

F. Transportation Technology

Policies

MTP Reference #	Transportation System Safety
TT3-001	Transportation agencies in the region will make data about their systems accessible using open data best practices in order to support automated vehicle operations and optimize the operation of travel navigation, mobility-as-a-service payment, and other transportation services in use today and in the future.
TT3-002	Priority will be given to two-way data sharing arrangements under which the recipient of transportation data from public agencies in the region share their transportation data with public entities in the region.
TT3-003	Transportation agencies will do a cost/benefit analysis of data sharing as an alternative to the installation, operation, and maintenance of hardware solutions before proceeding with hardware solutions.
TT3-004	The region will support the installation and operation of reliable and robust wireless communications in and around transportation facilities.
TT3-005	The region will explore advances in technology as a way to preserve transportation corridors and utilize them most effectively.
TT3-006	The region supports the testing and deployment of automated vehicles that meet applicable safety and legal requirements.
TT3-007	Maintaining existing roadways at a level that supports the effective and safe operation of automated (and human driven) vehicles will be accomplished before investing in the construction of new roadways that add to the inventory of roadways the region must maintain.
TT3-008	The region will support efforts to ameliorate the impact of increased demand for mobility as a result of automated vehicles by supporting efforts to increase average vehicle occupancy by transportation network companies and other transportation suppliers and through demand management tools such as TryParkingIt.
TT3-009	In making planning and investment decisions concerning roadways, transportation agencies will do a cost/benefit analysis of using automated vehicle technology and demand management tools as an alternative to building additional lanes to increase roadway capacity.
TT3-010	Automated vehicles must be deployed in a manner consistent with Mobility 2045 goals of providing the public with a transportation system that offers the public more travel options and enhances the safety of other roadway users such as bicyclists and pedestrians.

Programs

Texas Automated Vehicle Proving Ground/Arlington	
Reference	TT2-001
Background	The purpose of this program is to support pilot program deployment of a low-speed automated vehicle.
Related Goals	Improve the availability of transportation options for people and goods.
Related Policies	TT3-006
Implementation	Support and fund pilot studies for automated vehicle projects.
Performance Dimensions	<ul style="list-style-type: none"> ▪ Miles traveled ▪ Persons served ▪ User acceptance ▪ safety
Cost Estimate	\$600,000

Automated Vehicle Infrastructure, Technologies, and Business Practices	
Reference	TT2-002
Background	The purpose of this program is to put in place technologies and related business practices that support connected/automated vehicles and improve roadway operations.
Related Goals	Ensure all communities are provided access to the regional transportation system and planning process.
Related Policies	TT3-001
Implementation	Implement technologies and related business practices that support connected/automated vehicles and improve roadway operations.
Performance Dimensions	<ul style="list-style-type: none"> ▪ Designated equipment (dedicated short-range vehicle communication, roadside units) installed and operational ▪ Designated business practices (data analytics) performed
Cost Estimate	\$1,000,000

Automated Vehicle Data Infrastructure/Traffic Signal	
Reference	TT2-003
Background	The purpose of this program is to make traffic signal data accessible to the developer community to support connected vehicle, travel navigation, and other applications.
Related Goals	Support travel efficiency measures and system enhancements targeted t congestion reduction and management.
Related Policies	TT3-002
Implementation	Share traffic signal data with the developer community to support connected vehicle, travel navigation, and other applications.
Performance Dimensions	Number of communities sharing traffic signal data Number of traffic signals whose data is accessible to developer community
Cost Estimate	\$250,000

Travel Navigation Information Sharing	
Reference	TT2-004
Background	The purposes of this program are to make road closure information held by public agencies accessible to the developer community to support connected vehicle, travel navigation, and other applications; and receive roadway incident and other information from travel navigation services to improve traffic operations and emergency response by public agencies.
Related Goals	Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system.
Related Policies	TT3-002
Implementation	Share and receive roadway-related information with one or more travel navigation service.
Performance Dimensions	<ul style="list-style-type: none"> ▪ Number of communities sharing road closure information ▪ Number of communities utilizing roadway data stream supplied by travel navigation services
Cost Estimate	\$250,000

Mover Prototype	
Reference	TT2-005
Background	The purpose of this program is to advance the planning and design work on a people mover system that utilizes automated vehicle technology.
Related Goals	Provide for timely project planning and implementation.
Related Policies	TT3-005
Implementation	Support the advancement of the planning and design work on a people mover system that utilizes automated vehicle technology.
Performance Dimensions	<ul style="list-style-type: none"> ▪ Planning and design work in progress ▪ Planning and design work completed
Cost Estimate	\$575,000