

Initial Draft Programming Policies to Address Transportation Improvement Program (TIP) Project Cost Increases

This memo outlines a three-pronged approach to addressing the issue of cost increases for those projects funded using the Boston Region Metropolitan Planning Organization's (MPO) Regional Target funds. These categories of policy interventions are based on key takeaways from conversations had at the first three meetings of the TIP Project Cost Ad Hoc Committee on June 3, June 17, and July 8, 2021.

When reviewing this memo, committee members should consider the extent to which the recommendations below represent the preferred course of action for addressing project cost increases. Committee members should also consider whether or not additional policy interventions should be explored in advance of the drafting of a more formal policy recommendation for presentation to the full MPO board. These questions will be the basis of discussion at the July 29, 2021 committee meeting.

Intervention #1: Require More Advanced Design Status at Project Programming

Current Approach

Projects may be selected for funding by the MPO at any stage of design. This means a significant number of projects are first placed on the TIP having only been approved by the Massachusetts Department of Transportation's (MassDOT) Project Review Committee (PRC), the earliest possible stage at which a project may be selected for funding.

Resulting Issue

In the sample of 50 projects selected for funding by the MPO since federal fiscal year (FFY) 2016, projects saw the largest cost increases when advancing from PRC approval to 25 percent design, with a median cost increase at this stage of 28 percent. While costs still tend to increase later in project development, these increases are more modest. The median increase when advancing from 25 percent design to 75 percent design is 15 percent, and the median increase from 75 percent design to 100 percent design is nine percent. The earlier in design a project is selected for funding, the greater the uncertainty with respect to its final cost.

Possible Actions

1. Require projects to have an approved 25 percent design prior to being programmed in the TIP.
2. Require projects to have an approved pre-25 percent project scope, including the resulting updated cost estimate, prior to being programmed in the TIP.
3. Set another threshold for project programming, such as having a 25 percent design submission (regardless of approval status) or having completed a design public hearing (this takes place after the approval of 25 percent design plans).

Recommended Policy

The MPO should set a higher threshold than PRC approval for projects to be selected for TIP funding. Committee members should have further discussion before a recommendation is made on a programming threshold. Coupled with this higher programming threshold, the MPO could formalize a preliminary project evaluation system that would offer proponents guidance on how their project would score using the MPO's criteria before proponents invest local resources to reach 25 percent design (or some other threshold).

Questions for Consideration

1. What is the appropriate balance between flexibility and certainty in the project selection process?
2. What, if anything, should be done for proponents that need additional support to reach 25 percent design?

Intervention #2: Create Additional Touch Points Between Project Proponents, MPO Staff, the MPO Board, and MassDOT Staff

Current Approach

Interactions between project proponents and the MPO are largely focused on the development of each year's new TIP. During the early stages of TIP development in the fall and winter, the most engaged proponents tend to be those who have projects being scored and considered for funding. Proponents of projects that have already been programmed in the TIP tend to interact with MPO staff and the MPO board the most when a concern has arisen about their projects' cost or schedule. Project proponents are not required to attend MPO meetings at any point during their projects' life cycle in the TIP. MPO staff's interactions with MassDOT Highway District staff are mostly concentrated during early TIP development in the fall when MPO staff are sourcing new projects to be considered for funding.

Resulting Issues

In the absence of regular, established check-in points between all parties, project-related issues often only rise to the surface at MassDOT's annual TIP project readiness meetings in February. While this information is useful, the timing allows the MPO only six or seven weeks to find solutions for any project cost or schedule issues that come to light before the new TIP must be drafted. Given the limited amount of time at this stage, it is difficult for all parties to exchange high-quality information so that informed programming decisions can be made for the new TIP. The lack of ongoing project monitoring also means that MPO staff and the MPO board may not know when a project's scope has changed.

Possible Actions

There are numerous possible avenues for increasing regular engagement between all TIP stakeholders, each with their own merits. Rather than detail all possible options here, a recommendation is offered below based on the existing capacity of the MPO staff and previously expressed needs of the MPO board.

Recommended Policy

1. Additional check-in points should be established between MPO staff and project proponents, perhaps biannually.
2. Project proponents should include MPO staff on design submissions to MassDOT.
3. More robust check-in points should be established between MPO staff and MassDOT Highway District staff, allowing for proactive communication about current and prospective TIP projects.
4. Project proponents should present detailed information to the MPO upon a project cost or scope change beyond a specified threshold.
5. MPO staff should create additional materials detailing the TIP process for proponents, including outlining clear expectations for proponents should their project be selected for funding by the MPO.

Questions for Consideration

1. Should certain proponent actions be required? If so, how should this be enforced?
2. Do MPO members desire more regular project status updates? If so, what is the best format for this information?

Intervention #3: Establish a Policy for Rescoring Projects When Costs or Scopes Change Beyond a Specified Threshold

Current Approach

Projects are only scored by the MPO when they are under consideration for new funding. No action is taken to reconsider projects when they experience a cost or scope change of any magnitude.

Resulting Issues

Without a formal mechanism to reconsider projects that have significant cost or scope changes, the MPO has historically maintained its funding commitments to all programmed projects. This includes covering any cost increases and accommodating scope or schedule changes without a great degree of scrutiny. Funding cost increases across the board limits the MPO's financial capacity to program new projects. In the absence of a formal, clear, and transparent policy, any enforcement action taken on a project for a cost increase could be considered arbitrary or unfair.

Possible Actions

As with Intervention #2 above, there are numerous possible approaches to project rescoring. The possible components of a policy are outlined below, but more discussion is needed by the committee before a specific recommendation can be advanced.

Recommended Policy

1. Set a cost increase threshold, in dollars or percentage of cost, at which projects are rescored.

2. Determine how a cost-effectiveness measure should be used as a part of the scoring and rescoring process for two purposes:
 - a. As a tool to compare relative value across projects, such as in the Atlanta-Region Transit Link Authority's four-quadrant approach
 - b. As a tool to compare the relative value of a project to itself prior to a cost change
3. If using cost-effectiveness scoring, determine the units of this measure:
 - a. Cost/point
 - b. Cost/lane mile
 - c. Cost/user
 - d. Other units
4. Determine if projects above a certain score are exempt from being rescored.
5. Determine when rescoring happens:
 - a. Once/year simultaneous rescoring for all projects with cost increases of a certain scale
 - b. Rolling rescoring any time a project's cost increases above a certain threshold
6. Determine if any qualitative assessments are made of projects as a part of the rescoring process.
7. Determine the result of a rescoring process that would trigger further action by the MPO board.
8. Outline the range of desired actions for the MPO board to take if and when action is warranted.

Questions for Consideration

Each component of the recommended policy above contains questions that would need to be answered in the drafting of an approach to project rescoring.