

EXECUTIVE PLAN SUMMARY, AN ITS STRATEGIC PLAN FOR TEXAS

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EXECUTIVE SUMMARY

The TxDOT ITS Strategic Plan supports the goals and objectives of the TxDOT agency Strategic Plan. It has the same four goals as the TxDOT Strategic Plan:

- Maintain a safe system.
- Address congestion.
- Connect Texas communities.
- Become a best-in-class state agency.

For some ITS objectives, specific strategies have been identified to further describe the objective.

The ITS Strategic Plan goals, objectives, and strategies are listed below. They have been prepared with input from both TxDOT agency staff and from partner agencies throughout the state.

The following sections outline key objectives that fall under each of the four plan goals. Each objective also has a list of strategies that, when implemented, help TxDOT meet the higher objective and goal in support of the agency strategic plan.

GOAL: MAINTAIN A SAFE SYSTEM

The following objectives are integral to ITS playing a role in maintaining a safe system for the citizens of Texas:

- Objective: Deploy and operate ITS technologies and services to reduce crashes and fatalities.
 - Strategy: Deploy and operate ITS services that provide incident management, traffic control, emergency management, and other safety related capabilities.
 - Strategy: Use ITS in high accident locations and areas of high congestion to improve safety and increase traveler information.
 - Strategy: Expand the use of ITS by TxDOT and their contractors in construction zones to reduce the potential for crashes and improve worker safety.
 - Strategy: Incorporate the use of ITS systems and services in major evacuation efforts in order to both monitor events and share information with the public.
- Objective: Manage ITS infrastructure and services as an asset.
 - Strategy: Use ITS for data collection to support safety performance measures.
 - Strategy: Fill in critical gaps in ITS systems in TxDOT districts and along strategic routes using TxDOT, partner, or private sector resources.

GOAL: ADDRESS CONGESTION

Two primary objectives listed can enable TxDOT to address congestion within the transportation network across the state:

- **Objective:** Deploy and operate ITS technologies and services to provide travel and traffic management services.
 - **Strategy:** Deploy and operate ITS services that provide pre-trip, en-route, and travel demand management capabilities through public and/or private sector paths.
 - **Strategy:** Deploy and operate ITS traffic management services to effectively manage the capacity of the roadway system.
 - **Strategy:** Provide active management of traffic and other progressive solutions services that can improve travel reliability and predictability.
- **Objective:** Work cooperatively with regional partners to provide regional ITS solutions, systems, and staffing.
 - **Strategy:** Support ITS services that enable public transit.
 - **Strategy:** Develop standard ITS operating procedures and systems that are consistent with regional needs and that serve the TxDOT Strategic Plan.
 - **Strategy:** Assign adequate staff and equipment resources to traffic management and maintenance operations to provide effective working relationships and performance outcomes.

GOAL: CONNECT TEXAS COMMUNITIES

TxDOT can meet the goal of connecting Texas communities by meeting the three objectives described:

- **Objective:** Deploy and operate strategic corridors and regions to enhance the economic development, mobility, and safety.
 - **Strategy:** Partner with private sector, multimodal travel information providers to effectively reach different users in these strategic corridors.
 - **Strategy:** Provide interoperability of roadway toll revenue collections including parking within the state and between neighboring states.
- **Objective:** Deploy ITS in a cost-effective and beneficial manner that includes innovative services and technologies.
 - **Strategy:** Deploy compatible ITS software and systems to make operations seamless across district boundaries.
 - **Strategy:** Locate computer control elements of ITS technologies in larger urban centers that can provide supplemental staffing to rural districts.
 - **Strategy:** Incorporate automated and semi-automated decision support systems into the ITS software and systems.
- **Objective:** Deploy ITS systems and technologies that facilitate the efficient movement of freight and goods along strategic, high-volume freight corridors including border crossings.
 - **Strategy:** Understand and address the freight community's needs for information.
 - **Strategy:** Deploy ITS to provide more seamless information to freight community.

GOAL: BECOME A BEST IN CLASS STATE AGENCY

To reach the goal of being a best in class state agency, TxDOT can work to achieve the three key objectives that follow:

- **Objective**: Deploy equipment and staffing of ITS services in a cost effective manner.
 - **Strategy**: Continually evaluate the financial and service implications of alternative business models for ITS including private sector ownership and operations.
 - **Strategy**: Provide dedicated funding for ITS so that operations and maintenance can be planned and costs are identified.
 - **Strategy**: Develop a consistent performance monitoring system that computes operations, safety, and resource savings benefits of all TxDOT ITS deployments.
- **Objective**: Anticipate local and regional service needs and plan the services to accommodate those needs.
 - **Strategy**: Implement and operate communications systems that can be shared with partner agencies and that meet the requirements of ITS services as the marketplace develops.
 - **Strategy**: Provide a forum at the state and/or regional level for TxDOT and partner agency staff to share ITS knowledge, experience, and needs.
- **Objective**: Participate in connected vehicle and automated vehicle activities that will improve economic competitiveness for Texas.
 - **Strategy**: Participate in test beds, pilot programs, demonstration programs, and other venues that will allow Texas to effectively prepare for and engage in these transformational technologies.
 - **Strategy**: Identify and address institutional and policy issues that can facilitate successful ventures in the connected vehicle efforts.

