

Information Item

DATE: October 8, 2015
TO: TAC Funding and Programming Committee
PREPARED BY: Carl Ohrn, Planning Analyst (651-602-1719)
SUBJECT: Proposed Changes to the Scope Change Review Process and Cost Effectiveness Criteria in the Regional Solicitation Increases

The attached memos address the work of the MnDOT/Metro Council Scope Change Work Group. Given the complexity of the issue and the potentially long agenda items at the Funding & Programming Committee, this is brought as an information item with the intent of bringing it back as an action item in the near future.



Memorandum

DATE: October 8, 2015

TO: Funding and Programming Committee

FROM: MnDOT and Metro Council Scope Change Work Group

SUBJECT: Proposed Changes to the Scope Change Review Process and Cost Effectiveness Criteria in the Regional Solicitation Increases

There are four memos attached. Two of these have been developed by a MnDOT/Metro Council Scope Change Work Group.

The other two memos are copies of the existing scope change process and the process to evaluate scope changes. These have not been changed.

The critical effort of the Work Group was to develop some ideas on how the scope change review process could be improved. During the same time, the MC staff were working on refining the Regional Solicitation package for the 2016 Solicitation, the cost effectiveness sub-criteria were identified as generating some comments. Since determining the cost effectiveness score of a project requesting a scope change generated various problems, the Work Group decided it would also weigh in on this issue.

The Work Group met with Steve Albrecht and Tim Mayasich on September 2, 2015 to review draft material. Based on that meeting, it was agreed the modified memos attached should be taken to the F&PC to begin discussion of what changes might be pursued and then moved through the TAC/TAB approval process.

Also attached are the adopted policies concerning the scope changes for the committees' reference.

1. Regional Solicitation Projects: Scope change Consultation Process, February 6, 2015.
2. Process to evaluate scope change requests for regionally-selected projects, adopted by the TAB on March 16, 2011.

The intent of the Work Group is to incorporate the scope change process and all of the relevant material into one document. This work would be brought to the F&PC before it moved to the TAC if the F&PC supports the changes as written or as modified.



Memorandum

DATE: July 29, 2015

TO: Steve Albrecht, TAC Chair
Tim Mayasich, F&P Chair

FROM: MnDOT/MC Scope Change Working Group

SUBJECT: Proposed changes to the Scope Change Review Process

Background

The TAB, with the help of the TAC, is responsible for selecting projects for federal funding. In addition, TAC and TAB are responsible for ensuring these funds are used as intended and these projects deliver the benefits purported in the applications. The scope change review is a key element of this federal funds management process.

In many cases the scope change request comes to the F&PC very late in the project development process, resulting in the need for immediate decisions. Staff at times are put in the awkward position of recommending denial. In most cases the scope changes are approved even though there are debates about the merits.

A group of MnDOT and Council staff (Pat Bursaw, Tom Styrbicki, Paul Czech, Colleen Brown, Molly McCartney, Elisa Bottas, Mark Filipi, Joe Barbeau, Carl Ohrn) have met three times over the past four months to discuss possible changes to how staff and the committees address scope change requests. The work group believes there are ways to improve the process and is bringing the ideas described below to you to seek your help in refining them. If you agree with these ideas, we can move them through the F&PC and TAC to TAB. Of course, you may have ideas to modify these suggestions or you may disagree with our approach. We would appreciate any direction you can give us on how to improve the process and want to work with you to develop ideas to take to F&PC and TAC.

In review of scope changes, there are two objectives: 1) ensuring the region is receiving adequate comparable benefits (to the originally applied-for project's scope) from the federal money allocated to the project through the regional solicitation, and 2) maintaining the fairness of the process by showing that the changed project would have competed and scored comparable to other projects evaluated to be allocated federal funds.

The first objective is the more important objective and has proven to be easier to determine. The second, while more quantified, is more difficult, especially given that many of the competing projects also change during their project development processes. The cost effectiveness score is a particularly difficult aspect of this process, given the moving target of project costs of the subject project and the other projects that it needs to be compared to.

The work group has developed a number of suggestions that may help achieve both of these objectives. The first suggestion is to bring the scope change request before the F&PC much earlier in the project development process, providing the opportunity for-and encouraging-dialogue between the applicant and F&PC members. This should help avoid the need for last-minute decisions on the part of the F&PC.

1. Early Review of Scope Change Requests by the F&PC

Given that regional solicitation projects will not be implemented for four to five years after selection, the projects are most likely in the “sketch” planning stage when submitted in the Regional Solicitation versus preliminary or final design and therefore some scope changes should be expected. Conversely, four to five years for project development should be adequate time to complete the project development process and request needed scope changes from the F&PC without being within months of the program year deadline.

As a first step to help reduce the need for a scope change late in the process earlier this year, the TAB Coordinator, working with MnDOT State Aid staff, have modified the letter notifying applicants of project selection resulting from the 2014 Solicitation, to alert them to the need to contact State Aid early in the project development process and to be aware of the schedule to meet the program year.

The on-going work of State Aid with applicants should also be recognized as an effective way to expedite project implementation and helps to reduce the frequency of scope change requests. State Aid now requires a “Kick-off” meeting with each project sponsor. The various requirements, such as program year deadlines, and procedures are provided at that time. Many scope change requests are resolved through the consultation process between MnDOT, MC and TAB. Minor changes are approved through this process. State Aid also alerts applicants to project scope changes that would be difficult for the F&PC to accept or to accept without requiring a reduction in the allocated federal funds.

Building on these efforts to alert applicants of the requirements of meeting the program year schedule and to anticipate scope change needs, State Aid will notify applicants if a scope change is needed at the conclusion of the local input process. This is the key change being proposed to the scope change review process being followed today. Applicants would be alerted by State Aid that once the public input process has been completed, if a possible scope change appears needed, the project manager/unit of government should schedule an informational presentation to the F&PC informing the committee of the potential of scope change needs. The intent of this meeting is to open a dialogue between the applicant and the F&PC members. The presentation at F&PC would include the main elements of a formal scope change request with needed materials provided by Council staff, but without a staff review or recommendation on the request.

This dialogue is intended to:

- Identify the problems that have occurred to require a scope change.
- Clarify how the scope change modifies the benefits of the original project.
- Identify what criteria were important in the selection of the project and how the performance/scores of the project relative to these criteria might change.
- Provide F&PC members the opportunity to a) express opinions and provide advice concerning the changes to the project and b) express their support or lack thereof for the changes.
- Provide the applicant a schedule for the formal submittal that allows adequate time for the F&PC to review the final request.

The intent of this review and dialogue is to facilitate the understanding and approval of scope changes that address current issues but deliver comparable benefits to the region reflective of the original project and to ensure fairness to all applicants in the regional solicitation. At this time, the work group is not recommending this informal presentation be a requirement.

2. Additions and Clarification to the Scope Change Consultation Process and Process to Evaluate Scope Change Requests.

The TAB has adopted two separate documents that discuss scope changes, the review, and submittals. These two documents are the Scope Change Consultation Process and the Scope Change Evaluation Process. Possible additions and clarifications to the process are discussed below. The work group recommended the two documents-and any changes that are eventually approved - be incorporated into one document.

2a. Optional actions available to F&PC/TAC/TAB when reviewing a scope change request.

The modifications to the scope change procedures should identify the optional actions available to F&PC/TAC/TAB when considering a scope change. Including these options should help the applicant and the F&PC/TAC/TAB to better understand the process. These options on a typical scope change request include:

- Grant the scope change as requested.
- Grant the request requiring specific modifications.
- Grant the request but with an adjustment to the federal funds the applicant will receive. (In no case will the federal funds be increased).
- Deny the request.

2b. Optional actions available to the applicant requesting a scope change.

The modified scope change procedures should also include the optional actions available to the applicant in response to the F&PC/TAC/TAB actions. Articulating these options should also help the applicant and the F&PC/TAC/TAB to better understand the process.

- Accept the F&PC's recommendation to be brought forth to TAC/TAB.
- Accept part of F&PC's recommendation and challenge part of it at TAC (e.g., accept the scope change and challenge a funds reduction).

- Withdraw requested scope change and submit a modified request in response to F&PC concerns.
- Withdraw the requested scope change and submit the original project documentation to State Aid.
- Withdraw the project.
- Appear before the TAC/TAB to support or challenge the recommended F&PC action.

2c. In requesting a scope change, the project applicant will provide a comparison of the benefits anticipated by the original and modified project scopes and the actual and estimated scoring of the original and the revised project scopes, respectively. These two closely related topics are the subject of the F&PC deliberations. The TAB allocated federal funds to the project with the understanding that certain benefits would result from the implementation of that project. The F&PC is called on to determine whether these benefits in large part will be provided by the modified project. There are a number of critical project elements that, if changed, have the potential to negatively affect the potential benefits produced by a project. These are listed below and need to be addressed in the scope change request if applicable.

- Length of trail, path, road or transit line
- Capacity/use of trail, path, road or transit service or park-and-ride lot or garage
- Design features such as width of path, trail
- Connections to major facilities for all modes
- Safety improvements and benefits for all modes
- Multimodal incentives

The applicant will recalculate all criteria of the original applications using the characteristics of the modified project. Calculations must be displayed to allow a comparison.

Given the importance of these project elements, any significant change to one or more of these elements would be cause for denying a scope change. For example, if a trail, road or transit line were to be reduced by 10% or more and eliminate a connection to a key destination, this may be cause to deny the scope change.

A detailed cost estimate form must be presented for the modified project and all differences between the original project costs and the modified project explained.

3, Additional Issues and Concerns

The MC/MnDOT Scope Change Work Group identified a number of issues or concerns that have been raised. These are listed below. As the conversation on scope changes and the revised solicitation package move forward, the following “solutions” or recommendations should be discussed.

- A. Does a staff recommendation to approve or deny a scope change need to be added to the committee action? There doesn't seem to be a pressing need to have a staff recommendation in the scope change review. There is no written policy that says staff must make a recommendation. Staff could list the specific optional actions available to

the F&PC/TAC/TAB. The need for or desirability of inclusion of a staff recommendation should be discussed by the F&PC.

- B. If a project element is eliminated or shortened, how should the federal money be adjusted? Should it always be proportional? Should it reflect the true cost of what will be built? Should it be tied to the benefits of what is built if this is possible?

There are a number of references to this topic in the discussion of modifying the scope change process and addressing project cost increases. The F&PC should discuss these options and if a consensus is reached, a recommendation(s) should be forwarded to the TAC.

- C. Scope change requests after a project contract has been let or implementation has begun.

In some instances a project sponsor has requested State Aid to approve changes to a project after the project construction contracts have been executed. There are no adopted TAC/TAB procedures to cover such changes. The TAB expects the project contract to reflect the funded project modified by scope changes, if required and the project sponsor will implement that project.

Cost Effectiveness Criteria Measurement Related to Project Selection and the Scope Change Process

Concern has been raised in our review of the Regional Solicitation with cost effectiveness criteria measurements. There is also a concern when we process scope change requests and attempt to determine whether a modified project would have scored enough to be funded, the cost effectiveness criteria become problematic. Two scope change issues have surfaced: a) the project cost increases for the project being considered and the other projects selected in the same solicitation and, while there may be good cost data on the project requesting the change, costs of the other projects are not consistently available for comparisons and b) the potential for a scope change to be denied based on the addition of locally-funded ancillary elements such as utility work which are included and affect the cost effectiveness score. The following changes are being recommended by the Scope Change Work Group.

1. Measure cost effectiveness only on the project elements and costs eligible for federal funding.

The solicitation projects include elements both eligible and non-eligible for federal funding. The cost effectiveness calculation uses the total project cost as the basis for the cost effectiveness calculation, which may include a significant level of non-eligible costs. In some cases, scope change requests involve non-eligible elements such as water or sewer lines in the right-of-way that are not necessarily part of the transportation scope of work.

If only the eligible elements of the project and the associated costs were the basis of the cost effectiveness measure, changes to the non-eligible and, therefore, non-funded project elements could be made during project development and not have to be analyzed from the cost effectiveness perspective.

The rationale for using only federal eligible elements and cost also benefit smaller agencies that are not as able to propose larger projects with large local contributions for non eligible elements.

2. Measure cost effectiveness based on the total score of the project.

Today there are cost effectiveness sub-criteria measures for safety, air quality, congestion reduction, etc. Another method, used for bridge projects in the solicitation, is to calculate the cost effectiveness given the total points the project received on all criteria. These points are then divided by the total project costs. This is more in line with the lower-cost/high-benefit policy in that it measures all aspects of the project against all costs.

3. Modify how cost effectiveness measures are addressed in the scope change analysis.

Inflation and changes in material costs can change the cost of a project a great deal over a short period of time. If the changes noted above are made, the analysis of cost effectiveness changes will be simplified as follows:

- Given the cost effectiveness would not include the non-eligible project elements and the associated cost, issues that have occurred in scope change requests related to these locally funded elements would not occur in the future.

- Assuming cost effectiveness would be calculated based on the total points granted to a project, changes to one or two criteria would not have a significant factor in determining the final score.

While it is difficult to compare all project costs, two methods are possible.

- Compare the modified project with the changed benefits to the other projects with the original cost estimate unless formal scope change and costs have been approved by staff or the TAC/TAB. While all projects may increase in cost, it is very difficult to know this at any one point in time but the applicant of the changed project has calculated the cost of the modified project.
- Use the new cost of the modified project and calculate a cost for all other similar projects from the same solicitation based on the Construction Cost Index. The original cost of all other projects in the same category would be increased based on the CCI report for Minnesota or the national calculated annual inflation rate for non-construction projects. This data is readily available and the calculations would be straight forward.

Regional Solicitation Projects: Scope Change Consultation Process
Federal Funding Reallocation Work Group: February 6, 2015
TAB Approval: March 18, 2015

Overview

Projects selected through the regional solicitation process have defined scopes, or descriptions of proposed improvements. The project scope is the basis to measure how well these projects address safety, congestion, air quality, and other criteria used in the evaluation. It is also used as the basis for authorizing federal funds for projects. The project scope is important because these projects were selected to receive federal transportation funds based on the benefits they provide.

From the Transportation Advisory Board (TAB) perspective, these projects were awarded federal funds because they were evaluated and provide the most benefit to the public. Projects are ranked by the cumulative score of many weighted criteria. Changes in the project's scope could affect a project's benefits, reducing its score and possibly affecting its rank among the scored projects. The TAB wants to ensure that the benefits from re-scoped projects are substantially the same as the original projects and justify using the federal funds that were awarded to the original projects. It is important to the TAB that any change in project scope does not substantially reduce a project's benefits and value to the public, especially if it would mean the revised project scope would not have scored as well as the original scope and may not have ranked high enough to be selected.

What is a scope change?

Projects submitted in the regional solicitation are usually conceptual in nature and are refined during design and environmental study. Therefore, a limited number of project scope change requests are likely to be necessary. The TAB adopted a policy in March 2011 on how to evaluate them.

A consultation process among the FHWA, MnDOT and the MPO can help determine whether a formal scope change and TIP amendment is needed or whether the modification is minor and can be implemented informally by MnDOT. The project description in the original application can serve as the project scope for the purpose of making this determination. For these purposes, a scope change is considered to be any revision that changes the physical characteristics of the project and has the potential to detract from the project's benefits.

There are three types of changes: those allowed with Metro State Aid or Metropolitan Council Grants Manager review and approval; project modifications allowed through an informal consultation process; and scope changes requiring approval.

1) Changes allowed with Metro State Aid or Metropolitan Council Grants Manager review and approval:

Changes to projects that typically occur when projects move into detail design or minor additions of project amenities or aesthetic items. These changes do not affect project score or ranking and do not meet the threshold for a TIP amendment. A change made through Metro State Aid or Metropolitan Council Grants Manager review is allowed for changes including, but not limited to:

- Removal or addition of minor items, such as benches, waste receptacles, minor signing, etc.
- Change in the design of aesthetic items, such as lighting, railings, benches, etc.
- Addition of items due to normal detail design of a project (such as noise walls, retaining walls, storm sewers, etc.) unless the cost increases enough to require a TIP amendment

2) Project modifications allowed through informal consultation process:

Slight changes to projects that do not affect original project score to the degree that it would change the project ranking/selection. A project modification through an informal consultation process is allowed for changes including, but not limited to:

- Slight changes in bike or pedestrian trail route alignment while still making the major connections and keeping the same termini
- Very minor change in project termini, such as adding one block of project, such as a roadway or trail, to make better connection
- Change in bike path width (must still meet standards)
- Adding locally-funded project to the federally-funded project (such as mill and overlay adjacent to project)

3) Scope changes requiring approval by TAB:

- Any change that may significantly alter the estimate of benefits and project score and its rank within its solicitation category, particularly if altered to the degree where the revised scope may not justify selection

A scope change is likely to be needed in instances including but not limited to the following examples:

- Adding significant elements to a project
- Removing significant elements from a project (such as a trail, ped bridge, lighting, signal, etc.)
- Significant reduction in access closures
- Changing the termini of a project significantly
- Reducing the number of travel lanes (such as 4 lanes approved changing to 3 lanes with a center turn lane)
- Changing a significant number of parking spaces in a park-and-ride facility
- Changing from rehabilitation to replacement and vice versa
- Pedestrian bridge to a tunnel, or a tunnel to a pedestrian bridge
- Off-road trail to on-road
- Signal to a roundabout

When is a scope change a new project?

The project as programmed in the TIP and STIP identifies the project that will be awarded federal funds.

The project description in the original application lists the type of work, the most significant construction elements, and the project location and length, where applicable. This defines a project's scope of work. A proposed change will be considered a new project not eligible for a scope change request if it:

- Relocates the project away from the defined problem, need, or location, such as switching transit start-up service from one market area to another
- Moves funding from one project to another, such as moving funds awarded to a project on County Road A to the same, similar, or different work on County Road Z

In these cases, the original project will be withdrawn.

Consultation and Scope Change Request Process

After initial consultation with Metro State Aid or the Metropolitan Council Grants Manager, a project sponsor must initiate scope change requests with the TAB Coordinator. The short process described below will help the region decide whether a scope change needs to go through the formal process with a TIP amendment or just done through an informal consultation process.

1. Project sponsor informs the TAB Coordinator that it wishes to change a project. The project sponsor provides a written description of the scope change and a map or schematics showing how the proposed scope change affects the project.
2. The TAB Coordinator will consult with MnDOT Metro State Aid or the Metropolitan Council Grants Manager and the FHWA or FTA to discuss the extent of the changes and whether the scope change could impact the projects benefits, score and rank among the other projects in its category and solicitation year.
3. By agreement, the TAB Coordinator may contact the project sponsor and provide directions on how to request a scope change and TIP amendment through the TAC, TAB and Metropolitan Council. Also by agreement, the TAB Coordinator may inform the project sponsor that the proposed modification does not trigger a formal scope change and TIP amendment, and the modification can be performed through an informal consultation and approval process. The TAB Coordinator will inform Metro State Aid or the Metropolitan Council Grants Manager and the TAC Funding and Programming Committee of the administrative approval.
4. By agreement, the TAB Coordinator may inform the project sponsor that the proposed revisions exceed the limits of a scope change and is actually a new project. The project sponsor will also be informed that the request will not be processed through the TAC and TAB.

Process to evaluate scope change requests for regionally-selected projects

Adopted by the Transportation Advisory Board on March 16, 2011

ACTION TRANSMITTAL 2011-35

Projects submitted for consideration through the regional solicitation are often just concepts or unrefined ideas. Project sponsors work on the preliminary and final design, environmental studies etc... after the TAB awards funds to the project. Sometimes during project development the project sponsor has to make significant design changes or finds that the construction cost was underestimated. When that happens, project sponsors may be required to request a scope change and TIP/STIP amendment because the scope and cost in the TIP/STIP has to be consistent with final project documentation that is sent to the FHWA.

Projects sponsors, Met Council and TAB staff, the TAC Funding & Programming Committee (F&PC) and the region would benefit from an adopted methodology to evaluate requested project scope changes. MN/DOT Metro State Aid has been very good at sorting out the significant scope changes that require action from the TAB. The FHWA has provided guidance on when a cost increase triggers a TIP/STIP amendment, and when a change in a project's design requires a scope change and TIP/STIP amendment (attached). The TAC and TAB want to be comfortable that the revised project scope of a regionally-selected project still provides about the same benefits as the original project scope and would have scored high enough to have been selected like the original project scope – to be fair to the other projects not selected. Below is a proposed outline of a process and guidelines for scope change requests.

- 1) Any construction elements added to the project scope must be eligible according to the solicitation criteria used to evaluate the original project submittal, unless the additional elements are already programmed in the STIP.
- 2) Additional federal funds will not be provided and federal funds cannot be swapped between projects of the same or different sponsor.
- 3) Met Council and TAB staff will provide data on the original project to the TAC F&PC, including cover page, project description, location map, layouts, sketches or schematics, and the original project cost estimate.
- 4) The project sponsor must provide data on the revised project scope to the TAC F&PC, including a complete project description, location map, project layout or sketches or schematics, checklist of work that still needs to be done and a revised project cost estimate.
- 5) The project sponsor must also recalculate the responses to certain key criteria based on the revised project scope and provide them to the TAC F&PC. Met Council and TAB staff may consult with the scoring group chair and individual project scorers if necessary to evaluate the recalculated responses and estimate the change in the original project score.
- 6) The TAC F&PC will base their recommendation on whether the estimated score of the revised project scope would have been high enough to have been awarded funds through the regional solicitation. A recommendation to approve the scope change and adopt a TIP amendment will go before the TAC, TAB Programming Committee and full TAB for adoption, then to the Metropolitan Council for concurrence. A recommendation to reject the scope change and TIP amendment will go before the TAC, TAB Programming Committee and full TAB for approval.