

Memorandum

To: MPO Committees
From: Sandy Shackelford, Director of Planning & Transportation
Date: November 29, 2023
Reference: Moving Toward 2050 Data Analysis Updates

Purpose:

The MPO worked with a consultant team of Michael Baker and Renaissance to develop a process to prioritize transportation improvements within the MPO area. MPO staff and the EPR consultant team have been working through the prioritization of system needs.

Discussion:

The attached table shows the current status of the data processing as of the date of this memo. As data processing is completed, staff will continue to make the outputs available in a shared folder for review with the caveat that the individual data layers will paint an incomplete picture of the overall system needs. The needs prioritization will be based on the cumulative weighting from all of the evaluation criteria to demonstrate where the highest priority system needs are. However, review of the individual evaluation metric outputs is a good opportunity to ensure the data outputs are reasonable and make sense.

It is also important to reiterate that this data analysis is only one aspect of identifying system network needs. This data will be considered in conjunction with the public input that was provided as part of the public outreach that was conducted earlier this year.

Staff is continuing to work to complete the data processing and begin reviewing the system needs and public input against the candidate project list to begin identifying the project priorities. This analysis will be used to develop an initial list of project priorities. Ultimately, this list will be determined by the Policy Board based on additional public feedback and recommendations from the MPO committees.

Maps of the data analysis completed to date can be found here: [Data Prioritization Maps](#)

Actions: This information is being shared for discussion purposes. No action is requested at this time.

Table 1. Summary of Needs Prioritization Processing Completed

Prioritization Category	Evaluation Metric	Threshold	Factor Weighting	Data Processing
Safety	Roadway Safety (PSI ¹)	All PSI locations	15%	In Progress
	Bike/Ped Safety (PSAP ² Corridors)	Top 5% Regional Corridors ³	15%	Complete
Multi-modal Accessibility	PAI ⁴ - Bike/Ped	All segments PAI greater than 0	8%	Complete
	PAI - Transit	All segments PAI greater than 0	8%	Complete
	PAI - Vehicle	All segments PAI greater than 0	6%	Complete
	PAI – Disadvantaged Populations	All segments PAI greater than 0	8%	Complete
Efficiency & Economic Development	Travel Time Index	Avg weeklong TTI > 1.5 for three hours; > 1.7 for one hour	3%	Not yet started
	Travel Time Reliability (PTI ⁵)	Avg weeklong PTI > 1.5 for three hours; > 1.7 for one hour	3%	Not yet started
	Transit On-Time Performance	On-time performance less than systemwide average performance from previous year	4%	Not yet started
Land Use Coordination	Walk Access - General	All segments in “somewhat walkable” census tracts	10%	Not yet started
	Walk Access – Disadvantaged Populations	All segments in transit viable EEA ⁶ that are also in “somewhat walkable” census tracts	20%	Not yet started
Environment	Flooding Exposure	Segments Exposed to Historical Flooding		
		Additional Adjustment for economically distressed communities		

¹ PSI – Potential for Safety Improvement

² PSAP – Pedestrian Safety Action Plan

³ While the MPO committees had supported the use of the top 5% of the statewide corridors for this evaluation metric, the information contained in that data layer was not compatible with the processing steps to utilize the information. The information glitch in the mapping layer that prevented us from viewing the correct information when the MPO committees were discussing the information had been resolved. While the top 5% regional corridor contains additional segments on smaller road networks than what is considered in the Top 5% of statewide corridors, the use of the top 1% regional corridors did not include all of the segments that were captured by the top 5% statewide corridors. Therefore, MPO staff used the top 5% regional corridors data layer to complete the first step of the data processing.

⁴ PAI – Potential for Accessibility Improvement

⁵ PTI – Planning Time Index

⁶ EEA – Equity Emphasis Areas; defined in [VTrans](#)