

Transportation Asset and Performance Management

Gulf Regional Planning Commission (GRPC) guides transportation decision-making by performing the planning and outreach necessary to develop the region's federally required transportation plans and maintain its certification ensuring that the region is eligible to receive federal transportation dollars. GRPC educates stakeholders and promotes innovative measures to enhance the mobility, accessibility and safety of the transportation system. GRPC staff uses planning tasks identified in the UPWP to monitor transportation conditions leading to the identification and development of transportation projects that specifically address MPO objectives.

GRPC has adopted an asset and performance management approach to transportation planning and critical to this method is the use of transportation performance planning to measure infrastructure needs. Transportation performance management is a strategic approach that uses system information to make investment and policy decisions to achieve goals and objectives.

GRPC uses in-house performance measures in addition to federal performance measures to guide planning and project development. GRPC's Transportation Performance Planning Program defines a "way of doing business" and provides structure to the decision-making processes. This is a way of improving GRPC existing procedures for allocating resources to achieve desired outcomes.

The establishment of GRPC's focus is reached through goals, objectives, strategies, and a set of performance measures aligned with the 23 USC 134(h) MPO planning factors. Programmed projects are linked directly to the performance measures. Completed projects from the STIP and TIP will be assessed, and reports generated to show how we have provided progress toward performance measures.

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Accessibility	Refers to the ease of reaching goods, services and activities and the time and cost it takes
Mobility	Ease of movement by automobile, walking, biking, transit, etc.
Safety	Solutions to transportation hazards
Security	Transportation design elements to deter crime
Economic Vitality	Benefits to society and increased economic activity in the region
Resilience	The ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.
Environment	Avoid and mitigate adverse impacts on the environment and underserved populations
Multimodal Connectivity	The quality, speed, convenience, comfort, safety, of walking, biking, and public transit
Management & Operations	Maximizing the efficient use of existing transportation resources
Tourism	Visitors with the confidence that they can travel through a region safely and quickly
Preservation	Replace, repair, or improve transportation assets to bring them to a state of good repair

Urban federal-aid roads	693 miles
Urban federal-aid roads (non-interstate)	659 miles
Mobility corridors	189 miles
Mobility corridors (non-interstate)	139 miles
Urban federal-aid intersections	581
Interstate interchanges	20



Transportation Asset and Performance Management



Economic Vitality

Objective
Improve the transportation system to enhance economic competition
Improve the mobility of freight by truck, rail, and other modes
Strategy
Address freight bottlenecks and other impediments
Provide access to developed and undeveloped areas (such as frontage roads)
Improve the quality of transportation for rural centers
Performance Measure
Number of impediments on freight connectors
% of freight corridors operating under congested conditions (LOS E)
Value of vehicle operating cost (VMT) and travel time (VHT) in the region
Truck Travel Time Reliability (TTTR) Index

Objective
Improve mobility by reducing traffic congestion and delay
Enhance regional connectivity
Strategy
Expand roadway capacity where needed
Strategically enhance corridors (reconstruction, medians, road diets, etc.)
Provide critical linkages enabling more direct travel
Give priority to projects on the National Highway System (NHS)
Performance Measure
Miles of roads operating over capacity (LOS E)
Vehicle Hours Traveled (VHT) and Vehicle Miles Traveled (VMT) in the region
% person-miles traveled on the Interstate that are reliable
% person-miles traveled on the non-Interstate NHS that are reliable



Mobility & Accessibility



Safety & Security

Objective
Reduce motor vehicle crash fatalities and serious injuries
Strategically enhance corridors for safety and context
Strategy
Mitigate or eliminate safety concerns at high crash rate intersections
Improve decision-making and awareness with signage and pavement marking
Improve safety at railroad crossings
Install lighting on mobility corridors and interchanges
Improve conditions to prevent lane departures
Provide safety education
Address aggressive driving in areas with high speeds
Mitigate or eliminate safety concerns on high crash rate road segments
Performance Measure
Number of serious injury and fatality crashes
% of railroad crossings with adequate signals and vertical crossing profile
Number of intersections with crash rate above 1.5 per 1,000,000 vehicles
% of non-interstate mobility corridors lighted
Number of interstate interchanges lighted
Number of rural lane departure crashes
Number of fatalities
Rate of fatalities
Number of serious injuries
Rate of serious injuries



System Preservation

Objective
Maintain transportation infrastructure in a good state of repair
Strategy
Prioritize pavement condition
Prioritize bridge condition
Performance Measure
% of federal-aid roads with a good (<95) or acceptable (>95 to <170) IRI
% of NHS bridges by deck area in Good condition
% of NHS bridges by deck area in Poor condition
% of non-Interstate NHS pavements in Good condition
% of non-Interstate NHS pavements in Poor condition
% of Interstate pavements in Good condition
% of Interstate pavements in Poor condition

Transportation Asset and Performance Management



Objective
Improve mobility by reducing traffic congestion and delay
Prepare for technological advances to manage roadway demand
Strategy
Use operational strategies to improve traffic flow at intersections
Use roundabouts to improve traffic flow and safety at intersections
Support carpooling, electric vehicle use or first responder efficiency
Utilize innovative technologies to improve conditions
Performance Measure
Average travel time on mobility corridor
Number of paved park and ride lots
Miles of NHS roadway with excessive travel time delay
Number of intersections with extended delay

Objective
Use transportation improvements to provide equitable benefits
Improve mobility for underserved communities
Provide a setting for regional transportation decision-making
Minimize adverse impacts to the natural and the human environment
Provide transportation resiliency
Strategy
Address infrastructure that is repeatedly damaged by extreme weather events
Address current and future vulnerabilities to evacuation routes
Maintain a social media presence
Prioritize projects that reduce idling
Develop projects located in or directly benefit underserved communities
Performance Measure
Number of days that Pollution Standard Index is in unhealthy range
Number of GRPC Facebook followers
Number of comments received and attendance from outreach efforts
Number of projects positively impacting underserved communities
Miles of roadway that experience storm water inundation



Objective
Improve mobility and access for pedestrians and bicyclists
Reduce pedestrian and bicycle crash fatalities and serious injuries
Make public transportation a viable choice mode of transportation
Support shared mobility options to put more people into fewer vehicles
Strategy
Provide adequate pedestrian crossings
Install suitable pedestrian and biking infrastructure on mobility corridors
Add or widen shoulders on rural roads
Install sidewalks and multi-use pathways
Provide off-road trails
Use protected bicycle lanes where needed
Use pavement markings to indicate bicycle use
Improve pedestrian and bicycle access to transit stops
Improve ADA access
Improve fixed route transit headways
Performance Measure
% of signalized intersections suitable for pedestrian crossing
% of transit stops with suitable pedestrian and bicycle access
% of federal-aid roads with pedestrian pathways
% of federal-aid roads suitable for bicycles based on FHWA Bikeway Guide
% of mobility corridors suitable for bicycles based on FHWA Bikeway Guide
% of mobility corridors with pedestrian pathways
% of stops with shelter
Fixed route operating cost per hour
Number of non-motorized crashes
Fixed route on-time performance
Fixed route average speed
Fixed route farebox recovery
Ridership per revenue hour
Number of non-motorized fatalities and serious injuries
% of revenue vehicles exceeding their Useful Life Benchmark (ULB)
% of non-revenue service vehicles exceeding their ULB
% of facilities rated under 3.0 on the Transit Economic Requirements Model
Number of fatalities by mode (fixed route & non-fixed route)
Rate of fatalities per 100,000 total vehicle revenue miles by mode (fr & nfr)
Number of injuries by mode (fixed route & non-fixed route)
Rate of injuries per 100,000 total vehicle revenue miles traveled by mode
Number of safety events by mode
Rate of safety events per 100,000 total vehicle revenue miles by mode
Mean distance between major mechanical failures