

2025 Transportation Evaluation Criteria

Introduction

This memo summarizes changes that were endorsed in February 2025 to the Northern Middlesex Metropolitan Planning Organization's (NMMPO) Transportation Evaluation Criteria (TEC). TEC scoring determines how well transportation projects align with the goals outlined in Envision 2050, the region's Metropolitan Transportation Plan. TEC ensures that the NMMPO's fiscally constrained funding is allocated to projects with the greatest potential to enhance safety, mobility, and sustainability. The purpose of this memo is to outline proposed updates to the TEC and provide an opportunity for stakeholders and the public to engage in the process. These updates aim to reflect evolving priorities and improve alignment with regional plans and policies.

The proposed changes to the TEC were presented at the January 22, 2025 Northern Middlesex Metropolitan Planning Organization (NMMPO) Board Meeting, which was open to public attendance. A memorandum summarizing proposed changes to the TEC was provided to stakeholders and posted publicly to allow review of the changes and invite feedback during a 21-day public comment period that started January 27, 2025, and ended February 17, 2025. Additionally, the NMMPO hosted a virtual public meeting on February 5, 2025, at 5:00 PM via Zoom. Following the public comment period, the NMMPO met at their regular meeting on February 26, 2025 to review comments received. At that meeting, the NMMPO voted to endorse the TEC.

Background

The TEC is a systematic scoring tool that evaluates projects across 22 characteristics grouped into six categories, each corresponding to specific regional transportation goals. Scores for each characteristic range from -3 to 3, reflecting the project's potential impact, and are summed to produce a total TEC score. With a maximum score of 18, projects that score higher are prioritized for funding, ensuring that limited resources are allocated to those that best support regional goals such as safety, mobility, and sustainability. Consistent with prior federal transportation authorizations, the most recent Federal legislation regarding surface transportation, the Infrastructure Investment and Jobs Act (IIJA) states that metropolitan planning organizations "shall develop a competitive process to allow eligible entities to submit

projects for funding." The NMMPO's TEC scoring process satisfies this requirement for a competitive project selection process.¹

The TEC was initially developed for the FFY 2005-2009 Transportation Improvement Program (TIP) by state transportation agencies and the former Office of Commonwealth Development (OCD) to create a competitive framework for selecting projects.² It was subsequently updated for the FFY 2006-2010 TIP to include three new subcriteria: "Effect on service to minority or low-income neighborhoods," "Effect on wildlife and endangered species," and "Effect on transportation security and evacuation routes." However, no substantial updates have been made to the TEC scoring system in 19 years, even as regional transportation goals have evolved.

Justification for Update

In recent years, the NMMPO has adopted two key regional plans—*Envision 2050: A Long-Range Transportation Plan for Northern Middlesex County*³ and the *Greater Lowell Vision Zero Plan*⁴—which represent a shift in transportation priorities to place greater emphasis on safety and addressing neighborhood vulnerability.⁵ Additionally, the IJA now mandates that project selection prioritize high-need areas, such as low-income and transit-dependent communities, further reinforcing the necessity for this update.⁶ Finally, the United States Department of Transportation's Final Report on the NMMPO's 2024 Federal Certification Review includes a recommendation that "The MPO should review their current TEC to determine if updates are needed and to ensure they are consistent with the current goals and prioritization of the region." By revising the TEC, the NMMPO aims to ensure its project evaluation framework reflects the region's mobility and safety goals while satisfying federal requirements.

To summarize, NMMPO staff propose updating the TEC for the following reasons:

- 1) Align scoring criteria with Envision 2050 and the Greater Lowell Vision Zero plans;
- 2) Address feedback from Federal Certification Review to review the TEC's alignment with current state and regional goals; and
- 3) Comply with the IJA to prioritize high-need areas, such as low-income and transit-dependent communities.

¹ (DeFazio 2021)

² NMCOG, 2024.

³ Endorsed August 23, 2023. Available at <https://www.nmcog.org/federal-certification-documents>

⁴ Endorsed July 24, 2024. Available at <https://www.nmcog.org/glvisionzero>.

⁵ NMCOG 2023; WSP Global Inc and NMCOG 2024.

⁶ DeFazio, 2021.

Approach and Methodology

Our approach aimed to integrate the goals and priorities outlined in the NMMPO's recently endorsed plans with staff's understanding of regional issues and needs, while maintaining the familiar structure of the current TEC. This process sought to ensure alignment with updated priorities without a dramatic departure from the existing TEC format. The following steps guided the development of the proposed updates:

- 1) **Plan Review and Gap Analysis:** Staff reviewed NMMPO-endorsed plans, including Envision 2050 and the Greater Lowell Vision Zero Plan, to identify how their goals align with the current TEC and where gaps exist in the criteria. This analysis provided a foundation for introducing new elements and refining existing ones.
- 2) **Peer MPO Comparison:** Staff examined TEC methodologies from peer MPOs, particularly those updated within the last two years. This review highlighted distinctions in how other MPOs assign weight to various criteria and revealed potential new criteria, weighting strategies, and methodologies that could be adapted to the NMMPO TEC.
- 3) **Drafting and Testing:** Staff developed draft criteria and weighting schemes, conducting multiple rounds of scoring on previously evaluated projects. This iterative process assessed the impact of adjusting weights, introducing new criteria, and incorporating bonus scoring elements. Adjustments focused on eliminating redundancy, ensuring a balanced approach to social and regional equity, and maintaining clarity and consistency in scoring for future use. A core objective of this work was to ensure that future staff could seamlessly apply the TEC and produce results consistent with current scoring practices.
- 4) **Final Draft:** Staff finalized the proposed TEC adjustments and presented them to the NMMPO for consideration and adoption.
- 5) **Incorporate Comments:** Receive public comments on the proposed changes during a 21-day public comment period; Review and incorporate changes;
- 6) **Adoption:** Present the final proposed changes for adoption by the NMMPO Board.

Proposed Changes

The proposed updates to the TEC scoring system aim to enhance alignment with regional priorities, improve clarity, and ensure that project evaluations reflect the Northern Middlesex region's most pressing needs. These changes address limitations in the current scoring system by reducing redundancy, emphasizing safety for all road users, and elevating the visibility and importance of equity considerations. A key component of this update is the introduction of a Transportation Equity Bonus Score, which replaces a fragmented and under-weighted equity metric. The new bonus score is more visible, increases equity's significance in project prioritization, and expands inclusivity by incorporating seniors, people with limited English

proficiency, and zero-car households. It also ensures greater relevance by basing evaluations on the Regional Equity Vulnerability Index, tailored specifically to the NMMPO region.

In addition to equity, the updates place greater emphasis on roadway safety by prioritizing projects that address high-risk, high-injury areas and by clarifying criteria for evaluating pedestrian and bicycle infrastructure. For example, projects that dedicate protected and separated spaces for pedestrians and bicyclists will receive higher scores, reflecting their critical role in improving safety. These updates also align with recently endorsed regional plans, including Envision 2050 and the Greater Lowell Vision Zero Plan, to ensure that TEC scoring supports goals such as sustainability, equity, and the elimination of traffic fatalities.

The following sections provide a detailed breakdown of the changes, beginning with the two most significant changes followed by a list of all of the proposed changes:

- 1) Increase the weight of the Safety category
- 2) Introduce a Transportation Equity Bonus Score

Increase the Weight of the Safety Category

This change proposes increasing the weight of the Safety category from 16.7% (1 out of 6) to 30%. To accommodate this adjustment while maintaining the total TEC score at a maximum of 18, the weights of the other five categories—Condition, Mobility, Community Effects and Support, Land Use & Economic Development, and Environmental Effects—will each be reduced from 16.7% to 14%.

Currently, TEC scores for each category are calculated and summed, treating all categories as equally weighted. The updated system introduces a new step to adjust category scores based on their assigned weight before calculating the total TEC score. The steps for this calculation are as follows:

- 1) Determine the TEC score for the category.
- 2) Multiply the category's weight by 18.
- 3) Divide the result of Step 2 by 3.
- 4) Multiply the result of Step 3 by the TEC score for the category.
- 5) Repeat Steps 1–4 for all categories and sum the scores to calculate the final TEC score.

The formula for calculating the new weighted TEC score for each category is:

$$\text{Weighted Category TEC Score} = \text{Category TEC Score} \times \frac{\text{Category Weight} \times 18}{3}$$

Example:

If a project receives a TEC score of 2 in the Safety category:

- 1) Multiply the Safety weight (0.30) by 18: $0.30 \times 18 = 5.40$
- 2) Divide the result by 3: $5.4 / 3 = 1.85$
- 3) Multiply by the category TEC score: $1.8 \times 2 = 3.6$

The final weighted TEC score for Safety is 3.6.

Introduce a Transportation Equity Bonus Score

This change introduces an additional step in the TEC scoring process to award a Transportation Equity Bonus Score of 0, 1, or 2 points to projects based on their benefit to Regional Equity Priority Communities. This step is applied after calculating the project's final TEC score and it is not possible to receive a negative score. These communities face a 7.6 times greater risk of fatal or serious injury crashes and are composed of the following five demographic components:

- **Poverty:** Households at or below the poverty limit.
- **Race:** Hispanic or Non-White populations.
- **Seniors:** Persons aged 65 or older.
- **Language:** Limited English Proficiency households.
- **No Car:** Households with no vehicles.

The bonus score is primarily determined using the Regional Equity Vulnerability Index map, created as part of the Greater Lowell Vision Zero Plan and viewable on the Vision Zero Dashboard [Regional Equity Indicators](#) page. The scoring follows a two-step process as follows:

- 1) **Step 1:** Determine project distance from a Regional Equity Priority Community (REPC). If the project touches, lies within, or is a ¼ mile distance from a REPC, the project's TEC score gains either 1 or 2 bonus points. The project will gain a score of +2 if it is a High REPC or +1 if it is a general REPC. The only exception to this is if the transportation project would clearly provide no benefit or would harm the REPC — for example, a proposed highway expansion that would only benefit people traveling *through* rather than *in* the REPC.
 - a. **+2 Points:** Projects benefiting High REPC (dark blue on the map), representing the top 20% of Census Block Groups in the region.
 - b. **+1 Point:** Projects benefiting REPC (light blue on the map), representing the top 35% of Census Block Groups in the region.

- 2) **Step 2:** If the project lies greater than a ¼ mile distance away from a REPC, it may still be eligible to receive the +1 or +2 score. The MPO acknowledges that transportation projects can impact communities that are greater than a ¼ mile away so in these instances staff will evaluate the project's potential benefits to an REPC based on the following criteria:
- a. **Improved Access to Opportunity and Essential Services:** The project increases residents' access to jobs and key destinations, such as local businesses, educational institutions, healthcare facilities, childcare centers, grocery stores, and recreational areas.
 - b. **Enhanced Mobility and Connectivity:** The project improves transportation options, increases reliability, or enhances connections to transit networks, making it easier for residents to travel within and beyond their community.
 - c. **Reduction of Environmental Impacts:** The project mitigates nuisance effects such as noise, air pollution, stormwater, or traffic congestion that disproportionately burden nearby communities.
 - d. **Safety Improvements:** The project enhances safety for all road users, particularly in areas with high injury rates, reducing risks for people walking, biking, rolling, and driving.
 - e. **Alignment with Community Needs:** The project aligns with locally identified transportation needs and priorities, as documented in municipal plans, public input, or engagement with community organizations.

List of Proposed Changes

In addition to the broader changes described above, a number of minor changes are proposed to eliminate redundancies across scoring criteria, clarify the scoring process, and ensure consistency in the application of the TEC from year to year. These include the following:

- 1) Eliminate "Types of improvements to other modes of travel such as bikes, pedestrians, and other non-SOV travel."

Rationale: Improves balance with proposed changes to the safety category, which is increasing in weight.

- 2) Increase the weight of the safety category from 16.7% to 30%.

Rationale: Aligns with the NMMPO's Greater Lowell Vision Zero Plan (GLVZ) to eliminate traffic fatalities and the Metropolitan Transportation Plan (MTP), Envision 2050, which emphasizes safety and equity.

- 3) Reduce the weight of five categories ("Condition," "Mobility," "Community Effects and Support," "Land Use and Economic Development," "Environmental Effects") from 16.7% to 14%.

Rationale: This adjustment balances the increased weight for safety, maintaining a total weight of 100%.

- 4) Replace "Effect on crash rate compared to state average" with two new criteria: "Effect on the safety of the High-Injury Network" And "Effect on the safety of the High-Risk Network"

Rationale: Prioritizes projects that address unsafe roadways identified in the GLVZ plan, focusing on areas with the greatest safety needs.

- 5) Replace "Effect on bicycle and pedestrian safety" with two new criteria: "Effect on Pedestrian Safety" and "Effect on Bicycle Safety"

Rationale: Ensures that projects improve safety for pedestrians and bicyclists individually, rather than grouping them together.

- 6) Eliminate "Effect on transportation security and evacuation routes."

Rationale: Redundant with "Improvements on Roadways that have regional significance" under the mobility category.

- 7) Add new criteria "Advances goals and strategies in local, regional, and/or state housing plans."

Rationale: Strengthens alignment with adopted housing plans to increase relevance and impact.

- 8) Eliminate "Effect on service to minority or low-income neighborhoods."

Rationale: Redundant with change #10, which consolidates equity-related criteria into a dedicated new bonus score for transportation equity.

- 9) Eliminate "Other impacts/benefits to minority or low-income neighborhoods."

Rationale: Redundant with change #10, which consolidates equity-related criteria into a dedicated new bonus score for transportation equity.

- 10) Add new criteria "Advances Transportation Equity in the Region" as a bonus score of 0, +1, or +2.

Rationale: Rewards projects that benefit Regional Equity Priority Communities identified by the Greater Lowell Vision Zero Plan.

11) Remove "right-of-way" from "Business effects: right-of-way, access, noise, traffic, parking, and freight access."

Rationale: Simplifies language and removes redundancy.

12) Move "Historic and cultural resource effects" from "Environmental Effects" to "Land Use and Economic Development."

Rationale: Recognizes the stronger link between historic preservation and economic development.

13) Modify "Consistent with regional land-use and economic development plans" to "Advances goals and strategies in local, regional, and/or state land-use and economic development plans."

Rationale: Broadens applicability to include state and local plans, aligning with criteria that prioritize adopted plans.

14) Modify "Residential effects: right-of-way, noise, aesthetics, cut-through traffic, other" to "Residential neighborhood noise, aesthetics, cut-through traffic, stress, and quality of life."

Rationale: Removes redundant language and broadens the scope to include more aspects of residential quality of life.

The full TEC with proposed changes is provided on the following pages.

Detailed Overview of Proposed TEC Scoring Changes

Removed text is ~~red with strikethrough~~; new text is green

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
Condition	Magnitude of pavement condition improvement	Regional Pavement Condition (RSL data categorized into Federal performance categories) or Data from other sources	Poor to Good with extent > 1/2 mile: 3	Efficiently manage existing transportation assets and infrastructure
			Poor to Good with extent <1/2 mile: 2	
			Poor to Good at intersection only: 1	
			No Pavement improvement: 0	
			Good to Poor at intersection: -1	
			Good to Poor with extent < 1/2 mile: -2	
			Good to Poor with extent > 1/2 mile: -3	
Condition	Magnitude of improvement of other infrastructure elements	Bridge Conditions (MassDOT Data)	Poor to Good Bridge > 500 feet: 3	Efficiently manage existing transportation assets and infrastructure
			Poor to Good <500 ft: 2	
			Poor to Good Small Bridge/Culvert: 1	
			No Bridge Improvement: 0	
			Good to Poor Small Bridge/Culvert: -1	
			Good to Poor <500 ft: -2	
			Good to Poor > 500 ft: -3	
Mobility	Effect on magnitude and duration of congestion	Magnitude of congestion: LOS, Travel Times, Delays, Truck Travel Times, Volume	Significant Improvement in Congested Conditions: 3	Improve travel time and reliability for people and goods
			Moderate Improvement in Congested Conditions: 2	
			Minor Improvement in Congested Conditions: 1	
			No Change: 0	
			Minor Increase in Congested Conditions: -1	
			Moderate Increase in Congested Conditions: -1	
			Significant Increase in Congested Conditions: -1	
Mobility	Effect on travel time and connectivity/access	Improvements designed to reduce travel time by improving access and/or connectivity for all users of the Transportation System	Significant Improvement in access or connectivity : 3	Improve travel time and reliability for people and goods
			Moderate Improvement in access or connectivity: 2	
			Low Improvement in access or connectivity: 1	
			No Change: 0	
			Low reduction in access or connectivity: -1	
			Moderate reduction in access or connectivity: -2	
			Significant reduction in access or connectivity: -3	
Mobility	Effect on other modes using facility	Types of improvements to other modes of travel such as bikes, pedestrians,	Significant Improvement to Non-SOV Facilities: 3	Improve travel time and reliability for people and goods
			Moderate Improvement to Non-SOV Facilities: 2	
			Minor Improvement to Non-SOV Facilities: 1	
			No Change: 0	

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
		and other non-sov travel	Minor Negative Impact to Non-SOV Facilities: -1 Moderate Negative Impact to Non-SOV Facilities: -2 Significant Impact to Non-SOV Facilities: -3	
Mobility	Effect on Regional and Local Traffic	Improvements on Roadways that have regional significance	Improvement to an Interstate or Principal Arterial or spanning multiple communities: 3 Improvement to Minor Arterial : 2 Improvement to Collector or Local Road: 1 No Change: 0 Negative Impact to Collector or Local Road : -1 Negative Impact to Minor Arterial: -2 Negative Impact to Interstate or Principal Arterial: -3	Improve travel time and reliability for people and goods
Safety	Effect on crash rate compared to state average	Crash Data, Crash rates, EPDO, Crash Cluster data, Regional and State Top 100 High crash data	Improvements at Top 100 location or High-crash cluster: 3 Improvements to location with higher than average crash rate: 2 Safety Improvements at lower than average crash rate locations: -1 No Change: 0 Small Negative Impact to low crash location: -1 Moderate Negative Impact higher than average crash location: -2 Significant Negative Impact to High-Crash location: -3	Improve the safety of the transportation system for all users.
Safety	Effect on the safety of the High-Injury Network	Crash Data, Crash rates, EPDO, Crash Cluster data, Regional and State Top 100 High crash data, Pedestrian and bicycle facility data	Significant Improvement in Safety: 3 Moderate Improvement in Safety: 2 Minor Improvement in Safety: 1 No Change: 0 Minor Decrease in Safety: -1 Moderate Decrease in Safety: -2 Significant Decrease in Safety: -3	Improve the safety of the transportation system for all users
Safety	Effect on the safety of the High-Risk Network	Crash Data, Crash rates, EPDO, Crash Cluster data, Regional and State Top 100 High crash data, Pedestrian and bicycle facility data	Significant Improvement in Safety: 3 Moderate Improvement in Safety: 2 Minor Improvement in Safety: 1 No Change: 0 Minor Decrease in Safety: -1 Moderate Decrease in Safety: -2 Significant Decrease in Safety: -3	Improve the safety of the transportation system for all users

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
Safety	Effect on bicycle and pedestrian safety	Crash Data, Crash rates, EPDO, Crash Cluster data, Regional and State Top 100 High crash data, Pedestrian and bicycle facility data	Non-Vehicular Improvements at Top 100 location or High crash cluster: 3	Improve the safety of the transportation system for all users
			Non-Vehicular Improvements to location with higher than average crash rate: 2	
			Non-Vehicular Safety Improvements at lower than average crash rate locations: 1	
			No Change: 0	
			Non-Vehicular Minor Negative Impact to low crash location: -1	
			Non-Vehicular Moderate Negative Impact higher than average crash location: -2	
			Non-Vehicular Significant Negative Impact to High Crash location: -3	
Safety	Effect on bicycle safety	Crash Data, Crash rates, EPDO, Crash Cluster data, Regional and State Top 100 High crash data, Pedestrian and bicycle facility data	Significantly improves bicycle safety. Includes protected or fully separated bike facilities, pathways, and intersection treatments: 3	Improve the safety of the transportation system for all users
			Moderately improves bicycle safety, such as buffered bike lanes, flex posts, modal filters, and other semi-protected facilities: 2	
			Slightly improves bicycle safety, such as installing painted bike lanes, bike boxes, road diets, traffic calming, or reducing speed limits: 1	
			No impact on bicycle safety: 0	
			Slightly worsens bicycle safety, such as narrowing existing bike lanes or increasing traffic speeds: -1	
			Moderately worsens bicycle safety, such as removing bike lanes or increasing vehicle volumes on shared roads: -2	
			Significantly worsens bicycle safety, such as adding high-speed traffic lanes without any bicycle accommodations.: -3	

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
Safety	Effect on pedestrian safety	Crash Data, Crash rates, EPDO, Crash Cluster data, Regional and State Top 100 High crash data, Pedestrian and bicycle facility data	Significantly improves pedestrian safety, with new high quality pedestrian facilities such as adding new crosswalks, HAWK signals, curb extensions, refuge islands, raising existing crosswalks, connecting gaps in ped network, new separation/protection from vehicle traffic or new sidewalks/pathways: 3	Improve the safety of the transportation system for all users
			Moderately improves pedestrian safety, with a focus on upgrading existing pedestrian facilities. Including new lighting, widening existing sidewalks/pathways, adding RRFBs, visibility enhancements, or reducing vehicle speeds, reducing crossing distances: 2	
			Slightly improves pedestrian safety, such as resurfacing/repairing existing sidewalks/pathways, adding signage, paint, flex posts or basic lighting enhancements: 1	
			No impact on pedestrian safety: 0	
			Slightly worsens pedestrian safety, such as reducing sidewalk space or increasing crossing distances: -1	
			Moderately worsens pedestrian safety, such as removing crosswalks or allowing higher traffic speeds near pedestrian-heavy areas: -2	
			Significantly worsens pedestrian safety, such as eliminating sidewalks or crossings entirely, or increasing vehicular priority at pedestrian intersections: -3	
			Safety	
Improvements to location with higher than average crash rate on a Designated Evacuation Route: 2				
Non-Vehicular Safety Improvements at lower than average crash rate locations on a Designated Evacuation Route: 1				
Project not on a Designated Evacuation Route: 0				
Minor Negative Impact to low crash location on a Designated Evacuation Route: -1				
Moderate Negative Impact higher than average crash location on a Designated Evacuation Route: -2				

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
			Significant Negative Impact to High Crash location on a Designated Evacuation Route: -3	
Community Effects and Support	Residential effects: right-of-way, noise, aesthetics, cut-through traffic, other Residential neighborhood noise, aesthetics, cut-through traffic, stress, and quality of life	Project effects on Residential areas	Significant Improvement to Residential Area: 3	Provide fair and equitable transportation access and service quality for all communities
			Moderate Improvement to Residential Area: 2	
			Minor Improvement to Residential Area: 1	
			No Effect on Residential Area: 0	
			Minor Negative Effect on Residential Area: -1	
			Moderate Negative Effect on Residential Area: -2	
			Significant Negative Effect on Residential Area: -3	
Community Effects and Support	Public, local government, legislative, and regional support	Community Support; Regional or local plans, Letters of support, Community Investment	Significant Support from Community/Region: 3	Provide fair and equitable transportation access and service quality for all communities
			Moderate Support from Community/Region: 2	
			Minor Support from Community/Region: 1	
			No support or unknown: 0	
			Some Opposition from Community/Region: -1	
			Moderate Opposition from Community/Region: -2	
Significant Opposition from Community/Region: -3				
Community Effects and Support	Effect on service to minority or low income neighborhoods	Title VI and Environmental Justice Areas	Significant Improvement to Service in a Title VI and Environmental Justice Area: 3	Provide fair and equitable transportation access and service quality for all communities
			Moderate Improvement to Service in a Title VI and/or Environmental Justice Area: 2	
			Minor Improvement to Service in a Title VI and/or Environmental Justice Area: 1	
			No Effect to Service in Title VI and/or EJ area: 0	
			Minor Negative Service Impact to Title VI and/or EJ Area: -1	
			Moderate Negative Service Impact to Title VI and/or EJ Area: -2	
			Significant Negative Service Impact to Title VI and/or EJ Area: -3	
Community Effects and Support	Other impact/benefits to minority or low income neighborhoods	Title VI and Environmental Justice Areas	Significant Improvements in a Title VI and Environmental Justice Area: 3	Provide fair and equitable transportation access and service quality for all communities
			Moderate Improvements in a Title VI and/or Environmental Justice Area: 2	
			Minor Improvements in a Title VI and/or Environmental Justice Area: 1	

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
			No Effects in Title VI and/or EJ area: 0 Minor Negative Impact to Title VI and/or EJ Area: -1 Moderate Negative Impact to Title VI and/or EJ Area: -2 Significant Negative Impact to Title VI and/or EJ Area: -3	
Community Effects and Support	Effect on development and redevelopment of housing stock	Housing Data, Land Use, Zoning Designation	Significant Positive Effect on Housing Stock: 3 Moderate Positive Effect on Housing Stock: 2 Minor Positive Effect on Housing Stock: 1 No Effects Housing Stock Opportunities: 0 Minor Negative effect on Housing Stock Opportunity: -1 Moderate Negative effect on Housing Stock Opportunity: -2 Significant Negative effect on Housing Stock Opportunity: -3	Environmental Sustainability; Economic Vitality
Community Effects and Support	Advances goals and strategies in local, regional, and/or state housing plans	Housing Data, Land Use, Zoning Designation	Significant Support of Plan: 3 Moderate Support of Plan: 2 Minor Support of Plan: 1 No support or unknown: 0 Some Opposition to Plan: -1 Moderate Opposition to Plan: -2 Significant Opposition to Plan: -3	Environmental Sustainability; Economic Vitality
Land Use and Economic Development	Business effects: right-of-way , access, noise, traffic, parking, freight access other	Regional CEDS Document, degree of effect on nearby businesses, Traffic Volumes, Freight Corridor Designation	Significant Improvement to Businesses: 3 Moderate Improvement to Businesses: 2 Minor Improvement to Businesses: 1 No Effect on Businesses: 0 Minor Negative effect on Businesses: -1 Moderate Negative Effect on Businesses: -2 Significant Negative effect on Businesses: -3	Ensure that the transportation network supports economic development and accommodates future economic growth
Land Use and Economic Development	Sustainable Development Effects	Regional CEDS Document, Regional Strategic Plan, Master Plans	Significant Impact to Sustainable Development: 3 Moderate Impact to Sustainable Development: 2 Minor Impact to Sustainable Development: 1 No Impact to Sustainable Development: 0 Minor Negative Impact to Sustainable Development: -1 Moderate Negative Impact to Sustainable Development: -2 Significant Negative Impact to Sustainable Development: -3	Ensure that the transportation network supports economic development and accommodates future economic growth

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
Land Use and Economic Development	Consistent with regional land-use and economic development plans Advances goals and strategies in local, regional, and/or state land-use and economic development plans	Regional CEDS Document, Regional Strategic Plan, Master Plans	Project Included in Regional and Local Plan: 3	Ensure that the transportation network supports economic development and accommodates future economic growth
			Project Included in Regional or Local Plan: 2	
			Project Not Explicitly Included, but area mentioned in Regional or Local Plan: 1	
			Project Not Included in Regional or Local Plan: 0	
			Project has Minor Negative Impact to land use and economic development: -1	
			Project has Moderate Negative Impact to land use and/or economic development: -2	
			Project has Significant Negative Impact to land use and/or economic development: -3	
Land Use and Economic Development	Effect on job creation.	Regional CEDS Document, Regional Strategic Plan, Master Plans, Job Creation Estimates	Significant Positive Impact on Job Creation: 3	Ensure that the transportation network supports economic development and accommodates future economic growth
			Moderate Positive Impact on Job Creation: 2	
			Minor Positive Impact on Job Creation: 1	
			No Impact on Job Creation: 0	
			Minor Negative Impact on Job Creation: -1	
			Moderate Negative Impact on Job Creation: -2	
Environmental Effects	Air Quality/Climate effects	Greenhouse Gas Emissions Analysis	Quantified Decrease in GHG Emissions and Approved by CMAQ Consultation Committee: 3	Minimize and mitigate the impacts of the transportation system on the environment, including air quality, water quality, wildlife, and climate change
			Quantified Decrease in GHG Emissions: 2	
			Qualitative Decrease in GHG Emissions: 1	
			No Impact on GHG Emissions	
			Qualitative Increase in GHG Emissions: -1	
			Quantified Increase in GHG Emissions: -2	
			Quantified Increase in GHG Emissions and NO Increase in Lowell: -3	
Environmental Effects	Water quality/supply effects; wetlands effects	Wetlands data, Conservation land data, Open Space and Recreation Plans	Significant Positive Effect on Water Quality and Wetlands: 3	Minimize and mitigate the impacts of the transportation system on the environment, including air quality, water quality, wildlife, and climate change
			Moderate Positive Effect on Water Quality and Wetlands: 2	
			Minor Positive Effect on Water Quality and Wetlands: 1	
			No effect on Water Quality/Wetlands: 0	
			Minor Negative Effect on Water Quality and Wetlands: -1	
			Moderate Negative Effect on Water Quality and Wetlands: -2	

TEC Category	TEC Subcategory	Data Used	Scoring Criteria	Metropolitan Transportation Plan Regional Goal
			Significant Negative Effect on Water Quality and Wetlands: -3	
Environmental Effects Land Use and Economic Development	Historic and cultural resource effects	Historical data, Travel and Tourism data	Significant Positive Effect on Historical and Cultural Areas: 3	Minimize and mitigate the impacts of the transportation system on the environment, including air quality, water quality, wildlife, and climate change—Ensure that the transportation network supports economic development and accommodates future economic growth
			Moderate Positive Effect on Historical and Cultural Areas: 2	
			Minor Positive Effect on Historical and Cultural Areas: 1	
			No Effect on Historical and Cultural Areas: 0	
			Minor Negative Effect on Historical and Cultural Areas: -1	
			Moderate Negative Effect on Historical and Cultural Areas: -2	
			Significant Negative Effect on Historical and Cultural Areas: -3	
Environmental Effects	Effect on wildlife and endangered species	Endangered Species Presence, Conservation Land Data	Significant Positive Effect on Wildlife Habitat: 3	Minimize and mitigate the impacts of the transportation system on the environment, including air quality, water quality, wildlife, and climate change
			Moderate Positive Effect on Wildlife Habitat: 2	
			Minor Positive Effect on Wildlife Habitat: 1	
			No Effect on Wildlife Habitat: 0	
			Minor Negative Effect on Wildlife Habitat: -1	
			Moderate Negative Effect on Wildlife Habitat: -2	
Significant Negative Effect on Wildlife Habitat: -3				
Transportation Equity	Transportation Equity Bonus Score	Regional Equity Vulnerability Index from the Greater Lowell Vision Zero Plan	Benefits a High Regional Equity Priority Community: 2	Provide fair and equitable transportation access and service quality for all communities
			Benefits a Regional Equity Priority Community: 1	
			No Benefits to a Regional Equity Priority Community: 0	

Responses to Public Comments Received

The MPO received one comment divided into four sections from a member of the public regarding the proposed changes. The comment is listed below with responses from MPO staff.

Comment: Thank you for the opportunity to comment on the Transportation Evaluation Criteria [TEC]. I believe that the increased emphasis on safety and the Equity Priority Communities is both appropriate and welcome. However, I do have concerns about the details of implementation, specifically:

- 1) **Comment:** I am concerned that the Equity Bonus Scores are constrained by distance (no more than one-quarter mile from an Equity Priority Community). Census data give us data on where people live, but not what their transportation needs are. An investment at a destination may be more useful to members of the community than an improvement physically within the community. (As an example, think of a project that brings better access to a major grocery store for a community in a food desert.) Similarly, improvements within an Equity Priority Community may not bring benefits to the current members of that community (think gentrification).
 - a. **Response:** Thank you for your thoughtful feedback. In response to this comment, MPO staff revised the methodology for determining whether a project benefits a Regional Equity Priority Community (REPC). While proximity remains a key factor, projects located beyond a quarter mile from an REPC may still receive bonus points if they provide meaningful benefits to the REPC. Staff will evaluate these projects based on factors such as improved access to jobs, education, healthcare, childcare, grocery stores, and recreation; enhanced mobility and transit connections; support for local businesses; and reductions in noise, air pollution, and traffic congestion.
- 2) **Comment:** I am also concerned that the magnitude of the benefits necessary to receive the Equity Bonus Score is not specified. For example, if an arterial street within an Equity Priority Community is improved and there are small improvements within the community, but most of the benefits are for people driving through the community, should that project be eligible for bonus points? Much care should be taken in the application of the Equity Bonus Scores, and more specific guidelines as to when they should be applied is appropriate.
 - a. **Response:** We appreciate this important observation. The MPO's revised guidelines clarify that a project's location within an REPC does not automatically guarantee the Equity Bonus Score, nor does being outside the community

disqualify the project. MPO staff will evaluate projects holistically, considering the direct and measurable benefits provided to community residents. For example, a highway improvement that primarily benefits through-traffic will not qualify for bonus points. However, if the project includes elements that reduce noise or air pollution for nearby residents, such as sound barriers, it may be eligible. Additionally, projects located outside the quarter-mile boundary may still receive bonus points if they improve access to essential services, enhance mobility and transit connections, or reduce environmental impacts for REPC residents. This ensures that projects awarded bonus points provide clear, tangible benefits aligned with community needs

- 3) **Comment:** I also am concerned that the ‘effect on bicycle safety’ and the ‘effect on pedestrian safety’ subcategories appear to rely on data such as crash data, crash rates, and crash cluster data. Bicycle and pedestrian accidents are relatively rare, and the probability of the next cyclist or pedestrian injury occurring in a location where a recent injury occurred is relatively low. I would prefer that NMCOG establish a safety ranking methodology to identify the most hazardous intersections and streets for pedestrians and cyclists so that those may be improved before the next injury.
 - a. **Response:** Thank you for raising this concern. To clarify, the bicycle and pedestrian safety subcategories do not rely solely on crash data. Instead, these criteria evaluate the design and characteristics of proposed infrastructure, prioritizing projects that follow best practices for improving safety. Projects that include protected and physically separated spaces for bicyclists and pedestrians receive higher scores, as these features have been shown to significantly reduce injury risk. Additionally, we appreciate the suggestion regarding a safety ranking methodology. We are pleased to note that the MPO has already developed such a methodology in the Greater Lowell Vision Zero Plan, which identifies high-risk intersections and road segments through the High-Injury Network and High-Risk Network maps. The proposed changes to the TEC scoring include subcategories for improving safety along each of these networks.
- 4) **Comment:** We must recognize that a high percentage of people living within the Equity Priority Communities are not able to drive or do not have access to an automobile. For those persons, street and highway infrastructure have limited value unless they are supported by increased investment in transit operations. Because transit operations and infrastructure projects are funded by separate funding, few transit operation projects are evaluated by the TEC process. This creates a modal bias toward auto-centric

transportation that NMCOG and the funding agencies need to be aware of and actively work to eliminate.

- a. **Response:** Thank you for highlighting this important issue. We recognize the historical bias toward auto-centric transportation in Greater Lowell and the need to ensure that transportation investments serve individuals who rely on public transit and active transportation modes. While transit operations are outside the scope of the TIP highway funding, the MPO has incorporated this feedback into the revised Regional Equity Priority Community guidelines. Specifically, when evaluating whether a project benefits an Equity Priority Community, staff will consider whether it enhances connections to transit networks. Transit in Greater Lowell primarily serves community members of REPCs so a transportation project that lies greater than a ¼ mile distance away from a REPC may still receive bonus points if the project improves transit access from an REPC to the proposed project area.

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