Changing the Scoping Package

Introduction (revised 6-24-2019)

The potential for change does exist with every project. Change can come from a variety of sources, both internal and external, and in many different forms. This chapter discusses the common types of change to MDOT projects and the effects of those changes. Additionally, this chapter identifies how to make, manage, and document those changes.

Original plan found in MAP Database (JobNet)

The effects of change can have a major impact to a project's scope, its associated cost (or resources), and/or the time required to design or construct the project. As a result, Change Management becomes an important tool to process and document change from a project's original baseline to its actual plan at the time of execution. A project's original baseline is the scope of work, cost and schedule as defined at the time the project concept statement is approved/programmed in MDOT's MAP Database (JobNet). The actual plan is the project's final plan/proposal package at time of project advertisement and letting. Time of execution is the date the project is awarded for construction.

Change Management is the process by which change can be processed and resulting impacts can be evaluated and decisions can be made, which are documented and communicated. Further analysis of change may even be able to detect trends and make forecasts to improve future projects. These trends can be found in the Matrix Measurement Components Report, in JobNet.

Tracking change

Change Request module JobNet

Within MDOT, changes to programmed jobs are processed and tracked through the Change Request module of JobNet. A change management plan is needed for every project that documents and tracks changes to projects from the very initial scoping stage or project conception, up to the programming of the job in JobNet. Changes to scoping packages are addressed through the annual Call For Projects and are done through the Change Request process.

Submitting changes

System Manager

Statewide Transportation Planning Division

Form 2604
Project Authorization/ Program Revision Request

After the scope has been verified, any changes to the cost, limits, work, schedule and/or funding shall be submitted to the System Manager, or the Statewide Transportation Planning Division, for concurrence and approval. This is done through communication and by submitting a "Project Authorization/Program Revision Request" form (2604) through the Change Request module of JobNet. Use this process for the following types of change requests:
- Any request to add a new project or a new project phase
- Any request to abandon either a project or a project phase
- Any complex or multiple project changes (including any splits, combines, transfers of road work or structures from one job to another, costs, length and etc)

- Any change to a currently programmed phase that is not of the type indicated in the first three listed above
- Any general project information changes to currently programmed projects

See the RDM 14.15 for more information.

Common Types of Change

Policy Changes
Policy changes at MDOT may be triggered by one of several factors, including FHWA, state government laws or policy changes, industry initiated changes or other factors. The effects of these changes may be broad and affect projects in some way. There is very little that can be done to foresee these changes. Policy changes typically affect programmed projects more than scoped projects.

For projects that have been scoped and not programmed, analyze the effects of policy or direction changes to determine the impacts at a project level, and document this accordingly in the scoping package folder. Depending on the policy change, the project scoping estimate may need to be updated to reflect the change.

Most policy changes and implementation of these changes are handled through the annual Call For Projects. If there are any changes to policy or Department direction that occur throughout the year, the Region System Manager will notify the appropriate staff and the changes will then follow through as appropriate.

Design Details or Standards Changes (revised 6-24-2019)
Design Standard Plans and Geometric Design Guides are periodically updated to reflect new information or studies which indicate an improved method to perform or design a detail or element. Depending on the change, you may need to review the scoping package to determine what impacts the revised standard has on the proposed project. The review of the project should specifically look at items which may impact the estimate of the project, cause additional work, or require the scope of work (fix type) to be revised or require Design Exceptions or Design Variances. All changes to the scoping package must be documented.

Scope of Work Changes
Sometimes in the life of a scoping package, it becomes necessary to change the scope of work. This can be caused by some of the changes listed above, a change in the pavement strategy or prioritization, or simply by the desire to apply a more cost effective fix, given the pavement's or structure's performance or funding limitations. Scope of work changes can include changes to the proposed work for all, or a portion of the project or by changing the limits of the projects.

Effects of Change

How change to cost, time, and scope affect each other

As mentioned in the introduction, all change has the potential to impact the project's scope of work, associated cost (or resources), and/or the time required to design or construct the project. The combination of these three constraints is known as the Triple Constraint. A typical diagram depicting the Triple Constraint is shown below and is intended to show the relationship between the project constraints. Any change in one of the constraints will affect one or both of the other constraints. As can be seen, the scope has a direct impact on the cost and time of a project.

Requesting and Documenting Scope Changes (revised 6-24-2019)
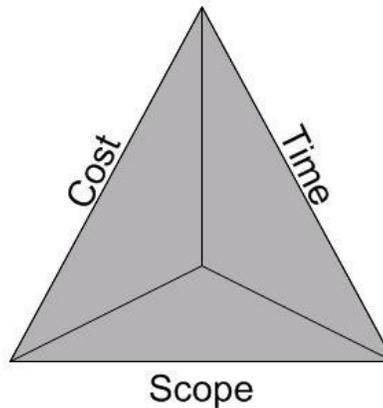
Systems Manager

Development Manager/TSC Manager

Changes to the scoping package should be discussed between the Systems Manager and the Development Manager/TSC Manager to obtain concurrence. If the change is approved, the decision should be documented and communicated to the project stakeholders. Any changes in the scoping package should be documented on the Scoping Project Record form, where the scoping history is documented.

Scoping Report & Details Worksheet

The Scoping Report & Details Worksheet may need to be updated and included it in the scoping package. If the costs need to be updated, the estimator can update the bid based prices in PQS/AP Preconstruction and reprint the estimate. The previous documents should be retained in the folder to help track the history of the scoping package.