

## 2050 MTP Development -- DRAFT Performance Measures

Goals	Objectives	Performance Measures
<b>I.</b> Protect the Human and Natural Environment and Minimize Climate Change	a) Reduce transportation sector emissions	a) and b) Total and per capita transportation GHG (CO <sub>2</sub> ) featured. Also calculate ozone (NO <sub>x</sub> ), CO (carbon monoxide), and particulate matter emissions, and energy consumption (fossil fuel?)
	b) Achieve net zero carbon emissions	
	c) Reduce negative impacts on natural and cultural environment	c) Proportion of planned investment in existing highways
		c) Vehicle Miles Traveled (VMT) per capita
<b>II.</b> Ensure Equity and Participation	a) Ensure that transportation investments do not create disproportionate negative impacts for communities of concern	The <i>Environmental Justice (EJ)</i> report for the 2045 MTP assesses equitable distribution of transportation investments, thus, a separate performance measure is not needed. The <i>EJ</i> report will be updated for the 2050 MTP.
	b) Ensure equitable public participation among communities of concern	Staff is working to identify this performance measure. See list of potential equity measures on the page that follows this table.
<b>III.</b> Connect People and Places	a) Increase mobility options for all communities -- particularly communities of concern	a) Percentage of work and non-work trips by transit less than 40 minutes (by MPO, and by low-income, minority and zero-car households)  This performance measure is new - it was not in the 2045 MTP.
		a) Percentage of jobs within 1/4 mile of frequent bus transit service (15min) or 1/2 mile of fixed guideway transit service
	b) Achieve zero disparity of access to jobs, education, and other important destinations by race, income, or other marginalized groups	b) Percentage of work and non-work trips by auto less than 20 minutes (by MPO, and by low-income, minority and zero-car households)  This performance measure is new - it was not in the 2045 MTP.
<b>IV.</b> Ensure That All People Have Access to Multimodal and Affordable Transportation Choices	a) Enhance transit services, amenities and facilities	a) Per capita transit service hours <u>Note:</u> Staff is assessing the feasibility of adding "per capita expenditure for amenities and facilities."
	b) Improve bicycle and pedestrian facilities	b) MPO total programming per capita on bicycle and pedestrian facilities <u>Note:</u> This measure is unlikely to be available for 2050 MTP. Staff is investigating feasible methods.
		b) Proportion of jurisdictions that have an ordinance requiring developers to build or pay in lieu for sidewalks
	c) Increase utilization of affordable non-auto travel modes	c) Total transit boardings per capita

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DCHC Goals	DCHC Objectives	Performance Measures
		<p>c) Percentage of transit and bicycle/pedestrian mode shares in Travel Choice Neighborhoods (TCN) (by MPO, and by low-income, minority and zero-car households)</p> <p>This performance measure is new - it was not in the 2045 MTP.</p>
<b>V.</b> Promote Safety, Health and Well-Being	a) Achieve zero deaths and serious injuries on our transportation system	<p>a) FHWA TPMs (highway)</p> <ul style="list-style-type: none"> <li>- Number of non-motorized fatalities and serious injuries (by low-income, minority and zero car households)</li> <li>- Number of motorized fatalities</li> <li>- Rate of motorized fatalities (per 100m VMT)</li> <li>- Number of motorized serious injuries</li> <li>- Rate of motorized serious injuries (per 100m VMT)</li> </ul>
		<p>a) FHWA TPMs (transit)</p> <ul style="list-style-type: none"> <li>- Fixed-route (FR) and demand response (DR) total fatalities and fatalities per 100k vehicle revenue miles (VRM)</li> <li>- FR and DR total injuries and injuries per 100k VRM</li> <li>- FR and DR total safety events and safety events per 100k VRM</li> <li>- FR and DR system reliability (distance between major mechanical failures)</li> </ul> <p>This performance measure is new - it was not in the 2045 MTP.</p>
	b) Provide all residents with active transportation choices	See performance measure for Goal IV, Objective C.
<b>VI.</b> Improve Infrastructure Condition and Resilience	a) Increase proportion of highways and highway assets in 'Good' condition	<p>a) FHWA TPMs</p> <ul style="list-style-type: none"> <li>- Percent of interstate pavement in good and poor condition</li> <li>- Percent of National Highway System (NHS) pavement in good and poor condition</li> <li>- Percent of NHS bridges in good and poor condition</li> </ul>
	b) Maintain transit vehicles, facilities, and amenities in the best operating condition	<p>b) FTA TPMs:</p> <ul style="list-style-type: none"> <li>- Percentage of non-revenue vehicles that have met or exceeded their useful life benchmark (ULB)</li> <li>- Percentage of revenue vehicles within a particular asset class that have met or exceeded their ULB</li> <li>- Percentage of facilities with a condition rating below 3 on the Federal Transit Agency's Transit Economic Requirements Model (TERM)</li> </ul>
	c) Improve the condition of bicycle and pedestrian facilities and amenities	See performance measure for Goal IV, Objective B (per capita programming on bicycle and pedestrian facilities)
	d) Promote resilience planning and practices	<u>Note:</u> This measure is unlikely to be available for 2050 MTP. Staff is investigating feasible methods.
	e) Support autonomous, connected, and electric vehicles	<u>Note:</u> This measure is unlikely to be available for 2050 MTP. Staff is investigating feasible methods.
<b>VII.</b> Manage Congestion & System Reliability	a) Allow people and goods to move with greater reliability	<p>a) FHWA TPMs: (there are 2- and 4-year targets for Interstate)</p> <ul style="list-style-type: none"> <li>- Interstate LOTTR (level of travel time reliability)</li> <li>- Non-interstate NHS LOTTR</li> </ul>

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		a) Daily minutes of delay per capita (by MPO, and by low-income, minority and zero-car households)  This performance measure is new - it was not in the 2045 MTP.
	b) Increase efficiency of existing transportation system through strategies such as Transportation Demand Management (TDM) and Intelligent Transportation Systems (ITS)	b) Percentage of peak-hour travelers driving alone
		b) Total individuals provided TDM support via programs and activities
		b) ITS investments  Note: This measure is unlikely to be available for 2050 MTP. Staff is investigating feasible methods.
<b>VIII.</b> Stimulate Inclusive Economic Vitality	a) Ensure equitable distribution of transportation investments especially to communities of concern	The <i>Environmental Justice (EJ)</i> report for the 2045 MTP assesses equitable distribution of transportation investments, thus, a separate performance measure is not needed. The <i>EJ</i> report will be updated for the 2050 MTP.
	b) Improve freight movement	b) FHWA <b>TPM</b> : (there is a 2- and 4-year target) - Interstate truck TTR
	c) Coordinate land use and transportation	See performance measure for Goal I, Objective C (vehicle miles of travel per capita); Goal III, Objectives A, B and C (percentage of jobs near transit, and percentage of trips under specified travel time)
	d) Invest in cost-effective solutions to improve travel reliability and safety	Note: This measure is unlikely to be available for 2050 MTP. Staff is investigating feasible methods.
	e) Improve project delivery for all modes	Note: This measure is unlikely to be available for 2050 MTP. Staff is investigating feasible methods.

**PM** - MPO Performance Measure

**TPM** - Transportation Performance Measures required by federal rules and adopted by MPO

**Def** - Performance Measure to be used in Deficiency Analysis and Needs Assessment stage of MTP process (spring 2021)

**Alts** - Performance Measure to be used in Alternatives Analysis stage of MTP process (summer 2021)

**PrefOpt** - Performance Measure to be used in Preferred Option stage of MTP process (fall 2021)