# **Executive Summary**

The Town of Gilbert has invested in technology, systems, and staff to support the operations and management of the Gilbert transportation network. However, the Town recognizes that there are opportunities to make better use of existing resources, pursue initiatives, and more effectively plan for future technology investments to improve the Town's transportation operations.

The Town of Gilbert's (Town) Transportation Systems Management and Operations (TSMO) Plan is an opportunity for the Town to map out a direction for the TSMO Program and plan a phased approach to improving traffic management, traveler information, incident management, inter-agency communications, and inter-departmental coordination to be more effective locally and regionally. TSMO strategies are often applied across a network or an organization, rather than an individual location, and many TSMO strategies require coordination across multiple departments, modes, and even jurisdictions. Examples of TSMO strategies include coordination activities such as traffic signal coordination, traveler information, special event management, integrated corridor management, work zone management, and traffic incident management. While many TSMO strategies require a technology component, the TSMO toolbox also includes business processes, collaborative activities or partnerships, and engineering solutions to optimize the mobility and reliability of the existing system using limited resources.

TSMO focuses on the *people*, *processes*, *and technology* involved in the *implementation*, *management*, *and maintenance* of the transportation network. TSMO is an approach to integrate planning and design with operations and maintenance to address both recurring and non-recurring congestion to maximize the safety, mobility, and reliability of the existing transportation network. While other planning efforts focus on planning the physical network and facilities that support mobility in Gilbert, the TSMO Plan focuses on planning, programming, designing and operating assets to actively manage the transportation network.

#### TSMO Vision, Mission, and Goals

The TSMO *vision*, *mission*, and *goals* are related but individually necessary to articulate what is intended to be accomplished and how it will be accomplished.

#### TSMO goals include:

- Data: Collect and utilize real-time data evaluated against performance metrics to support operational decision making and response to events.
- Customer Service: Deliver accurate and reliable traveler information to Town residents and the traveling public so they can make informed mobility decisions.

#### TSMO Vision

Improve safety and mobility for all modes of transportation by integrating planning, design, operations and maintenance activities that support the Town in striving to be a Town of the Future.

#### TSMO Mission

Work together as a Town to provide Gilbert residents and visitors with a proactive, responsive, and comprehensive transportation network that promotes quality of life and supports economic growth.

- Infrastructure: Make functional and cost-effective transportation infrastructure investments that serve safety and mobility purposes.
- Integration: Prioritize TSMO as a core objective in the agency's planning, design, construction, operations and maintenance activities of the transportation network to serve Town purposes as well as the role in the regional transportation system.

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- Investment: Leverage opportunities to sustain funding, staffing, and infrastructure resources to support the operations and management of the transportation network and its assets.
- Consistency: Establish succession planning, documentation, and training in TSMO activities that creates the opportunity to improve what has been established over time.
- Efficiency: Implement projects that optimize existing transportation system capacity and alleviate congestion.



### **Involving Town Departments**

To accomplish the level of stakeholder involvement desired for a TSMO Plan, Town staff representing many different departments and roles were invited to participate in stakeholder workshops and one-on-one or small group meetings to collect multiple perspectives and references on a variety of transportation topics.

The stakeholder input gathered through the various methods were reviewed and categorized into four main categories of *policies, projects, processes,* and *people* which encompasses the breadth and lifecycle of a TSMO Program. Overarching themes that resonated with most, if not all, Town departments included:

- Town staff are advocates for making changes and improvements that are in the best interest of the Town's residents.
- Department and project managers must utilize data and performance measurement to support data driven investments and decision making.
- Managers should seek to be lean smart, utilizing resources efficiently but effectively to achieve the Town mission and the missions of individual departments.
- The Town wants to implement appropriate latest and greatest technologies that have been tested and proven by others.
- Project teams should generate recommendations that are scalable and flexible to provide the ability to respond to the environment and conditions present when implementation is being pursued.
- Recommendations of the Plan should have clear owners/champions identified for implementation.

The TSMO Plan documents the current environment at the Town including a number of existing, programmed, and planned characteristics of the Town's assets, processes, and resources. The current environment also includes an examination of key dimensions influencing the Town's TSMO readiness including business processes, systems and technology, performance measurement, culture, organization and workforce, and collaboration.

## Developing Strategies for Implementation

The Town's TSMO Strategies were developed based on the full set of policy, project, process, and people needs. The full range of strategies were then packaged to focus on strategies that span multiple/different needs categories and will help the Town take meaningful steps towards achieving their TSMO goals. The strategy categories – *infrastructure*, *processes*, *people*, and *data* – are similar to the original needs

### Gilbert Transportation Systems Management and Operations Plan

categories but are more focused to illustrate the interrelation between strategies and how a TSMO focus requires investments in the 'overlaps' rather than looking at people, processes, or infrastructure in silos.

Focusing on the singular strategies alone will not result in the type of TSMO program that the Town envisions. Instead, a majority of the time and staff investment should go into those strategies identified in the overlaps between the categories. The overlapping strategies are those that are multi-departmental efforts to improve coordination and sharing of resources and data. Successful implementation of these strategies will help elevate many aspects of transportation operations and management in the Town and will help the Town make progress towards achieving their TSMO vision.

Each item in the Strategy Summary diagram is further detailed in the TSMO Plan, including the following in-depth information:

- Category of strategy and strategy title;
- Strategy description/actions or steps to take to implement the strategy;
- Deliverables or outcomes that should be expected when the strategy is completed;
- Items to consider when pursuing strategy implementation;
- Planning level costs;
- Recommended implementation timeframe (in process, near-term, mid-term, or long-term); and
- Responsible party, including both a lead department and other departments to support.





# **Infrastructure**

- 1. Implement an asset replacement and upgrade program for ITS devices and communications
- **2.** Implement a preventative maintenance program for ITS devices and communications
- **3.** Fill ITS and communications infrastructure gaps

- 12. Implement a formal training and cross-training program for TSMO staff and other staff who interact with TSMO
- 13. Implement a quantifiable staffing formula for TSMO staff to justify systematic hiring



# People

11. Organize and clarify staffing roles and responsibilities to make sure there are staff identified and available to perform all TSMO functions

- **4.** Identify and document infrastructure standards and requirements to use when vetting technologies and systems so they support multiple department needs
- **5.** Implement CIP and project scoping processes that gather broad TSMO input and account for technology costs and ongoing 0&M
- **6.** Develop and formalize SOPs for traffic management device and system operations

- Data
- **14.** Implement performancebased decision making for transportation operations and investments
- 15. Consolidate systems that collect and track data and make data accessible to all Town departments
- **16.** Develop an internal and external data dashboard

- 8. Institutionalize (and document) processes for coordinating transportation planning and operations with neighboring and regional agencies
- **9.** Expand the plan review process, including traffic control plans, to include input from all Town departments at the 30% design stage
- **10.** Develop and formalize SOPs for incident response and management and other traffic management processes



## **Processes**

7. Implement Town traffic engineering and transportation operations standards

Gilbert TSMO Strategy Summary

February 2021 iv



# Gilbert Transportation Systems Management and Operations Plan

### Support for Implementation

It will be vital to the success of this TSMO Plan for Town staff to continue to coordinate within and between departments to deliver an integrated approach. It is important for Town representatives to stay appraised of regional initiatives or funding opportunities, build relationships and share information with other local and regional agency staff, and gain knowledge and skills related to the use and maintenance of technology.

While a majority of the strategies provided in the TSMO Plan will not require funding, there are some strategies that will require funding investments and should be included in the Town's CIP. These strategies utilize a variety of funding sources based on strategy owner and ultimate user. Possible resources and funding sources are provided to assist the Town in identifying funding opportunities and initiatives to participate in.

The Town of Gilbert TSMO Plan is a dynamic plan that focuses on current and future technology infrastructure, TSMO processes and plans that will impact TSMO functions within the Town as well as with other agencies. To be consistent with changing needs and evolving technologies, this Plan and the associated tools will require periodic updating and review as the TSMO Program continues to grow. As projects are implemented or expanded, as agency priorities change, or as other changes occur that impact technology and transportation operations in the Town, changes should be documented through an update to the TSMO Plan.