

Description of Performance Measures used in the SET

TxDOT Goal	Sustainability-Related Objective	Performance Measure	Description
Reduce congestion	Improve mobility on highways	1 a - Travel time index	Considers mobility of highway travel in terms of the ratio of peak and off-peak speeds. It is a function of traffic volumes, number of lanes, and other details used for speed estimation.
	Improve reliability of highway travel	1 b - Buffer index	Measure of the reliability of highway travel and is estimated based on a relationship with the travel time index.
Enhance safety	Reduce crash rates and crash risk	2 a - Annual severe crashes per mile	Estimated using crash prediction models that also make use of traffic data, roadway classification, and geometrics.
	Improve traffic incident detection and response	2 b - Percentage lane-miles under traffic monitoring/surveillance	Considers the presence of traffic monitoring and surveillance centers.
Expand economic opportunity	Optimize land-use mix for development potential	3 a - Land-use balance	Quantified based on classification of land use along a corridor half a mile to either side of the roadway. A desirable measure value is achieved when the land use is evenly distributed among the categories.
	Improve road-based freight movement	3 b - Truck throughput efficiency	Function of truck volumes and truck operating speeds along the corridor.

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Preserve the value of transportation assets	Maintain existing highway system quality	4 a - Average pavement condition score	Rating of overall pavement condition, obtained from TxDOT's pavement management information system database.
	Reduce cost and impact of highway capacity expansion	4 b - Capacity addition within available right of way	Considers the potential for adding highway capacity within the existing right of way.
	Leverage non-traditional funding sources for highways	4 c - Cost recovery from alternative sources	Quantifies the benefit of non-DOT funding sources for both capital and O&M expenditures (including toll revenue, private sector partnerships, etc.)
	Increase use of alternatives to single-occupant automobile travel	4 d - Proportion of non-single-occupant travel	Proportion of passenger miles of travel in any mode other than a single-occupant automobile. This includes transit, carpooling, and high occupancy vehicles.
Improve air quality	Reduce adverse human health impacts and comply with ambient air quality standards	5 a - Air Quality Index	A function of an area's non-attainment status (for Ozone, Carbon Monoxide and particulate matter) as well as the pollutant emissions associated with these (Oxides of Nitrogen, Volatile Organic Compounds, Carbon Monoxide, and particulate matter). Quantified based on non-attainment status, emissions rates, vehicle speeds, and traffic volumes.
	Reduce greenhouse gas emissions	5 b - Daily CO ₂ emissions	Measure of daily Carbon Dioxide emissions per mile of roadway. Quantified on the basis of emissions rates, vehicles speeds, and traffic volumes.