09 |

Intersection Summary

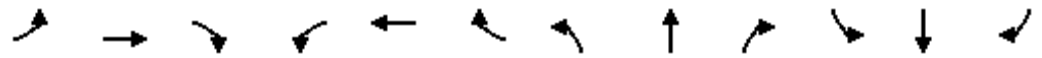
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 14 (18%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 19.7
 Intersection LOS: B
 Intersection Capacity Utilization 64.0%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

2030 - Weekday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 264 | 693 | 379 | 244 | 452 | 145 | 150 | 518 | 98 | 275 | 1105 | 126 |
| Future Volume (vph) | 264 | 693 | 379 | 244 | 452 | 145 | 150 | 518 | 98 | 275 | 1105 | 126 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.947 | | | 0.964 | | | 0.976 | | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3240 | 0 | 1652 | 3298 | 0 | 1652 | 4798 | 0 | 1652 | 4842 | 0 |
| Flt Permitted | 0.260 | | | 0.174 | | | 0.182 | | | 0.330 | | |
| Satd. Flow (perm) | 452 | 3240 | 0 | 303 | 3298 | 0 | 316 | 4798 | 0 | 574 | 4842 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 129 | | | 54 | | | 48 | | | 24 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | 792 | |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | 12.0 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.89 | 0.89 | 0.89 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 272 | 714 | 391 | 274 | 508 | 163 | 163 | 563 | 107 | 289 | 1163 | 133 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 272 | 1105 | 0 | 274 | 671 | 0 | 163 | 670 | 0 | 289 | 1296 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 28.0 | | 9.0 | 28.0 | |
| Total Split (s) | 12.0 | 29.0 | | 12.0 | 29.0 | | 11.0 | 28.0 | | 11.0 | 28.0 | |
| Total Split (%) | 15.0% | 36.3% | | 15.0% | 36.3% | | 13.8% | 35.0% | | 13.8% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 33.0 | 23.0 | | 33.0 | 23.0 | | 31.0 | 22.0 | | 31.0 | 22.0 | |
| Actuated g/C Ratio | 0.41 | 0.29 | | 0.41 | 0.29 | | 0.39 | 0.28 | | 0.39 | 0.28 | |
| v/c Ratio | 0.89 | 1.08 | | 1.06 | 0.68 | | 0.68 | 0.49 | | 0.91 | 0.96 | |
| Control Delay | 50.2 | 79.2 | | 103.2 | 27.2 | | 45.6 | 24.9 | | 60.5 | 46.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 50.2 | 79.2 | | 103.2 | 27.2 | | 45.6 | 24.9 | | 60.5 | 46.2 | |
| LOS | D | E | | F | C | | D | C | | E | D | |
| Approach Delay | | 73.5 | | | 49.3 | | | 29.0 | | | 48.8 | |
| Approach LOS | | E | | | D | | | C | | | D | |
| Stops (vph) | 221 | 1246 | | 172 | 472 | | 125 | 488 | | 195 | 1073 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2030 - Weekday PM



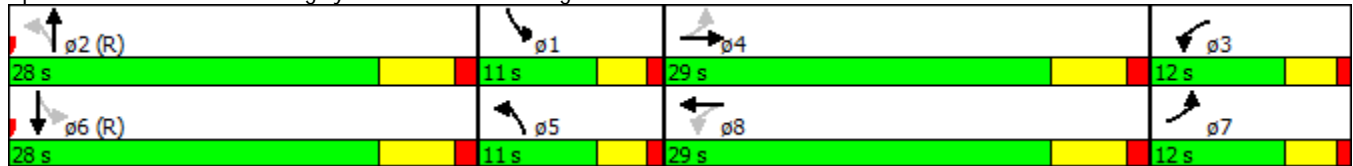
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 15 | 70 | | 10 | 15 | | 5 | 19 | | 15 | 68 | |
| CO Emissions (g/hr) | 1028 | 4921 | | 681 | 1066 | | 369 | 1311 | | 1072 | 4722 | |
| NOx Emissions (g/hr) | 200 | 958 | | 133 | 207 | | 72 | 255 | | 209 | 919 | |
| VOC Emissions (g/hr) | 238 | 1141 | | 158 | 247 | | 85 | 304 | | 248 | 1094 | |
| Dilemma Vehicles (#) | 0 | 119 | | 0 | 37 | | 0 | 24 | | 0 | 73 | |
| Queue Length 50th (ft) | 73 | -223 | | -92 | 143 | | 58 | 105 | | 95 | 229 | |
| Queue Length 95th (ft) | m#175 | #402 | | #244 | 198 | | #137 | 139 | | #174 | #327 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 306 | 1023 | | 259 | 986 | | 239 | 1354 | | 316 | 1348 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.89 | 1.08 | | 1.06 | 0.68 | | 0.68 | 0.49 | | 0.91 | 0.96 | |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.08
 Intersection Signal Delay: 52.6
 Intersection LOS: D
 Intersection Capacity Utilization 93.9%
 ICU Level of Service F
 Analysis Period (min) 15























- ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2030 - Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 832 | 51 | 235 | 865 | 106 |
| Future Volume (vph) | 70 | 25 | 59 | 31 | 28 | 137 | 48 | 832 | 51 | 235 | 865 | 106 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.895 | | | 0.876 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1556 | 0 | 1711 | 1523 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.445 | | | 0.696 | | | 0.278 | | | 0.291 | | |
| Satd. Flow (perm) | 801 | 1556 | 0 | 1253 | 1523 | 0 | 483 | 4916 | 1478 | 506 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 66 | | | 159 | | | | 76 | | | 93 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.86 | 0.86 | 0.86 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 78 | 28 | 66 | 36 | 33 | 159 | 52 | 904 | 55 | 255 | 940 | 115 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 94 | 0 | 36 | 192 | 0 | 52 | 904 | 55 | 255 | 940 | 115 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 17.0 | 17.0 | | 17.0 | 17.0 | | 10.0 | 22.0 | 22.0 | 10.0 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 12.0 | 49.0 | 49.0 | 12.0 | 49.0 | 49.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 12.0% | 49.0% | 49.0% | 12.0% | 49.0% | 49.0% |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effct Green (s) | 14.1 | 14.1 | | 14.1 | 14.1 | | 71.8 | 62.4 | 62.4 | 71.9 | 62.4 | 62.4 |
| Actuated g/C Ratio | 0.14 | 0.14 | | 0.14 | 0.14 | | 0.72 | 0.62 | 0.62 | 0.72 | 0.62 | 0.62 |
| v/c Ratio | 0.70 | 0.34 | | 0.20 | 0.55 | | 0.12 | 0.29 | 0.06 | 0.57 | 0.31 | 0.12 |
| Control Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.4 | 2.6 | 0.4 | 16.6 | 4.3 | 0.9 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 70.3 | 17.8 | | 39.0 | 15.6 | | 2.4 | 2.6 | 0.4 | 16.6 | 4.3 | 0.9 |
| LOS | E | B | | D | B | | A | A | A | B | A | A |
| Approach Delay | | 41.6 | | | 19.3 | | | 2.4 | | | 6.4 | |
| Approach LOS | | D | | | B | | | A | | | A | |
| Stops (vph) | 66 | 29 | | 28 | 40 | | 7 | 128 | 1 | 119 | 188 | 6 |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2030 - Weekday PM

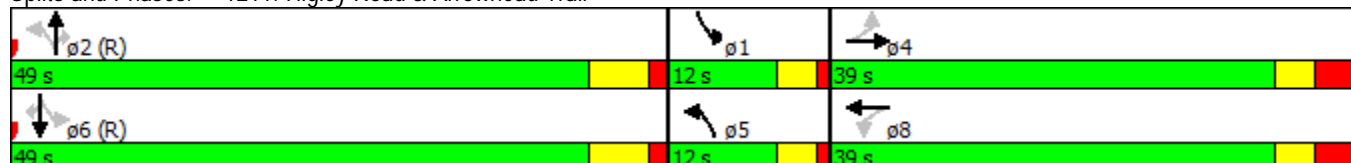


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 1 | 1 | | 1 | 2 | | 0 | 8 | 0 | 9 | 26 | 3 |
| CO Emissions (g/hr) | 104 | 49 | | 36 | 105 | | 33 | 581 | 28 | 597 | 1831 | 204 |
| NOx Emissions (g/hr) | 20 | 10 | | 7 | 21 | | 6 | 113 | 5 | 116 | 356 | 40 |
| VOC Emissions (g/hr) | 24 | 11 | | 8 | 24 | | 8 | 135 | 7 | 138 | 424 | 47 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 10 | 0 | 0 | 8 | 0 |
| Queue Length 50th (ft) | 48 | 16 | | 21 | 19 | | 3 | 30 | 0 | 37 | 44 | 0 |
| Queue Length 95th (ft) | 94 | 58 | | 45 | 71 | | m10 | 50 | m0 | m129 | 67 | m5 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 264 | 557 | | 413 | 609 | | 443 | 3069 | 951 | 458 | 3069 | 957 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.30 | 0.17 | | 0.09 | 0.32 | | 0.12 | 0.29 | 0.06 | 0.56 | 0.31 | 0.12 |

Intersection Summary































Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 17 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 8.3
 Intersection LOS: A
 Intersection Capacity Utilization 65.7%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2030 - Weekday PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |    |  |  |    | |  |    | |  |    |  |
| Traffic Volume (vph) | 56 | 1139 | 230 | 138 | 588 | 213 | 275 | 856 | 153 | 399 | 860 | 68 |
| Future Volume (vph) | 56 | 1139 | 230 | 138 | 588 | 213 | 275 | 856 | 153 | 399 | 860 | 68 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | | 0.850 | | 0.960 | | | 0.977 | | | 0.989 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4719 | 0 | 1711 | 4803 | 0 | 1711 | 4862 | 0 |
| Flt Permitted | 0.182 | | | 0.182 | | | 0.204 | | | 0.135 | | |
| Satd. Flow (perm) | 328 | 4916 | 1531 | 328 | 4719 | 0 | 367 | 4803 | 0 | 243 | 4862 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 183 | | 84 | | | 39 | | | 14 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2550 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 38.6 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 58 | 1174 | 237 | 150 | 639 | 232 | 316 | 984 | 176 | 411 | 887 | 70 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 58 | 1174 | 237 | 150 | 871 | 0 | 316 | 1160 | 0 | 411 | 957 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | | 7.0 | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | | 11.0 | 16.0 | | 11.0 | 16.0 | |
| Total Split (s) | 12.0 | 28.0 | 28.0 | 12.0 | 28.0 | | 20.0 | 40.0 | | 20.0 | 40.0 | |
| Total Split (%) | 12.0% | 28.0% | 28.0% | 12.0% | 28.0% | | 20.0% | 40.0% | | 20.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 31.7 | 22.0 | 22.0 | 31.7 | 22.0 | | 52.3 | 34.3 | | 52.3 | 34.3 | |
| Actuated g/C Ratio | 0.32 | 0.22 | 0.22 | 0.32 | 0.22 | | 0.52 | 0.34 | | 0.52 | 0.34 | |
| v/c Ratio | 0.28 | 1.09 | 0.49 | 0.71 | 0.79 | | 0.78 | 0.69 | | 1.14 | 0.57 | |
| Control Delay | 23.2 | 83.4 | 7.3 | 54.9 | 39.2 | | 43.8 | 37.8 | | 123.7 | 28.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 23.2 | 83.4 | 7.3 | 54.9 | 39.2 | | 43.8 | 37.8 | | 123.7 | 28.1 | |
| LOS | C | F | A | D | D | | D | D | | F | C | |
| Approach Delay | | 68.8 | | | 41.5 | | | 39.1 | | | 56.8 | |
| Approach LOS | | E | | | D | | | D | | | E | |
| Stops (vph) | 36 | 963 | 49 | 116 | 671 | | 327 | 908 | | 241 | 722 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2030 - Weekday PM



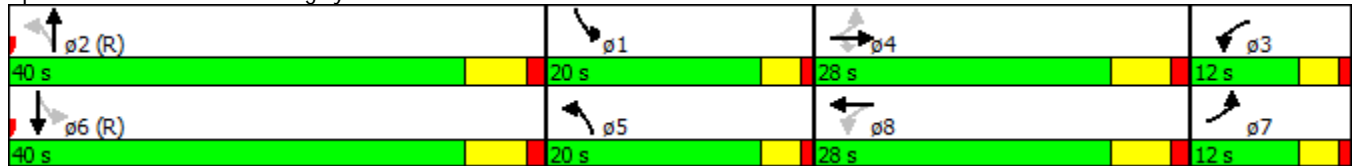
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 3 | 70 | 9 | 7 | 40 | | 14 | 46 | | 20 | 30 | |
| CO Emissions (g/hr) | 184 | 4921 | 618 | 511 | 2786 | | 969 | 3214 | | 1373 | 2073 | |
| NOx Emissions (g/hr) | 36 | 957 | 120 | 99 | 542 | | 188 | 625 | | 267 | 403 | |
| VOC Emissions (g/hr) | 43 | 1141 | 143 | 118 | 646 | | 225 | 745 | | 318 | 480 | |
| Dilemma Vehicles (#) | 0 | 38 | 0 | 0 | 39 | | 0 | 22 | | 0 | 47 | |
| Queue Length 50th (ft) | 22 | -313 | 30 | 66 | 175 | | 109 | 261 | | -248 | 179 | |
| Queue Length 95th (ft) | m27 | #383 | 20 | #135 | 224 | | #186 | 261 | | #437 | 223 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2470 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 215 | 1081 | 479 | 215 | 1103 | | 406 | 1671 | | 362 | 1675 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.27 | 1.09 | 0.49 | 0.70 | 0.79 | | 0.78 | 0.69 | | 1.14 | 0.57 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 48 (48%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.14
 Intersection Signal Delay: 52.3
 Intersection LOS: D
 Intersection Capacity Utilization 88.4%
 ICU Level of Service E
 Analysis Period (min) 15

- ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1307: Higley Road & Germann Road



Lanes, Volumes, Timings
 4: Higley Road & Bridges Boulevard

2030 - Weekday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Future Volume (vph) | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3506 | | | 1834 |
| Travel Time (s) | 20.8 | | 53.1 | | | 27.8 |
| Peak Hour Factor | 0.97 | 0.97 | 0.92 | 0.92 | 0.91 | 0.91 |
| Adj. Flow (vph) | 33 | 390 | 1189 | 52 | 509 | 1437 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 33 | 390 | 1189 | 52 | 509 | 1437 |
| Sign Control | Stop | | Free | | | Free |

Intersection Summary

| | |
|-----------------------------------|------------------------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 60.1% ICU Level of Service B |
| Analysis Period (min) | 15 |

Intersection

Int Delay, s/veh 56.4

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Future Vol, veh/h | 32 | 378 | 1094 | 48 | 463 | 1308 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 97 | 97 | 92 | 92 | 91 | 91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 390 | 1189 | 52 | 509 | 1437 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|----------------------|--------|-------|--------|---|--------|---|
| Conflicting Flow All | 2782 | 595 | 0 | 0 | 1189 | 0 |
| Stage 1 | 1189 | - | - | - | - | - |
| Stage 2 | 1593 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 35 | ~ 383 | - | - | ~ 317 | - |
| Stage 1 | 185 | - | - | - | - | - |
| Stage 2 | 135 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 35 | ~ 383 | - | - | ~ 317 | - |
| Mov Cap-2 Maneuver | 35 | - | - | - | - | - |
| Stage 1 | 185 | - | - | - | - | - |
| Stage 2 | 135 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-------|----|------|
| HCM Control Delay, s | 101.3 | 0 | 82.6 |
| HCM LOS | F | | |

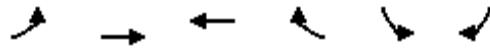
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|----------|-------|--------|-----|
| Capacity (veh/h) | - | - | 35 | 383 | ~ 317 | - |
| HCM Lane V/C Ratio | - | - | 0.943 | 1.017 | 1.605 | - |
| HCM Control Delay (s) | - | - | \$ 304.2 | 84.1 | \$ 316 | - |
| HCM Lane LOS | - | - | F | F | F | - |
| HCM 95th %tile Q(veh) | - | - | 3.4 | 12.5 | 30.3 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes, Volumes, Timings
7: Queen Creek Road & Middle Drive

2030 - Weekday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 50 | 1237 | 691 | 12 | 8 | 36 |
| Future Volume (vph) | 50 | 1237 | 691 | 12 | 8 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 30 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 8.1 | |
| Peak Hour Factor | 0.96 | 0.96 | 0.89 | 0.89 | 0.85 | 0.85 |
| Adj. Flow (vph) | 52 | 1289 | 776 | 13 | 9 | 42 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 52 | 1289 | 776 | 13 | 9 | 42 |
| Sign Control | | Free | Free | | Stop | |

Intersection Summary

| | |
|-----------------------------------|------------------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 44.2% |
| Analysis Period (min) | 15 |
| | ICU Level of Service A |

Intersection

| | |
|------------------|-----|
| Int Delay, s/veh | 0.7 |
|------------------|-----|

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 50 | 1237 | 691 | 12 | 8 | 36 |
| Future Vol, veh/h | 50 | 1237 | 691 | 12 | 8 | 36 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 89 | 89 | 85 | 85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 1289 | 776 | 13 | 9 | 42 |

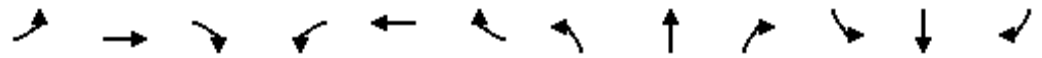
| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 776 | 0 | 388 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | 4.14 | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | 2.22 | - | 3.32 |
| Pot Cap-1 Maneuver | 836 | - | 611 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 836 | - | 611 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.4 | 0 | 17.2 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 836 | - | - | - | 102 | 611 |
| HCM Lane V/C Ratio | 0.062 | - | - | - | 0.092 | 0.069 |
| HCM Control Delay (s) | 9.6 | - | - | - | 43.9 | 11.3 |
| HCM Lane LOS | A | - | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - | 0.3 | 0.2 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 105 | 271 | 72 | 31 | 173 | 38 | 93 | 231 | 141 | 203 | 292 | 140 |
| Future Volume (vph) | 105 | 271 | 72 | 31 | 173 | 38 | 93 | 231 | 141 | 203 | 292 | 140 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.969 | | | | 0.850 | | 0.943 | | | 0.951 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1805 | 0 | 1770 | 1863 | 1583 | 1770 | 3337 | 0 | 1770 | 3366 | 0 |
| Flt Permitted | 0.543 | | | 0.187 | | | 0.457 | | | 0.507 | | |
| Satd. Flow (perm) | 1011 | 1805 | 0 | 348 | 1863 | 1583 | 851 | 3337 | 0 | 944 | 3366 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 13 | | | | 82 | | 153 | | | 109 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 3718 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 56.3 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.78 | 0.78 | 0.78 | 0.82 | 0.82 | 0.82 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 135 | 347 | 92 | 38 | 211 | 46 | 101 | 251 | 153 | 226 | 324 | 156 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 135 | 439 | 0 | 38 | 211 | 46 | 101 | 404 | 0 | 226 | 480 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 30.0 | 9.5 | 30.0 | | 9.5 | 30.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | 35.0 | 12.0 | 53.0 | | 12.0 | 53.0 | |
| Total Split (%) | 35.0% | 35.0% | | 35.0% | 35.0% | 35.0% | 12.0% | 53.0% | | 12.0% | 53.0% | |
| Yellow Time (s) | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 27.5 | 27.5 | | 27.5 | 27.5 | 27.5 | 57.5 | 49.9 | | 57.5 | 49.9 | |
| Actuated g/C Ratio | 0.28 | 0.28 | | 0.28 | 0.28 | 0.28 | 0.58 | 0.50 | | 0.58 | 0.50 | |
| v/c Ratio | 0.49 | 0.87 | | 0.40 | 0.41 | 0.09 | 0.19 | 0.23 | | 0.38 | 0.28 | |
| Control Delay | 36.1 | 51.7 | | 37.4 | 28.5 | 6.1 | 10.2 | 9.5 | | 10.6 | 9.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 36.1 | 51.7 | | 37.4 | 28.5 | 6.1 | 10.2 | 9.5 | | 10.6 | 9.4 | |
| LOS | D | D | | D | C | A | B | A | | B | A | |
| Approach Delay | | 48.0 | | | 26.1 | | | 9.6 | | | 9.8 | |
| Approach LOS | | D | | | C | | | A | | | A | |
| Stops (vph) | 86 | 301 | | 22 | 112 | 8 | 39 | 127 | | 74 | 131 | |
| Fuel Used(gal) | 5 | 19 | | 2 | 8 | 1 | 4 | 15 | | 8 | 17 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Saturday MIDDAY

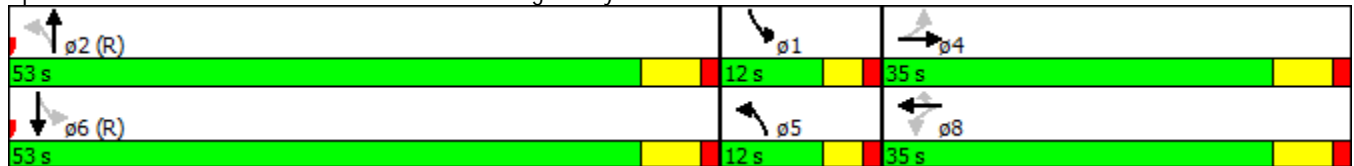


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 382 | 1339 | | 111 | 586 | 102 | 275 | 1069 | | 583 | 1210 | |
| NOx Emissions (g/hr) | 74 | 261 | | 22 | 114 | 20 | 53 | 208 | | 113 | 235 | |
| VOC Emissions (g/hr) | 89 | 310 | | 26 | 136 | 24 | 64 | 248 | | 135 | 280 | |
| Dilemma Vehicles (#) | 0 | 15 | | 0 | 10 | 0 | 0 | 18 | | 0 | 14 | |
| Queue Length 50th (ft) | 69 | 249 | | 16 | 88 | 3 | 26 | 46 | | 44 | 53 | |
| Queue Length 95th (ft) | 107 | 302 | | m31 | m131 | m11 | 48 | 75 | | 86 | 76 | |
| Internal Link Dist (ft) | | 5241 | | | 3638 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 300 | 544 | | 103 | 552 | 527 | 569 | 1741 | | 617 | 1733 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.45 | 0.81 | | 0.37 | 0.38 | 0.09 | 0.18 | 0.23 | | 0.37 | 0.28 | |

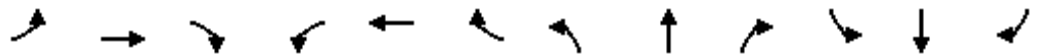
Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 22.6
 Intersection LOS: C
 Intersection Capacity Utilization 67.9%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

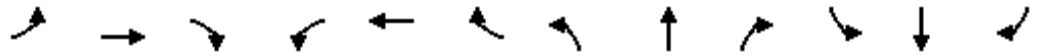


1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 60 | 518 | 70 | 52 | 701 | 175 | 78 | 319 | 71 | 162 | 235 | 47 |
| Future Volume (vph) | 60 | 518 | 70 | 52 | 701 | 175 | 78 | 319 | 71 | 162 | 235 | 47 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.982 | | | 0.970 | | | 0.973 | | | 0.975 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3360 | 0 | 1888 | 3319 | 0 | 1888 | 3329 | 0 | 1652 | 3336 | 0 |
| Flt Permitted | 0.211 | | | 0.368 | | | 0.487 | | | 0.347 | | |
| Satd. Flow (perm) | 367 | 3360 | 0 | 731 | 3319 | 0 | 968 | 3329 | 0 | 603 | 3336 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 33 | | | 27 | | | 23 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 64 | 551 | 74 | 57 | 770 | 192 | 87 | 354 | 79 | 184 | 267 | 53 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 64 | 625 | 0 | 57 | 962 | 0 | 87 | 433 | 0 | 184 | 320 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | | 14.0 | 39.0 | | 12.0 | 35.0 | | 12.0 | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | | 14.0% | 39.0% | | 12.0% | 35.0% | | 12.0% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | None | | None | None | |
| Act Effect Green (s) | 57.6 | 49.3 | | 57.6 | 49.3 | | 28.3 | 18.8 | | 28.3 | 18.8 | |
| Actuated g/C Ratio | 0.58 | 0.49 | | 0.58 | 0.49 | | 0.28 | 0.19 | | 0.28 | 0.19 | |
| v/c Ratio | 0.22 | 0.38 | | 0.12 | 0.58 | | 0.25 | 0.67 | | 0.74 | 0.50 | |
| Control Delay | 7.7 | 5.4 | | 5.7 | 9.5 | | 27.1 | 43.1 | | 51.6 | 29.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 7.7 | 5.4 | | 5.7 | 9.5 | | 27.1 | 43.1 | | 51.6 | 29.5 | |
| LOS | A | A | | A | A | | C | D | | D | C | |
| Approach Delay | | 5.6 | | | 9.3 | | | 40.4 | | | 37.6 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Stops (vph) | 16 | 178 | | 11 | 359 | | 50 | 302 | | 184 | 242 | |

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

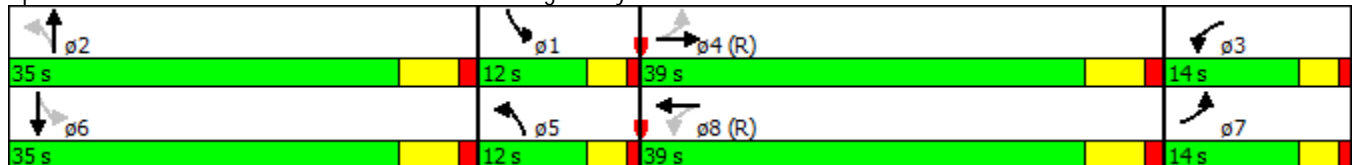


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 2 | 17 | | 2 | 32 | | 4 | 21 | | 10 | 14 | |
| CO Emissions (g/hr) | 119 | 1164 | | 120 | 2213 | | 261 | 1439 | | 668 | 1006 | |
| NOx Emissions (g/hr) | 23 | 227 | | 23 | 431 | | 51 | 280 | | 130 | 196 | |
| VOC Emissions (g/hr) | 28 | 270 | | 28 | 513 | | 60 | 334 | | 155 | 233 | |
| Dilemma Vehicles (#) | 0 | 9 | | 0 | 26 | | 0 | 29 | | 0 | 7 | |
| Queue Length 50th (ft) | 3 | 23 | | 7 | 71 | | 38 | 119 | | 109 | 96 | |
| Queue Length 95th (ft) | 22 | 44 | | m15 | 224 | | 62 | 150 | | 156 | 132 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 353 | 1665 | | 564 | 1654 | | 363 | 984 | | 267 | 983 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.18 | 0.38 | | 0.10 | 0.58 | | 0.24 | 0.44 | | 0.69 | 0.33 | |

Intersection Summary

























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 19.5
 Intersection LOS: B
 Intersection Capacity Utilization 65.9%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
1205: Higley Road & Queen Creek Road

2030 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 70 | 440 | 290 | 99 | 426 | 177 | 256 | 649 | 108 | 202 | 674 | 64 |
| Future Volume (vph) | 70 | 440 | 290 | 99 | 426 | 177 | 256 | 649 | 108 | 202 | 674 | 64 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Flt Permitted | 0.371 | | | 0.337 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 645 | 3421 | 1478 | 586 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 312 | | | 153 | | | 142 | | | 16 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.97 | 0.97 | 0.97 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 75 | 473 | 312 | 102 | 439 | 182 | 275 | 698 | 116 | 217 | 725 | 69 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 75 | 473 | 312 | 102 | 439 | 182 | 275 | 698 | 116 | 217 | 794 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 30.8 | 21.8 | 21.8 | 30.8 | 21.8 | 21.8 | 12.8 | 38.6 | 38.6 | 12.8 | 38.6 | |
| Actuated g/C Ratio | 0.31 | 0.22 | 0.22 | 0.31 | 0.22 | 0.22 | 0.13 | 0.39 | 0.39 | 0.13 | 0.39 | |
| v/c Ratio | 0.28 | 0.63 | 0.55 | 0.40 | 0.59 | 0.41 | 0.67 | 0.37 | 0.17 | 0.53 | 0.42 | |
| Control Delay | 35.0 | 45.7 | 15.0 | 30.5 | 37.9 | 10.6 | 61.4 | 27.5 | 7.8 | 44.2 | 15.5 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 35.0 | 45.7 | 15.0 | 30.5 | 37.9 | 10.6 | 61.4 | 27.5 | 7.8 | 44.2 | 15.5 | |
| LOS | C | D | B | C | D | B | E | C | A | D | B | |
| Approach Delay | | 33.6 | | | 30.0 | | | 33.9 | | | 21.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Stops (vph) | 49 | 402 | 138 | 67 | 367 | 36 | 246 | 547 | 32 | 189 | 535 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2030 - Saturday MIDDAY

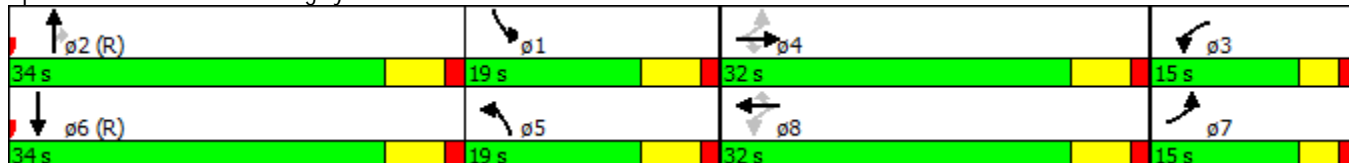


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 1 | 11 | 4 | 6 | 29 | 10 | 9 | 18 | 2 | 6 | 15 | |
| CO Emissions (g/hr) | 104 | 800 | 291 | 452 | 2059 | 685 | 654 | 1277 | 131 | 398 | 1018 | |
| NOx Emissions (g/hr) | 20 | 156 | 57 | 88 | 401 | 133 | 127 | 248 | 25 | 77 | 198 | |
| VOC Emissions (g/hr) | 24 | 186 | 67 | 105 | 477 | 159 | 151 | 296 | 30 | 92 | 236 | |
| Dilemma Vehicles (#) | 0 | 15 | 0 | 0 | 18 | 0 | 0 | 23 | 0 | 0 | 16 | |
| Queue Length 50th (ft) | 32 | 148 | 55 | 44 | 131 | 15 | 94 | 152 | 15 | 71 | 65 | |
| Queue Length 95th (ft) | m63 | 195 | 107 | 78 | 174 | 69 | 132 | 198 | m50 | 104 | 86 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 335 | 889 | 615 | 321 | 889 | 497 | 416 | 1897 | 677 | 416 | 1882 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.22 | 0.53 | 0.51 | 0.32 | 0.49 | 0.37 | 0.66 | 0.37 | 0.17 | 0.52 | 0.42 | |

Intersection Summary





























Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 29.7
 Intersection LOS: C
 Intersection Capacity Utilization 58.1%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1205: Higley Road & Queen Creek Road



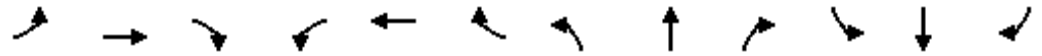
Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2030 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|--|---|---|---|---|--|--|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   |  |  |  |  |  |   |  |  |    |  |
| Traffic Volume (vph) | 106 | 212 | 48 | 27 | 181 | 39 | 77 | 874 | 164 | 160 | 763 | 232 |
| Future Volume (vph) | 106 | 212 | 48 | 27 | 181 | 39 | 77 | 874 | 164 | 160 | 763 | 232 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Frnt | | | 0.850 | | | 0.850 | | 0.976 | | | 0.965 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3339 | 0 | 1711 | 4744 | 0 |
| Flt Permitted | 0.435 | | | 0.511 | | | 0.189 | | | 0.160 | | |
| Satd. Flow (perm) | 837 | 3421 | 1531 | 952 | 1801 | 1478 | 399 | 3339 | 0 | 288 | 4744 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 125 | | | 125 | | 25 | | | 89 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.73 | 0.73 | 0.73 | 0.85 | 0.85 | 0.85 | 0.96 | 0.96 | 0.96 | 0.88 | 0.88 | 0.88 |
| Adj. Flow (vph) | 145 | 290 | 66 | 32 | 213 | 46 | 80 | 910 | 171 | 182 | 867 | 264 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 145 | 290 | 66 | 32 | 213 | 46 | 80 | 1081 | 0 | 182 | 1131 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 14 | 4 | | 10 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 14 | 4 | 4 | 10 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 10.0 | 10.0 | 4.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 20.0 | 16.5 | 16.5 | 20.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 20.0 | 21.0 | 21.0 | 20.0 | 21.0 | 21.0 | 15.0 | 44.0 | | 15.0 | 44.0 | |
| Total Split (%) | 20.0% | 21.0% | 21.0% | 20.0% | 21.0% | 21.0% | 15.0% | 44.0% | | 15.0% | 44.0% | |
| Yellow Time (s) | 3.5 | 4.5 | 4.5 | 3.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 0.5 | 1.5 | 1.5 | 0.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | Lag | Lead | Lead | Lag | Lead | Lead | | | | | | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 25.2 | 18.1 | 18.1 | 24.0 | 14.4 | 14.4 | 59.1 | 48.6 | | 59.1 | 48.6 | |
| Actuated g/C Ratio | 0.25 | 0.18 | 0.18 | 0.24 | 0.14 | 0.14 | 0.59 | 0.49 | | 0.59 | 0.49 | |
| v/c Ratio | 0.51 | 0.47 | 0.17 | 0.11 | 0.82 | 0.14 | 0.21 | 0.66 | | 0.61 | 0.48 | |
| Control Delay | 42.3 | 37.5 | 5.2 | 27.1 | 67.0 | 0.9 | 11.6 | 22.4 | | 32.9 | 12.1 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 42.3 | 37.5 | 5.2 | 27.1 | 67.0 | 0.9 | 11.6 | 22.4 | | 32.9 | 12.1 | |
| LOS | D | D | A | C | E | A | B | C | | C | B | |
| Approach Delay | | 34.6 | | | 52.2 | | | 21.6 | | | 15.0 | |
| Approach LOS | | C | | | D | | | C | | | B | |
| Stops (vph) | 104 | 201 | 11 | 21 | 163 | 0 | 31 | 757 | | 143 | 597 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2030 - Saturday MIDDAY

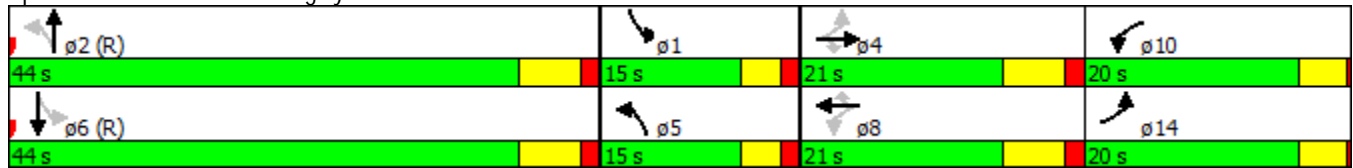


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 6 | 11 | 2 | 1 | 7 | 1 | 3 | 50 | | 6 | 32 | |
| CO Emissions (g/hr) | 411 | 801 | 129 | 54 | 481 | 36 | 226 | 3501 | | 452 | 2261 | |
| NOx Emissions (g/hr) | 80 | 156 | 25 | 10 | 94 | 7 | 44 | 681 | | 88 | 440 | |
| VOC Emissions (g/hr) | 95 | 186 | 30 | 12 | 112 | 8 | 52 | 811 | | 105 | 524 | |
| Dilemma Vehicles (#) | 0 | 4 | 0 | 0 | 8 | 0 | 0 | 52 | | 0 | 25 | |
| Queue Length 50th (ft) | 90 | 101 | 1 | 15 | 133 | 0 | 17 | 265 | | 45 | 89 | |
| Queue Length 95th (ft) | m110 | 110 | m5 | 34 | #224 | 0 | 39 | 372 | | 114 | 164 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 440 | 626 | 382 | 439 | 271 | 328 | 410 | 1635 | | 324 | 2351 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.33 | 0.46 | 0.17 | 0.07 | 0.79 | 0.14 | 0.20 | 0.66 | | 0.56 | 0.48 | |

Intersection Summary

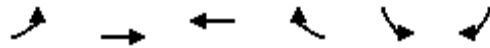
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 23.7
 Intersection LOS: C
 Intersection Capacity Utilization 70.7%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

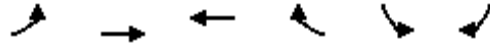
2030 - Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 40 | 393 | 491 | 312 | 233 | 38 |
| Future Volume (vph) | 40 | 393 | 491 | 312 | 233 | 38 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.942 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3334 | 0 | 1770 | 1583 |
| Flt Permitted | 0.230 | | | | 0.950 | |
| Satd. Flow (perm) | 428 | 3539 | 3334 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 217 | | | 46 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.89 | 0.89 | 0.82 | 0.82 |
| Adj. Flow (vph) | 42 | 414 | 552 | 351 | 284 | 46 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 42 | 414 | 903 | 0 | 284 | 46 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 50.7 | 48.7 | 42.4 | | 19.3 | 19.3 |
| Actuated g/C Ratio | 0.63 | 0.61 | 0.53 | | 0.24 | 0.24 |
| v/c Ratio | 0.11 | 0.19 | 0.48 | | 0.67 | 0.11 |
| Control Delay | 7.2 | 7.5 | 7.5 | | 35.0 | 7.5 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 7.2 | 7.5 | 7.5 | | 35.0 | 7.5 |
| LOS | A | A | A | | C | A |
| Approach Delay | | 7.5 | 7.5 | | 31.2 | |
| Approach LOS | | A | A | | C | |
| Stops (vph) | 16 | 172 | 323 | | 202 | 9 |
| Fuel Used(gal) | 2 | 16 | 33 | | 12 | 1 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2030 - Saturday MIDDAY

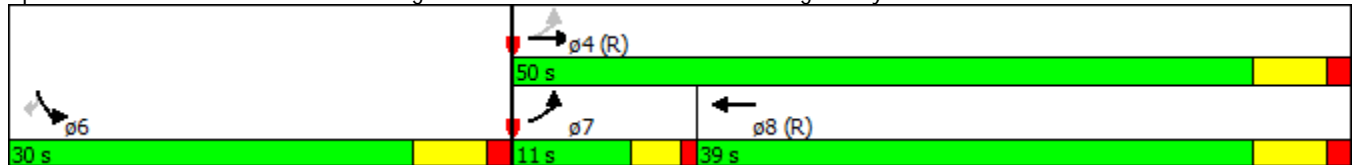


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 115 | 1144 | 2339 | | 861 | 105 |
| NOx Emissions (g/hr) | 22 | 223 | 455 | | 167 | 20 |
| VOC Emissions (g/hr) | 27 | 265 | 542 | | 199 | 24 |
| Dilemma Vehicles (#) | 0 | 16 | 25 | | 0 | 0 |
| Queue Length 50th (ft) | 9 | 48 | 91 | | 128 | 0 |
| Queue Length 95th (ft) | 21 | 71 | 136 | | 171 | 19 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 388 | 2156 | 1867 | | 531 | 507 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.11 | 0.19 | 0.48 | | 0.53 | 0.09 |

Intersection Summary

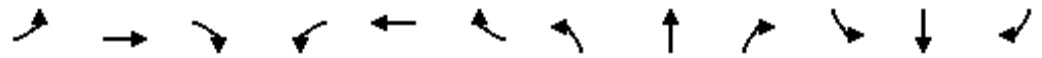
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 12.1
 Intersection LOS: B
 Intersection Capacity Utilization 54.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
1209: Higley Road & Chandler Heights Road

2030 - Saturday MIDDAY



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 246 | 416 | 173 | 200 | 323 | 148 | 139 | 493 | 78 | 206 | 740 | 115 |
| Future Volume (vph) | 246 | 416 | 173 | 200 | 323 | 148 | 139 | 493 | 78 | 206 | 740 | 115 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.956 | | | 0.953 | | | 0.979 | | | 0.980 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3271 | 0 | 1652 | 3260 | 0 | 1652 | 4813 | 0 | 1652 | 4817 | 0 |
| Flt Permitted | 0.389 | | | 0.296 | | | 0.221 | | | 0.353 | | |
| Satd. Flow (perm) | 676 | 3271 | 0 | 515 | 3260 | 0 | 384 | 4813 | 0 | 614 | 4817 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 81 | | | 96 | | | 38 | | | | 37 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | | 45 |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | | 792 |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | | 12.0 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 265 | 447 | 186 | 217 | 351 | 161 | 158 | 560 | 89 | 217 | 779 | 121 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 265 | 633 | 0 | 217 | 512 | 0 | 158 | 649 | 0 | 217 | 900 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | |
| v/c Ratio | 0.81 | 0.61 | | 0.78 | 0.49 | | 0.67 | 0.44 | | 0.70 | 0.61 | |
| Control Delay | 49.1 | 26.5 | | 44.4 | 20.3 | | 39.8 | 23.2 | | 34.7 | 25.1 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 49.1 | 26.5 | | 44.4 | 20.3 | | 39.8 | 23.2 | | 34.7 | 25.1 | |
| LOS | D | C | | D | C | | D | C | | C | C | |
| Approach Delay | | 33.2 | | | 27.5 | | | 26.5 | | | 27.0 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Stops (vph) | 223 | 480 | | 138 | 304 | | 99 | 427 | | 140 | 675 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2030 - Saturday MIDDAY

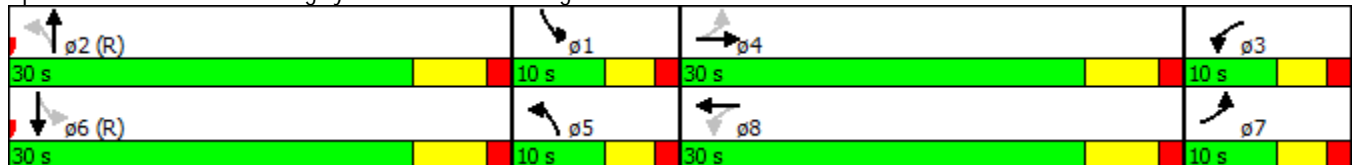


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 14 | 30 | | 6 | 11 | | 5 | 18 | | 10 | 42 | |
| CO Emissions (g/hr) | 969 | 2084 | | 388 | 735 | | 329 | 1236 | | 722 | 2962 | |
| NOx Emissions (g/hr) | 189 | 406 | | 76 | 143 | | 64 | 240 | | 141 | 576 | |
| VOC Emissions (g/hr) | 225 | 483 | | 90 | 170 | | 76 | 286 | | 167 | 686 | |
| Dilemma Vehicles (#) | 0 | 20 | | 0 | 29 | | 0 | 33 | | 0 | 53 | |
| Queue Length 50th (ft) | 103 | 142 | | 67 | 87 | | 48 | 92 | | 67 | 134 | |
| Queue Length 95th (ft) | #233 | 202 | | #154 | 134 | | #107 | 123 | | #135 | 176 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 329 | 1038 | | 277 | 1045 | | 235 | 1470 | | 309 | 1471 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.81 | 0.61 | | 0.78 | 0.49 | | 0.67 | 0.44 | | 0.70 | 0.61 | |

Intersection Summary























Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 28.5
 Intersection LOS: C
 Intersection Capacity Utilization 70.2%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2030 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 857 | 25 | 96 | 643 | 108 |
| Future Volume (vph) | 65 | 11 | 30 | 21 | 11 | 131 | 16 | 857 | 25 | 96 | 643 | 108 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.890 | | | 0.862 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1547 | 0 | 1711 | 1499 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.552 | | | 0.725 | | | 0.391 | | | 0.296 | | |
| Satd. Flow (perm) | 994 | 1547 | 0 | 1305 | 1499 | 0 | 680 | 4916 | 1478 | 515 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 36 | | | 141 | | | | 82 | | | 110 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.93 | 0.93 | 0.93 | 0.95 | 0.95 | 0.95 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 78 | 13 | 36 | 23 | 12 | 141 | 17 | 902 | 26 | 98 | 656 | 110 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 78 | 49 | 0 | 23 | 153 | 0 | 17 | 902 | 26 | 98 | 656 | 110 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effct Green (s) | 12.8 | 12.8 | | 12.8 | 12.8 | | 74.3 | 66.8 | 66.8 | 74.3 | 66.8 | 66.8 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.74 | 0.67 | 0.67 | 0.74 | 0.67 | 0.67 |
| v/c Ratio | 0.61 | 0.21 | | 0.14 | 0.49 | | 0.03 | 0.27 | 0.03 | 0.22 | 0.20 | 0.11 |
| Control Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.0 | 2.5 | 0.0 | 12.5 | 9.6 | 5.1 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 61.0 | 18.9 | | 38.8 | 13.6 | | 1.0 | 2.5 | 0.0 | 12.5 | 9.6 | 5.1 |
| LOS | E | B | | D | B | | A | A | A | B | A | A |
| Approach Delay | | 44.7 | | | 16.9 | | | 2.4 | | | 9.4 | |
| Approach LOS | | D | | | B | | | A | | | A | |
| Stops (vph) | 61 | 16 | | 19 | 28 | | 2 | 120 | 0 | 59 | 423 | 48 |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2030 - Saturday MIDDAY

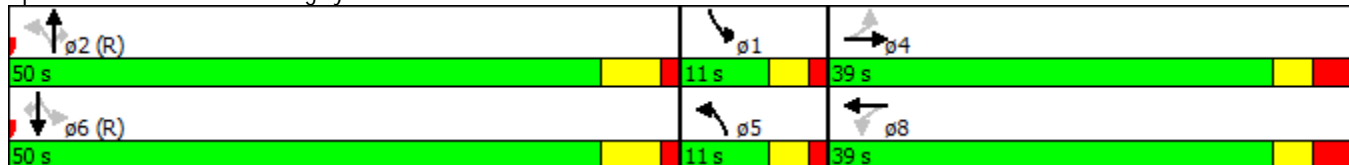


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 1 | 0 | | 0 | 1 | | 0 | 8 | 0 | 4 | 24 | 4 |
| CO Emissions (g/hr) | 88 | 25 | | 24 | 85 | | 10 | 588 | 13 | 247 | 1655 | 251 |
| NOx Emissions (g/hr) | 17 | 5 | | 5 | 17 | | 2 | 114 | 3 | 48 | 322 | 49 |
| VOC Emissions (g/hr) | 20 | 6 | | 6 | 20 | | 2 | 136 | 3 | 57 | 384 | 58 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 30 | 0 | 0 | 29 | 0 |
| Queue Length 50th (ft) | 48 | 7 | | 13 | 7 | | 1 | 19 | 0 | 34 | 110 | 24 |
| Queue Length 95th (ft) | 84 | 34 | | 35 | 61 | | m2 | 42 | 1 | 80 | 153 | 68 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 328 | 534 | | 430 | 589 | | 571 | 3281 | 1013 | 458 | 3281 | 1023 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.24 | 0.09 | | 0.05 | 0.26 | | 0.03 | 0.27 | 0.03 | 0.21 | 0.20 | 0.11 |

Intersection Summary































Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 9.0
 Intersection Capacity Utilization 57.6%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service B
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
1307: Higley Road & Germann Road

2030 - Saturday MIDDAY

| |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |    |  |  |    | |  |    | |  |    |  |
| Traffic Volume (vph) | 56 | 674 | 162 | 81 | 683 | 197 | 279 | 844 | 114 | 235 | 618 | 69 |
| Future Volume (vph) | 56 | 674 | 162 | 81 | 683 | 197 | 279 | 844 | 114 | 235 | 618 | 69 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.966 | | | 0.982 | | | 0.985 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4749 | 0 | 1711 | 4827 | 0 | 1711 | 4842 | 0 |
| Fl _t Permitted | 0.156 | | | 0.225 | | | 0.295 | | | 0.169 | | |
| Satd. Flow (perm) | 281 | 4916 | 1531 | 405 | 4749 | 0 | 531 | 4827 | 0 | 304 | 4842 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 193 | | 70 | | | 26 | | | 21 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 67 | 802 | 193 | 90 | 759 | 219 | 310 | 938 | 127 | 258 | 679 | 76 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 67 | 802 | 193 | 90 | 978 | 0 | 310 | 1065 | 0 | 258 | 755 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 33.1 | 25.6 | 25.6 | 33.1 | 25.6 | | 50.9 | 36.0 | | 50.9 | 36.0 | |
| Actuated g/C Ratio | 0.33 | 0.26 | 0.26 | 0.33 | 0.26 | | 0.51 | 0.36 | | 0.51 | 0.36 | |
| v/c Ratio | 0.38 | 0.64 | 0.36 | 0.43 | 0.77 | | 0.72 | 0.61 | | 0.75 | 0.43 | |
| Control Delay | 30.8 | 40.5 | 12.9 | 34.2 | 36.8 | | 39.0 | 31.1 | | 44.2 | 25.2 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 30.8 | 40.5 | 12.9 | 34.2 | 36.8 | | 39.0 | 31.1 | | 44.2 | 25.2 | |
| LOS | C | D | B | C | D | | D | C | | D | C | |
| Approach Delay | | 34.9 | | | 36.6 | | | 32.9 | | | 30.0 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Stops (vph) | 36 | 561 | 68 | 57 | 741 | | 311 | 816 | | 147 | 494 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2030 - Saturday MIDDAY

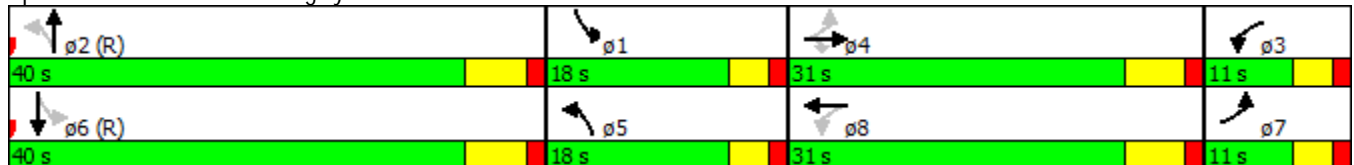


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 3 | 36 | 7 | 4 | 43 | | 14 | 42 | | 8 | 21 | |
| CO Emissions (g/hr) | 190 | 2493 | 477 | 267 | 3034 | | 946 | 2920 | | 557 | 1500 | |
| NOx Emissions (g/hr) | 37 | 485 | 93 | 52 | 590 | | 184 | 568 | | 108 | 292 | |
| VOC Emissions (g/hr) | 44 | 578 | 111 | 62 | 703 | | 219 | 677 | | 129 | 348 | |
| Dilemma Vehicles (#) | 0 | 65 | 0 | 0 | 41 | | 0 | 15 | | 0 | 34 | |
| Queue Length 50th (ft) | 21 | 147 | 2 | 38 | 199 | | 143 | 234 | | 84 | 135 | |
| Queue Length 95th (ft) | 54 | 214 | 73 | 72 | 251 | | #210 | 268 | | #200 | 169 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 187 | 1265 | 537 | 221 | 1274 | | 437 | 1793 | | 352 | 1796 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.36 | 0.63 | 0.36 | 0.41 | 0.77 | | 0.71 | 0.59 | | 0.73 | 0.42 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 33.6
 Intersection LOS: C
 Intersection Capacity Utilization 71.1%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
 4: Higley Road & Bridges Boulevard

2030 - Saturday MIDDAY



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 30 | 338 | 1006 | 42 | 330 | 913 |
| Future Volume (vph) | 30 | 338 | 1006 | 42 | 330 | 913 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 134.2

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 30 | 338 | 1006 | 42 | 330 | 913 |
| Future Vol, veh/h | 30 | 338 | 1006 | 42 | 330 | 913 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 33 | 367 | 1093 | 46 | 344 | 951 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|------------|
| Conflicting Flow All | 2161 | 547 | 0 0 1093 0 |
| Stage 1 | 1093 | - | - - - - |
| Stage 2 | 1068 | - | - - - - |
| Critical Hdwy | 5.74 | 7.14 | - - 5.34 - |
| Critical Hdwy Stg 1 | 6.64 | - | - - - - |
| Critical Hdwy Stg 2 | 6.04 | - | - - - - |
| Follow-up Hdwy | 3.82 | 3.92 | - - 3.12 - |
| Pot Cap-1 Maneuver | 77 | 412 | - - 353 - |
| Stage 1 | 212 | - | - - - - |
| Stage 2 | 263 | - | - - - - |
| Platoon blocked, % | | | - - - - |
| Mov Cap-1 Maneuver | ~ 2 | 412 | - - 353 - |
| Mov Cap-2 Maneuver | ~ 2 | - | - - - - |
| Stage 1 | 212 | - | - - - - |
| Stage 2 | ~ 7 | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|--------|----|------|
| HCM Control Delay, s | \$ 885 | 0 | 20.3 |
| HCM LOS | F | | |

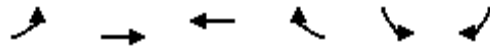
| Minor Lane/Major Mvmt | NBT | NBRWBLn1WBLn2 | SBL | SBT |
|-----------------------|-----|----------------------|-----|-----|
| Capacity (veh/h) | - | - 2 412 | 353 | - |
| HCM Lane V/C Ratio | - | - 16.304 0.892 0.974 | - | - |
| HCM Control Delay (s) | - | \$ 10254.9 53.4 76.4 | - | - |
| HCM Lane LOS | - | - F F F | - | - |
| HCM 95th %tile Q(veh) | - | - 5.9 9.3 10.8 | - | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
7: Queen Creek Road & Middle Drive

2030 - Saturday MIDDAY



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↕↕ | ↕↕ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 74 | 601 | 670 | 24 | 19 | 54 |
| Future Volume (vph) | 74 | 601 | 670 | 24 | 19 | 54 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.95 | 0.95 | 0.76 | 0.76 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

| | |
|------------------|-----|
| Int Delay, s/veh | 1.5 |
|------------------|-----|

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 74 | 601 | 670 | 24 | 19 | 54 |
| Future Vol, veh/h | 74 | 601 | 670 | 24 | 19 | 54 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 91 | 91 | 95 | 95 | 76 | 76 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 81 | 660 | 705 | 25 | 25 | 71 |

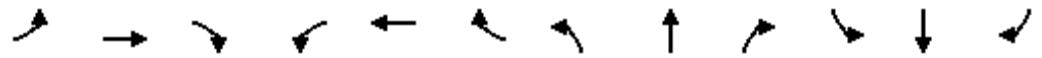
| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 705 | 0 | 1198 |
| Stage 1 | - | - | 705 |
| Stage 2 | - | - | 493 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 889 | - | 178 |
| Stage 1 | - | - | 451 |
| Stage 2 | - | - | 579 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 889 | - | 162 |
| Mov Cap-2 Maneuver | - | - | 162 |
| Stage 1 | - | - | 451 |
| Stage 2 | - | - | 526 |

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 1 | 0 | 16.5 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 889 | - | - | - | 162 | 643 |
| HCM Lane V/C Ratio | 0.091 | - | - | - | 0.154 | 0.111 |
| HCM Control Delay (s) | 9.5 | - | - | - | 31.2 | 11.3 |
| HCM Lane LOS | A | - | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.5 | 0.4 |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 91 | 289 | 74 | 7 | 126 | 41 | 131 | 155 | 121 | 238 | 328 | 104 |
| Future Volume (vph) | 91 | 289 | 74 | 7 | 126 | 41 | 131 | 155 | 121 | 238 | 328 | 104 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 100 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.969 | | | | 0.850 | | 0.934 | | | 0.964 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1805 | 0 | 1770 | 1863 | 1583 | 1770 | 3306 | 0 | 1770 | 3412 | 0 |
| Flt Permitted | 0.646 | | | 0.239 | | | 0.368 | | | 0.552 | | |
| Satd. Flow (perm) | 1203 | 1805 | 0 | 445 | 1863 | 1583 | 685 | 3306 | 0 | 1028 | 3412 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 13 | | | | 125 | | 142 | | | 41 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 5321 | | | 3718 | | | 4051 | | | 1747 | |
| Travel Time (s) | | 80.6 | | | 56.3 | | | 61.4 | | | 26.5 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.75 | 0.75 | 0.75 |
| Adj. Flow (vph) | 97 | 307 | 79 | 8 | 148 | 48 | 154 | 182 | 142 | 317 | 437 | 139 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 97 | 386 | 0 | 8 | 148 | 48 | 154 | 324 | 0 | 317 | 576 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 10.0 | | 4.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 8.0 | 30.0 | | 8.0 | 22.0 | 22.0 | 9.5 | 30.0 | | 9.5 | 30.0 | |
| Total Split (s) | 8.0 | 37.0 | | 8.0 | 37.0 | 37.0 | 23.0 | 32.0 | | 23.0 | 32.0 | |
| Total Split (%) | 8.0% | 37.0% | | 8.0% | 37.0% | 37.0% | 23.0% | 32.0% | | 23.0% | 32.0% | |
| Yellow Time (s) | 3.5 | 4.5 | | 3.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 0.5 | 1.5 | | 0.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | None | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 33.2 | 25.8 | | 33.1 | 25.8 | 25.8 | 51.7 | 40.7 | | 51.7 | 40.7 | |
| Actuated g/C Ratio | 0.33 | 0.26 | | 0.33 | 0.26 | 0.26 | 0.52 | 0.41 | | 0.52 | 0.41 | |
| v/c Ratio | 0.23 | 0.81 | | 0.04 | 0.31 | 0.10 | 0.34 | 0.23 | | 0.53 | 0.41 | |
| Control Delay | 21.4 | 47.1 | | 15.7 | 32.5 | 1.8 | 18.1 | 13.6 | | 22.3 | 21.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 21.4 | 47.1 | | 15.7 | 32.5 | 1.8 | 18.1 | 13.6 | | 22.3 | 21.4 | |
| LOS | C | D | | B | C | A | B | B | | C | C | |
| Approach Delay | | 41.9 | | | 24.6 | | | 15.0 | | | 21.7 | |
| Approach LOS | | D | | | C | | | B | | | C | |
| Stops (vph) | 58 | 318 | | 4 | 97 | 3 | 68 | 107 | | 174 | 314 | |
| Fuel Used(gal) | 4 | 20 | | 0 | 6 | 1 | 6 | 12 | | 11 | 21 | |

Lanes, Volumes, Timings
 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road

2030 - Saturday PM

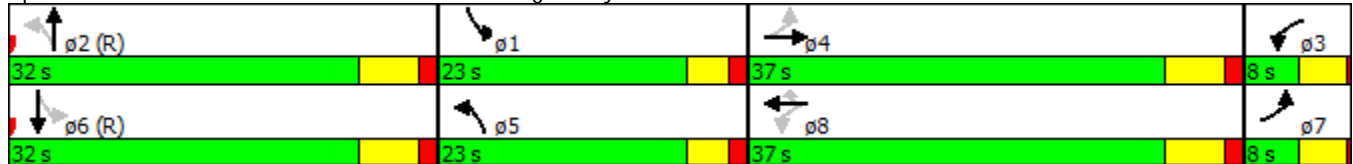


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|------|------|------|-----|------|------|-----|
| CO Emissions (g/hr) | 298 | 1396 | | 22 | 448 | 103 | 413 | 818 | | 799 | 1442 | |
| NOx Emissions (g/hr) | 58 | 272 | | 4 | 87 | 20 | 80 | 159 | | 155 | 281 | |
| VOC Emissions (g/hr) | 69 | 324 | | 5 | 104 | 24 | 96 | 190 | | 185 | 334 | |
| Dilemma Vehicles (#) | 0 | 14 | | 0 | 3 | 0 | 0 | 14 | | 0 | 16 | |
| Queue Length 50th (ft) | 40 | 223 | | 2 | 62 | 1 | 47 | 38 | | 140 | 145 | |
| Queue Length 95th (ft) | 68 | 301 | | m3 | m99 | m5 | 87 | 77 | | 172 | 178 | |
| Internal Link Dist (ft) | | 5241 | | | 3638 | | | 3971 | | | 1667 | |
| Turn Bay Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Base Capacity (vph) | 430 | 576 | | 217 | 586 | 583 | 616 | 1429 | | 761 | 1412 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.23 | 0.67 | | 0.04 | 0.25 | 0.08 | 0.25 | 0.23 | | 0.42 | 0.41 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 25.2
 Intersection LOS: C
 Intersection Capacity Utilization 61.6%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 171: Greenfield Rd/Santan Village Pkwy & Ocotillo Road



1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 33 | 502 | 88 | 47 | 581 | 136 | 61 | 348 | 57 | 169 | 299 | 31 |
| Future Volume (vph) | 33 | 502 | 88 | 47 | 581 | 136 | 61 | 348 | 57 | 169 | 299 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 14 | 11 | 10 | 14 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 175 | | 0 | 210 | | 0 | 200 | | 0 | 170 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 90 | | | 150 | | | 70 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.978 | | | 0.972 | | | 0.979 | | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3346 | 0 | 1888 | 3325 | 0 | 1888 | 3349 | 0 | 1652 | 3373 | 0 |
| Flt Permitted | 0.289 | | | 0.377 | | | 0.426 | | | 0.339 | | |
| Satd. Flow (perm) | 502 | 3346 | 0 | 749 | 3325 | 0 | 846 | 3349 | 0 | 589 | 3373 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 21 | | | 30 | | | 19 | | | 11 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 480 | | | 195 | | | 687 | | | 640 | |
| Travel Time (s) | | 7.3 | | | 3.0 | | | 10.4 | | | 9.7 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 34 | 518 | 91 | 51 | 632 | 148 | 67 | 382 | 63 | 190 | 336 | 35 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 34 | 609 | 0 | 51 | 780 | 0 | 67 | 445 | 0 | 190 | 371 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | | 9.0 | 16.0 | |
| Total Split (s) | 14.0 | 39.0 | | 14.0 | 39.0 | | 12.0 | 35.0 | | 12.0 | 35.0 | |
| Total Split (%) | 14.0% | 39.0% | | 14.0% | 39.0% | | 12.0% | 35.0% | | 12.0% | 35.0% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | | 1.0 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | | 4.0 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | C-Max | | None | C-Max | | None | None | | None | None | |
| Act Effect Green (s) | 56.9 | 49.3 | | 56.9 | 49.3 | | 29.0 | 19.3 | | 29.0 | 19.3 | |
| Actuated g/C Ratio | 0.57 | 0.49 | | 0.57 | 0.49 | | 0.29 | 0.19 | | 0.29 | 0.19 | |
| v/c Ratio | 0.10 | 0.37 | | 0.10 | 0.47 | | 0.21 | 0.67 | | 0.75 | 0.56 | |
| Control Delay | 3.2 | 4.1 | | 5.0 | 7.1 | | 30.4 | 42.0 | | 52.3 | 32.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 3.2 | 4.1 | | 5.0 | 7.1 | | 30.4 | 42.0 | | 52.3 | 32.8 | |
| LOS | A | A | | A | A | | C | D | | D | C | |
| Approach Delay | | 4.0 | | | 7.0 | | | 40.4 | | | 39.4 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Stops (vph) | 4 | 115 | | 9 | 196 | | 48 | 366 | | 191 | 295 | |

1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road

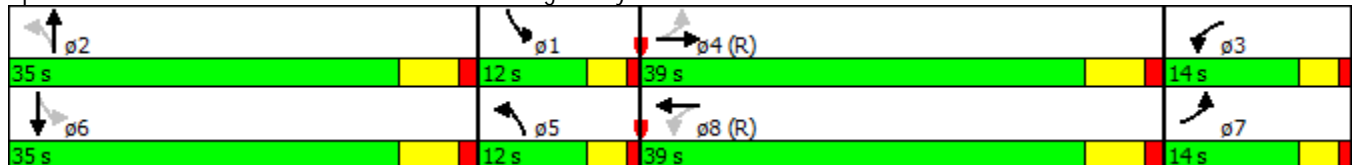


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 1 | 16 | | 2 | 24 | | 3 | 22 | | 10 | 17 | |
| CO Emissions (g/hr) | 60 | 1113 | | 107 | 1706 | | 215 | 1533 | | 698 | 1203 | |
| NOx Emissions (g/hr) | 12 | 217 | | 21 | 332 | | 42 | 298 | | 136 | 234 | |
| VOC Emissions (g/hr) | 14 | 258 | | 25 | 395 | | 50 | 355 | | 162 | 279 | |
| Dilemma Vehicles (#) | 0 | 8 | | 0 | 22 | | 0 | 9 | | 0 | 9 | |
| Queue Length 50th (ft) | 2 | 15 | | 5 | 52 | | 36 | 142 | | 109 | 118 | |
| Queue Length 95th (ft) | 6 | 32 | | m12 | 121 | | 68 | 191 | | 157 | 156 | |
| Internal Link Dist (ft) | | 400 | | | 115 | | | 607 | | | 560 | |
| Turn Bay Length (ft) | 175 | | | 210 | | | 200 | | | 170 | | |
| Base Capacity (vph) | 423 | 1661 | | 573 | 1655 | | 344 | 984 | | 269 | 985 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.08 | 0.37 | | 0.09 | 0.47 | | 0.19 | 0.45 | | 0.71 | 0.38 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 42 (42%), Referenced to phase 4:EBTL and 8:WBTL, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 20.1
 Intersection LOS: C
 Intersection Capacity Utilization 62.0%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1204: Greenfield Rd/Santan Village Pkwy & Queen Creek Road



Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2030 - Saturday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 56 | 505 | 356 | 85 | 358 | 144 | 229 | 571 | 93 | 202 | 666 | 65 |
| Future Volume (vph) | 56 | 505 | 356 | 85 | 358 | 144 | 229 | 571 | 93 | 202 | 666 | 65 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 10 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 2 | | 1 | 2 | | 0 |
| Taper Length (ft) | 45 | | | 70 | | | 70 | | | 85 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3421 | 1478 | 1652 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Flt Permitted | 0.426 | | | 0.291 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 741 | 3421 | 1478 | 506 | 3421 | 1478 | 3204 | 4916 | 1531 | 3204 | 4852 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 352 | | | 149 | | | 142 | | 16 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 825 | | | 483 | | | 1860 | | | 1164 | |
| Travel Time (s) | | 12.5 | | | 7.3 | | | 28.2 | | | 17.6 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 | 0.87 | 0.87 | 0.87 | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph) | 60 | 537 | 379 | 94 | 398 | 160 | 263 | 656 | 107 | 208 | 687 | 67 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 60 | 537 | 379 | 94 | 398 | 160 | 263 | 656 | 107 | 208 | 754 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | | | 2 | | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | 10.0 | 7.0 | 10.0 | |
| Minimum Split (s) | 11.0 | 16.0 | 16.0 | 11.0 | 16.0 | 16.0 | 13.0 | 16.0 | 16.0 | 13.0 | 16.0 | |
| Total Split (s) | 15.0 | 32.0 | 32.0 | 15.0 | 32.0 | 32.0 | 19.0 | 34.0 | 34.0 | 19.0 | 34.0 | |
| Total Split (%) | 15.0% | 32.0% | 32.0% | 15.0% | 32.0% | 32.0% | 19.0% | 34.0% | 34.0% | 19.0% | 34.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | |
| Lead/Lag | | | | | | | Lag | Lead | Lead | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | Yes | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | C-Max | None | C-Max | |
| Act Effct Green (s) | 32.3 | 23.3 | 23.3 | 32.3 | 23.3 | 23.3 | 12.7 | 37.2 | 37.2 | 12.7 | 37.2 | |
| Actuated g/C Ratio | 0.32 | 0.23 | 0.23 | 0.32 | 0.23 | 0.23 | 0.13 | 0.37 | 0.37 | 0.13 | 0.37 | |
| v/c Ratio | 0.20 | 0.67 | 0.62 | 0.39 | 0.50 | 0.35 | 0.65 | 0.36 | 0.16 | 0.51 | 0.42 | |
| Control Delay | 31.4 | 46.0 | 17.1 | 30.3 | 35.1 | 8.3 | 59.5 | 27.0 | 6.4 | 42.5 | 13.5 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 31.4 | 46.0 | 17.1 | 30.3 | 35.1 | 8.3 | 59.5 | 27.0 | 6.4 | 42.5 | 13.5 | |
| LOS | C | D | B | C | D | A | E | C | A | D | B | |
| Approach Delay | | 33.9 | | | 27.9 | | | 33.2 | | | 19.8 | |
| Approach LOS | | C | | | C | | | C | | | B | |
| Stops (vph) | 38 | 464 | 241 | 56 | 299 | 25 | 222 | 488 | 24 | 188 | 488 | |

Lanes, Volumes, Timings
 1205: Higley Road & Queen Creek Road

2030 - Saturday PM

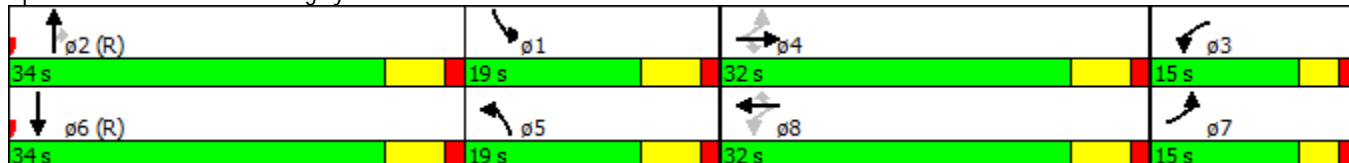


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Fuel Used(gal) | 1 | 13 | 6 | 6 | 24 | 8 | 8 | 16 | 2 | 6 | 14 | |
| CO Emissions (g/hr) | 79 | 923 | 430 | 387 | 1707 | 549 | 580 | 1126 | 108 | 392 | 951 | |
| NOx Emissions (g/hr) | 15 | 180 | 84 | 75 | 332 | 107 | 113 | 219 | 21 | 76 | 185 | |
| VOC Emissions (g/hr) | 18 | 214 | 100 | 90 | 396 | 127 | 134 | 261 | 25 | 91 | 220 | |
| Dilemma Vehicles (#) | 0 | 21 | 0 | 0 | 14 | 0 | 0 | 20 | 0 | 0 | 12 | |
| Queue Length 50th (ft) | 23 | 164 | 73 | 39 | 113 | 5 | 89 | 145 | 13 | 69 | 115 | |
| Queue Length 95th (ft) | m52 | 227 | 132 | 73 | 157 | 55 | 124 | 183 | m43 | 103 | 71 | |
| Internal Link Dist (ft) | | 745 | | | 403 | | | 1780 | | | 1084 | |
| Turn Bay Length (ft) | 285 | | 110 | 140 | | 75 | 210 | | 125 | 315 | | |
| Base Capacity (vph) | 369 | 889 | 644 | 309 | 889 | 494 | 416 | 1827 | 658 | 416 | 1814 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.16 | 0.60 | 0.59 | 0.30 | 0.45 | 0.32 | 0.63 | 0.36 | 0.16 | 0.50 | 0.42 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 28.9 Intersection LOS: C
 Intersection Capacity Utilization 59.0% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1205: Higley Road & Queen Creek Road



Lanes, Volumes, Timings
1207: Higley Road & Ocotillo Road

2030 - Saturday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 86 | 167 | 93 | 25 | 156 | 35 | 76 | 754 | 139 | 220 | 754 | 236 |
| Future Volume (vph) | 86 | 167 | 93 | 25 | 156 | 35 | 76 | 754 | 139 | 220 | 754 | 236 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 13 | 11 | 11 | 12 | 11 | 10 | 16 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | 0 | 255 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 65 | | | 110 | | | 80 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | | 0.850 | | 0.977 | | | 0.964 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1829 | 3421 | 1531 | 1770 | 1801 | 1478 | 2006 | 3343 | 0 | 1711 | 4739 | 0 |
| Fl _t Permitted | 0.359 | | | 0.577 | | | 0.224 | | | 0.188 | | |
| Satd. Flow (perm) | 691 | 3421 | 1531 | 1075 | 1801 | 1478 | 473 | 3343 | 0 | 339 | 4739 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 141 | | | 125 | | 25 | | | 95 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1618 | | | 528 | | | 298 | | | 3480 | |
| Travel Time (s) | | 24.5 | | | 8.0 | | | 4.5 | | | 52.7 | |
| Peak Hour Factor | 0.66 | 0.66 | 0.66 | 0.62 | 0.62 | 0.62 | 0.90 | 0.90 | 0.90 | 0.98 | 0.98 | 0.98 |
| Adj. Flow (vph) | 130 | 253 | 141 | 40 | 252 | 56 | 84 | 838 | 154 | 224 | 769 | 241 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 130 | 253 | 141 | 40 | 252 | 56 | 84 | 992 | 0 | 224 | 1010 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 10.0 | 10.0 | 4.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 8.0 | 16.5 | 16.5 | 8.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 8.0 | 27.0 | 27.0 | 8.0 | 27.0 | 27.0 | 19.0 | 46.0 | | 19.0 | 46.0 | |
| Total Split (%) | 8.0% | 27.0% | 27.0% | 8.0% | 27.0% | 27.0% | 19.0% | 46.0% | | 19.0% | 46.0% | |
| Yellow Time (s) | 3.5 | 4.5 | 4.5 | 3.5 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 0.5 | 1.5 | 1.5 | 0.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.0 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | None | None | None | None | None | C-Max | | None | C-Max | |
| Act Effct Green (s) | 25.2 | 18.1 | 18.1 | 25.2 | 18.1 | 18.1 | 57.8 | 46.0 | | 57.8 | 46.0 | |
| Actuated g/C Ratio | 0.25 | 0.18 | 0.18 | 0.25 | 0.18 | 0.18 | 0.58 | 0.46 | | 0.58 | 0.46 | |
| v/c Ratio | 0.56 | 0.41 | 0.36 | 0.13 | 0.77 | 0.15 | 0.20 | 0.64 | | 0.67 | 0.45 | |
| Control Delay | 36.0 | 36.1 | 11.1 | 26.3 | 54.9 | 0.9 | 11.3 | 23.7 | | 34.3 | 13.5 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 36.0 | 36.1 | 11.1 | 26.3 | 54.9 | 0.9 | 11.3 | 23.7 | | 34.3 | 13.5 | |
| LOS | D | D | B | C | D | A | B | C | | C | B | |
| Approach Delay | | 29.3 | | | 42.9 | | | 22.8 | | | 17.2 | |
| Approach LOS | | C | | | D | | | C | | | B | |
| Stops (vph) | 63 | 133 | 36 | 19 | 146 | 0 | 32 | 661 | | 169 | 626 | |

Lanes, Volumes, Timings
 1207: Higley Road & Ocotillo Road

2030 - Saturday PM

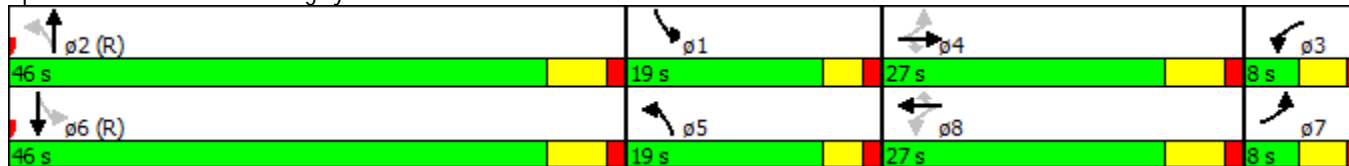


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Fuel Used(gal) | 4 | 9 | 4 | 1 | 6 | 0 | 3 | 43 | | 9 | 33 | |
| CO Emissions (g/hr) | 307 | 606 | 271 | 49 | 392 | 33 | 224 | 3038 | | 602 | 2297 | |
| NOx Emissions (g/hr) | 60 | 118 | 53 | 10 | 76 | 6 | 44 | 591 | | 117 | 447 | |
| VOC Emissions (g/hr) | 71 | 140 | 63 | 11 | 91 | 8 | 52 | 704 | | 139 | 532 | |
| Dilemma Vehicles (#) | 0 | 11 | 0 | 0 | 7 | 0 | 0 | 45 | | 0 | 23 | |
| Queue Length 50th (ft) | 50 | 67 | 14 | 18 | 152 | 0 | 20 | 250 | | 78 | 97 | |
| Queue Length 95th (ft) | 80 | 86 | 23 | 29 | 150 | 0 | 40 | 348 | | 144 | 232 | |
| Internal Link Dist (ft) | | 1538 | | | 448 | | | 218 | | | 3400 | |
| Turn Bay Length (ft) | 105 | | 105 | 205 | | 205 | 175 | | | 255 | | |
| Base Capacity (vph) | 232 | 723 | 434 | 306 | 380 | 411 | 515 | 1551 | | 408 | 2231 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.56 | 0.35 | 0.32 | 0.13 | 0.66 | 0.14 | 0.16 | 0.64 | | 0.55 | 0.45 | |

Intersection Summary

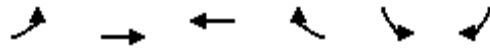
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 23.9
 Intersection Capacity Utilization 67.6%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 1207: Higley Road & Ocotillo Road



Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

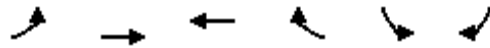
2030 - Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|-------|-------|------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 34 | 452 | 504 | 290 | 352 | 55 |
| Future Volume (vph) | 34 | 452 | 504 | 290 | 352 | 55 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 200 | | | 250 | 250 | 0 |
| Storage Lanes | 1 | | | 0 | 0 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Frt | | | 0.945 | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3345 | 0 | 1770 | 1583 |
| Flt Permitted | 0.188 | | | | 0.950 | |
| Satd. Flow (perm) | 350 | 3539 | 3345 | 0 | 1770 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | 174 | | | 60 |
| Link Speed (mph) | | 50 | 45 | | 45 | |
| Link Distance (ft) | | 5263 | 4780 | | 1332 | |
| Travel Time (s) | | 71.8 | 72.4 | | 20.2 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.81 | 0.81 | 0.91 | 0.91 |
| Adj. Flow (vph) | 38 | 502 | 622 | 358 | 387 | 60 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 38 | 502 | 980 | 0 | 387 | 60 |
| Turn Type | pm+pt | NA | NA | | Prot | Perm |
| Protected Phases | 7 | 4 | 8 | | 6 | |
| Permitted Phases | 4 | | | | | 6 |
| Detector Phase | 7 | 4 | 8 | | 6 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | | 10.0 | 10.0 |
| Minimum Split (s) | 9.0 | 16.0 | 30.0 | | 28.0 | 28.0 |
| Total Split (s) | 11.0 | 50.0 | 39.0 | | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 62.5% | 48.8% | | 37.5% | 37.5% |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | | 4.5 | 4.5 |
| All-Red Time (s) | 1.0 | 1.5 | 1.5 | | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | | 6.0 | 6.0 |
| Lead/Lag | Lead | | Lag | | | |
| Lead-Lag Optimize? | Yes | | Yes | | | |
| Recall Mode | None | C-Max | C-Max | | None | None |
| Act Effct Green (s) | 47.9 | 45.9 | 39.5 | | 22.1 | 22.1 |
| Actuated g/C Ratio | 0.60 | 0.57 | 0.49 | | 0.28 | 0.28 |
| v/c Ratio | 0.12 | 0.25 | 0.56 | | 0.79 | 0.12 |
| Control Delay | 8.1 | 9.0 | 9.5 | | 39.5 | 6.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 8.1 | 9.0 | 9.5 | | 39.5 | 6.8 |
| LOS | A | A | A | | D | A |
| Approach Delay | | 9.0 | 9.5 | | 35.1 | |
| Approach LOS | | A | A | | D | |
| Stops (vph) | 14 | 212 | 395 | | 312 | 12 |
| Fuel Used(gal) | 1 | 19 | 34 | | 19 | 2 |

Lanes, Volumes, Timings
 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy

2030 - Saturday PM

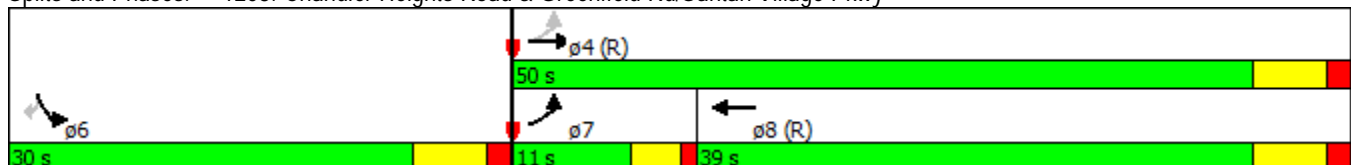


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|------|------|------|-----|------|------|
| CO Emissions (g/hr) | 98 | 1340 | 2399 | | 1329 | 150 |
| NOx Emissions (g/hr) | 19 | 261 | 467 | | 259 | 29 |
| VOC Emissions (g/hr) | 23 | 311 | 556 | | 308 | 35 |
| Dilemma Vehicles (#) | 0 | 20 | 24 | | 0 | 0 |
| Queue Length 50th (ft) | 8 | 65 | 119 | | 172 | 0 |
| Queue Length 95th (ft) | 19 | 87 | 136 | | #283 | 26 |
| Internal Link Dist (ft) | | 5183 | 4700 | | 1252 | |
| Turn Bay Length (ft) | 200 | | | | 250 | |
| Base Capacity (vph) | 333 | 2030 | 1741 | | 531 | 516 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.11 | 0.25 | 0.56 | | 0.73 | 0.12 |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 58 (73%), Referenced to phase 4:EBTL and 8:WBT, Start of 1st Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 15.2
 Intersection LOS: B
 Intersection Capacity Utilization 57.8%
 ICU Level of Service B
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1208: Chandler Heights Road & Greenfield Rd/Santan Village Pkwy



Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

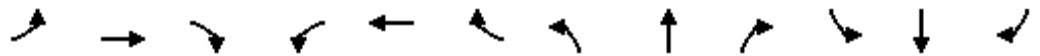
2030 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 288 | 480 | 230 | 165 | 349 | 133 | 146 | 434 | 76 | 218 | 780 | 123 |
| Future Volume (vph) | 288 | 480 | 230 | 165 | 349 | 133 | 146 | 434 | 76 | 218 | 780 | 123 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 | 10 | 11 | 11 |
| Storage Length (ft) | 205 | | 0 | 200 | | 0 | 210 | | 0 | 210 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 75 | | | 95 | | | 70 | | | 55 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Frt | | 0.951 | | | 0.958 | | | 0.978 | | | 0.980 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1652 | 3254 | 0 | 1652 | 3278 | 0 | 1652 | 4808 | 0 | 1652 | 4817 | 0 |
| Flt Permitted | 0.379 | | | 0.224 | | | 0.174 | | | 0.409 | | |
| Satd. Flow (perm) | 659 | 3254 | 0 | 389 | 3278 | 0 | 303 | 4808 | 0 | 711 | 4817 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 104 | | | 71 | | | 45 | | | | 38 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | | 45 |
| Link Distance (ft) | | 626 | | | 1567 | | | 772 | | | | 792 |
| Travel Time (s) | | 9.5 | | | 23.7 | | | 11.7 | | | | 12.0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph) | 300 | 500 | 240 | 179 | 379 | 145 | 160 | 477 | 84 | 245 | 876 | 138 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 300 | 740 | 0 | 179 | 524 | 0 | 160 | 561 | 0 | 245 | 1014 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 9.5 | 16.0 | | 9.5 | 16.0 | | 9.5 | 28.0 | | 9.5 | 28.0 | |
| Total Split (s) | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | | 10.0 | 30.0 | |
| Total Split (%) | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | | 12.5% | 37.5% | |
| Yellow Time (s) | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Max | | None | Max | | None | C-Max | | None | C-Max | |
| Act Effect Green (s) | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | | 31.0 | 24.0 | |
| Actuated g/C Ratio | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | | 0.39 | 0.30 | |
| v/c Ratio | 0.93 | 0.71 | | 0.76 | 0.51 | | 0.76 | 0.38 | | 0.72 | 0.69 | |
| Control Delay | 67.3 | 27.9 | | 45.8 | 21.8 | | 51.4 | 22.1 | | 34.2 | 26.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 67.3 | 27.9 | | 45.8 | 21.8 | | 51.4 | 22.1 | | 34.2 | 26.6 | |
| LOS | E | C | | D | C | | D | C | | C | C | |
| Approach Delay | | 39.3 | | | 27.9 | | | 28.6 | | | 28.1 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Stops (vph) | 268 | 679 | | 115 | 332 | | 110 | 365 | | 149 | 739 | |

Lanes, Volumes, Timings
 1209: Higley Road & Chandler Heights Road

2030 - Saturday PM

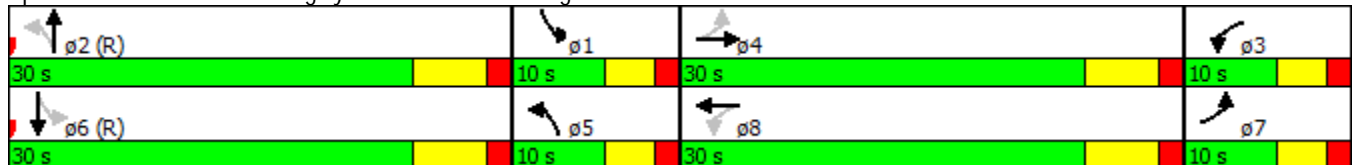


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 17 | 37 | | 5 | 11 | | 5 | 15 | | 11 | 45 | |
| CO Emissions (g/hr) | 1215 | 2614 | | 325 | 781 | | 375 | 1083 | | 763 | 3168 | |
| NOx Emissions (g/hr) | 236 | 509 | | 63 | 152 | | 73 | 211 | | 149 | 616 | |
| VOC Emissions (g/hr) | 282 | 606 | | 75 | 181 | | 87 | 251 | | 177 | 734 | |
| Dilemma Vehicles (#) | 0 | 22 | | 0 | 30 | | 0 | 29 | | 0 | 56 | |
| Queue Length 50th (ft) | 132 | 175 | | 54 | 96 | | 49 | 76 | | 77 | 156 | |
| Queue Length 95th (ft) | m#216 | 235 | | #129 | 144 | | #133 | 108 | | #148 | 199 | |
| Internal Link Dist (ft) | | 546 | | | 1487 | | | 692 | | | 712 | |
| Turn Bay Length (ft) | 205 | | | 200 | | | 210 | | | 210 | | |
| Base Capacity (vph) | 323 | 1049 | | 237 | 1033 | | 210 | 1473 | | 340 | 1471 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.93 | 0.71 | | 0.76 | 0.51 | | 0.76 | 0.38 | | 0.72 | 0.69 | |

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 31.3
 Intersection LOS: C
 Intersection Capacity Utilization 73.3%
 ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1209: Higley Road & Chandler Heights Road



Lanes, Volumes, Timings
1211: Higley Road & Arrowhead Trail

2030 - Saturday PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 679 | 32 | 144 | 632 | 91 |
| Future Volume (vph) | 54 | 13 | 51 | 28 | 17 | 166 | 31 | 679 | 32 | 144 | 632 | 91 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 10 | 10 | 11 | 10 | 10 | 10 | 11 | 10 | 10 | 11 | 10 |
| Storage Length (ft) | 90 | | 0 | 40 | | 0 | 145 | | 90 | 250 | | 85 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 0 | | | 45 | | | 40 | | | 55 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Frt | | 0.880 | | | 0.864 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 1530 | 0 | 1711 | 1502 | 0 | 1652 | 4916 | 1478 | 1652 | 4916 | 1478 |
| Flt Permitted | 0.357 | | | 0.702 | | | 0.376 | | | 0.344 | | |
| Satd. Flow (perm) | 643 | 1530 | 0 | 1264 | 1502 | 0 | 654 | 4916 | 1478 | 598 | 4916 | 1478 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 67 | | | 193 | | | | 82 | | | 100 |
| Link Speed (mph) | | 25 | | | 25 | | | 45 | | | | 45 |
| Link Distance (ft) | | 388 | | | 592 | | | 1164 | | | | 4111 |
| Travel Time (s) | | 10.6 | | | 16.1 | | | 17.6 | | | | 62.3 |
| Peak Hour Factor | 0.76 | 0.76 | 0.76 | 0.86 | 0.86 | 0.86 | 0.88 | 0.88 | 0.88 | 0.91 | 0.91 | 0.91 |
| Adj. Flow (vph) | 71 | 17 | 67 | 33 | 20 | 193 | 35 | 772 | 36 | 158 | 695 | 100 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 71 | 84 | 0 | 33 | 213 | 0 | 35 | 772 | 36 | 158 | 695 | 100 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 6.0 | 10.0 | 10.0 | 6.0 | 10.0 | 10.0 |
| Minimum Split (s) | 16.0 | 16.0 | | 16.0 | 16.0 | | 10.5 | 22.0 | 22.0 | 10.5 | 22.0 | 22.0 |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 11.0 | 50.0 | 50.0 | 11.0 | 50.0 | 50.0 |
| Total Split (%) | 39.0% | 39.0% | | 39.0% | 39.0% | | 11.0% | 50.0% | 50.0% | 11.0% | 50.0% | 50.0% |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | 4.5 |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | 6.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | None | | None | None | | None | C-Max | C-Max | None | C-Max | C-Max |
| Act Effct Green (s) | 13.2 | 13.2 | | 13.2 | 13.2 | | 71.8 | 64.3 | 64.3 | 71.8 | 64.3 | 64.3 |
| Actuated g/C Ratio | 0.13 | 0.13 | | 0.13 | 0.13 | | 0.72 | 0.64 | 0.64 | 0.72 | 0.64 | 0.64 |
| v/c Ratio | 0.84 | 0.32 | | 0.20 | 0.58 | | 0.07 | 0.24 | 0.04 | 0.32 | 0.22 | 0.10 |
| Control Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.3 | 2.6 | 0.2 | 16.1 | 11.7 | 5.2 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 103.5 | 16.2 | | 39.8 | 14.3 | | 1.3 | 2.6 | 0.2 | 16.1 | 11.7 | 5.2 |
| LOS | F | B | | D | B | | A | A | A | B | B | A |
| Approach Delay | | 56.2 | | | 17.7 | | | 2.4 | | | 11.7 | |
| Approach LOS | | E | | | B | | | A | | | B | |
| Stops (vph) | 51 | 20 | | 26 | 35 | | 4 | 94 | 0 | 98 | 494 | 44 |

Lanes, Volumes, Timings
 1211: Higley Road & Arrowhead Trail

2030 - Saturday PM

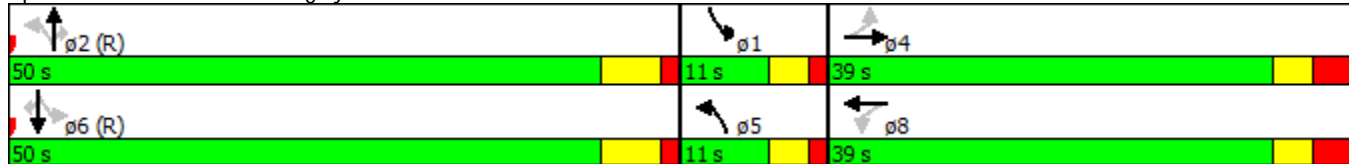


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| Fuel Used(gal) | 2 | 0 | | 0 | 2 | | 0 | 7 | 0 | 6 | 25 | 3 |
| CO Emissions (g/hr) | 106 | 35 | | 33 | 111 | | 20 | 465 | 17 | 387 | 1713 | 215 |
| NOx Emissions (g/hr) | 21 | 7 | | 6 | 22 | | 4 | 91 | 3 | 75 | 333 | 42 |
| VOC Emissions (g/hr) | 24 | 8 | | 8 | 26 | | 5 | 108 | 4 | 90 | 397 | 50 |
| Dilemma Vehicles (#) | 0 | 0 | | 0 | 0 | | 0 | 21 | 0 | 0 | 13 | 0 |
| Queue Length 50th (ft) | 45 | 10 | | 19 | 12 | | 1 | 16 | 0 | 67 | 128 | 22 |
| Queue Length 95th (ft) | 75 | 36 | | 43 | 65 | | 6 | 35 | 0 | 127 | 170 | 67 |
| Internal Link Dist (ft) | | 308 | | | 512 | | | 1084 | | | 4031 | |
| Turn Bay Length (ft) | 90 | | | 40 | | | 145 | | 90 | 250 | | 85 |
| Base Capacity (vph) | 212 | 549 | | 417 | 624 | | 537 | 3161 | 979 | 501 | 3161 | 986 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.33 | 0.15 | | 0.08 | 0.34 | | 0.07 | 0.24 | 0.04 | 0.32 | 0.22 | 0.10 |

Intersection Summary

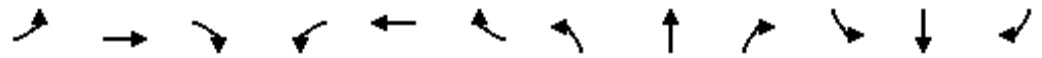
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16 (16%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 12.0
 Intersection Capacity Utilization 59.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 1211: Higley Road & Arrowhead Trail



Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2030 - Saturday PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 39 | 645 | 152 | 85 | 599 | 158 | 239 | 747 | 101 | 321 | 675 | 52 |
| Future Volume (vph) | 39 | 645 | 152 | 85 | 599 | 158 | 239 | 747 | 101 | 321 | 675 | 52 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (ft) | 170 | | 155 | 300 | | 0 | 175 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 115 | | | 100 | | | 95 | | | 90 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 |
| Fr _t | | | 0.850 | | 0.969 | | | 0.982 | | | 0.989 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1711 | 4916 | 1531 | 1711 | 4763 | 0 | 1711 | 4827 | 0 | 1711 | 4862 | 0 |
| Flt Permitted | 0.163 | | | 0.260 | | | 0.220 | | | 0.188 | | |
| Satd. Flow (perm) | 294 | 4916 | 1531 | 468 | 4763 | 0 | 396 | 4827 | 0 | 339 | 4862 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 171 | | 63 | | | 26 | | | 13 | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 1275 | | | 4831 | | | 4111 | | | 2643 | |
| Travel Time (s) | | 19.3 | | | 73.2 | | | 62.3 | | | 40.0 | |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.82 | 0.82 | 0.82 | 0.90 | 0.90 | 0.90 | 0.84 | 0.84 | 0.84 |
| Adj. Flow (vph) | 44 | 725 | 171 | 104 | 730 | 193 | 266 | 830 | 112 | 382 | 804 | 62 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 44 | 725 | 171 | 104 | 923 | 0 | 266 | 942 | 0 | 382 | 866 | 0 |
| Turn Type | pm+pt | NA | Perm | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 10.0 | 10.0 | 5.0 | 10.0 | | 5.0 | 10.0 | | 5.0 | 10.0 | |
| Minimum Split (s) | 10.0 | 16.0 | 16.0 | 10.0 | 16.0 | | 10.0 | 16.0 | | 10.0 | 16.0 | |
| Total Split (s) | 11.0 | 31.0 | 31.0 | 11.0 | 31.0 | | 18.0 | 40.0 | | 18.0 | 40.0 | |
| Total Split (%) | 11.0% | 31.0% | 31.0% | 11.0% | 31.0% | | 18.0% | 40.0% | | 18.0% | 40.0% | |
| Yellow Time (s) | 3.0 | 4.5 | 4.5 | 3.0 | 4.5 | | 3.0 | 4.5 | | 3.0 | 4.5 | |
| All-Red Time (s) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | | 1.5 | 1.5 | | 1.5 | 1.5 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 4.5 | 6.0 | 6.0 | 4.5 | 6.0 | | 4.5 | 6.0 | | 4.5 | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Recall Mode | None | Min | Min | None | Min | | None | C-Min | | None | C-Min | |
| Act Effct Green (s) | 31.9 | 24.6 | 24.6 | 31.9 | 24.6 | | 52.1 | 30.8 | | 52.1 | 30.8 | |
| Actuated g/C Ratio | 0.32 | 0.25 | 0.25 | 0.32 | 0.25 | | 0.52 | 0.31 | | 0.52 | 0.31 | |
| v/c Ratio | 0.25 | 0.60 | 0.34 | 0.47 | 0.76 | | 0.57 | 0.63 | | 0.85 | 0.58 | |
| Control Delay | 25.9 | 39.5 | 13.9 | 35.2 | 37.1 | | 35.8 | 31.6 | | 51.1 | 30.3 | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 25.9 | 39.5 | 13.9 | 35.2 | 37.1 | | 35.8 | 31.6 | | 51.1 | 30.3 | |
| LOS | C | D | B | D | D | | D | C | | D | C | |
| Approach Delay | | 34.2 | | | 36.9 | | | 32.5 | | | 36.7 | |
| Approach LOS | | C | | | D | | | C | | | D | |
| Stops (vph) | 23 | 528 | 70 | 60 | 639 | | 328 | 723 | | 188 | 581 | |

Lanes, Volumes, Timings
 1307: Higley Road & Germann Road

2030 - Saturday PM

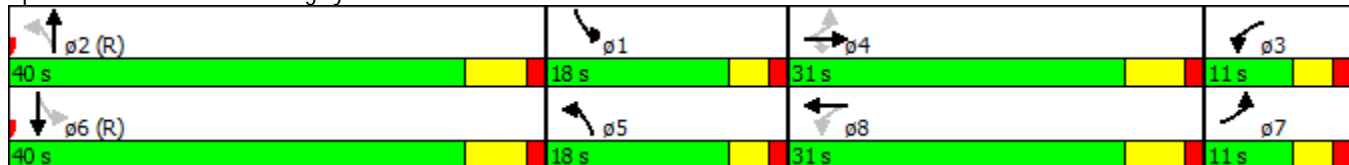


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| Fuel Used(gal) | 2 | 34 | 7 | 4 | 37 | | 12 | 37 | | 11 | 24 | |
| CO Emissions (g/hr) | 128 | 2368 | 455 | 281 | 2614 | | 853 | 2592 | | 782 | 1691 | |
| NOx Emissions (g/hr) | 25 | 461 | 89 | 55 | 509 | | 166 | 504 | | 152 | 329 | |
| VOC Emissions (g/hr) | 30 | 549 | 106 | 65 | 606 | | 198 | 601 | | 181 | 392 | |
| Dilemma Vehicles (#) | 0 | 68 | 0 | 0 | 37 | | 0 | 34 | | 0 | 36 | |
| Queue Length 50th (ft) | 13 | 130 | 2 | 44 | 186 | | 123 | 207 | | 163 | 171 | |
| Queue Length 95th (ft) | 42 | 209 | 80 | 73 | 207 | | #181 | 235 | | #330 | 182 | |
| Internal Link Dist (ft) | | 1195 | | | 4751 | | | 4031 | | | 2563 | |
| Turn Bay Length (ft) | 170 | | 155 | 300 | | | 175 | | | 220 | | |
| Base Capacity (vph) | 188 | 1229 | 511 | 233 | 1238 | | 467 | 1658 | | 448 | 1661 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.23 | 0.59 | 0.33 | 0.45 | 0.75 | | 0.57 | 0.57 | | 0.85 | 0.52 | |

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 20 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 35.1
 Intersection LOS: D
 Intersection Capacity Utilization 71.2%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1307: Higley Road & Germann Road



Lanes and Geometrics
4: Higley Road & Bridges Boulevard

2030 - Saturday PM



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|------|-------|-------|------|
| Lane Configurations | ↵ | ↵ | ↑↑↑ | ↵ | ↵ | ↑↑↑ |
| Traffic Volume (vph) | 38 | 274 | 915 | 86 | 276 | 960 |
| Future Volume (vph) | 38 | 274 | 915 | 86 | 276 | 960 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 0 | 0 | | 100 | 250 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 1583 | 5085 | 1583 | 1770 | 5085 |
| Link Speed (mph) | 30 | | 45 | | | 45 |
| Link Distance (ft) | 913 | | 3480 | | | 1860 |
| Travel Time (s) | 20.8 | | 52.7 | | | 28.2 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.91 | 0.91 | 0.89 | 0.89 | 0.98 | 0.98 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

Int Delay, s/veh 17.3

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 38 | 274 | 915 | 86 | 276 | 960 |
| Future Vol, veh/h | 38 | 274 | 915 | 86 | 276 | 960 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | 100 | 250 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 91 | 91 | 89 | 89 | 98 | 98 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 42 | 301 | 1028 | 97 | 282 | 980 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 1983 | 514 | 0 | 0 | 1028 | 0 |
| Stage 1 | 1028 | - | - | - | - | - |
| Stage 2 | 955 | - | - | - | - | - |
| Critical Hdwy | 5.74 | 7.14 | - | - | 5.34 | - |
| Critical Hdwy Stg 1 | 6.64 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.04 | - | - | - | - | - |
| Follow-up Hdwy | 3.82 | 3.92 | - | - | 3.12 | - |
| Pot Cap-1 Maneuver | 96 | 433 | - | - | 379 | - |
| Stage 1 | 232 | - | - | - | - | - |
| Stage 2 | 302 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | ~ 25 | 433 | - | - | 379 | - |
| Mov Cap-2 Maneuver | ~ 25 | - | - | - | - | - |
| Stage 1 | 232 | - | - | - | - | - |
| Stage 2 | 77 | - | - | - | - | - |

| Approach | WB | | NB | | SB |
|----------------------|-------|--|----|--|-----|
| HCM Control Delay, s | 107.1 | | 0 | | 8.4 |
| HCM LOS | F | | | | |

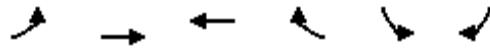
| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|----------|-------|-------|-----|
| Capacity (veh/h) | - | - | 25 | 433 | 379 | - |
| HCM Lane V/C Ratio | - | - | 1.67 | 0.695 | 0.743 | - |
| HCM Control Delay (s) | - | - | \$ 661.7 | 30.2 | 37.4 | - |
| HCM Lane LOS | - | - | F | D | E | - |
| HCM 95th %tile Q(veh) | - | - | 5.1 | 5.2 | 5.9 | - |

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes and Geometrics
 7: Queen Creek Road & Middle Drive

2030 - Saturday PM



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Configurations | ↶ | ↷↷ | ↷↷ | ↷ | ↶ | ↷ |
| Traffic Volume (vph) | 41 | 701 | 605 | 15 | 14 | 29 |
| Future Volume (vph) | 41 | 701 | 605 | 15 | 14 | 29 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 100 | | | 100 | 0 | 0 |
| Storage Lanes | 1 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 1770 | 3539 | 3539 | 1583 | 1770 | 1583 |
| Link Speed (mph) | | 45 | 45 | | 25 | |
| Link Distance (ft) | | 4295 | 825 | | 355 | |
| Travel Time (s) | | 65.1 | 12.5 | | 9.7 | |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.94 | 0.94 | 0.95 | 0.95 | 0.90 | 0.90 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | | 0% | 0% | | 0% | |
| Shared Lane Traffic (%) | | | | | | |

Intersection Summary

| | |
|------------|-------|
| Area Type: | Other |
|------------|-------|

Intersection

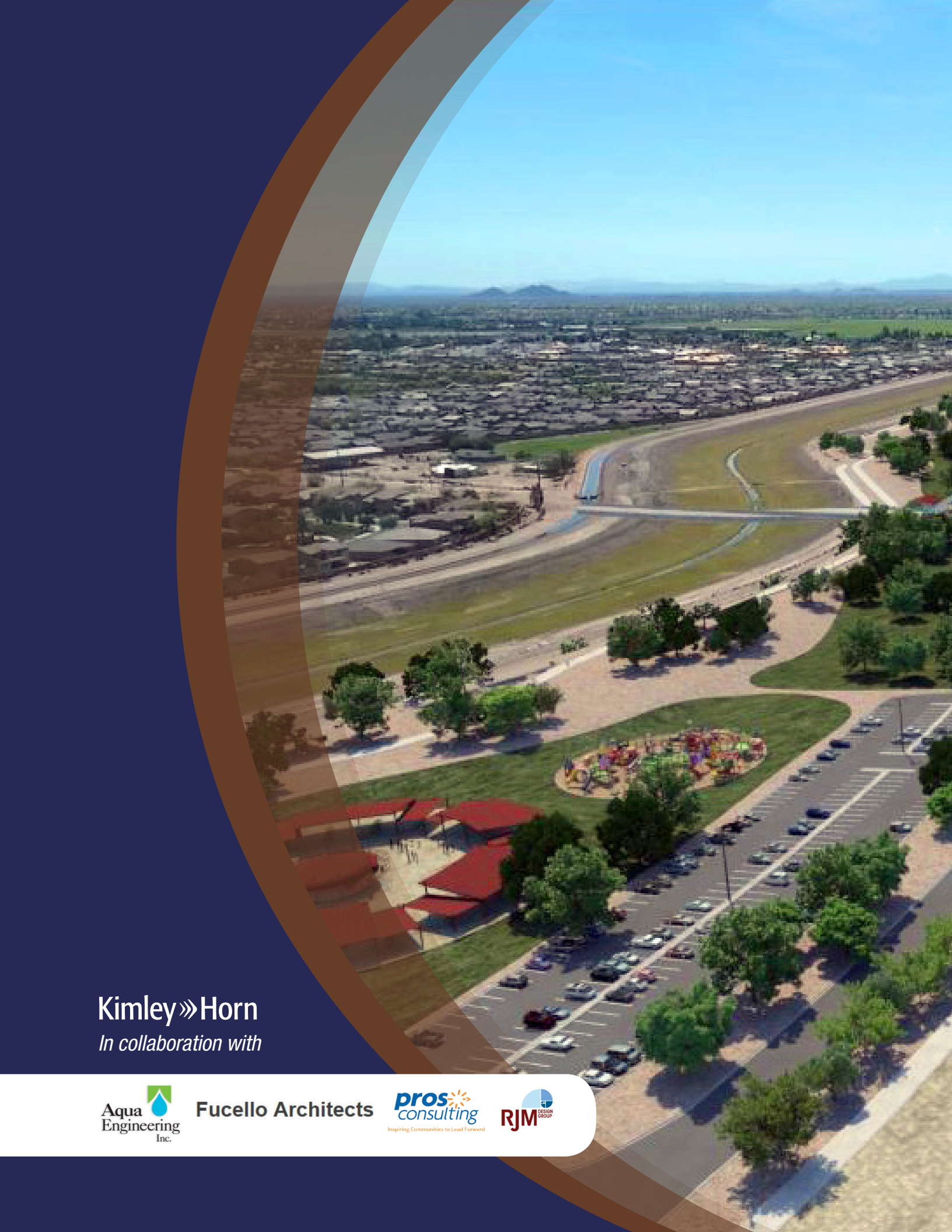
| | |
|------------------|-----|
| Int Delay, s/veh | 0.8 |
|------------------|-----|

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Traffic Vol, veh/h | 41 | 701 | 605 | 15 | 14 | 29 |
| Future Vol, veh/h | 41 | 701 | 605 | 15 | 14 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | 100 | 0 | 0 |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 95 | 95 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 44 | 746 | 637 | 16 | 16 | 32 |

| Major/Minor | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 637 | 0 | 1097 |
| Stage 1 | - | - | 637 |
| Stage 2 | - | - | 460 |
| Critical Hdwy | 4.14 | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | 3.52 |
| Pot Cap-1 Maneuver | 943 | - | 207 |
| Stage 1 | - | - | 489 |
| Stage 2 | - | - | 602 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | 943 | - | 197 |
| Mov Cap-2 Maneuver | - | - | 197 |
| Stage 1 | - | - | 489 |
| Stage 2 | - | - | 574 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 15.2 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-----|-----|-----|-------|-------|
| Capacity (veh/h) | 943 | - | - | - | 197 | 678 |
| HCM Lane V/C Ratio | 0.046 | - | - | - | 0.079 | 0.048 |
| HCM Control Delay (s) | 9 | - | - | - | 24.8 | 10.6 |
| HCM Lane LOS | A | - | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 | 0.1 |



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