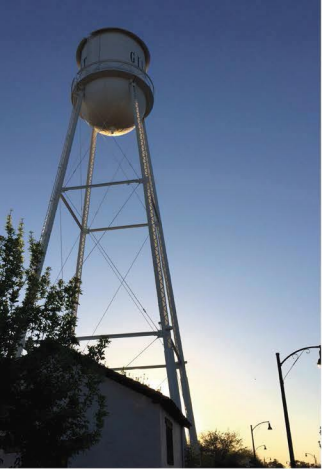
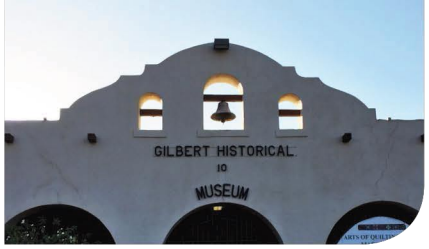




GILBERT
ARIZONA

July 2015 Consultant Report

Parking Master Plan Study

This document represents Kimley-Horn's findings and recommendations for Gilbert to consider regarding parking in the Heritage District.

Prepared for Gilbert by

Kimley»Horn

Expect More. Experience Better.

Existing and Future Parking Conditions in the Heritage District

Existing Parking Conditions

An analysis of existing parking conditions was conducted for the portion of the Heritage District bounded by the Western Canal, Union Pacific railroad, and Elm Street. There are currently 256 on-street parking spaces and 1,563 off-street parking spaces in this portion of the Heritage District. Parking is generally open to free public use and much of the parking is subsidized by the Town.

Parking occupancy data was collected at 16 off-street parking facilities and at 13 on-street block faces on three occasions: a typical weekday, a typical weekend day and evening, and a weekend evening with a food truck event. Friday night at 7pm experienced the highest parking demands compared to the typical weekday and weekend. This is likely due to the additional demand brought in by Friday night food trucks and the performances at Hale Theater. Even with these events, however, there is still surplus parking throughout the system. An analysis of the parking data determined the following:

- On- and off-street parking facilities within a block of Gilbert Road operate at 68 percent average occupancy, while parking facilities located greater than a block away operate at 49 percent average occupancy.
- On-street parking has a lower surplus of parking (33 percent) than off-street parking (39 percent).
- Peak occupancy for the Vaughn Parking Garage is approximately 50 percent.
- The Heritage District parking system has an overall surplus of 38 percent during peak conditions, indicating there is currently an oversupply of parking.

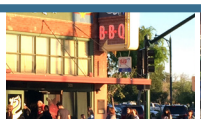
Future Parking Conditions

Future scenarios for full "build-out" development conditions were developed for both a typical weekday and a typical weekend to understand the future parking needs of the District when all projected development is complete. For weekday build-out conditions at 7pm, it is projected that the full build-out District parking system (public and private) will have an occupancy of 72 percent, with 54 percent of the total demand projected to be public demand and the public parking spaces operating at 67 percent occupancy. For weekend night build-out conditions at 7pm, it is projected that the full build-out District parking system (public and private) will have an occupancy of 73 percent, with 41 percent of the total demand projected to be public demand and the public parking spaces operating at 77 percent occupancy.

Parking Regulatory Strategies

The following parking regulatory strategies are recommended for the District.

- **Fee In-Lieu Parking Program** – Developers pay a fee rather than develop on-site parking. The fees are used to build and maintain shared parking facilities.
- **Curb Lane Management** – Regulating who can park on-street next to the curbs and for how long helps balance and prioritize the demands of curb lanes (e.g. on-street parking, loading zones, etc.).




- **Shared Parking** – Adjacent land uses utilize the same parking facilities, maximizing the efficient use of the existing facilities rather than constructing new parking.
- **Parking Maximums and Minimums** – Setting parking maximums and reducing parking minimums can help incentivize more intense development by giving developers flexibility with providing parking, allowing them to determine how much parking is necessary for their use.
- **Introduce Time Limits** –Time restrictions on how long users are allowed to park in certain areas of the District encourages turnover so that multiple users can park throughout the day.
- **Implement New On-Street Parking** – If new parking lots or structures cannot be constructed, additional on-street parking can be created by converting existing travel lanes to on-street parking.
- **Enforcement** – Regular and consistent enforcement of the parking regulatory strategies can help to ensure people are parking properly to maintain an efficient parking system.

Parking System Recommendations in the Heritage District

Table ES-1 provides the near-term and long-term recommendations and associated estimated costs that have been developed to improve efficiency of the parking system in the Heritage District based on the findings of the analysis of existing and future parking conditions.

TABLE ES-1 – RECOMMENDED IMPROVEMENTS TO PARKING SYSTEM AND ESTIMATED COSTS

Recommendation	Project Description	Estimated Total Cost
Near-Term Recommendations		
Parking Enforcement and Regulation Policies	Signage and enforcement of parking restrictions including time restrictions for on-street parking, restrictions on overnight parking and implementation of a Residential Parking Permit program	$50,000 for signage and implementation plus staff time for enforcement
Parking Management	Conducting a parking management study to develop an organizational structure and procedures for managing parking within the District	$50,000 for a parking management study plus staff time for management
New Parking Zoning Policy	Creation and implementation of a fee-in lieu parking program along with reduced parking minimums, the establishment of parking maximums, and the expansion of shared parking	$50,000 for a fee in-lieu rate study and development of new parking zoning policies plus staff time for implementation
Long-Term Recommendations		
Curb Lane Management Policy	Conducting a curb lane management policy study to determine how curb lane uses should be prioritized	$50,000 for a curb lane management policy study plus $250 per sign and staff time for implementation
Construct New Parking Facilities	Constructing 950 spaces in two new parking structures	$14M - $19M plus land acquisition costs
Evaluate Need for On-Street Parking on Gilbert Road	Regularly evaluating if there is a need for on-street parking on Gilbert Road and installing appropriate signage and pavement markings if needed	$1,000 per space for signage, striping, and implementation costs

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I. Introduction

The Heritage District Redevelopment Plan outlines a vision for the Gilbert downtown area that builds on the unique walkable, Main Street environment that currently defines the Heritage District ("District"). An integral part of maintaining this character is the provision of appropriate parking and associated regulations. The purpose of this document is to present the analysis conducted on the District's parking needs, present best management practices that would be appropriate for achieving the District's goals, and provide recommendations that will help the District achieve its goals.

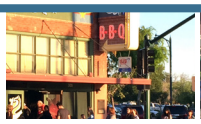
The Heritage District, generally located along Gilbert Road between Juniper Avenue and Elliot Road, is characterized by live theatre venues, a variety of dining options, boutique shopping, and the Gilbert Historical Museum. Additionally, there are a number of seasonal and regular community events, such as the food trucks that attract approximately 1,500 people to the District every Friday, the Farmer's Market every Saturday morning, and an Art Walk in Water Tower Park every other Saturday.

The parking analysis conducted for this document focuses on the portion of the Heritage District bounded by the Western Canal, Union Pacific railroad, and Elm Street. On-street parking is provided within the District along Vaughn Avenue, Page Avenue, Cullumber Avenue, Elm Street, and Ash Street for a total of 256 on-street spaces. The on-street spaces are free and not regulated by any time restrictions, except for a few locations, including in front of the Hale Theatre where there are a few spaces with a 15-minute time limit. The existing on-street parking south of the railroad is also available for use by patrons to self-park.

In addition to the 256 on-street spaces, there are 17 off-street facilities scattered throughout the District that provide 1,563 spaces for a total of 1,819 spaces. The majority of these facilities are open to the public for parking, but others are restricted to those who will visit the adjacent business. Off-street parking is made available at no cost to patrons that in most places is subsidized by Town investments.

As additional development occurs in the Heritage District, the Town should consider implementing some parking management strategies and regulations to ensure that the District has parking that supports projected future growth. The parking in the Heritage District is currently regulated through the Town's municipal code in Chapter 62, Article 3, and development regulations regarding parking in the District are provided in the Town of Gilbert Land Development Code. These codes and ordinances will likely need to be modified if the Town is to maintain acceptable levels of service for the parking system as development continues in the future.

The intent of this document is to analyze the current parking conditions in the District, project future parking demands based on projected developments, and identify parking regulatory strategies that are appropriate for the Town.

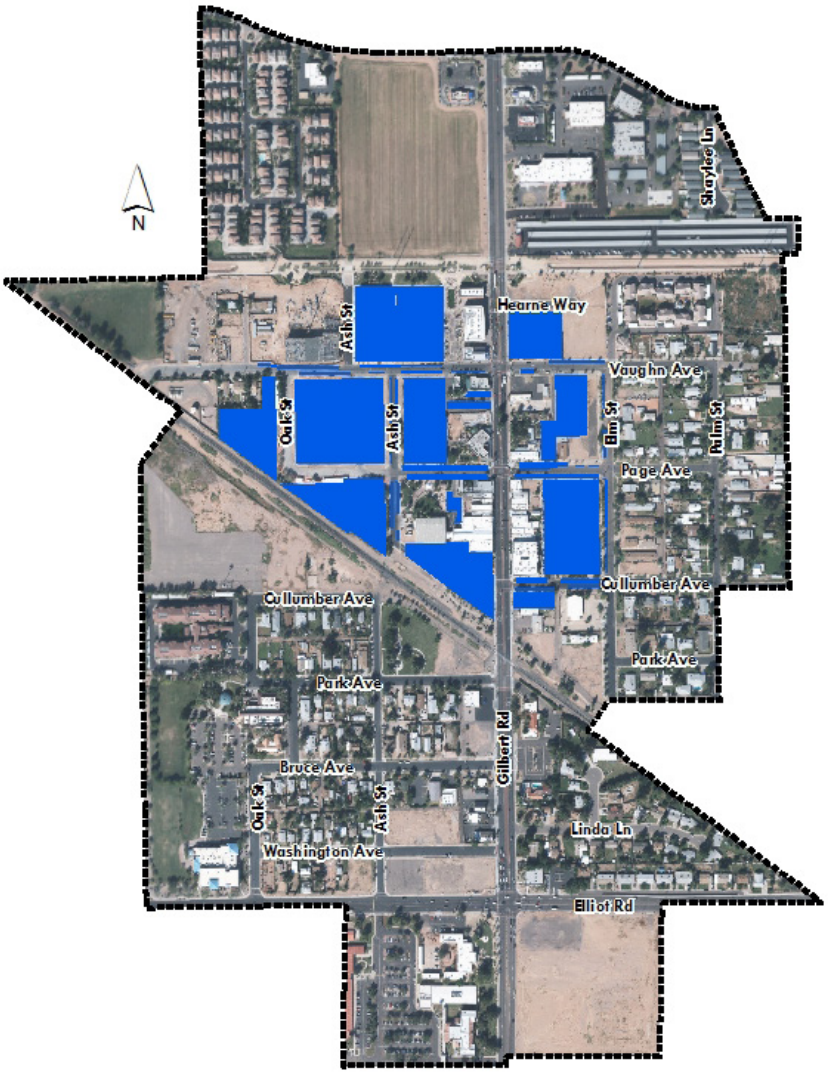


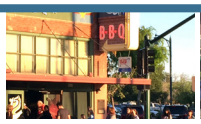
II. Data Collection

An evaluation of parking occupancy provides insight on how the Town's parking system is operating, as well as the behavior patterns of patrons and users of the area. The Heritage District has seen significant growth in activity over recent years, specifically restaurant uses that have high parking demand, especially during weekend and evening periods. The Town is anticipating increased growth and development intensification that would alter parking patterns and patron behavior in the District area. Parking occupancy data was collected at 16 off-street parking facilities and at 13 on-street block faces to better understand these trends and establish baseline data to predict future parking patterns.

Parking data was collected in the portion of the Heritage District bounded by the canal, railroad, and Elm Street on three occasions: a typical weekday, a typical weekend day and evening, and a weekend evening with a food truck event. **Figure 1** identifies the off- and on-street parking locations where occupancy was observed and collected as part of this study.

Figure 1 - Parking Data Collection Areas





The parking occupancy on a typical weekday (Wednesday, May 6, 2015) was collected from 11am to 2pm and 5pm to 8pm to capture the lunch and dinner peak hours. For a typical weekend (Saturday, May 9, 2015), data was collected from 8am to 12pm and 5pm to 8pm. The Heritage District has a recurring food truck event as well as performances at the Hale Theater that draw several hundred additional vehicles in addition to other typical weekend demands. To capture this special event demand, data was collected on Friday, May 8, 2015 from 5pm to 9pm. **Figures 2, 3,** and **4** illustrate the average parking occupancy for off-street and on-street parking locations for the typical weekday (Wednesday), weekend (Saturday), and special event (Friday).

Figure 2 - Wednesday Parking Occupancy (5/6/2015)

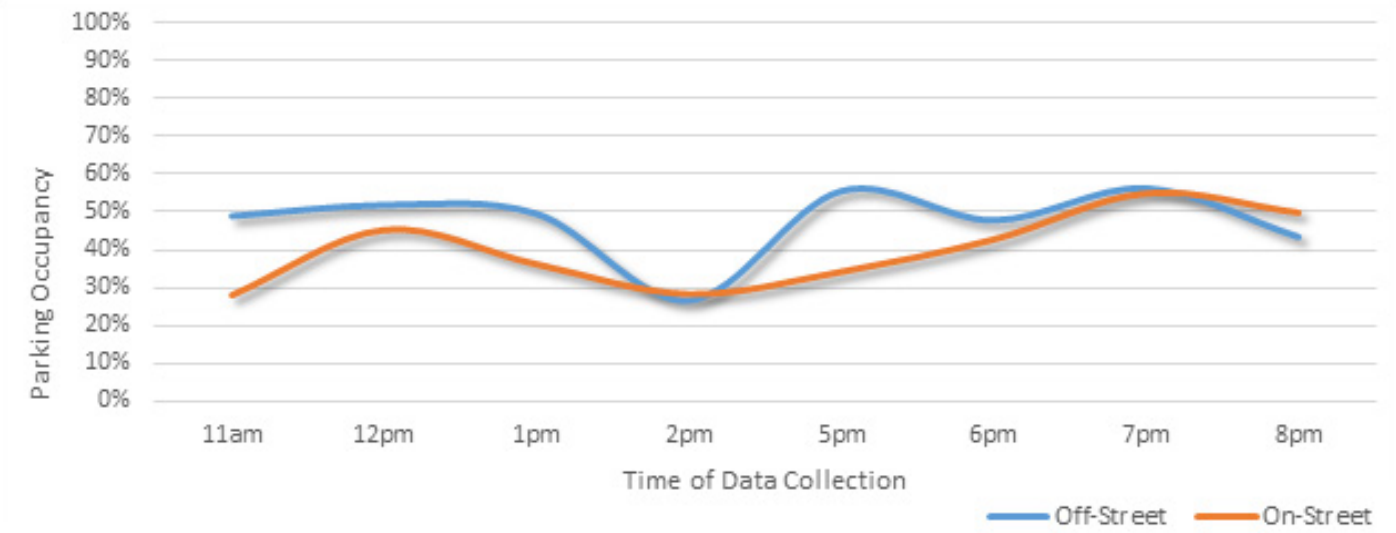


Figure 3 - Saturday Parking Occupancy (5/9/2015)

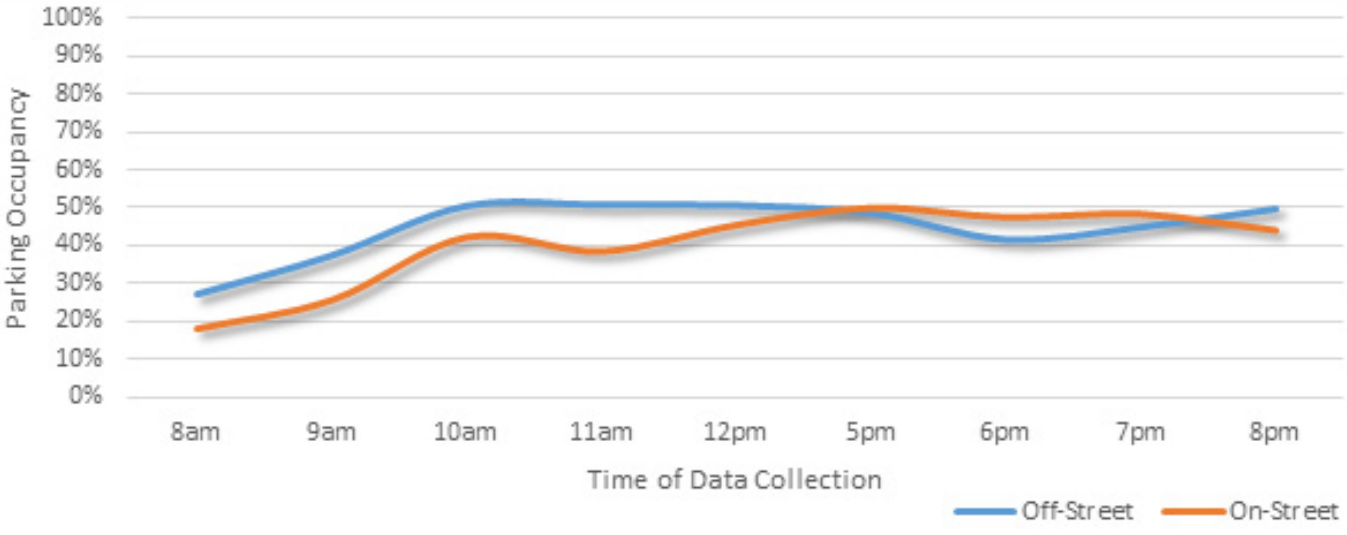
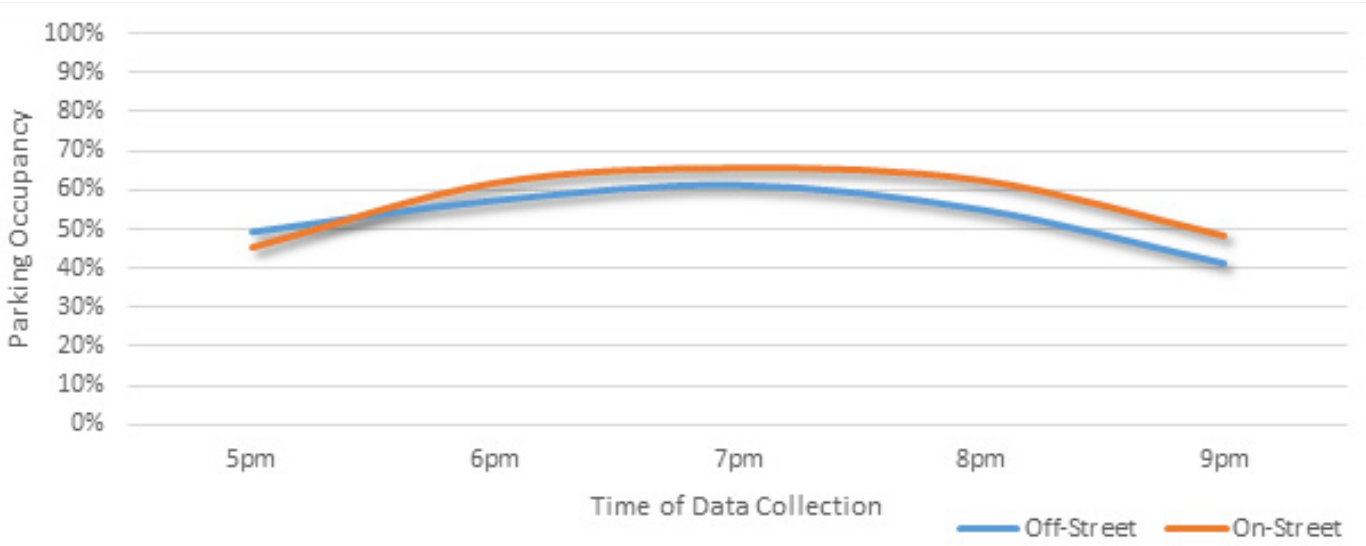


Figure 4 - Friday Parking Occupancy (5/8/2015)

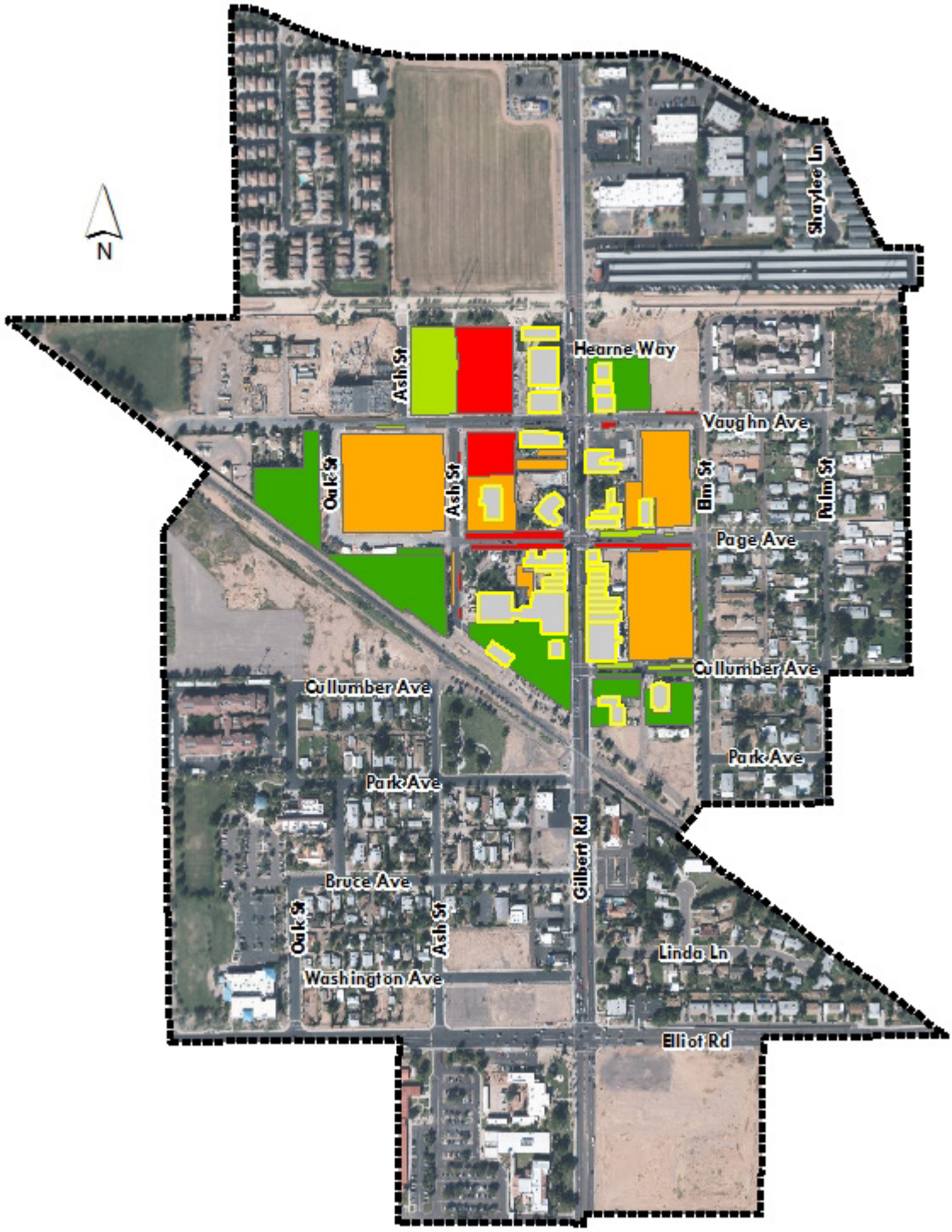


As the graphs indicate, Friday night experiences the highest parking demands compared to the typical weekday and weekend. This is due to the additional demand brought in by the food trucks and the performances at Hale Theater. However, even with these events, there is still surplus parking throughout the system. **Figure 5** on the following page identifies the occupancy at the off- and on-street parking facilities during the peak hour (Friday at 7pm).

The following are key findings from collecting public parking occupancy data within the Heritage District:

- On-street and off-street parking facilities within a block of Gilbert Road are operating at an average occupancy of at 68 percent, whereas facilities that are greater than a block from Gilbert Road have an average occupancy of 49 percent. This indicates walking distance is a significant factor influencing parking behavior within the Heritage District. With several parking facilities not operating near or at capacity, it is clear there is available parking within reasonable walking distance of Gilbert Road.
- On-street parking has a lower surplus of parking (33 percent), whereas off-street has a 39 percent surplus, indicating patrons preferred to park on-street versus the off-street parking facilities (Vaughn Parking Garage, Oak-Ash Surface Lots, Park-N-Rides).
- The peak occupancy for the Vaughn Parking Garage is approximately 50 percent during the event periods.
- The Heritage District parking system has an overall surplus of 38 percent during peak conditions. This is considered a large parking surplus and indicates the District has an over-supply of parking. This surplus can provide the opportunity for additional development to occur without needing to provide additional parking investment immediately.

Figure 5 - Current Parking Occupancy on Friday at Peak Hour (7pm)



Land Uses

Occupancy 0 - 50% 50 - 75% 75 - 90% 90%+

When a parking system is approaching effective capacity, additional strategies should be implemented to regulate parking in an efficient manner that also accommodates anticipated parking demand from projected developments. Effective capacity for a parking system is when occupancy for the system reaches 85 to 90 percent consistently, creating a surplus of 10 to 15 percent. When the system reaches this point, it becomes inefficient because users have difficulty finding the last remaining available spaces that are scattered throughout the system. Additionally, there are other trigger points that may indicate that the system needs different regulations. Those include customer and business owner complaints about lack of parking availability.

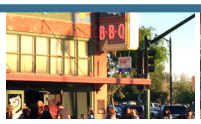
Determining the appropriate time to implement parking management strategies is not always readily apparent — decisions to implement these strategies should be supported by robust data collection and analysis. Collected parking data can inform managers about how the parking system is operating and where areas of high parking demand are located, which can lead to the identification of appropriate strategies to implement. For instance, if occupancy exceeds 85 percent in particular areas, more intensive parking controls should be considered. In other areas it may be more appropriate to implement time restrictions or remove parking restrictions to attract more parking users. Once parking strategies have been implemented, continued data collection and analysis can identify changes in the parking system, such as shifts in demand or over-capacity areas.

The Town of Gilbert is in a unique position to take a proactive approach to managing parking as it prepares for the projected development outlined in the Heritage District Redevelopment Plan Update Addendum: Real Estate, Land Use & Housing Assessment. This document will evaluate how existing parking conditions may be impacted by these anticipated improvements and provide the Town with strategies to manage the parking and get ahead of any issues before they arise.

Fee In-Lieu Parking Program

A fee in-lieu parking program enables jurisdictions to provide developers with the option of paying a fee as an alternative to providing the parking required by the development code or ordinance. This is a program that is recommended in the Heritage District Redevelopment Plan Addendum: Real Estate, Land Use & Housing Assessment. In all jurisdictions, developments must adhere to a parking code that dictates how much parking is required for a particular use based on the square footage, number of units, etc. These requirements often cater to suburban style development and can be restrictive to urban development where space for parking is limited and demands are lower because of increased walkability and shared parking. It should be noted that the parking code requirements are discussed later in this document, and it is recommended that they be modified to reflect the mixed-use character of the area.

Under a fee in-lieu program, developers are allowed to pay a fee rather than provide the required parking, essentially leasing spaces from the Town in shared parking facilities to support their business. The intent is to give developers greater flexibility with regard to providing parking, particularly in areas where providing on-site parking would be unfeasible due to cost or site characteristics. Additionally, the program makes




more efficient use of the available parking. To further promote the shared parking system in the community, owners that have an abundant supply of parking could share their extra spaces with other surrounding developers that could lease or buy the extra parking spaces rather than constructing more parking.

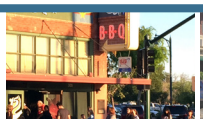
The fees generated from the program can contribute to funding new parking facilities or other area improvements. This fee might be required up-front or financed over a period of time. Developers usually have the option to opt-in to the program with all of their parking requirements or just a portion of the required spaces. What a developer pays is related to the number of spaces involved and the construction, operations, and maintenance cost of shared parking facilities. The Town can use an appraisal process that sets the fee on a case-by-case basis, or, what is more commonly done is that a flat fee per space is set for all participants in the program. Additionally, the Town could also set a fee that is lower than the actual cost of constructing an on-site parking space to incentivize participation into the program.

Regardless of how the fee is set, it must maintain a rational nexus with the parking provision requirement. The fee can either go toward the construction of parking facilities or to Travel Demand Management (TDM) programs because of their impact on parking demand. There is a wide range of TDM programs in which the Town could invest, such as bicycle and pedestrian infrastructure and amenities, transit and incentives provided by employers. These programs are helpful for reducing the inherent demand for parking and for promoting a more walkable and accessible community. Reducing demand through TDM can be significantly less expensive than the addition of more spaces if used effectively, although the use of TDM in the District would likely be limited until the area becomes much more intensely developed and multimodal.

A fee-in-lieu program has a number of benefits for the Town and developers. From the Town's perspective, one of the more notable benefits is that it promotes the sharing of parking resources, which enables those resources to be used more efficiently. The Town already encourages shared parking in the District; a fee in-lieu program will support and strengthen that program. When new parking is needed, the fees collected from the fee in-lieu program will be able to cover some or all of the cost of constructing the new facility. Additionally, the fee in-lieu program will support the Town's goal for the Heritage District to be more pedestrian-oriented. A reduced amount of on-site parking allows continuous storefronts without gaps for adjacent surface parking lots. The Town can put public parking lots and structures where they have the lowest impact on vehicle and pedestrian circulation.

Developers can undertake infill projects without assembling large sites to accommodate on-site parking, and architects have a greater range of design options that can translate into more attractive buildings. In-lieu fees also allow adaptive reuse of historic buildings where the new use requires additional parking that would otherwise be difficult to provide. The in-lieu policy therefore makes it easier to preserve historic buildings and rehabilitate historic areas.

The City of Santa Monica, CA implemented a fee in-lieu program in 1986 in their downtown area to incentivize developers and property owners to utilize public parking facilities, which in turn would encourage visitors to the area to park once and walk between multiple destinations. The City determines the fee amount based on the cost per space to construct parking in the Downtown District. The current cost to construct parking in the Downtown District ranges between $31,000 and $54,000. However, the in-lieu fee is $20,000 per parking space to encourage developers to participate in the program.




From the developer's perspective, a fee in-lieu program creates flexibility by allowing parking requirements to be met off-site, which can be more cost-effective than on-site parking. The Town currently requires developers to apply for an Administrative Use Permit to utilize off-site parking facilities. The fee in-lieu program would remove the time and effort involved in obtaining the permit as developers would be allowed to pay a fee instead. A fee in-lieu program is usually only applicable to commercial developments as it encourages shared, off-site parking. Residential development owners typically prefer to maintain on-site parking for their residents.

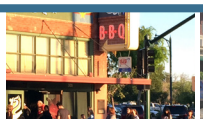
Developers and owners often have concerns about the implementation of a fee in-lieu program. One of the common concerns from developers and business owners is the lack of on-site parking. The concern is that lack of on-site, owner-controlled parking could reduce a development's attractiveness to tenants and customers. As a suburban society, individuals are accustomed to being able to park in lots dedicated to specific stores, and some customers may expect to be able to park directly in front of their destination. This concern can be addressed with open discussions about the benefits that shared parking resources could bring to the community and by education and wayfinding on alternative locations to park that are close by. Those who are still concerned that a fee in-lieu program would not provide convenient parking could choose to provide the parking rather than pay the fee.

Implementation of a fee in-lieu parking program should consider the following:

- A boundary of the in-lieu parking district should be determined and a parking inventory of all available public parking in the district should be conducted. This allows the Town to understand what supply is available for sharing among business. Public parking spaces utilized by participating businesses must be within acceptable walking distances from the purchasing destination to be considered viable alternatives to on-site parking.
- Establish criteria to determine which properties are subject to the in-lieu parking program.
- All existing development within the in-lieu parking district should not be assessed a fee for existing parking requirements.
- The in-lieu fee should only be assessed when there are new developments or intensifications to existing uses that increase parking demands.
- Owners should have the option to provide on-site parking instead of paying the in-lieu fee.
- Determine the cost of constructing parking. The in-lieu fee should be based on the construction and maintenance costs per parking space and the fee should ideally cover that cost. A typical range for the cost of a parking space is likely to be between $2,000 for a surface lot space and $10,000 for a garage space. These costs are exclusive of right-of-way acquisition costs that may be required. The cost will depend on the Town's sales tax and the historical increases over recent years, developer impact fees, and the cost to the Town of constructing parking.

Curb Lane Management

Curb lane management refers to regulating who can park on-street next to the curb and for how long. The goal of curb lane management is to balance the many competing curb lane users so that the curb can be used more efficiently and the needs of the users can be met. Typical curb lane users in the District include visitors, employees, and commercial loading operators. There are streets in the District where stopping,




standing, and parking are prohibited; however, the designation and use of the curb lane space is fairly open and doesn't distinguish between who can utilize the space or for how long they can utilize the space. Even though regulations are not in place within the District (e.g., specific loading zones with time limits, public parking spaces with time limits, etc.), there does not seem to be an issue with the competing users at this time. However, as the District grows and new developments are built, this balance may be upset. Creating consistency, especially over time as the District develops, allows users to know what to expect, which ultimately reduces confusion and pushback when changes occur.

A curbside management program should be adaptable to reflect the changing conditions as the Town grows over time. Curbside management strategies established through the curbside management program will help guide management and implementation decisions for new developments, thus maintaining the established structure of curbside uses over time.

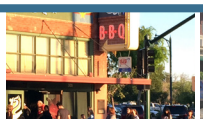
A curbside management program prioritizes and organizes curbside uses in a manner that:

- Supports business vitality, without compromising the character and vitality of the District, by establishing consistency when making decisions regarding when and where to designate various curb lane uses.
- Creates a clear and consistent management system.
- Promotes use of transit and other modes of transportation by ensuring that bike and transit access is not only provided along the curbside but that it is easily and safely accessible and consistently and conveniently placed.

It is important to note that the intent of implementing a curb lane management is not to impose more regulations, but rather to ensure that when regulations are implemented, that decisions about their implementation are made consistently. Establishing a curbside management program can be a proactive approach by the Town to define strategies to create a cohesive and consistent curb structure that is easy to understand, use, and manage, which helps the Town to achieve its larger community goals.

For the Heritage District, a curb lane management program would likely consist of creating a standard for how curb lane decisions are made as they relate to parking regulations, loading zones, location of bus stops, residential parking, and access for pedestrians and bicyclists. Under the current code, all of these curb lane components are treated separately, with their only commonality being that their implementation does not impede traffic or pedestrian flow or safety. The following sections discuss each of the different curb uses and how they can be managed in concert with other curb lane uses while supporting their individual needs.

An example of a community that has implemented curb lane management successfully is Charlotte, NC in its Uptown area. The City realized that customers were confused by parking regulations and that the problem stemmed from unstandardized curb lane uses. The City engaged in a study to identify curb lane priorities and standardized practices for implementing curb lane decisions. Once implemented, the parking in the area became easier for users and for the City to manage. The initial pilot test of restandardized curb lanes and simplified signage resulted in a 50% reduction in citations and a 40% increase in revenue from parking.




Commercial Loading

Provision of space for commercial loading is essential for the support of businesses. According to the Town's Municipal Code, commercial loading can occur in locations where the traffic engineer has deemed it safe and appropriate to stop. Additionally, alleys, which are out of the traffic flow, are available for commercial loading. For smaller deliveries, 15-minute loading zones are available. As the Town implements parking regulations, commercial loading placement decisions should be made with consideration to on-street parking.

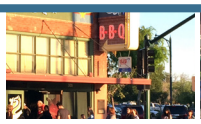
A best practice with regard to balancing commercial loading and on-street parking is to identify what the loading needs are of the surrounding businesses (this should be done on a block-by-block basis). Some businesses may receive deliveries once a week or less, whereas others receive deliveries multiple times a week. An additional component should be the delivery practices. Some businesses have deliveries that take a while to unload whereas for others it is relatively quick. The level of delivery frequency and practices needs to be determined so that appropriate space along the curb can be designated for loadings.

Generally speaking, placing at least one commercial loading zone on a block face (or every other block face depending on the needs of the area and access to alternative loading areas such as side streets or alleys) is sufficient to meet the needs of all the businesses on that block. Additionally, a general good practice is to consolidate the uses along the block (e.g. consolidate all on-street parking instead of separating it along the curb lane). Therefore, loading zones should be placed so that they do not unnecessarily separate on-street parking spaces.

An inventory of the types of deliveries being made within the District would also allow the Town to determine if off-peak delivery hours would be beneficial to the area. Often times, the activities of large delivery trucks are disruptive to traffic circulation so regulating when deliveries can be made may help to disperse the disruptions. A strategy that has been successful in accomplishing this is restricting delivery operations to the morning or evening hours when there is less traffic and competition with other curb lane users.

A time frame for deliveries that is commonly used is between 5am and 10am. The appropriate time-frame for the District would have to be established with input from business owners and delivery operators. For this strategy to be successful, employees of businesses receiving deliveries must be available and the regulation must be enforced to ensure operators adhere to the regulations and that employees are there to receive the deliveries within the specified time-frame.

For these recommendations to be implemented, it would be beneficial for the Town's Code to clearly define a commercial vehicle. Currently, a commercial vehicle is defined as a vehicle that is licensed as a commercial vehicle. However, further definition would allow the Town to regulate when, where, and how commercial vehicles can load and unload based on their dimensions or loading activities.




Access to Transit

The Heritage District is serviced by Valley Metro bus service along Gilbert Road and a loop on Vaughn Avenue, Oak Street, and Page Avenue. There are two bus routes that service the area: Route 136, which provides regular local bus service; and Route 531, which provides express service for commute trips. In addition, there are nine local bus stops in the District along Gilbert Road and Elliot Road and two park-and-ride stops (one on Page Avenue and another on Oak Street). The preferable location for bus stops, according to Valley Metro Bus Stop Program and Standards, is on the far side of an intersection; however, mid-block transit stops are allowed when necessary to accommodate high demand locations. The Town plans to relocate the existing eastbound bus stop on Elliot Road from the near side to the far side of Gilbert Road in late 2015 as part of project # ST111. A bus pullout will be provided at the relocated stop as part of that same project.

If more stops are needed in the District, the Town should work with Valley Metro to determine appropriate locations to locate bus stops in relation to the other curb lane uses.

Bicycle Parking

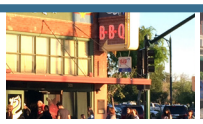
To encourage mobility and improved access for other modes of transportation in the District, Gilbert requires bicycle parking for land uses that need at least 40 vehicle parking spaces at a rate of 1 bicycle space for every 10 required vehicle parking spaces. In instances where less than 40 vehicles spaces are required, a minimum of 4 bicycle parking spaces shall be provided. The maximum bicycle parking rate is set at 100 bicycle parking spaces, regardless of the land use.

Bicycle parking is to be located within 50 feet of the primary building entrance and it is not to impede pedestrian access or landscaped areas. The Land Development Code states that parking facilities have to be permanently affixed to the ground or a structure, but does not limit what types of bicycle parking facilities can be used (e.g. bike rack or lockers).

As cycling has become a more predominant form of transportation in the Town, it is important to promote the use of bicycling with proper facilities. New and innovative ways to park and secure bicycles have been implemented in other cities to serve both long- and short-term bicycle parking needs.

The Town could expand on their existing bicycle parking code to differentiate between the types of parking that must be provided. The Code could require a certain percentage – depending on the land use – of bicycle parking to be provided in the form of enclosed bicycle parking and the rest in traditional rack parking. The percentages reflect the typical types of bicyclists each use generates, where enclosed bicycle parking requirements offer long-term parking (over 4 hours) and more secure parking options for cyclists while traditional rack parking provides parking for short-term (less than 4 hours) parking. The Town should identify locations where these different types of bicycle parking would be appropriate.

Another option would be to include bike parking in the fee in-lieu program, where owners could pay a fee to the Town rather than provide bike parking. The Town could then construct consolidated bike parking facilities at a few select locations, such as within surface parking lots or parking structures.



Residential Parking

As the Town starts to implement parking regulations and the District attracts more visitors, parking might start to negatively impact the surrounding residential neighborhoods. As a result, the Town should consider implementing a Residential Parking Permit (RPP) program. A RPP program regulates the spillover parking from the commercial area and ensures that residents in the area have available spaces to park for themselves and guests. This is typically accomplished with the issuance of permits to residents and the installation of signage letting users know that only those with a residential permit are allowed to park in that area.

To implement a RPP program, the Town would have to identify criteria for accepting applications into the program. The criteria, at a minimum, should have the support of the majority of the residents in the area. The Town will also have to identify the regulations that will govern the RPP areas. In some neighborhoods, the residents may want to restrict all users who do not have a permit, whereas in others it might be acceptable to allow non-residential parking in the area during specified hours during the day and restrict it during the evenings. With regard to guests, residents would be provided with guest permits that would allow guests to park in the area. Decisions would have to be made regarding the number of permits that are provided to each household. There would also have to be decisions about whether or not there would be restrictions on how long guests are allowed to park in the area. These types of decisions will have to be determined by the Town through outreach to the residential neighborhoods.

There are operations and maintenance costs that are associated with a RPP program, such as the issuance of permits, the installation of signs, and enforcement. This effort will need enforcement to ensure that regulations and restrictions are followed. The operations and maintenance of this program can be subsidized by the in-lieu fees or other Town taxes.

Shared Parking

Shared parking is the use of a parking facility to accommodate the parking demands of multiple adjacent land uses without preventing each individual use's ability to provide parking for its patrons. The shared nature of this concept reduces the number of parking spaces required for the facility, increases the facility capacity, and utilizes the space more efficiently. Typically, shared parking can reduce parking requirements by 10 to 30 percent, depending upon specific conditions.

The District is governed by the same parking requirements as the rest of the Town, where parking must be provided on-site. However, there may be times when not all parking needs can be accommodated on the site. In these instances, an Administrative Use Permit can be obtained to allow the use of off-site parking. As part of the requirements to use off-site parking, the application for the Administrative Use Permit must show that the off-site parking spaces are within 1,000 feet of the use and that cross-easements be recorded or evidence provided that there is adequate public parking available.

In addition, the Code allows for shared parking with the Administrative Use Permit in situations where adjacent properties have differing hours of operation and therefore can share parking resources. The shared parking regulations state that a permit will be granted for shared parking of up to 50 percent of the required parking.

To strengthen the program and further support the use of shared parking resources, the Town should consider the following:

- Establish a program with standard procedures for implementing shared parking that specify how to calculate minimum parking requirements for different combinations of land uses, acceptable walking distances, and requirements for sharing agreements, verification, and enforcement.
- Develop a standard shared parking agreement template that can be used in most shared parking situations. Two templates should be developed: one that assumes Town management and oversight of the shared parking facility; and another where management and oversight is the responsibility of the owning party or entity. These templates should be general and flexible so that they can be readily available but also flexible to adjust to individual conditions.

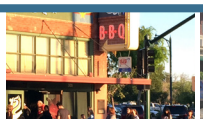
With a shared parking strategy, the Town is more likely to get the right amount of parking, in the most efficient location, serving the correct mix of uses. Public parking spaces allow shared use among different sites where the peak parking demands occur at different times. Shared public parking is more efficient and cost effective than single-use private parking because fewer spaces are needed to meet the total peak parking demand. Shared parking also allows visitors to leave their cars parked while making multiple trips on foot and is one of the easiest ways to make better use of the land and parking facilities in the District.

Park-and-Ride Lot

One opportunity to improve shared parking in the District is to facilitate the efficient use of the existing park-and-ride lot. During the week, the park-and-ride lot is used by commuters; however, during weekends and evenings when demands are higher in the District, the park-and-ride facility could be used as additional parking for District visitors. Additional education and signage would need to be made available so that visitors know that the lot is available for parking during these times. This would help alleviate some of the parking demand that is seen during weekends and will better utilize the parking resources that already exist in the District.

Parking Maximums and Minimums

Jurisdictions typically have off-street parking requirements for development as part of their zoning code. In most jurisdictions, including the Town of Gilbert, this code establishes a minimum number of parking spaces required for specific land uses based on the land use intensity (square footage, number of units, etc.). Developers are required to provide the minimum amount of parking on-site. However, the requirement for each development to provide its own on-site parking can be detrimental to the economic growth and maintenance of the pedestrian-friendly character of the District area. On-site parking is often a deterrent for businesses to overcome in mixed-use, higher density areas because the limited availability of land makes locating parking on-site too costly or impossible, depending on the use and the required parking associated with that use. Additionally, if the parking were able to be provided by each business, this would create numerous parking lots, which are not visually attractive for visitors and act as barriers for



pedestrian mobility. The Town's Code does allow businesses in the District to use off-site parking to meet their parking needs; however, they must obtain a permit to do so. It is recommended that the Town consider creating special parking standards in the form of parking maximums that are specific to the District and that will allow parking within the District to support business development without having to go through a permitting process.

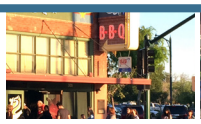
A parking maximum sets a cap on how much parking a developer can provide for a specific use based on square footage and number of units. This differs from a parking minimum because it allows developers to provide parking that is appropriate for their business or that is reflective of the parking patterns in the area, rather than constructing it because it is required. A combination of the fee in-lieu program and parking maximums will promote a more efficient use of existing parking facilities and add only the parking necessary to support demands. As a result, the District will likely not be burdened with an oversupply of parking. This strategy aims to maximize the use of excess parking, meet property parking requirements, and recover costs to manage public parking facilities.

Parking maximums give developers flexibility with providing parking and allow them to determine how much parking is necessary for their use based on their knowledge and experience. The use of parking maximums has been successful in curbing the amount of parking that needs to be provided and thus encouraging the use of alternate forms of transportation, including the use of transit. When coupled with the introduction of centralized shared-use facilities and balanced on-street parking areas, the distribution of parking demands within the District will be supported without the need for every business to provide its own parking supply.

The City of Tempe has implemented parking maximums in the Downtown area. They provide a parking minimum for each land use and the parking maximum is not to exceed 125 percent of the minimum required spaces.

In the event that a private developer wishes to construct a parking facility that is greater than the defined parking maximum, a stipulation should be that the developer must offer a specific percentage of parking spaces within the facility to the public. The Town should evaluate and define what that percentage should be. This same principle could also be applied to any new parking facility developed in the District, where a percentage of parking, regardless of the size of the facility, should be made available for the public.

With regard to determining an appropriate parking maximum, a good place to start is by taking the existing parking minimum standards and making that the parking maximum. However, it would also be beneficial to take into consideration the land use mix, proximity to and local use of transit, local demographics, and the presence of other parking strategies, such as shared parking or a fee in-lieu parking program, which will impact how the parking in the area is being utilized. This level of understanding of the system is reliant upon the collection and analysis of data. Knowledge of these system components will help the Town create a parking maximum that is reflective of the local needs and character of the district.



In addition to implementing parking maximums, many communities have found it beneficial to also maintain a parking minimum that is reduced. Having both a parking maximum and minimum makes the transition a little easier for developers who are used to working with minimums. Having both also provides a range for developers to work within so that they don't feel constrained on one end or feel like they are receiving little guidance on the other.

Introduce Time Limits

A successful regulatory strategy for managing parking involves implementing time restrictions for certain parking spaces. Time restrictions could be implemented when the delineation of parking spaces does not satisfy demand. The goal of time restrictions is to provide users with an appropriate amount of parking time while facilitating parking space turnover so that other users can park. The application of time-limited parking can help to direct visitors to appropriate parking facilities based on their intended lengths of stay. The intent is to encourage longer-term parkers, such as employees and business owners, to use parking spaces that will not conflict with spaces that serve business needs, such those used for short trip retail and commercial parking needs. If parking time limits are implemented, the Town can experiment with various lengths of time until the appropriate amount is determined. A good starting point is to establish a three- or four-hour time limit, which provides time for users to shop and eat but helps to avoid having parking spots occupied for the entire day by the same vehicle.

Time restrictions often need to be coupled with effective parking enforcement to ensure compliance with parking time regulations. The citation data from enforcement efforts can be useful to the Town; data on the number, type, and location of parking citations issued can be used to identify where, when, and how people are parking illegally, which can highlight potential problems with the system. While the Town currently only uses parking time limits to regulate parking in a few locations, the Town's Municipal Code does not prohibit the use of time restrictions for parking regulation.

Implement New On-Street Parking

As the Town develops, parking may become so constrained that parking demand will be constrained even after the implementation of the aforementioned strategies. At this point, it may be necessary to build or identify additional locations to supply parking to accommodate the growing demands of an area. One opportunity to provide additional parking in the District is to provide on-street parking along Gilbert Road by converting the outside travel lane to parallel parking spots. On-street parking along Gilbert Road would provide greater access to the businesses in the District and provide some additional parking that may be necessary. Parking along the road could be managed by implementing time constraints to encourage turnover of spaces and/or peak hour restrictions to allow for vehicles to travel in this outside lane during peak travel hours and improve the flow of traffic. While the conversion of travel lanes to on-street parking is likely not highly supported at this time, future economic and traffic conditions may provide a stronger case for this strategy in the future, thus the strategy should remain a viable option for the Town should those conditions arise.

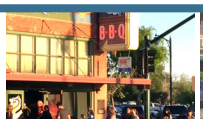
Enforcement

Current enforcement practices are performed by unarmed police aides authorized by the Police Department. Because there are few parking regulations in the District, regular enforcement has not been necessary, except to minimize the occurrence of traffic or safety violations. Between May 2013 and May 2015, there were 95 calls reporting illegally parked vehicles. Out of those calls, 65 resulted in written citations. The others received warnings or weren't able to be located.

As new parking regulations are implemented to balance increasing parking demands, however, parking will have to be regularly enforced to ensure that the parking regulations are being followed. The intent of enforcement is not to intimidate patrons, but rather to ensure people are using the parking facilities properly so that the parking system can function efficiently. Enforcement practices should focus on addressing repeat offenders while educating first time offenders on how to properly park. For a first offense, the enforcement officer can simply note the license plate of the vehicle. A second offense would warrant a warning on the vehicle with an education component explaining why the vehicle is receiving a warning and how to properly park next time. A third offense by the same vehicle indicates that the person is abusing the system and should receive a citation.

To enforce the parking system in this manner, the enforcement officer should use a handheld device with a license plate reader. Enforcement of this type will likely require only one officer who patrols the District area on days parking regulations are in effect.

The intent is to direct long-term parkers (those staying longer than three or four hours, such as employees) to parking locations that are farther from destinations. This allows those spaces close to destinations to remain available for patrons and other short-term users. Employee parking may not necessarily be a current issue in the Heritage District, but it is a good practice to encourage these specific long-term users to park in off-street facilities and leave spaces that are closer to businesses for patrons. Employers can further enforce this practice by being educated on where it is appropriate for their employees to park and directing the employees to do so.



IV. Heritage District Parking Demand Evaluation

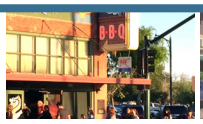
Based on the land use and real estate projections provided in the Heritage District Redevelopment Plan Update Addendum: Real Estate, Land Use, and Housing Assessment, the future of the Heritage District will likely look dramatically different than today's conditions. The addition of high-intensity residential, office, and retail uses will likely create the need for more intense public parking assets. In addition to the new parking garage today, the Town could see the need to introduce several new parking facilities to support public parking demands. Additionally, the private sector will likely need to invest in parking capacity outside of the primary core of the Heritage District and within residential developments.

This section documents the parking demand for several scenarios within the Heritage District: existing conditions, full build-out, and phased implementation of new developments. The parking demand analysis for this effort was completed using Kimley-Horn's Park+ parking demand model, designed specifically to reflect the characteristics of the Heritage District. The Heritage District Park+ model is based on existing land use data, parking supply, parking rates, public-private parking relationships, and mode splits specific to the study area. Additional parking generation characteristics for new development were taken from a recently completed Downtown Tempe Park+ model, which was used as a comparable basis for full build-out. This model was used to evaluate existing parking demand and predict future parking demand based on development projections, identifying impacts of future growth to the community.

Introduction to Park+

The Park+ Model is largely modeled after traditional supply and demand evaluations, which includes a multi-step process for evaluating parking demand conditions for a development, community, or campus. The multi-step process typically includes gathering data, defining assumptions or characteristics, selecting generation rates, applying reduction factors, creating scenarios, and evaluating results.

The Park+ Model includes a predictive gravity demand modeling algorithm that allocates projected parking demand to adjacent parking facilities based on walking distance, price, and general attractiveness of each facility. The gravity modeling algorithm used in this model was developed specifically for the applications found in Park+. The algorithm uses the range of walking distances, price, and facility types in the model to define localized scores related to each facility and land use pair. These scores are then used to define the percentage of parking demand allocated to each parking facility, up to a user-specified maximum occupancy percentage, which is defined as one of the user inputs to reflect the perceived effective capacity conditions within the modeled study area.



The outputs of the Park+ Model include parking demand, parking supply, general surplus or deficit, met demand, latent (unmet) demand, and traditional parking demand required. The parking demand metric is a summary of the demand generated for the entire study area (or for a selection area). The parking supply metric is a summary of the parking capacity for the entire study area (or the selection area). The surplus or deficit metric is simply the difference between the demand and supply metrics for the given area. The met demand metric describes the amount of parking demand that is actually allocated using the proximity parking methodology, within the study area or for a given selection area. The latent demand represents the amount of demand that is not met within each localized walking radius defined within the model. While the overall supply and demand may be met within a given scenario, there may still be localized deficiencies within specific areas of the model – latent demand captures and identifies these areas.

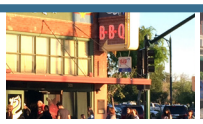
Park+ Calibration

The Park+ calibration process utilizes existing parking demands (collected by the project team) to calibrate parking generation rates for each individual land use within the study area. The result is a more accurate depiction of parking generation characteristics for the study area, rather than depending on city/county code or national parking generation rates reported by the Institute of Transportation Engineers (ITE) or the Urban Land Institute (ULI) that may not be applicable to the Heritage District. The calibration process uses the parking occupancy data, land use characteristics, multi-modal characteristics, parking relationships, and area-specific walking tolerances to define the adjusted parking generation rates. The model combined the aforementioned inputs, observed parking occupancy, and land use information to create parking generation rates specific to Heritage District land uses. As discussed in previous sections, developers are required to provide a certain amount of parking based on the land use. These requirements often lead to building too much parking, especially in areas that have higher density and mixed-uses, as in the Heritage District. The intent of using the Park+ model is to calibrate demand projections (and parking generation characteristics) in the Heritage District based on the parking occupancy data collected.

The table below summarizes those results, along with a comparison of rates found in the Town of Gilbert Land Development Code. The values indicate that the code requirements for restaurant uses are consistent with the observed demands. Office and retail demands are lower than the typical community code requirement, which isn't uncommon when viewing demands for a mixed-use area against suburban code requirements. However, the sample size for these two uses is small, and should be monitored as the area continues to redevelop.

LAND USE	GILBERT CODE REQUIREMENT	PARKING GENERATION CHARACTERISTIC AVERAGES (PER 1,000 SQUARE FEET)		
		Wednesday	Friday[1]	Saturday
General Retail	4 spaces per 1,000 sf	0.58	0.77	0.95
Office	4 spaces per 1,000 sf	2.1	NA	NA
Restaurant	10 spaces per 1,000 sf + 1 space per 400 sf outdoor space	10.1	15.1	10.3

[1] Friday demand characteristics are inclusive of Food Truck events occurring in the Downtown



Once the model calibration settings are determined to accurately reflect existing conditions, the Park+ model is able to run projected conditions for the current parking environment as well as develop and run future scenarios based on a myriad of different conditions. The projected conditions adjust for design-day conditions and predict where parkers would prefer to park if given the choice – based on the relationship between walking distance, price, and attractiveness of parking.

The following sections describe the scenarios developed using the Heritage District Park+ model, including existing conditions, phased build-out levels, and full build-out conditions. These results will be used to define parking management strategies for short-, medium-, and long-term timeframes.

Demand Projections

The demand projections in the following sections were developed using the calibrated Park+ model. The results can be analyzed for the entire study area, or by specific selection areas or selection sets within the study area. For the purposes of this analysis, the following conditions will be defined for each scenario:

1. **Overall Supply and Demand** – for existing scenarios, this will only look at the portion of the Heritage District within the triangular area between the canal, the railroad tracks, and Elm Street. For interim phases, this area will be expanded as new development cases are considered. For the final build-out it will include the entire Heritage District redevelopment area.
2. **Demands for Public Parking** – for existing scenarios, this will include the retail and restaurant uses that utilize the public parking system. For interim scenarios, this will include Saint Xavier University and other uses within the District that might utilize a shared parking district. For the final build-out, the assumption is that all non-residential uses within the district could utilize a shared parking system.
3. **Demands for "Walkable" Public Parking** – this metric simply looks at the demand for lots within a one-block radius of Gilbert Road. While the walkability of the district is likely much larger, the data collected as part of this study indicated that the current users of the district attempt to park within this area to utilize restaurant and retail uses along the corridor.
4. **Available Capacity** – this condition defines how many more spaces of demand could be accommodated within the area without building new public parking infrastructure. This metric uses the idea of effective capacity to define the threshold at which the system will reach a tipping point where more parking infrastructure is needed. The results from numbers 2 and 3 above are used to define the excess capacity in the system.

These results are provided for each scenario as a comparison point to see how each project or iteration affects the overall system.

Existing Conditions

The first evaluation considered was existing parking conditions. This included using data from the data collection portion of this study to define how parkers behave with existing inventory and businesses. The following sections provide results for a typical weekday (Wednesday), Friday evening (with food truck and Hale Theater events), and typical weekend (Saturday) evening.

Typical Weekday

The typical weekday condition was based on data collected on a Wednesday in April 2015. The data indicated that peak conditions occur around 7pm, near the height of the dinner rush. This is not surprising given the prevalence of restaurants along the Gilbert Road corridor. At the time of peak conditions, the demand for parking (public and private) in the study area was 743 spaces versus a supply of 1,819 spaces.

Information on existing typical weekday parking conditions is summarized in **Table 1** and **Figure 6**. A few key findings about this demand projection include:

EVALUATION CHARACTERISTIC	SCENARIO RESULTS
Overall Supply and Demand (Public and Private)	• Demand of 743 spaces versus a supply of 1,819 spaces • Overall study area occupancy is 41% • There is ample surplus within the Heritage District area • Most of this surplus is found on the fringes of the study area, in locations where patrons typically do not walk to/from without event demands generating a need to do so
Demands for Public Parking	• Demands for just retail and restaurant uses within the study area are 661 spaces (90% of the total demand in the area) • Public parking represents 1,741 spaces in the study area • Public parking occupancy is 43%
Demands for "Walkable" Public Parking	• Higher profile public parking within one block of Gilbert Road is approximately 1,075 spaces • Overall public utilization of those spaces is 62%
Available Capacity	Overall, the public parking system in the Heritage District is operating well below capacity. Even factoring in the need for an effective supply cushion of 15%, the District still has room for 250 to 800 more spaces of demand on a typical weekday, depending upon how far people are willing to walk.

TABLE 1 - WEEKDAY DEMAND CONDITIONS BY TIME OF DAY

	11am	12pm	2pm	5pm	7pm	8pm
Public Demand (vehicles)	560	639	220	606	715	565
Private Demand (vehicles)	74	69	61	48	28	22
Total Demand (vehicles)	634	708	281	654	743	587
Total Occupancy	35%	39%	15%	36%	41%	32%

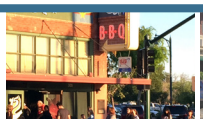
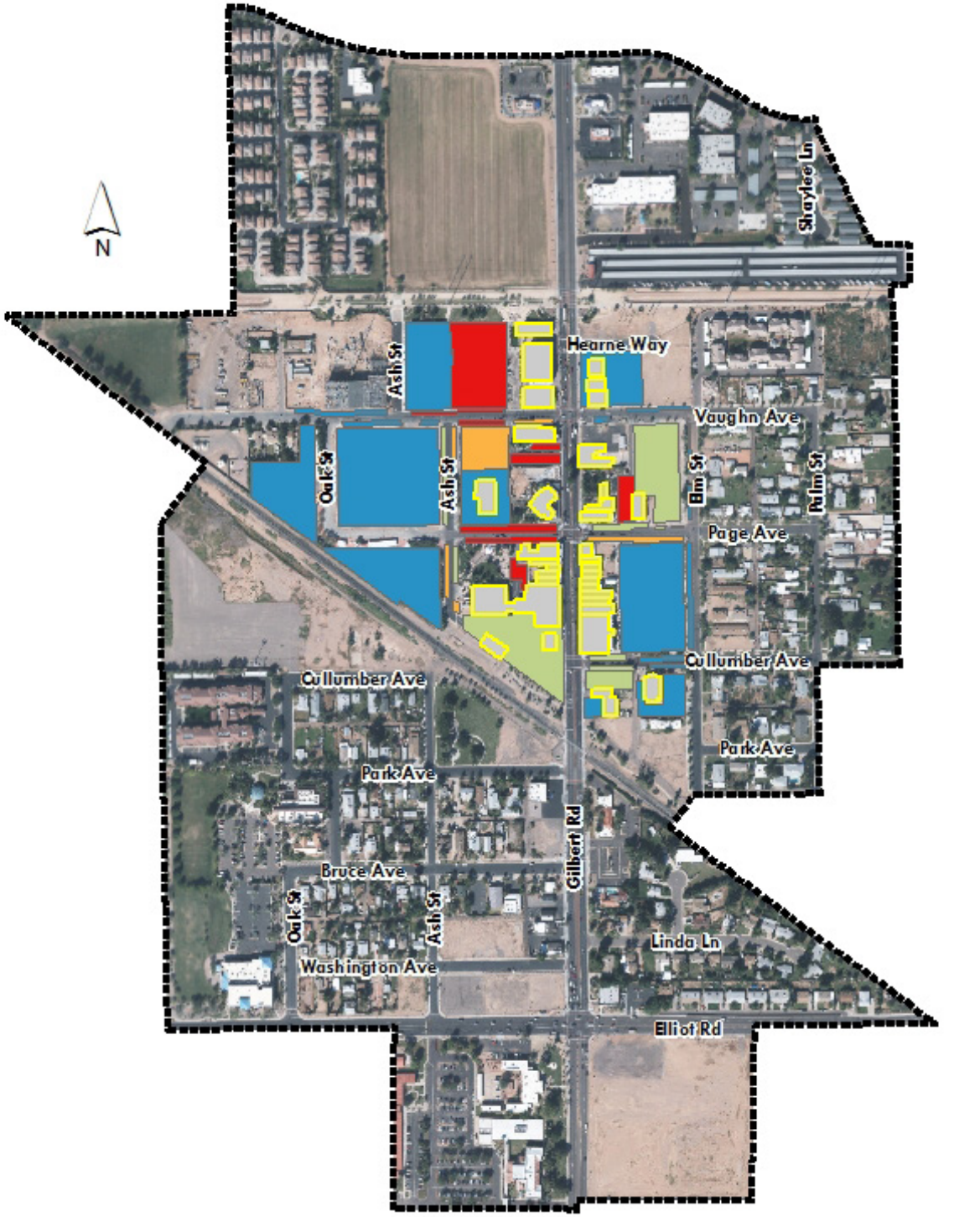


Figure 6 - Weekday Peak Parking Demand (7pm)



Typical Weekend

The typical weekend condition was based on data collected on a Saturday in April 2015. The data indicated that peak conditions occur around 7pm, near the height of the dinner rush. At the time of peak conditions, the demand for parking (public and private) in the study area was 745 spaces versus a supply of 1,819 spaces.

Information on existing typical weekend parking conditions is summarized in **Table 2** and **Figure 7.** A few key findings about this demand projection include:

EVALUATION CHARACTERISTIC	SCENARIO RESULTS
Overall Supply and Demand (Public and Private)	• Demand of 745 spaces versus a supply of 1,819 spaces • Overall study area occupancy is 41% • There is ample surplus within the Heritage District area • Most of this surplus is found on the fringes of the study area, in locations where patrons typically do not walk to/from without event demands generating a need to do so
Demands for Public Parking	• Demands for just retail and restaurant uses within the study area are 675 spaces (91% of the total demand in the area) • Public parking represents 1,741 spaces in the study area • Public parking occupancy is 43%
Demands for "Walkable" Public Parking	• Higher profile public parking within one block of Gilbert Road is approximately 1,075 spaces • Overall public utilization of those spaces is 63%
Available Capacity	Overall, the public parking system in the Heritage District is operating well below capacity. Even factoring in the need for an effective supply cushion of 15%, the District still has room for 240 to 800 more spaces of demand on a typical weekday, depending upon how far people are willing to walk.

TABLE 2 - WEEKEND DEMAND CONDITIONS BY TIME OF DAY

	8am	10am	12pm	5pm	7pm	8pm
Public Demand (vehicles)	383	705	628	700	718	667
Private Demand (vehicles)	18	38	29	46	27	23
Total Demand (vehicles)	401	743	657	746	745	690
Total Occupancy	22%	41%	36%	41%	41%	38%

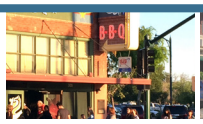
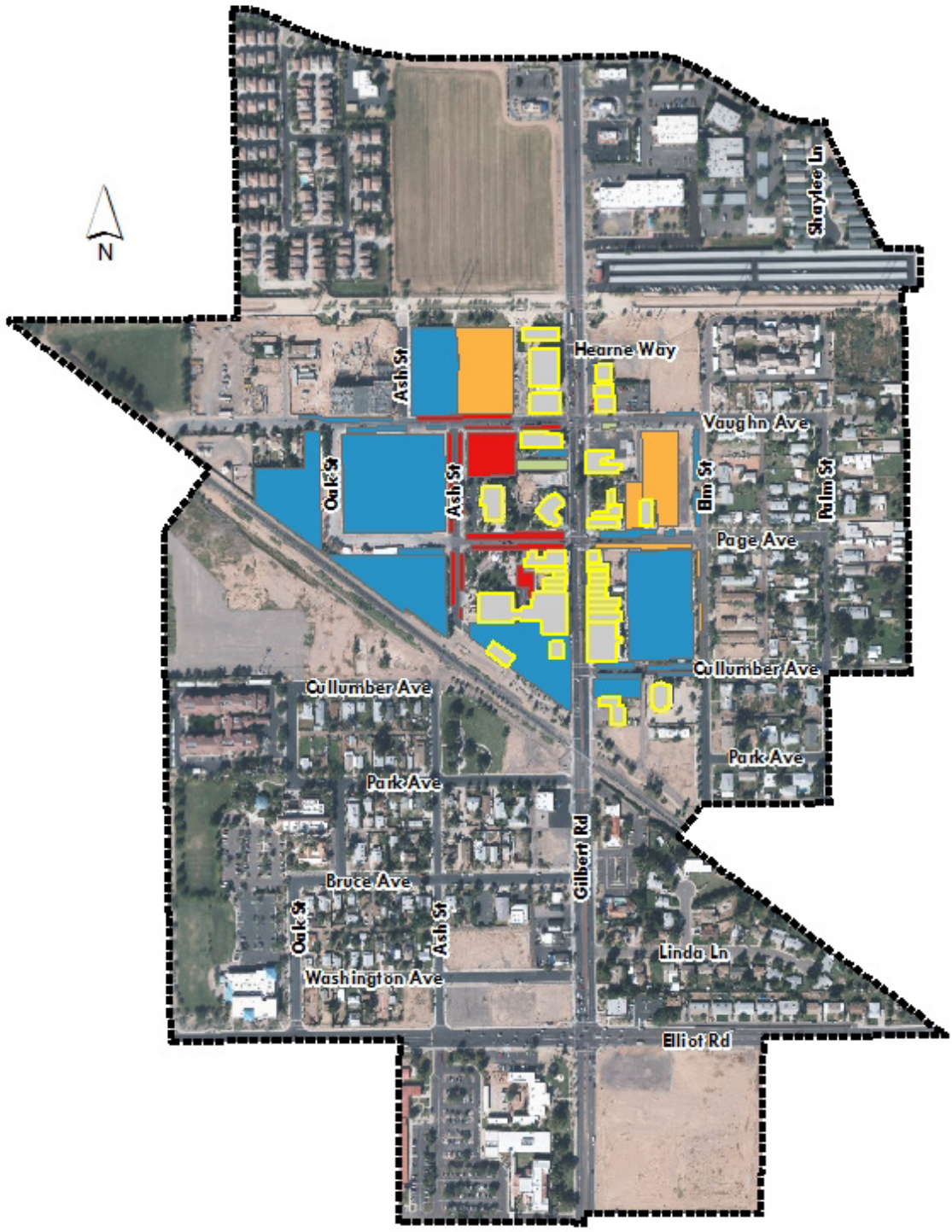


Figure 7 - Weekend Peak Parking Demand (7pm)



Land Uses

Calibrated Occupancy 0 - 50% 50 - 75% 75 - 90% 90%+

Weekend Night (with Food Trucks)

The typical weekend night condition with a food truck event was based on data collected on a Friday in April 2015 from 5pm to 9pm. The data indicated that peak conditions occur around 7pm, near the height of the dinner rush. At the time of peak conditions, the demand for parking (public and private) in the study area was 1,091 spaces versus a supply of 1,819 spaces.

Information on existing typical weekend night with food truck conditions is summarized in **Table 3** and **Figure 8**. A few key findings about this demand projection include:

EVALUATION CHARACTERISTIC	SCENARIO RESULTS
Overall Supply and Demand (Public and Private)	• Demand of 1,091 spaces versus a supply of 1,819 spaces • Overall study area occupancy is 60% • There is ample surplus within the Heritage District area • Most of this surplus is found on the fringes of the study area, in locations where patrons typically do not walk to/from without event demands generating a need to do so
Demands for Public Parking	• Demands for just retail and restaurant uses within the study area are 985 spaces (90% of the total demand in the area) • Public parking represents 1,741 spaces in the study area • Public parking occupancy is 60%
Demands for "Walkable" Public Parking	• Higher profile public parking within one block of Gilbert Road is approximately 1,075 spaces • Overall public utilization of those spaces is 87%
Available Capacity	The public parking system in the Heritage District is likely approaching capacity on the evenings with a food truck event. Those primary spaces that are 1-2 blocks from Gilbert Road are at a point that they would be considered at capacity by most industry standards. When looking at the less desirable spaces farther away from Gilbert Road, the overall occupancy indicates that there is some room for continued growth in demand, although that is likely less than 500 spaces.

TABLE 3 - WEEKEND NIGHT WITH FOOD TRUCK DEMAND CONDITIONS BY TIME OF DAY

	5pm	6pm	7pm	8pm	9pm
Public Demand (vehicles)	661	866	1,053	897	700
Private Demand (vehicles)	47	39	38	31	15
Total Demand (vehicles)	708	905	1,091	928	715
Total Occupancy	39%	50%	60%	51%	39%

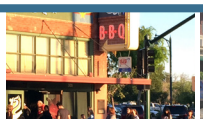
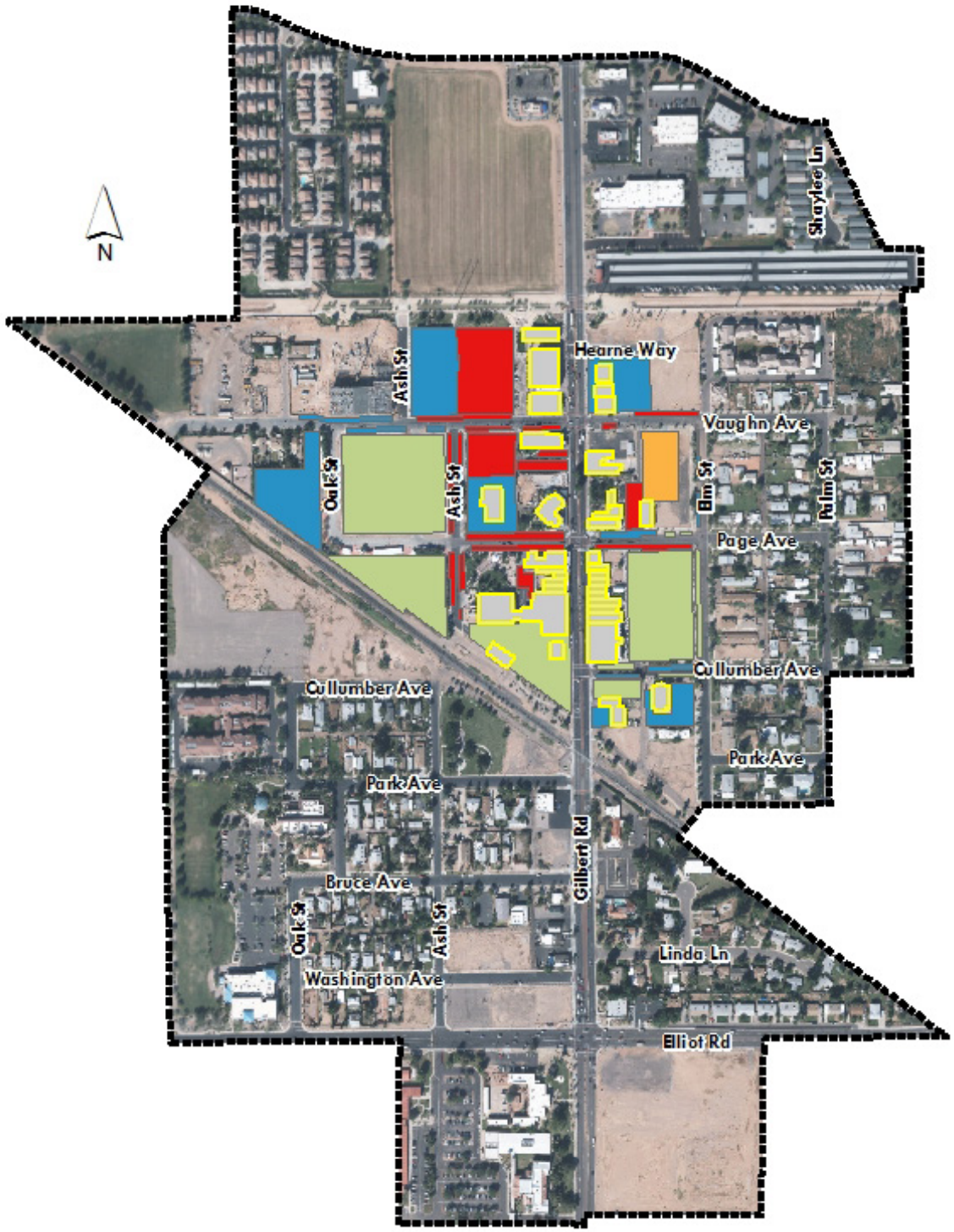


Figure 8 - Weekend Night with Food Truck Peak Parking Demand (7pm)



Weekend Night (with Food Trucks and Hale Theater Performance)

The typical weekend night condition with a food truck event that also includes a performance at the Hale Theater between 6pm and 9pm was based on data collected on a Friday in April 2015. The data indicated that peak conditions would occur around 7pm near the height of the dinner rush. At the time of peak conditions, the demand for parking (public and private) in the study area was 1,103 spaces versus a supply of 1,819 spaces.

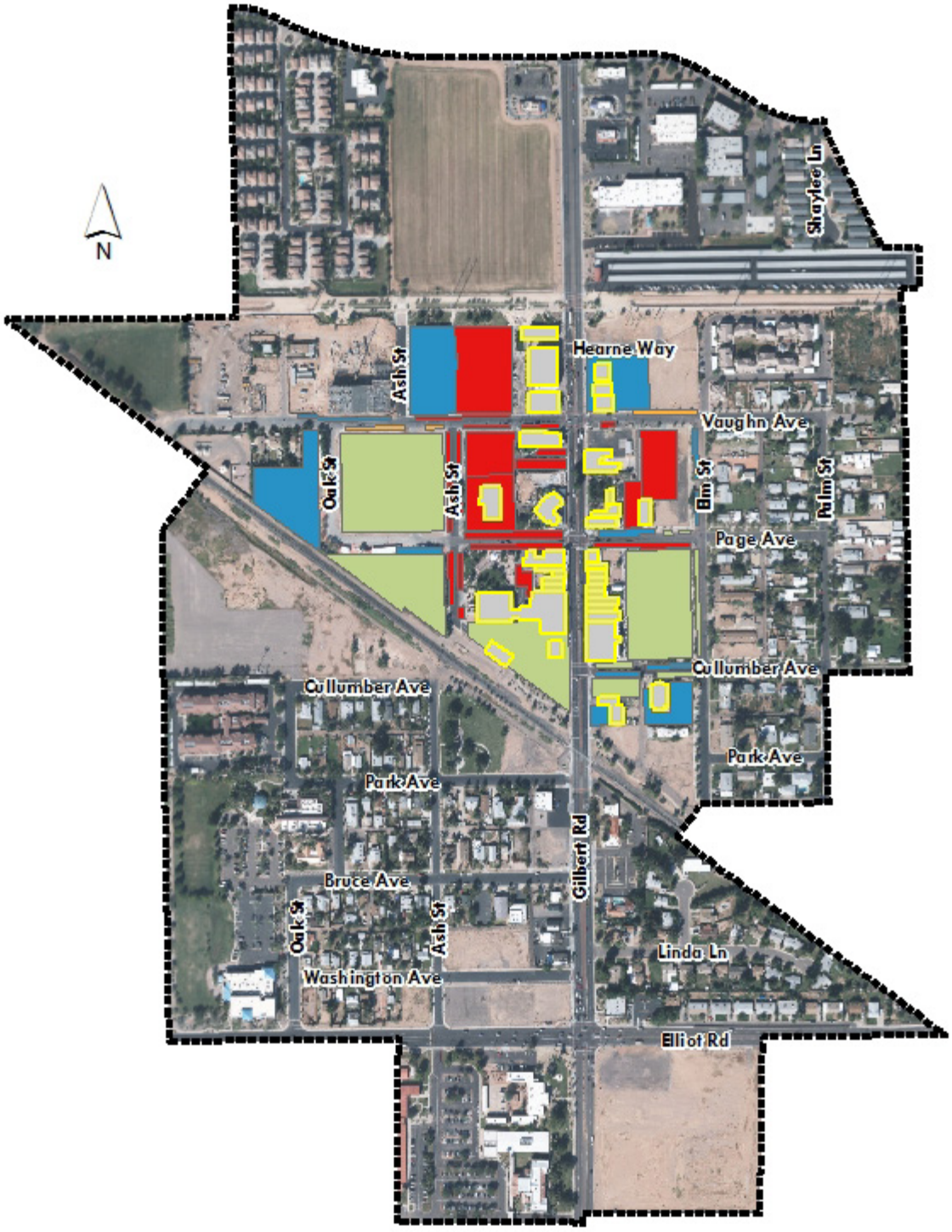
Information on existing typical weekend night with food trucks and a Hale Theater performance is summarized in **Table 4** and **Figure 9**. A few key findings about this demand projection include:

EVALUATION CHARACTERISTIC	SCENARIO RESULTS
Overall Supply and Demand (Public and Private)	• Demand of 1,103 spaces versus a supply of 1,819 spaces • Overall study area occupancy is 61% • There is ample surplus within the Heritage District area • Most of this surplus is found on the fringes of the study area, in locations where patrons typically do not walk to/from without event demands generating a need to do so
Demands for Public Parking	• Demands for just retail and restaurant uses within the study area are 938 spaces (85% of the total demand in the area) • Public parking represents 1,741 spaces in the study area • Public parking occupancy is 54%
Demands for "Walkable" Public Parking	• Higher profile public parking within one block of Gilbert Road is approximately 1,096 spaces • Overall public utilization of those spaces is 85%
Available Capacity	With the addition of the performance at Hale Theater, the primary spaces that are 1-2 blocks from Gilbert Road are at a point that they would be considered at capacity by most industry standards. When looking at the less desirable spaces farther away from Gilbert Road, the overall occupancy indicates that there is some room for continued growth in demand, although that is likely less than 500 spaces.

TABLE 4 - WEEKEND NIGHT WITH FOOD TRUCKS AND HALE THEATER PERFORMANCE DEMAND CONDITIONS BY TIME OF DAY

	5pm	6pm	7pm	8pm	9pm
Public Demand (vehicles)	590	769	938	798	626
Private Demand (vehicles)	129	147	165	142	107
Total Demand (vehicles)	719	916	1,103	940	733
Total Occupancy	40%	50%	61%	52%	40%

Figure 9 – Weekend Night with Food Trucks and Hale Theater Performance Peak Parking Demand (7pm)



Land Uses

Calibrated Occupancy 0 - 50% 50 - 75% 75 - 90% 90%+

Interim Build-Out Scenarios

The previous section dealt with the existing conditions that were observed in the Heritage District. This section will look at interim scenarios between existing and full build-out conditions based on the land use plan identified in the Heritage District Redevelopment Plan Update Addendum: Real Estate, Land Use & Housing Assessment. This analysis aims to define the triggers that would necessitate the implementation of new parking to support continued growth in the area. The developments evaluated include the opening of Saint Xavier University and incremental infill development in the Heritage District.

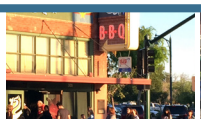
For this analysis, the following assumptions were made:

- Residential parking (both single family and multi-family) will park itself on-site
- Developments north of the canal and south of the railroad tracks will park themselves on-site

Saint Xavier University

The first scenario looks at the opening of Saint Xavier University, which is anticipated to have up to 100 full-time students and employees at the time of opening in August 2015. These people will likely park in the new parking structure along Vaughn Avenue. As such, no additional parking was included in this evaluation. Future phases of the school could include on-site residential space with supporting parking, but these were not considered for this first threshold analysis.

The parking demands generated by Saint Xavier University will likely shift daytime demands higher, especially around the lunch hour as they comingle with existing restaurant demands along Gilbert Road. The Park+ model indicated that peak conditions would occur around 1pm, near the height of the lunch rush. At the time of peak conditions, the demand for parking (public and private) in the study area was 740 spaces versus a supply of 1,816 spaces. Saint Xavier University is responsible for 29 spaces of demand during the peak hour.



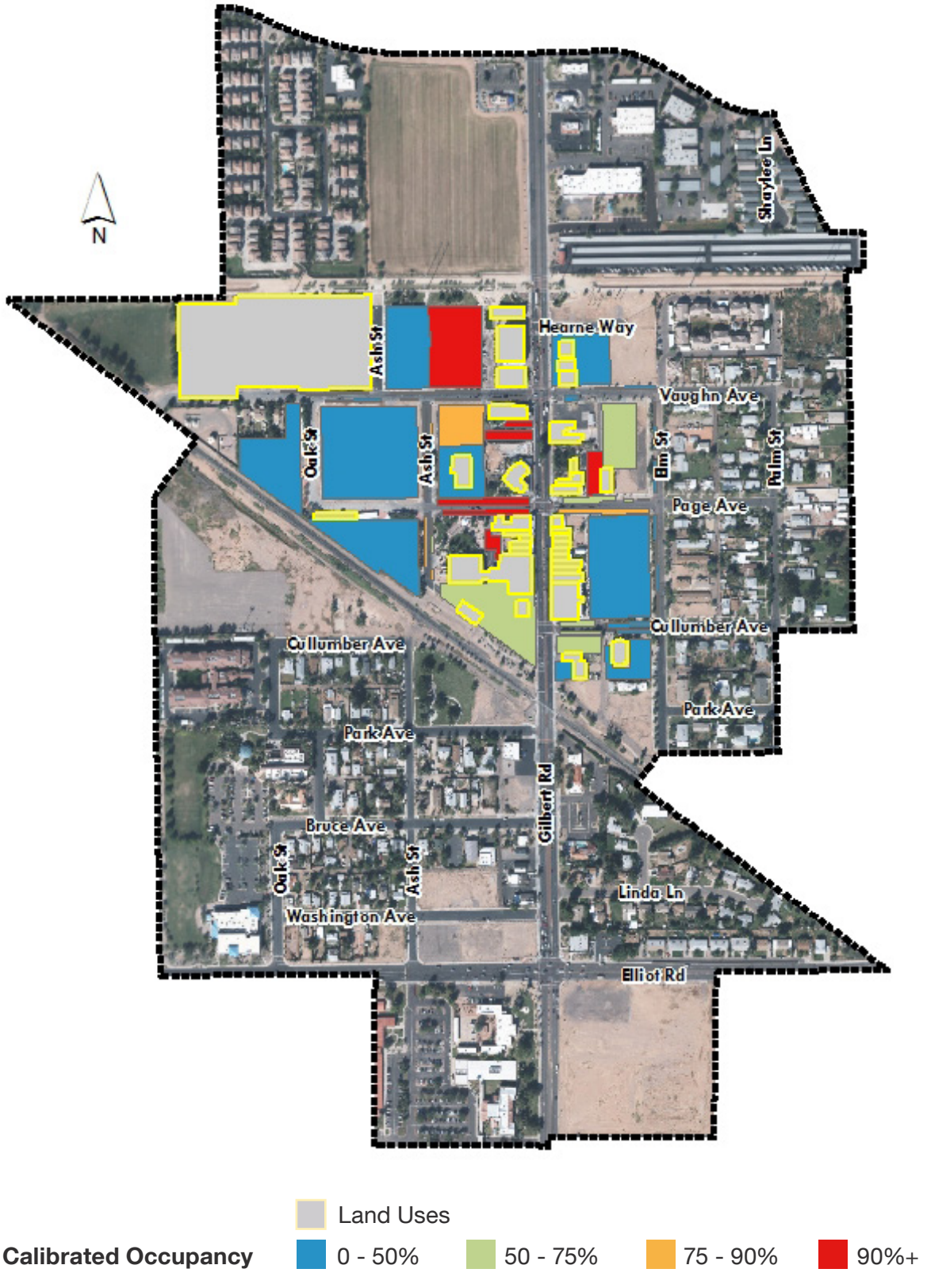
Information on projected Fall 2015 weekday conditions is summarized in **Table 5** and **Figure 10**. A few key findings about this demand projection include:

EVALUATION CHARACTERISTIC	SCENARIO RESULTS
Overall Supply and Demand (Public and Private)	• Demand of 740 spaces versus a supply of 1,816 spaces • Overall study area occupancy is 41% • There is ample surplus within the Heritage District area • Most of this surplus is found on the fringes of the study area, in locations where patrons typically do not walk to/from without event demands generating a need to do so
Demands for Public Parking	• Demands for just Saint Xavier University, retail and restaurant uses within the study area are 670 spaces (96% of the total demand in the area) • Public parking represents 1,738 spaces in the study area • Public parking occupancy is 39%
Demands for "Walkable" Public Parking	• Higher profile public parking within one block of Gilbert Road is approximately 1,093 spaces • Overall public utilization of those spaces is 59%
Available Capacity	Even with the addition of Saint Xavier University, the public parking supply is still below capacity thresholds with accommodating the additional demand. Even factoring in the need for an effective supply cushion of 15%, the District still has room for 200 to 750 more spaces of demand on a typical weekday, depending upon how far people are willing to walk.

TABLE 5 - FALL 2015 WEEKDAY DEMAND CONDITIONS BY TIME OF DAY

	11am	12pm	1pm	2pm	5pm	6pm	7pm	8pm
Public Demand (vehicles)	560	639	646	220	606	586	715	565
Private Demand (vehicles)	103	98	99	90	50	34	28	22
Total Demand (vehicles)	663	737	745	310	656	620	743	587
Total Occupancy	37%	41%	41%	17%	36%	34%	41%	32%

Figure 10 - Fall 2015 Weekday Peak Parking Demand (1pm)



Immediate Infill Development

The second scenario looks at infill development projects that seem most likely given the current land use mixture within the district. The primary sites that are considered in this scenario are:

- Completion of the Snooze Restaurant (currently under construction)
- The 11-acre vacant property on the northwest side of the canal and Gilbert Road
- Infill restaurant and retail development north of the Hale Theater and between Snooze and Oregano's
- Phase 2 of the Heritage Marketplace, including buildings 4 and 5 between the existing site and the Town's garage

These developments include 160,000 square feet of office, retail and restaurant use and 300 multi-family apartments. With these redevelopments, approximately 100 parking spaces would be lost to construction. Of that proposed development, 24,500 square feet and 300 units will park themselves on the 11-acre redevelopment site north of the canal (according to the assumptions of this analysis).

The 11-acre development north of the canal generated approximately 587 spaces of demand and was modeled based on the parking demands at that site, with peak hour demands occurring around 7pm when retail, residential, and apartment uses comingle at the highest intensity. Based on this demand, a parking supply of 600 spaces was provided on-site north of the canal.

The Park+ model indicated that peak conditions would occur around 7pm, near the height of the dinner rush. At the time of peak conditions, the demand for parking (public and private) in the study area was 1,620 spaces versus a supply of 2,310 spaces (including the new spaces north of the canal and removing those spaces lost due to construction of new development). When looking at just the parking in the main core of the Heritage District between the canal and the railroad, the demand (public and private) is 1,034 spaces versus a supply of 1,710 spaces (subtracting out the spaces lost to construction of new development).

Information on projected initial infill development weekday conditions is summarized in **Table 6** and **Figure 11**. A few key findings about this demand projection include:

EVALUATION CHARACTERISTIC	SCENARIO RESULTS
Overall Supply and Demand (Public and Private)	• Demand of 1,620 spaces versus a supply of 2,310 spaces for the entire area • Overall study area occupancy is 70% • Demand of 1,034 spaces versus a supply of 1,710 spaces for the core area of the Heritage District • Core Heritage District area occupancy is 60% • There is still an adequate surplus within the Heritage District area • Most of the remaining surplus is found in the parking garage's top floors and private parking facilities
Demands for Public Parking	• Demands for just Saint Xavier University, retail and restaurant uses within the core area of the Heritage District are 1,006 spaces (97% of the total demand in the area) • Public parking represents 1,632 spaces in the study area • Public parking occupancy is 62%
Demands for "Walkable" Public Parking	• Higher profile public parking within one block of Gilbert Road is approximately 1,016 spaces • Overall public utilization of those spaces is 95%
Available Capacity	With the addition of new retail and restaurant developments, the public parking supply in the core area of the Heritage District is beginning to approach capacity thresholds. Factoring in the need for an effective supply cushion of 15%, the District still has room for approximately 343 more spaces of demand on a typical weekday, assuming people are willing to walk farther to outlying parking facilities.

TABLE 6 - HERITAGE DISTRICT[2] IMMEDIATE INFILL DEVELOPMENT WEEKDAY DEMAND CONDITIONS BY TIME OF DAY

	11am	12pm	1pm	2pm	5pm	6pm	7pm	8pm
Public Demand (vehicles)	829	932	942	362	856	828	1,006	780
Private Demand (vehicles)	74	69	70	61	48	33	28	22
Total Demand (vehicles)	903	1,001	1,012	423	904	861	1,034	802
Total Occupancy	53%	59%	59%	25%	53%	50%	60%	47%

[2] The demands shown in this table are only for the Heritage District parcels, within the bounds of the canal, railroad tracks, and Elm Street

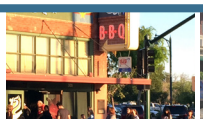
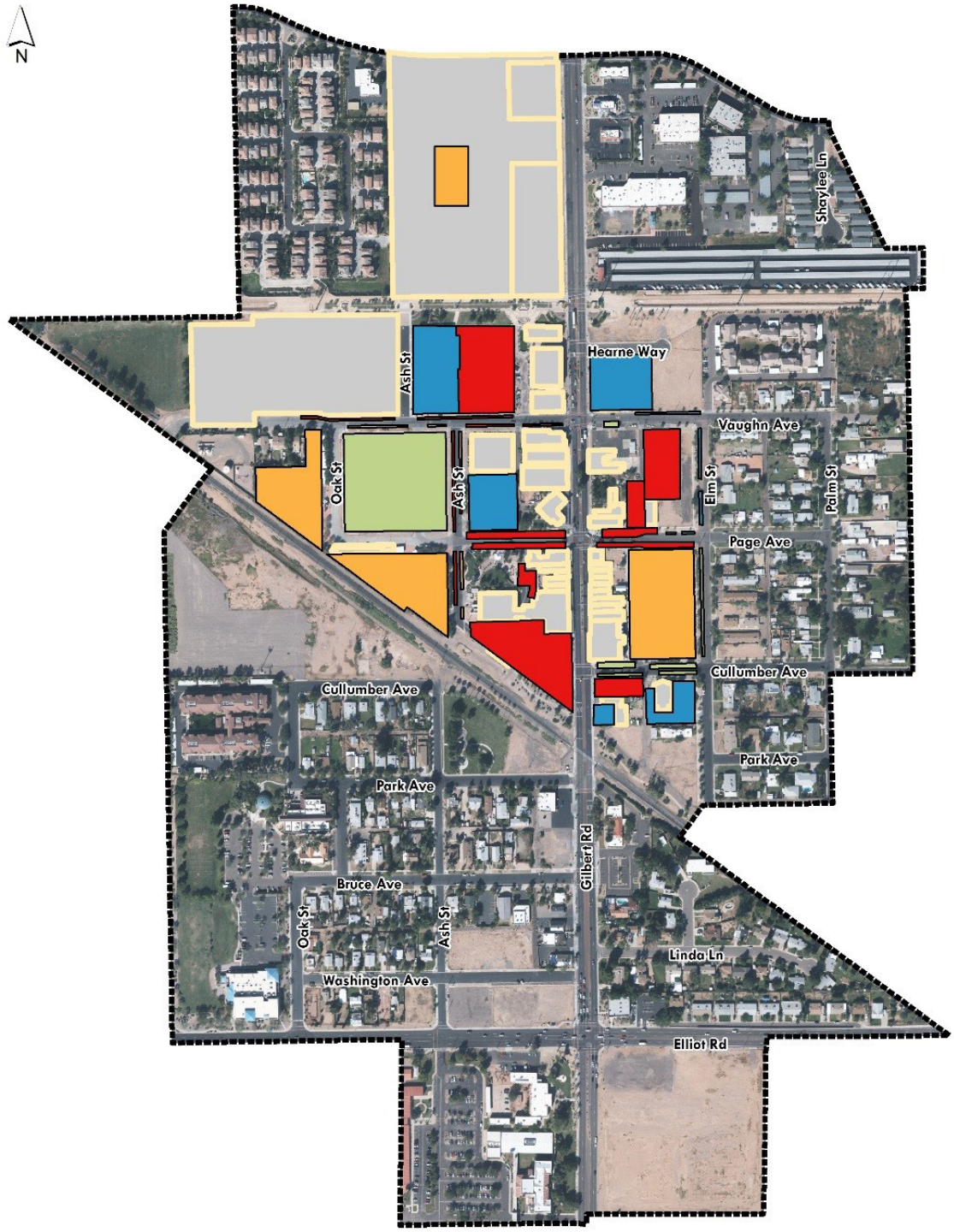



Figure 11 - Immediate Infill Development Weekday Peak Parking Demand (7pm)



Land Uses

Calibrated Occupancy 0 - 50% 50 - 75% 75 - 90% 90%+

Subsequent Infill Development (Trigger Analysis)

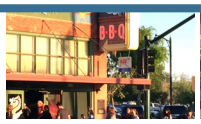
The third scenario looks at further infill development projects that will create the need for additional parking on a typical weekday, typical Friday night with food trucks, and typical weekend. The next development projects are not known at the time of this study, so any of the future projections found in the Heritage District Redevelopment Plan Update Addendum: Real Estate, Land Use & Housing Assessment could be inserted into this scenario. The intent is to show what level of development will create a critical level of public parking demand within the area that will necessitate investment in new parking. For the purposes of this analysis, the following sites were chosen:

- Redevelopment of the Church of Christ/Clements Auto Repair block to mixed use
- Redevelopment of the uses north of Bergie's Coffee House to retail and restaurant
- Redevelopment of the vacant land east of Joe's BBQ to retail and office
- Redevelopment of the vacant land around Hearne Way to mixed use, including retail, office, and apartments
- Redevelopment of the Elm Street parking lot to retail and apartments

These developments include 110,500 square feet of office, retail and restaurant use and 235 multi-family apartments. With these redevelopments, approximately 261 parking spaces would be lost to construction.

The Park+ model indicated that peak conditions would occur around 7pm, with the demand for parking (public and private) in the study area at 1,937 spaces versus a supply of 2,402 spaces. When looking at just the parking in the main core of the Heritage District, the peak demand is 1,345 spaces versus a supply of 1,802 spaces. This is inclusive of apartment demands (600 spaces), which were assumed to park on-site within their footprint, rather than utilize the public parking system.

The peak public parking demand within the core Heritage District area occurs at noon, with peak restaurant, retail, office, and Saint Xavier University conditions. That demand is 1,043 spaces versus a supply of 1,420 spaces. This equates to an 84 percent public parking occupancy within the core Heritage District area. Any future projects will likely drive the public demand to a level that creates patron frustration and localized deficiencies within the area, creating the need for new parking infrastructure to support growth.



Information on projected subsequent infill development weekday conditions is summarized in **Table 7** and **Figure 12**. A few key findings about this demand projection include:

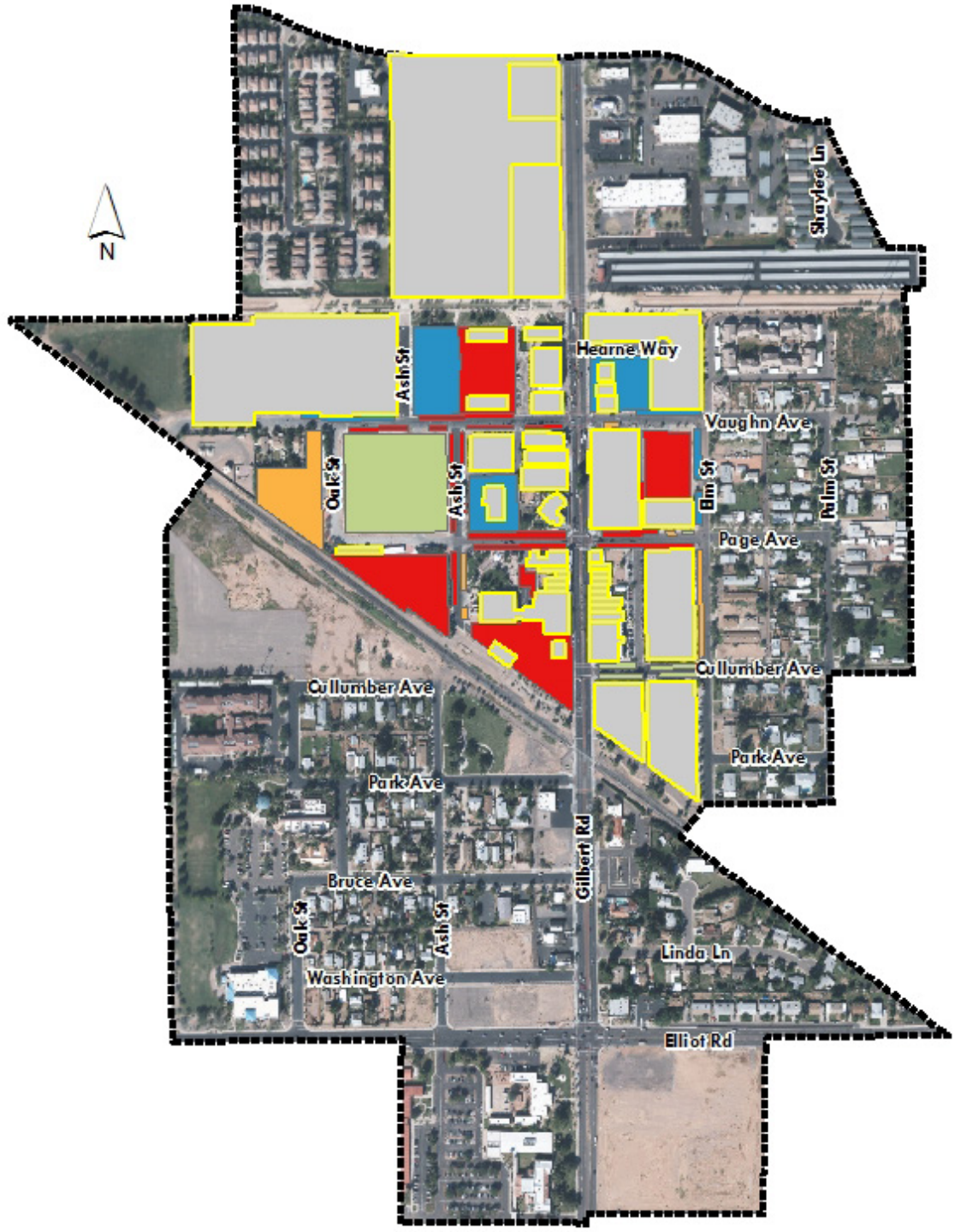
EVALUATION CHARACTERISTIC	SCENARIO RESULTS
Overall Supply and Demand (Public and Private)	• Demand of 1,937 spaces versus a supply of 2,402 spaces for the entire area • Overall study area occupancy is 81% • Demand of 1,345 spaces versus a supply of 1,802 spaces for the core area of the Heritage District • Core Heritage District area occupancy is 75% • The surplus in the Heritage District is nearly deteriorated • Most of the remaining surplus is found in the parking garage's top floors and private parking facilities
Demands for Public Parking	• Demands for just Saint Xavier University, office, retail and restaurant uses within the core area of the Heritage District are 1,043 spaces (84% of the total demand in the area) at noon • Public parking represents 1,420 spaces in the study area • Public parking occupancy is 73%
Demands for "Walkable" Public Parking	• Higher profile public parking within one block of Gilbert Road is approximately 775 spaces • Overall public utilization of those spaces is 137%, with facilities outside of this walkable boundary reaching capacity as well (358 spaces of availability)
Available Capacity	With the addition of a second iteration of infill developments, the public parking supply in the core area of the Heritage District is at or near capacity thresholds. Factoring in the need for an effective supply cushion of 15%, the District is essentially full and won't be able to realize additional redevelopment without additional public parking assets.

TABLE 7 - HERITAGE DISTRICT[3] SUBSEQUENT INFILL DEVELOPMENT WEEKDAY DEMAND CONDITIONS BY TIME OF DAY

	11am	12pm	1pm	2pm	5pm	6pm	7pm	8pm
Public Demand (vehicles)	954	1,068	1,051	497	943	885	1,062	769
Private Demand (vehicles)	393	202	210	217	237	268	283	302
Total Demand (vehicles)	1,347	1,270	1,261	714	1,180	1,153	1,345	1,071
Total Occupancy	75%	70%	70%	70%	65%	64%	75%	59%

[3] The demands shown in this table are only for the Heritage District parcels, within the bounds of the canal, railroad tracks, and Elm Street

Figure 12 - Subsequent Infill Development Weekday Peak Parking Demand (7pm)



Land Uses

Calibrated Occupancy 0 - 50% 50 - 75% 75 - 90% 90%+

In addition to the review of peak weekday demands (as in previous sections), the demands for a peak Friday night with food trucks and typical weekend without food trucks (Saturday) were also evaluated to make sure that peak retail and restaurant demands don't create parking issues with the subsequent infill development.

Friday Food Truck Event and Restaurant Conditions

The results in **Table 8** represent projected public parking demands based on generation characteristics developed from demands observed during a weekend evening with food truck demands.

TABLE 8 - HERITAGE DISTRICT[4] PUBLIC PARKING FRIDAY NIGHT WITH FOOD TRUCKS DEMAND CONDITIONS

	5pm	6pm	7pm	8pm
Public Demand (vehicles)	1,031	1,257	1,498	1,216
Private Demand (vehicles)	144	166	177	186
Total Demand (vehicles)	1,175	1,423	1,675	1,402
Total Occupancy	65%	79%	93%	78%

The table indicates that under normal "food truck" conditions, the parking capacity of the public parking system would be at 93% which leaves a very minimal surplus of parking. In this case, surplus parking would need to be located, likely in a parking facility outside of the normal district boundaries. More than likely, with the level of development anticipated in this scenario, the food truck event would need to be relocated to another location within the community.

Typical Weekend Restaurant Conditions

The results in **Table 9** represent projected public parking demands based on generation characteristics developed from demands observed during a typical weekend evening without food truck demands.

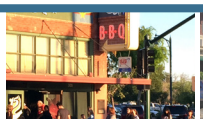
TABLE 9 - HERITAGE DISTRICT[5] PUBLIC PARKING WEEKEND NIGHT WITHOUT FOOD TRUCKS DEMAND CONDITIONS

	5pm	6pm	7pm	8pm
Public Demand (vehicles)	1,184	1,185	1,281	1,049
Private Demand (vehicles)	260	294	311	336
Total Demand (vehicles)	1,444	1,479	1,592	1,385
Total Occupancy	80%	82%	88%	78%

The table indicates that under normal weekend conditions, the parking capacity of the public parking system should have enough capacity to meet the needs of the restaurant and retail uses within the core Heritage District area.

[4] The demands shown in this table are only for the Heritage District parcels, within the bounds of the canal, railroad tracks, and Elm Street

[5] The demands shown in this table are only for the Heritage District parcels, within the bounds of the canal, railroad tracks, and Elm Street



Full Heritage District Build-Out

The final scenario developed was the full build-out of the entire study area, including south of the railroad tracks and north of the canal. Two scenarios were developed, including a typical weekday and a typical weekend. The uses provided in **Figure 13** and **Table 10** were provided as part of the Heritage District Redevelopment Plan Update Addendum: Real Estate, Land Use & Housing Assessment. The table depicts future land uses and intensities only. It does not include existing uses that are remaining. Future demand generation characteristics included several assumptions:

1. Parking generation characteristics observed in the field and calibrated in previous scenarios were used where applicable.
2. Parking generation characteristics developed as part of a recent Tempe Parking Strategic Plan, which also utilized Park+ as the modeling tool. The uses taken from that model include apartments and retail, because these uses were not heavily prevalent in the calibrated dataset from the Heritage District.
3. Residential uses would park their demand on-site in restricted parking facilities.

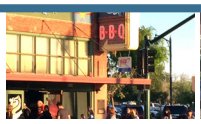
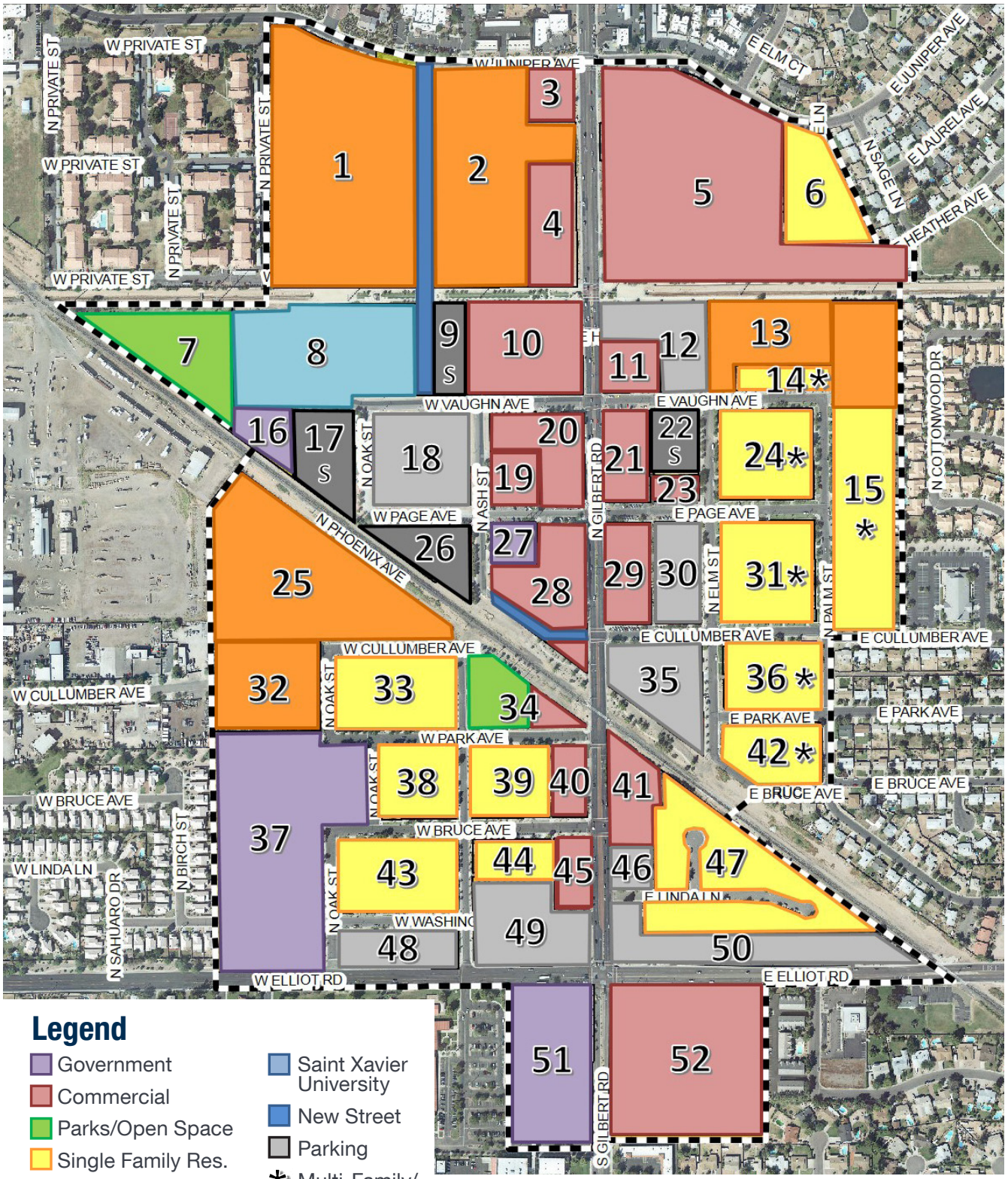


Figure 13 - Projected Build-Out Land Use Plan



Legend

- Government
- Commercial
- Parks/Open Space
- Single Family Res.
- Multi-Family Res.
- Mixed Use
- Saint Xavier University
- New Street
- Parking
- * Multi-Family/ Low Density (MF/L) Infill

This map was developed as part of the Heritage District Redevelopment Plan Update Addendum: Real Estate, Land Use & Housing Assessment.

TABLE 10 - PROJECTED BUILD-OUT LAND USE BY BLOCK							
Block	Projected Use	Max. Stories	Projected Retail	Projected Office	Projected Multi-Family	Projected Single-Family	Projected Parking Spaces
1	Multi-Family Housing	2			138		
2	Multi-Family Housing	3			300		
3	Commercial	2	17,500				
4	Commercial	2	40,250	40,250	0	0	
5	Commercial	2	0	0	0		
6	Single Family Housing	2				17	
7	Open Space	0					
8	Saint Xavier University	5			100		
9	Parking – Existing Garage	4					364
10	Commercial	2	59,000	59,000			
11	Commercial	2	24,500	20,000			
12	Mixed Use	4	5,000	17,000	60		
13	Multi-Family Housing	2			40		
14	Single Family Housing	2				8	
15	Single Family Housing	2			60	48	
16	Government	0					
17	Parking – New Garage	4					577
18	Mixed Use	5	20,000		150		
19	Commercial	2	8,500				
20	Commercial	2	44,000				
21	Commercial	2	27,500				
22	Parking – New Garage	3					365
23	Commercial	3	17,500	17,500			
24	Single Family Housing	2				30	
25	Multi-Family Housing	3			150		
26	Parking – Existing Surface Lot	1					126
27	Government	0					
28	Commercial	2	70,000	22,000			
29	Commercial	2	86,000	30,000			
30	Mixed Use	3	11,000		75		
31	Single Family Housing	2				33	
32	Multi-Family Housing	2			75		
33	Single Family Housing	2				18	
34	Open Space	3	2,000		0		

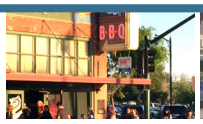
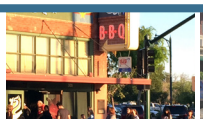


TABLE 10 - PROJECTED BUILD-OUT LAND USE BY BLOCK							
Block	Projected Use	Max. Stories	Projected Retail	Projected Office	Projected Multi-Family	Projected Single-Family	Projected Parking Spaces
35	Mixed Use	4	15,000		100		
36	Single Family Housing	2				12	
37	Government	2					
38	Single Family Housing	2				20	
39	Single Family Housing	2				20	
40	Commercial	2	20,000	15,700			
41	Commercial	1	6,870				
42	Single Family Housing	2				8	
43	Single Family Housing	2				20	
44	Single Family Housing	2				16	
45	Commercial	2	15,700	20,000			
46	Mixed Use	2	28,000				
47	Single Family Housing	2				23	
48	Mixed Use	2		3,000		10	
49	Mixed Use	3	10,000		40		
50	Mixed Use	2	4,700	6,600		22	
51	Government	1					
52	Commercial	1	170,000				
	TOTALS		**703,020**	**251,050**	**1,288**	**305**	**1,432**

Additionally, the future build-out scenario includes the following parking system assumptions:

- 1,579 spaces of on-street public parking was included throughout the study area. The on-street space capacity was estimated based on block face lengths as well as accounting for driveways, corner clearance, fire lanes, and crosswalks. These spaces are part of the available public spaces.
- The existing public parking garage in Block 9 (364 spaces) and public parking surface lot in Block 26 (126 spaces) are assumed to remain.
- New public parking garages are assumed for Block 17 (577 spaces) and Block 22 (365 spaces), both of which replace existing surface parking lots.
- Block 5 is an existing commercial development that will remain as well as provide necessary parking on-site.
- Block 16 is currently associated with an existing surface parking lot that has plans to become a parking garage. There are no proposed square footages or parking associated with this building and it is assumed no demand will be generated.
- Block 27 is an existing water feature that does not have any proposed expansion. The land use in the model remained as open space.
- Block 37 and Block 51 are existing government (community/cultural) uses that will remain in their existing state, including their associated parking (372 spaces).




Weekday Build-Out Conditions

The Park+ model indicated that peak conditions would occur around 7pm, with the demand for parking (public and private) in the study area at 4,507 spaces versus a supply of 6,288 spaces. This represents a full parking system at an occupancy of 72 percent. The public demands within the study area represent approximately 2,434 spaces of that demand (54 percent of the total demand). The public spaces within the entire Heritage District redevelopment area are operating at 67 percent occupancy. Information on projected full build-out weekday conditions is summarized in **Table 11** and **Figure 14**.

TABLE 11 - HERITAGE DISTRICT REDEVELOPMENT AREA FULL BUILD-OUT WEEKDAY DEMAND CONDITIONS

	11am	12pm	1pm	2pm	5pm	6pm	7pm	8pm
Public Demand (vehicles)	2,556	2,674	2,708	1,704	2,371	2,077	2,434	1,545
Private Demand (vehicles)	1,744	1,624	1,513	1,624	1,731	1,952	2,073	2,194
Total Demand (vehicles)	4,300	4,298	4,221	3,328	4,102	4,029	4,507	3,739
Total Occupancy	68%	68%	67%	53%	65%	64%	72%	60%

In addition to the future build-out projects included in this scenario, the existing park-and-ride bus station was assumed to be converted to a commuter rail station, as defined by future planning projections. The future commuter rail station was estimate to have 640 riders per day, based on projections from the MAG 2010 Commuter Rail System Study. Based on our understanding of commuter rail parking demands, the site was modeled and projected to have 109 spaces of parking demand during the weekday peak of 7pm. The parking supply for the commuter rail station is assumed to come from the planned 577-space parking garage proposed for construction in place of the existing west park-and-ride lot.

The following subsections discuss the parking demands in the northern and southern portions of the Heritage District.

Northern Heritage District

The northern portion of the Heritage District includes all of the uses between the canal and the railroad tracks. The portion north of the canal is assumed to park itself and was not included in this summary. For this area, the Park+ model indicated that peak conditions would occur around 7pm, with the demand for parking (public and private) in the area at 2,821 spaces versus a supply of 3,452 spaces. This represents a full build-out parking system at an occupancy of 82 percent.

The public demands within the study area represent approximately 1,881 spaces of that demand (67 percent of the total demand). The public spaces within the entire Heritage District redevelopment area are operating at 67 percent occupancy. These public demands are primarily supported by four parking facilities – the current parking garage, current east park-and-ride surface lot, and two new parking facilities. These two new facilities are located on the current surface parking lot at Vaughn and Elm (proposed 365 spaces) and the west park-and-ride lot (proposed 577 spaces). These two facilities would provide an additional 942 parking spaces to support the shared parking vision for the district. Coupled with the 490 spaces in the other two facilities and 826 spaces of on-street capacity, the parking system should operate at acceptable levels while maintaining a sufficient cushion. Information on projected full build-out weekday conditions for the Northern Heritage District is summarized in **Table 12**.

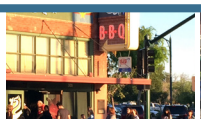


TABLE 12 - NORTHERN HERITAGE DISTRICT[6] FULL BUILD-OUT WEEKDAY DEMAND CONDITIONS								
	11am	12pm	1pm	2pm	5pm	6pm	7pm	8pm
Public Demand (vehicles)	1,899	2,035	2,060	1,159	1,806	1,509	1,881	1,295
Private Demand (vehicles)	783	731	678	731	783	968	940	1,016
Total Demand (vehicles)	2,682	2,766	2,738	1,890	2,589	2,477	2,821	2,311
Total Occupancy	78%	80%	79%	55%	75%	72%	82%	67%

Southern Heritage District

The southern portion of the Heritage District includes all of the uses south of the railroad tracks. For this area, the Park+ model indicated that peak conditions would occur around 7pm, with the demand for parking (public and private) in the area at 933 spaces versus a supply of 1,995 spaces. This represents a full build-out parking system at an occupancy of 47 percent. The public demands within the study area represent approximately 335 spaces of that demand (36 percent of the total demand). The public spaces within the entire Heritage District redevelopment area are operating at 67 percent occupancy. Most of the public spaces are found in either the on-street system, the community center, the museum lot, or the parking facility that will support the development in the southeast quadrant of Elliott Road and Gilbert Road.

When looking at just the public demands along Gilbert Road, the peak hour demands are approximately 498 spaces. Within the model these demands are supported by the adjacent on-street network. However, the Town may want to consider the inclusion of a surface parking lot to support these demands, similar to the current efforts in the northern portion of the study area. Information on projected full build-out weekday conditions for the Southern Heritage District is summarized in **Table 13.**

TABLE 13 - SOUTHERN HERITAGE DISTRICT[7] FULL BUILD-OUT WEEKDAY DEMAND CONDITIONS								
	11am	12pm	1pm	2pm	5pm	6pm	7pm	8pm
Public Demand (vehicles)	425	394	401	393	341	295	335	107
Private Demand (vehicles)	515	477	447	477	502	558	598	604
Total Demand (vehicles)	940	871	848	870	843	853	933	711
Total Occupancy	47%	44%	43%	44%	42%	43%	47%	36%

[6] The demands shown in this table are only for the northern Heritage District parcels, within the bounds of the canal, railroad tracks, and Elm Street

[7] The demands shown in this table are only for the southern Heritage District parcels, south of the railroad tracks

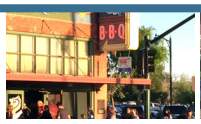
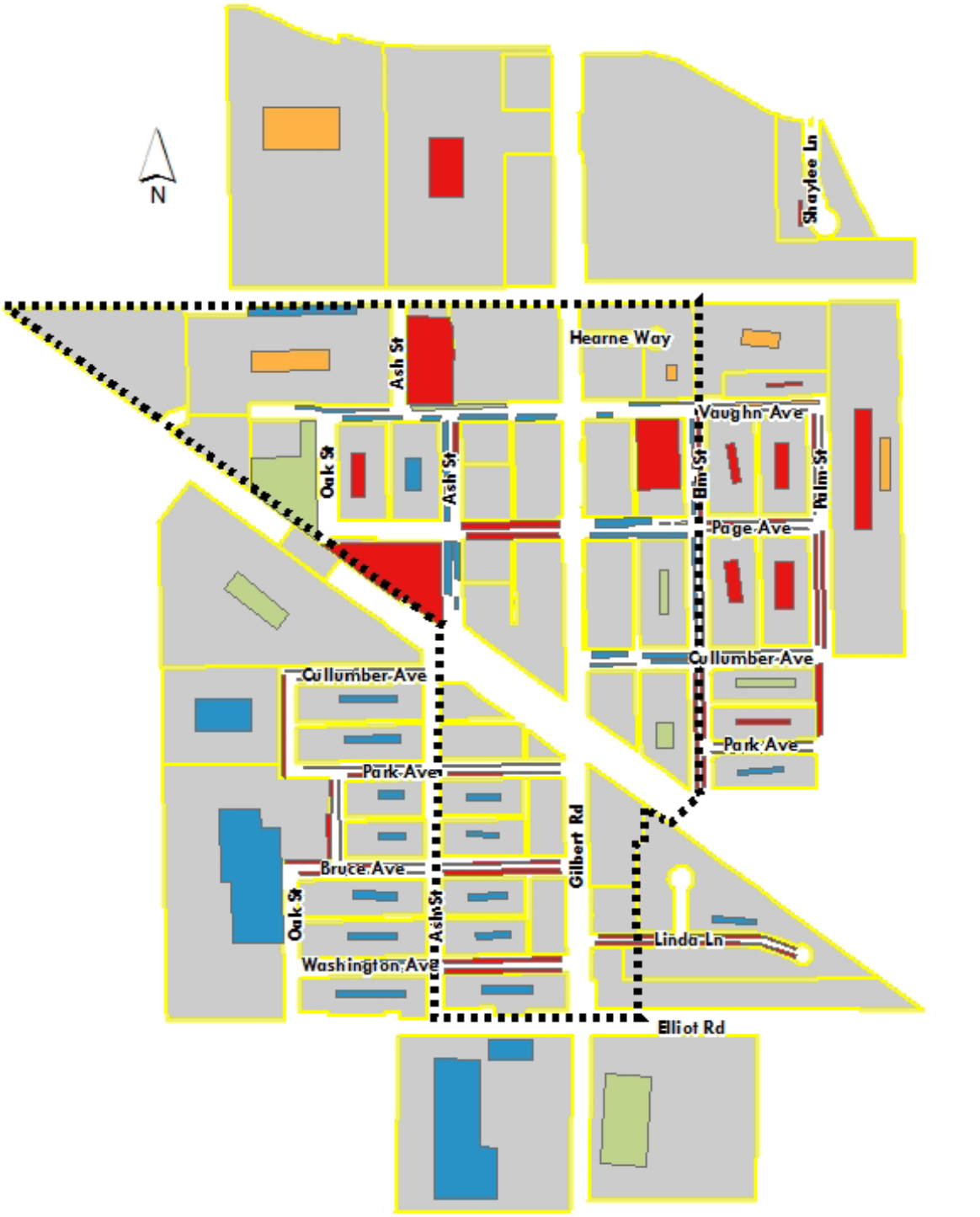


Figure 14 - Full Build-Out Weekday Conditions Peak Demand (7pm)



Weekend Night Build-Out Conditions

The Park+ model indicated that peak conditions would occur around 7pm, with the demand for parking (public and private) in the study area at 4,469 spaces versus a supply of 6,288 spaces. This represents a full build-out parking system at an occupancy of 71 percent. The public demands within the study area represent approximately 2,496 spaces of that demand (56 percent of the total demand). The public spaces within the entire Heritage District redevelopment area are operating at 67 percent occupancy. Information on projected full build-out weekend conditions is summarized in **Table 14** and **Figure 15**.

TABLE 14 - HERITAGE DISTRICT REDEVELOPMENT AREA FULL BUILD-OUT WEEKEND DEMAND CONDITIONS

	5pm	6pm	7pm	8pm
Public Demand (vehicles)	2,418	2,118	2,496	1,573
Private Demand (vehicles)	1,661	1,877	1,973	2,127
Total Demand (vehicles)	4,079	3,995	4,469	3,700
Total Occupancy	65%	64%	71%	59%

The following subsections discuss the parking demands in the northern and southern portions of the Heritage District.

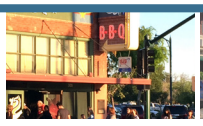
Northern Heritage District

For this area, the Park+ model indicated that peak conditions would occur around 7pm, with the demand for parking (public and private) in the area at 2,728 spaces versus a supply of 3,452 spaces. This represents a full build-out parking system at an occupancy of 79 percent. The public demands within the study area represent approximately 1,881 spaces of that demand (69 percent of the total demand). The public spaces within the entire Heritage District redevelopment area are operating at 67 percent occupancy. Information on projected full build-out weekend conditions for the Northern Heritage District is summarized in **Table 15.**

TABLE 15 - NORTHERN HERITAGE DISTRICT[8] FULL BUILD-OUT WEEKEND DEMAND CONDITIONS

	5pm	6pm	7pm	8pm
Public Demand (vehicles)	1,806	1,590	1,881	1,295
Private Demand (vehicles)	706	800	847	913
Total Demand (vehicles)	2,512	2,390	2,728	2,208
Total Occupancy	73%	69%	79%	64%

[8] The demands shown in this table are only for the northern Heritage District parcels, within the bounds of the canal, railroad tracks, and Elm Street



Southern Heritage District

For this area, the Park+ model indicated that peak conditions would occur around 7pm, with the demand for parking (pubic and private) in the area at 963 spaces versus a supply of 1,995 spaces. This represents a full build-out parking system at an occupancy of 48 percent. The public demands within the study area represent approximately 358 spaces of that demand (37 percent of the total demand). The public spaces within the entire Heritage District redevelopment area are operating at 67 percent occupancy. Information on projected full build-out weekend conditions for the Southern Heritage District is summarized in **Table 16.**

TABLE 16 - SOUTHERN HERITAGE DISTRICT[9] FULL BUILD-OUT WEEKEND DEMAND CONDITIONS

	5pm	6pm	7pm	8pm
Public Demand (vehicles)	379	327	372	119
Private Demand (vehicles)	493	559	591	638
Total Demand (vehicles)	872	886	963	757
Total Occupancy	44%	44%	48%	38%

[9] The demands shown in this table are only for the southern Heritage District parcels, south of the railroad tracks

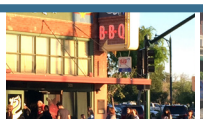
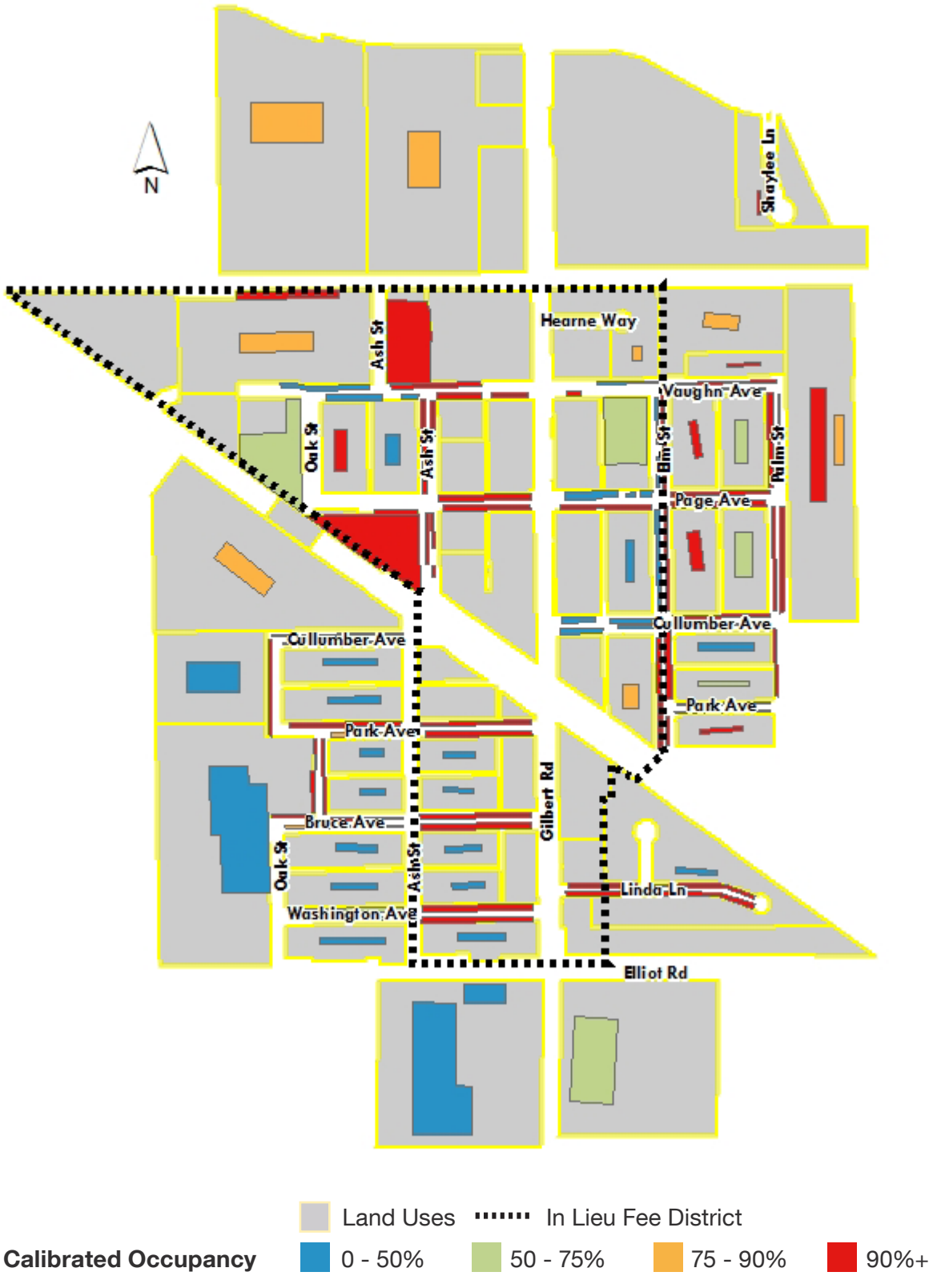


Figure 15 - Full Build-Out Weekend Night Conditions Peak Demand (7pm)

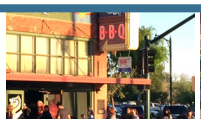


Based on the existing condition demand analysis and future condition projections, the Heritage District currently has a surplus of parking that can accommodate some of the demands of future developments and events. However, as the area reaches full build-out, parking will become increasingly constrained to the point where regulations and additional parking supply will be necessary to balance the parking demands and create efficient use of the parking system. As part of the development plans, the Town intends to construct two new parking garages, located on block 17 and block 22 (see Figure 12 and Table 9) with 577 spaces and 365 spaces, respectively. However, before these facilities are constructed, the Town should implement parking management strategies to efficiently and effectively manage the parking in the District. Additionally, after the facilities are constructed, parking regulations will continue to be necessary to promote efficient use of the system.

Generally, the introduction of parking regulations and control can come from either the public or private sector (depending upon ownership of the spaces) and will either prohibit access to parking or more clearly delineate where or when parking is available. Most times, this can be accomplished through signage. However, prohibition of parking access may require additional efforts such as gate access control, permits, and/or enforcement.

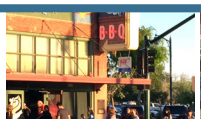
The following are recommendations that the Town should consider implementing to help strengthen parking management in the District and improve efficiency for users.

- Implement time restrictions of 3-4 hours for on-street parking. The intent is to direct shorter-term uses to use the on-street facilities that are closer to desired destinations and encourage the use of off-street or further away facilities for longer-term users.
- Restrict overnight parking in the District to ensure that spaces are available during daytime hours and not occupied by lingering vehicles from the previous night. Violators should receive a citation if parked for two consecutive nights.
- Management of the parking system should be done by existing Town of Gilbert staff, who will need to make decisions regarding parking operations and maintenance of the system. This staff should be involved in other transportation-related discussions as parking is an integral component of the overall transportation system.
- Create and implement a fee in-lieu parking program that will require the following:
  - A boundary of the in-lieu parking district should be determined and a parking inventory of all available public parking in the district should be conducted. This allows the Town to understand what supply is available for sharing among business. Public parking spaces utilized participating businesses must be within acceptable walking distances from the purchasing destination to be considered viable alternatives to on-site parking.
  - All existing development within the in-lieu parking district should not be assessed a fee for existing parking requirements.
  - The in-lieu fee should only be assessed when there are new developments or intensifications to existing uses that increase parking demands.
  - Owners should have the option to provide on-site parking instead of paying the in-lieu fee.



- Determine the cost of constructing parking. The in-lieu fee should be based on the construction and maintenance costs per parking space and the fee should ideally cover that cost. A typical range for the cost of a parking space is likely to be between $2,000 for a surface lot space and $10,000 for a garage space. These costs are exclusive of the right-of-way acquisition costs that may be required. The cost will depend on the Town's sales tax and the historical increases over recent years, developer impact fees, and the cost to the Town of constructing parking.

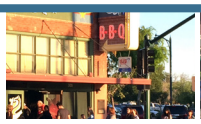
- Create and implement a curb lane management policy.
  - Conduct an inventory of the District land uses and the location of various curb lane uses (on-street parking, loading zones, bus stops, etc.).
  - Determine how each of the curb lane uses should be prioritized and a standard set of guidelines created on how curb lane use decisions are handled. This should be established for the entire District so that curb lane use decisions are made consistently throughout the District. However, these priorities should be flexible to accommodate special circumstances that don't necessarily fit the standard.
  - In conjunction with the curb lane policy, the Town should implement a Residential Parking Permit program to regulate non-residential users from parking in residential areas.
- Expand the use of shared parking in the District by establishing an official shared parking program and developing a standard shared parking agreement template.
- Utilize the park-and-ride parking facility on the weekends to help alleviate parking demand created by weekend events.
- Implement a reduced parking minimum and establish a parking maximum.
  - The existing parking minimum should become the parking maximum.
  - The Town should review their land uses and parking supply to determine an appropriate minimum parking rate.
- One existing Town of Gilbert officer should allocate time to enforce parking within the District.
  - The officer should be equipped with a handheld device that has a license plate reader.




Implementation of the recommendations presented in the previous section will require prioritization. **Table 17** outlines the recommendations as action items based on two planning horizons: near-term indicates actions within a five-year planning horizon; and long-term indicates a planning horizon of over five years. This table is intended to be a guide for accomplishing the goals put forth in this study by prioritizing the implementation of the recommendations found throughout this document.

TABLE 17 - RECOMMENDED IMPROVEMENTS TO PARKING SYSTEM AND ESTIMATED COSTS

RECOMMENDATIONS	COST
Near-Term Recommendations	
Implement enforcement and regulation policies within the District	$50,000 for signage and implementation plus staff time for enforcement
Enforcement should be conducted by a single enforcement officer using handheld equipment	
Implement time restrictions for on-street parking • Identify specific program strategies and goals • Install appropriate signage • Coordinate enforcement efforts to regulate the time limits	
Restrict overnight parking • Install signage	
Implement a Residential Parking Permit program • Install appropriate signage	
Implement parking management within the District	$50,000 for a parking management study plus staff time for management
Develop a management structure for managing parking within the District • The Town would need to allocate staff time to parking management	
Implement new parking zoning policy	$50,000 for a fee in-lieu rate study and development of new parking zoning policies plus staff time for implementation
Create and implement a fee in-lieu parking program • Establish evaluation criteria • Determine the fee for the program	
Implement a reduced parking minimum and establish a parking maximum	
Expand the use of shared parking in the District	
Long-Term Recommendations	
Create and implement a curb lane management policy • Conduct an inventory of the District land uses and the location of various curb lane uses • Determine how each of the curb lane uses should be prioritized	$50,000 for a curb lane management policy study plus $250 per sign and staff time for implementation
Construct new parking facilities • 950 spaces in two new parking structures	$14M - $19M plus land acquisition costs
Regularly evaluate need for on-street parking along Gilbert Road • Install appropriate signage and pavement markings if needed	$1,000 per space for signage, striping, and implementation costs

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