OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

OLD COLONY TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

DRAFT TRANSPORTATION EVALUATION CRITERIA (TEC)

DECEMBER 2023

PREPARED BY: OLD COLONY PLANNING COUNCIL 70 SCHOOL STREET BROCKTON, MASSACHUSETTS UNDER MASSDOT CONTRACT 123116

Introduction

Effective with the development of the Old Colony FFY 2025 – 2029 Transportation Improvement Program (TIP), Old Colony Planning Council has developed an updated set of Transportation Evaluation Criteria (TEC), and scoring system to be used in the process of developing the Old Colony Metropolitan Planning Organization's Transportation Improvement Program (TIP).

During TIP development, all projects that have been approved by the MassDOT Project Review Committee (PRC) are evaluated using these Transportation Evaluation Criteria. The MPO staff uses the Transportation Evaluation Criteria results, along with project readiness information, available funding, and other pertinent information to develop a Draft TIP. The Old Colony MPO releases the Draft TIP for a 21-Day Public Review and Comment Period. Following the 21-Day Public Review and Comment Period, the Old Colony MPO considers the comments received, and then endorses the TIP if there are no significant changes.

The proposed updated Transportation Evaluation Criteria replaces an 18-point system used by Old Colony Planning Council in recent years with a 100-point system that scores projects by specific defined criteria in the following categories:

- System Preservation 30 Points
- Safety 30 Points
- Mobility 10 Points
- Economic Impact 10 Points
- Environmental and Health Impact 10 Points
- Community Support and Consistency with Policy 10 Points

The updated Transportation Evaluation Criteria is designed to be clearly designed and fully transparent, considering all modes of transportation and users in transportation projects. They also take into consideration recent initiatives and policies, such as Complete Streets and MPO adopted Performance Targets.

Old Colony TIP Transportation Evaluation Criteria (TC)

Table 1 outlines how PRC approved projects are scored in six categories.

Table 1: Outline of Old Colony TIP Transportation Evaluation Criteria Scoring Categories and Potential Points

| Category | Evaluation Criterion | Total Potential Points |
|-------------------------|--|---------------------------|
| System Preservation / | Primary Asset Condition | 30 |
| State of Good Repair | Enhancements to Secondary Assets | |
| | Use of Modern Technology to Improve Efficiency | |
| | Incorporates Transit Elements into Design | |
| Safety | Motorist crash history and anticipated improvement | 30 |
| | Non-Motorist crash history and anticipated improvement | |
| | Proven Safety Measures | |
| Mobility | Existing Motorist Congestion | 10 |
| | Effect on Mobility and Accommodation for Non-Motorists | |
| | Effect on System Connectivity and Access | |
| Economic Impact | Access to or within a regionally designated economic development area | 10 |
| | Access to or within a business district | |
| | Connectivity between housing, employment, and commerce | |
| | Effect on freight network | |
| Environmental Effect | Effect on Wetlands, Wildlife or Other Natural Resources | 10 |
| | Protects or Enhances Water Quality by Improving Stormwater Management | |
| | Effect on air quality and GHG emissions | |
| | Improves Coastal Resiliency | |
| | Enhances local open space | |
| | Incorporates Healthy Transportation Options | |
| Community Support and | Project has Community Support, Identified in Local Plans, and an Active Design | 10 |
| Consistency with Policy | Project Identified in Regional Plan and/or Consistent with Regional Policy | |
| | Consistent with PM1, PM2, PM3, and/or TAM | |
| | Project Supports Federal and State Policy | |
| | Equity | |
| | Total Possible Score | 100 |

System preservation and Modernization Scoring

Table 2 outlines how projects are scored based on system preservation and modernization criteria.

Table 2: System Preservation and Modernization Criteria and Potential Scoring

| System Preservation Criterion | Factor | Points |
|---|--|--------|
| Primary asset condition / effect on | Poor or failing / substantial improvement | 12 |
| | Fair / moderate improvement | 8 |
| condition | Good / minor improvement | 4 |
| | Excellent / no improvement | 0 |
| | Potential Primary Asset Points | 12 |
| | Poor or failing / substantial improvement | 8 |
| Enhancements to Secondary Assets | Fair / moderate improvement | 5 |
| (Sidewalks, etc.) | Good / minor improvement | 2 |
| | Excellent / no improvement | 0 |
| | Potential Secondary Asset Points | 8 |
| | Use of innovative technology and/or | - |
| | incorporation of traffic counting technology | 5 |
| Use of modern technology to improve | Improvement in technology to current best | 2 |
| efficiency | practices | |
| | Maintain/repair existing technology | 1 |
| | Not applicable | 0 |
| | Potential Modern Technology Points | 5 |
| | Incorporates significant improvements to transit | 5 |
| | infrastructure, | |
| Incorporatos transit alamants into | accessibility and/or operational | |
| Incorporates transit elements into design | Incorporates minor transit improvements | 3 |
| uesign | Improves operations on a transit route | 1 |
| | No related improvements to transit | 0 |
| | access/operations are expected | 0 |
| | Potential Transit Elements Points | 5 |
| Total Potential | System Preservation and Modernization Scoring | 30 |

Safety Scoring

Table 3 outlines how projects are scored based on safety criteria.

Table 3: Safety Criteria and Potential Scoring

| Safety Criterion | Factor | Points |
|--|---|--------|
| | HSIP Eligible Location | 10 |
| | Location is Reginal Top 100 High Crash Location or engaged in a safety plan | 7 |
| | and project will improve motorist safety | / |
| | Demonstrated safety problem and safety improvement is anticipated with | 4 |
| Motorist crash history and anticipated | project | 4 |
| safety impact | No demonstrated safety problem, but safety improvement is anticipated with | 3 |
| | project | 5 |
| | No Safety Improvement Anticipated | 0 |
| | Project may adversely effect safety | -1 |
| | Potential Motorist Safety Points | 10 |
| | HSIP Bicycle or Pedestrian Cluster | 10 |
| | Location is Reginal Top 100 High Crash Location or engaged in a safety plan | 7 |
| | and project will improve non-motorist safety | / |
| Non-Motorist crash history and | Demonstrated safety problem and non-motorist safety improvement is | 4 |
| anticipated safety impact | anticipated with | - |
| anticipated survey impact | No demonstrated crash problem, but project is anticipated to | 3 |
| | improve non-motorist safety | 3 |
| | No safety improvement anticipated | 0 |
| | The project many adversely affect non-motorist safety | -1 |
| | Potential Non-Motorist Safety Points | 10 |
| | Characteristics of the location make it a primary risk location and the project | |
| | will implement a proven safety countermeasure | 10 |
| | Characteristics of the location make it a secondary risk location and the | |
| | project will implement a proven safety countermeasure | |
| | While not a primary or secondary risk location, the location provides access | |
| Systematic Safety Improvements/Proven | to vulnerable roadway users, such as schools, transit stops and senior | _ |
| Safety Countermeasures | destinations and the project will implement a proven safety countermeasure | 7 |
| | | |
| | No safety improvement anticipated | |
| | While not a primary or secondary risk location, the location provides access | |
| | to vulnerable roadway users, such as schools, transit stops and senior | 4 |
| | destinations and the project will implement a proven safety countermeasure | |
| | No safety improvement anticipated | 0 |
| | Potential Systematic Safety Improvement Points | 10 |
| | Total Potential Safety Scoring | 30 |

Mobility Scoring

Table 4 outlines how projects are scored based on mobility criteria.

Table 4: Mobility Criteria and Potential Scoring

| Mobility Criterion | Factor | Points |
|--|--|--------|
| Existing motorist congestion / | Location identified in the CMP network/ substantial improvement | 4 |
| | Significant existing / substantial improvement | 3 |
| | Significant existing / moderate or minor improvement | 2 |
| effect on motorist congestion | Minimal existing / minor improvement | 1 |
| | No Change | 0 |
| | Negative effect | -1 |
| Potential Motorist Congestion Points | | 4 |
| | Substantial improvement | 3 |
| Effect on mobility / | Moderate improvement | 2 |
| accommodation of non- | Minimal improvement | 1 |
| motorists | No effect for non-motorists | 0 |
| | Negative effect on mobility / accommodation | -1 |
| Potential Non-Motorist Mobility Points | | 3 |
| Effect on connectivity / access | Substantial improvement to connectivity through the corridor | 3 |
| (emphasis placed on key | Moderate improvement to connectivity | 2 |
| emergency and evacuation reoutes) | W Minimal effect on connectivity | 1 |
| | No effect on connectivity | 0 |
| | Negative effect on connectivity | -1 |
| | Potential Connectivity and Access Points | 3 |
| | Total Potential Mobility Scoring | 10 |

Economic Development Scoring

Table 5 outlines how projects are scored based on economic impact criteria.

Table 5: Economic Impact Criteria and Potential Scoring

| Economic Criterion | Factor | Points |
|--|---------------------------------------|--------|
| | Substantial improvement | 3 |
| Effect on access to or within a | Moderate improvement | 2 |
| regionally-designated | Minor improvement | 1 |
| economic development area | No effect | 0 |
| | Negative effect | -1 |
| | Potential Points | 3 |
| Effect on access to or within a | Substantial or moderate improvement | 2 |
| | Minor improvement | 1 |
| locally-designated business district | No effect | 0 |
| district | Negative effect | -1 |
| | Potential Points | 2 |
| Effect on connections between | Substantial improvement | 3 |
| | Moderate improvement | 2 |
| housing, job, cultural centers, and essential services within | Minor improvement | 1 |
| and beyond the region | No effect | 0 |
| | Negative effect | -1 |
| | Potential Points | 3 |
| Effect on the ability of the | Substantial or moderate improvement | 2 |
| region's freight network to | Minor improvement | 1 |
| handle current and future | No effect | 0 |
| freight needs | Negative effect | -1 |
| | Potential Points | 2 |
| То | tal Potential Economic Impact Scoring | 10 |

Environmental and Health Scoring

Table 6 outlines how projects are scored based on environmental and community health impact criteria.

Table 6: Environmental and Community Health Impact Criteria and Potential Scoring

| Environmental and Health Criterion | Factor | Points |
|---|---|---------|
| | Anticipated improvement | 2 |
| Effect on wetlands, wildlife, or | Minor contribution to preservation | 1 |
| other resource protection | No anticipated impact or negative impacts adequately mitigated | 0 |
| | Negative impact | -1 |
| | Potential Effect on Natural Resources Points | 2 |
| Effect on water quality through | Anticipated improvement in stormwater management and treatment | 2 |
| stormwater management and | Anticipated improvement in stormwater management | 1 |
| treatment with an emphasis on | No anticipated impact or negative impacts adequately mitigated | 0 |
| for nitrogen | Negative impact | -1 |
| | Potential Effect on Water Quality Points | 2 |
| | Significant, quantifiable decrease in GHG anticipated | 2 |
| Effect on air quality / GHG | Minor, quantifiable or qualitative decrease in GHG anticipated | 1 |
| emission | No effect on GHG anticipated | 0 |
| | Anticipated increase in GHG | -1 |
| | Potential Effect on Air Quality Points | 2 |
| | Project vulnerable area with resilient design | 2 |
| Coastal Resiliency / Sea Level | Project is not in a vulnerable area but includes with resilient design elements | 1 |
| Rise Vulnerability / Low Lying Roads | Project not in vulnerable area and not special consideration given to resilient design Project in a vulnerable area and is not a resilient design | 0 -1 |
| Potential Effect on Coastal Resiliency Points | | 2 |
| | Anticipated improvement | 1 |
| Effect on cultural resources or | No anticipated impact or negative impacts adequately mitigated | 0 |
| open space | Negative impact | -1 |
| Potential Effect on Open Space Points | | 1 |
| | Increase in healthy transportation options | 1 |
| Healthy Transportation Options | No anticipated impact or negative impacts adequately mitigated | 0 |
| , | Negative impact | -1 |
| Potential Effect on Healthy Transportation Options Points | | 1 |
| | Total Potential Environmental and Health Scoring | 10 |

Policy and Support Scoring

Table 7 outlines how projects are scored based on policy and support criteria.

Table 7: Policy and Support Criteria and Potential Scoring

| Policy and Support Criterion | Factor | Points |
|--|---|--------|
| | Stated Support for Project by Officials and Project Has Active Design | 3 |
| | Stated Support but No Active Design | 2 |
| Local Plans / Community Support | Project identified in existing local plan | 1 |
| | Neutral | 0 |
| | Project has community opposition | -1 |
| | Potential Local Sand Community Support Points | 3 |
| | Project specifically identified in Regional Plan | 2 |
| Project identified in Regional Plan and/or | Project Supports Regional Plan Policies, including PM1, PM2, PM3, an | 1 |
| Consistent with Regional Policy | Neutral | 0 |
| | Inconsistent with Regional Plan and Policies | -1 |
| | Potential Regional Support and Consistency Points | 2 |
| Droject supports Federal or State (including | Project specifically identified in a existing Federal or State Plan | 2 |
| Project supports Federal or State (including MassDOT) policies and goals not accounted | Consistent with Federal or State Policies or Principles | 1 |
| for in other criteria | Neutral | 0 |
| for in other citteria | Inconsistent with Federal or State Policies or Principles | -1 |
| | Potential State and Federal Consistency Points | 2 |
| | Project is located within an Environmental Justice area and will | |
| | have a positive impact on population | 3 |
| | Project is of a regional significance that will serve individuals and | |
| Equity | improve access for Environmental Justice populations | 1 |
| | Project is isolated and not located within or adjacent to an | |
| | Environmental Justice area | 0 |
| | Project in a vulnerable area and is not a resilient design | -1 |
| | Potential Equity and Environmental Justice Points | 3 |
| | Total Potential Policy and Support Scoring | 10 |

Project Evaluation Schedule

Table 8 outlines the schedule for evaluating and scoring projects. All projects are initially scored in the project initiation process following approval by MassDOT's Project Review Committee (PRC). However, as project design and other factors affecting project evaluation may change from the time a project is initiated, projects are subject to re-evaluation and updated scoring and circumstance necessitates.

| Initial Evaluation | Following PRC Approval |
|--------------------|---|
| When Projects May | • New Project Details Known (Functional Design Report / Pre-25% |
| Be Re-Evaluated | Design) |
| | Significant Change in Scope / Design has Occurred |
| | Significant Change in Community Support / Active Design has |
| | Occurred |
| | Significant Change in Existing conditions has Occurred |
| | Project Has Been Inactive for 3 TIP Development Cycles |