

DURHAM • CHAPEL HILL • CARRBORO

**DCHC**

METROPOLITAN PLANNING ORGANIZATION

PLANNING TOMORROW'S TRANSPORTATION

# Destination 2055 MTP Performance Measures

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Technical Committee Meeting | November 5, 2024

February 13, 2024

Technical Committee Meeting

Initial presentation on survey responses.

May 14, 2024

Technical Committee Meeting

Initial presentation of revised 2050 Goals and Objectives.

June 11, 2024

Technical Committee Meeting

Recommended to approve revised 2050 Goals and Objectives with incorporated feedback from Technical Committee.

October 8, 2024

Technical Committee Meeting

Presentation of Performance Measures for the development of Destination 2055 to Technical Committee.

November 5, 2024

Technical Committee Meeting

Second Presentation of Performance Measures for the development of Destination 2055 to Technical Committee.

# Performance Measures for Use in Destination 2055

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# What are Performance Measures, and how are we using them to develop Destination 2055?

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- For the purposes of the MTP, performance measures are used to evaluate and compare alternatives.
- Performance measures should be calculated regionwide (inclusive of CAMPO and relevant RPO planning areas).
- Ideally, forecastable – able to be forecasted into the future.
- Utilizes readily available data and within staff's capacity to measure.

# Performance Measures for Use in Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li># of jobs within 30 min by transit/auto/walk for communities of concern/underrepresented communities<sup>1</sup></li> </ul>	<p>The average or actual distance between designated pedestrian and bicycle crossing locations. - FHWA performance measure</p>	<p>Proposed PM responds to goal, Connect People and Places, and is relatively easy to extract from the TRM and can be forecast. FHWA PM is more a safety PM, the data and method are not known (it might take a big effort), and it cannot be forecast.</p>
<ul style="list-style-type: none"> <li>% of jobs/population in Travel Choice Neighborhoods<sup>2</sup></li> </ul>		
<ul style="list-style-type: none"> <li>% of communities of concern/underrepresented communities in Travel Choice Neighborhoods<sup>2</sup></li> </ul>		
<ul style="list-style-type: none"> <li>% of communities of concern/underrepresented communities with "good" or "excellent" transit and/or walk access</li> </ul>	<p>I'm not sure if this was called out somewhere, if not, what is this based on?</p>	
<ul style="list-style-type: none"> <li>% of communities of concern/underrepresented communities with greater-than-average work-trip travel times</li> </ul>	<p>Same as the comment above. What is this based on? It might be good to cite.</p>	

<sup>1</sup> **Communities of concern (CAMPO) and underrepresented communities (DCHC MPO)** are communities with high + concentrations of one or more of the following: minority residents (non-White race and/or Hispanic/Latino residents), low-income households, seniors, residents with limited English proficiency, or households with no vehicles. Data source: U.S. Census Bureau, 2022 American Community Survey 5-Year Estimates.

<sup>2</sup> **Travel Choice Neighborhoods** are neighborhoods located within ¼ mile of existing or planned high-frequency (headways of 15 minutes or less during peak period) bus routes or within ½ mile of planned premium transit stations (bus rapid transit or passenger rail).

# Performance Measures for Use in Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li>• % of bus stops that meet ADA requirements</li> </ul>		
<ul style="list-style-type: none"> <li>• Transit service miles (total and high-frequency routes)</li> </ul>		
<ul style="list-style-type: none"> <li>• Bus average on-time performance</li> </ul>		
<ul style="list-style-type: none"> <li>• MPO total programming per capita on bicycle and pedestrian facilities</li> </ul>	What exactly does this mean?	This measures the dollar amount to be invested in bike and ped divided by the population. It is a measure of investment in bike and pedestrian.
<ul style="list-style-type: none"> <li>• Proportion of jurisdictions that have an ordinance requiring developers to build or pay in lieu for sidewalks</li> </ul>	What is this measuring exactly? Isn't the percentage of developers within each jurisdiction that utilize the payment in lieu of for sidewalks more important than if it is just an option?	The PM measures the level of commitment among DCHC MPO jurisdictions to ensure sidewalks are built in new developments. The comment proposes calculating the percentage of developers that pay in lieu, which produces a very similar measure but with much more effort.
<ul style="list-style-type: none"> <li>• Bike/Ped level of traffic stress</li> </ul>	Spell out "bike and pedestrian" since these are two separate modes that would need traffic stress analysis	For the purposes of this exercise, these measures need to be able to be projected into the future, which is not possible for this measure. Additionally, bicycle and pedestrian projects are funded together in one "bucket" in the MTP given the small dollar amounts for these kinds of projects.
<ul style="list-style-type: none"> <li>• Transit ridership/Total transit boardings per capita</li> </ul>		
<ul style="list-style-type: none"> <li>• Transit and non-motorized mode share in Travel Choice Neighborhoods (moved from previous goal)</li> </ul>		

# Performance Measures for Use in Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li>• Interstate LOTTR (level of travel time reliability)</li> <li>• Non-interstate NHS LOTTR</li> <li>• Total and per capita minutes of delay for auto and non-auto (transit &amp; non-motorized) trips</li> <li>• Average congested travel time for auto/transit (AM)</li> <li>• Number of alternative transportation users supported by the TDM program/VMT reduced</li> <li>• ITS Investments (\$) per capita or ITS treatment miles by freeway and arterial</li> </ul>	<p>Add "Analysis of Bicycle and Pedestrian Level of Service (BLOS and PLOS)" Highway Capacity Manual Chapter 18 and 13</p>	<p>The 2055 PMs already include the bike/ped level of traffic stress (LTS). BLOS and PLOS would be great, but are similar to LTS.</p>

# Performance Measures for Use in Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<p><b>FHWA PMs (Highway)</b></p> <ul style="list-style-type: none"> <li>Number of non-motorized fatalities and serious injuries (total and in communities of concern/underrepresented communities; rate per 100k population)</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><b>FHWA PMs (Highway)</b></p>	
<p><b>FHWA PMs (Transit)</b></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><b>FHWA PMs (Transit)</b></p>	
<p><b>Other PMs</b></p> <ul style="list-style-type: none"> <li>Bike/ped facility density</li> </ul>	<p><b>Other PMs</b></p> <p>Spell out "bike and pedestrian" since these are two separate modes that would be reviewed</p>	<p>For the purposes of this exercise, these measures need to be able to be projected into the future, which is not possible for this measure. Additionally, bicycle and pedestrian projects are funded together in one "bucket" in the MTP given the small dollar amounts for these kinds of projects.</p>



# Performance Measures for Use in Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li>Interstate truck TTR (travel time reliability)</li> </ul>		
<ul style="list-style-type: none"> <li>Vehicle miles of travel (VMT) per capita and total</li> </ul>		
<ul style="list-style-type: none"> <li>Average travel distance for work trips</li> </ul>		
<ul style="list-style-type: none"> <li>% of TIP projects completed on time</li> </ul>	<p>What exactly is a "completed on time" TIP project?</p>	<p>NCDOT maintains a standard measure for the timeliness of project delivery/completion.</p>

# Performance Measures for Use in Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li>• Impact of planned highway improvements on communities of concern/underrepresented communities</li> <li>• % of communities of concern with greater-than-average minutes of delay per capita</li> <li>• % of public engagement/involvement plan requirements met</li> <li>• Link to Environmental Justice reports from both MPOs</li> </ul>	<p>Should this be more than just highway improvements?</p>	<p>The emphasis is on highway/roadway improvements as they have the largest impacts on communities.</p>

# Performance Measures for Use in Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li>• Percent of interstate pavement in good and poor condition</li> </ul>		
<ul style="list-style-type: none"> <li>• Percent of National Highway System (NHS) pavement in good and poor condition</li> </ul>		
<ul style="list-style-type: none"> <li>• Percent of NHS bridges in good and poor condition</li> </ul>		
<ul style="list-style-type: none"> <li>• Percentage of non-revenue transit vehicles that have met or exceeded their useful life benchmark (ULB)</li> </ul>	<p>A measurement of the physical condition and state of repair for pedestrian and bicycle facilities. - FHWA performance measure</p>	<p>This would be more appropriate if addressed within local bicycle/pedestrian plan.</p>
<ul style="list-style-type: none"> <li>• Percentage of revenue transit vehicles within a particular asset class that have met or exceeded their ULB</li> </ul>		
<ul style="list-style-type: none"> <li>• Percentage of transit facilities with a condition rating below 3 on the Federal Transit Agency's Transit Economic Requirements Model (TERM)</li> </ul>		

# Performance Measures for Use in the Destination 2055

PERFORMANCE MEASURES	COMMENTS	RESPONSES
<ul style="list-style-type: none"><li>• % of planned investment in existing roadways</li><li>• Total and per capita transportation GHG emissions</li><li>• Total and per capita energy consumption from transportation sources</li></ul>		

# Performance Measures for Use in the Destination 2055

PERFORMANCE MEASURES (CONTEXT)	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li><del>% of peak-hour travelers driving alone</del></li> </ul>	<p>Why was this removed? The goal of TDM is to reduce single-occupancy vehicle trips with a focus on peak-hour travel.</p>	<p>This measure does not meet the criteria outlined at the beginning of the presentation.</p>
	<p>Add “The proximity of pedestrian, bicycle, and transit infrastructure and services to origins and destinations (e.g., shopping, recreation, entertainment, etc.)” as a performance measure.</p>	<p>PMs should be able to be forecast into the future, measured regionally, and reasonable amount of staff time to measure. This measure does not meet these criteria.</p>
<ul style="list-style-type: none"> <li>Improve the condition of bicycle and pedestrian infrastructure. (Objective)</li> </ul>	<p>Is there a performance measure for this?</p>	<p>At the time, no. Conditions of bicycle and pedestrian infrastructure are usually addressed in local Bike/Ped plans.</p>
	<p>A measurement of the physical condition and state of repair for pedestrian and bicycle facilities. - FHWA performance measure</p>	
<ul style="list-style-type: none"> <li>Support autonomous, connected, and electric vehicles. (Objective)</li> </ul>	<p>There is no performance measure for the objective.</p>	<p>This PM is related to the availability of charging stations or a reliable EV network. Data for a related performance measure is not currently available.</p>

# Performance Measures for Use in the Destination 2055

PERFORMANCE MEASURES (CONTEXT)	COMMENTS	RESPONSES
<ul style="list-style-type: none"> <li>Provide all residents with active transport choices. (Goal)</li> </ul>	<p>Good goal but more difficult in rural areas. How about something which focuses primarily on urban areas where it's more feasible?</p>	<p>The PMs focus on Travel Choice Neighborhoods given the large areas of low-density development.</p>
<ul style="list-style-type: none"> <li>Achieve net zero carbon emissions. (Goal)</li> </ul>	<p>Difficult – how about “move toward net zero carbon emissions”?</p>	<p>The DCHC MPO Board has committed to “achieve net zero”.</p>
<ul style="list-style-type: none"> <li>“Average congested travel time for auto/transit (AM).”</li> </ul>	<p>Why only AM?</p>	<p>PM revised to “Average congested travel time for auto/transit (peak periods)” to be inclusive of both AM and PM peak periods.</p>
<ul style="list-style-type: none"> <li>“Manage Congestion and System Reliability.” (Goal)</li> </ul>	<p>Is there data from the Mobility Report Card which can be used as performance measures?</p>	<p>The Mobility Report Card was only for DCHC MPO, and thus does not include CAMPO and RPO planning areas. PMs have to be calculated regionwide, and not require inordinate staff time or data. Also, it is a bonus if the PM can be forecasted into the future.</p>
<ul style="list-style-type: none"> <li>“Coordinate land use and transportation.” (Objective)</li> </ul>	<p>Are there any quantifiable performance measures to go with this objective?</p>	<p>Congestion performance measures and multimodal share indicates how well the transportation supply matches the land use. A</p>

# Discussion

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Recommend the MPO Board approve the presented Performance Measures for use in the development of Destination 2055.



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