

Interagency Coordination and E-STIP Deployment Support

FINAL REPORT
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16. Abstract <p>The primary objective of this project is to establish the E-STIP application to provide interactive tools and protocols for TIP/STIP review and approvals involving several stakeholders, including NJDOT, FHWA, MPOs, and NJ Transit. To ensure that all the stakeholders' design requirements were properly addressed in the E-STIP application, an interagency coordination program was implemented that consisted of organizing focus groups and presentations for intended E-STIP users to obtain their feedback on proposed design of screens and protocols in the E-STIP application; organizing coordination meetings of relevant stakeholder representatives to ensure seamless transition from the current "pen and paper" practices to an electronic TIP/STIP review and approval process facilitated by the E-STIP application.</p> <p>NJDOT's E-STIP is an internet-based software that implements electronic submission, processing and approval of New Jersey's State Transportation Improvement Program (STIP). It is designed to streamline STIP development and the processing of amendments and modifications. The STIP contains transportation projects advanced by three New Jersey MPOs, and New Jersey Transit. E-STIP is a collaborative tool that allows planners from MPOs and DOT to initiate online requests for changes, and to upload all project related financial information and correspondence. Electronic submission expedites FHWA and FTA's review time and reduces errors. It also allows for tracking the real-time status of each STIP request which: improves staff productivity across the DOT and MPOs, reducing time for tracking down status of the project; improves process efficiency through automatic email notification to the subsequent reviewer whose action is required on request; facilitates a shared database that enables staff to electronically store and retrieve project-related data; documents correspondence in a central location; reduces data redundancy and input errors; and creates more complete documentation through streamlined data entry and exchange processes.</p>			
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Background

New Jersey Department of Transportation is required to prepare a Statewide Transportation Improvement Program (STIP) in conjunction with the State's Metropolitan Planning Organizations (MPO's) and New Jersey Transit. The process of preparing STIP in New Jersey involves a set of automated and manual processes that facilitate development, review, amendment, and approval of STIP projects, and STIP as a whole. These processes include a lot of paperwork, manual editing and sign-off, and transfer of STIP documents via mail, fax, and e-mail in several formats. Although most information is kept in an electronic form in different instances of the process, there is no systematic way of processing the STIP documents electronically and advancing the STIP business by all involved parties/stakeholders.

In order to streamline the STIP process, as part of the existing Task Order 78, NJIT has started assisting the NJDOT business units in identifying and documenting the business requirements for seamless management of the STIP process using a collaborative software application. The application is termed electronic STIP or E-STIP.

NJIT's research team met with the staff of NJDOT's Capital Investment Strategies business unit to brainstorm about the business processes involved in the STIP development/amendment process at NJDOT and the approval process at FHWA/FTA. The NJIT team identified and interviewed all the parties involved in the process of submitting and approving the amendments to the State Transportation Improvement Plan. These interviews helped the NJIT team understand the current process of all participants involved. The "Memorandum of Understanding between the NJTPA and the NJDOT and the NJ Transit" (see Appendix A), "Memorandum of Understanding between the SJTPO and the NJDOT and the NJ Transit" (see Appendix B) and "Memorandum of Understanding between the DVRPC and the NJDOT and the NJ Transit" (see Appendix C) were used as a guideline to understand the TIP/STIP amendment and modification process during the interviews. The information gathered in these interviews is translated into an identified business processes and described in greater detail in this document. This resulting Business Process Documentation document will be used in the later stages to develop and implement an electronic STIP approval process in New Jersey.

New Jersey State Transportation Improvement Program Process

The State Transportation Improvement Program (STIP) for NJDOT and NJ Transit is developed in cooperation with New Jersey's three regional MPOs in a collaborative process. The STIP development process is a 13 month process which starts annually in August for the next federal fiscal year STIP. The federal fiscal year starts on October 1. The STIP is submitted to the FHWA and FTA annually on or about September 1 for approval by October 1. The FHWA receives an earlier draft of the STIP and provides comments on it while the final draft is being developed. Ideally, the STIP is approved before October 1 which is the official start of the federal fiscal year.

The annual New Jersey state budget includes a Transportation Capital budget which is comprised of a detailed list of state and federal funded capital projects for NJDOT and NJ Transit. Thus, every fiscal year, the state funded transportation projects under New Jersey's Transportation Trust Fund is appropriated on July 1st and is available for obligation. In addition, the State provides funding authority for federally funded capital projects that can be submitted to FHWA and FTA for authorization after October 1, the start of the federal fiscal year under the approved STIP.

Figure 1 schematically describes the STIP process in New Jersey. All the projects eligible to be added to the STIP will first be screened by the NJDOT Capital Program Screening Committee at the Director level and approved by the Capital Program Committee at the Senior Management level. The list of projects (or Project Pool) is sent to the MPOs for prioritization and then assigned funds to be included in the Draft Program. The NJDOT will negotiate the Draft Program with the MPOs to finalize the Draft STIP. The Draft STIP will be submitted to the FHWA for approval. If and when necessary, the projects in the approved STIP will be amended or modified while maintaining the federally required fiscal constraint. Once the STIP project is approved or later amended, the funds assigned to the projects become eligible for federal authorization. Each of the processes shown in *Figure 1* is described in detail in the following sections.

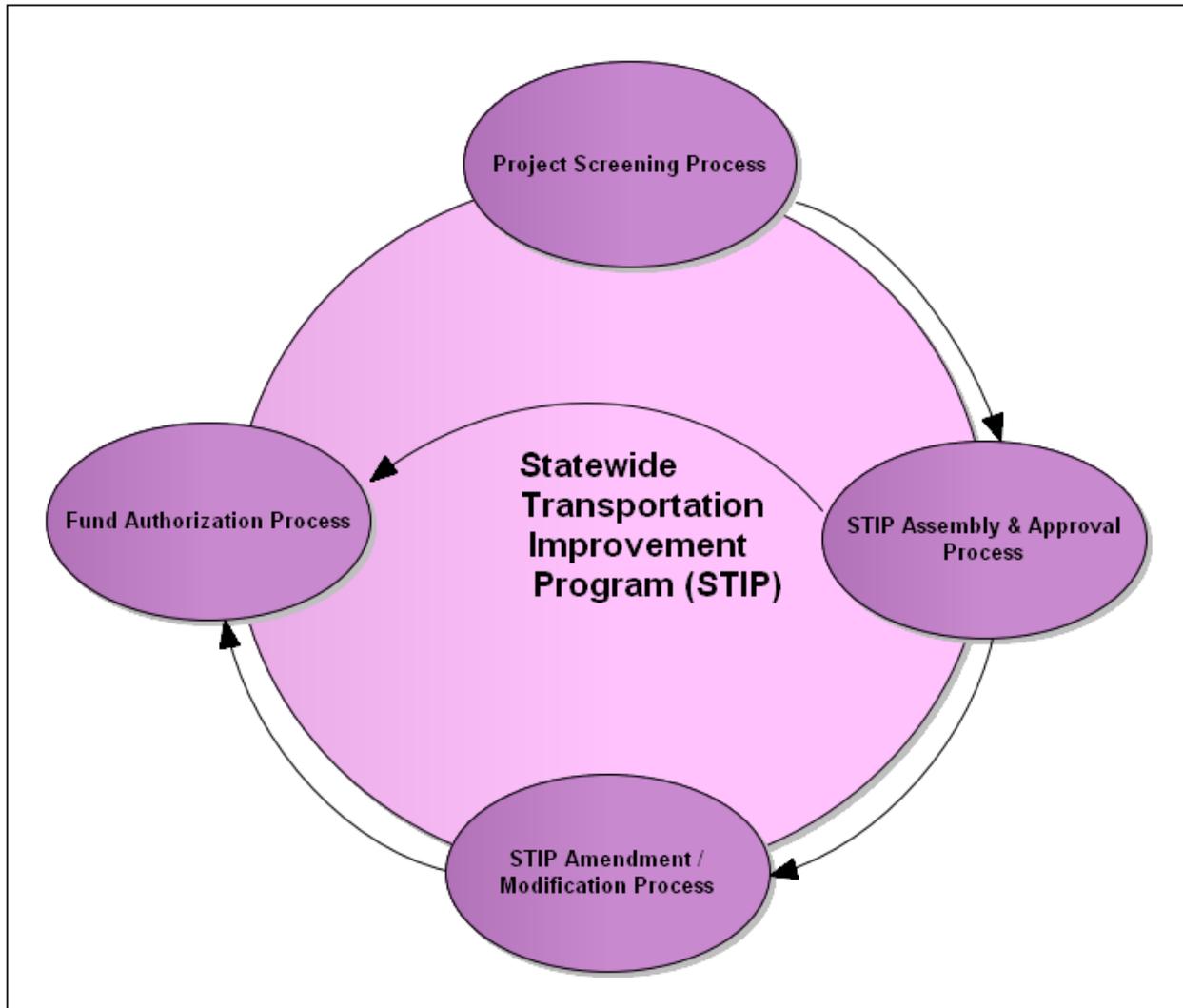


Figure 1: New Jersey STIP Process

Project Screening Process

Figure 2 shows the flow of the STIP Screening Process. Although the STIP screening process is part of the overall STIP Assembly/Approval and STIP Amendment/Modification process, NJIT felt it appropriate to dedicate a separate section to it. We feel that the STIP screening process should be considered the starting point of the overall STIP process. This process is also discussed in the STIP Assembly and Approval Process and the STIP Amendment/Modification Process sections of this document.

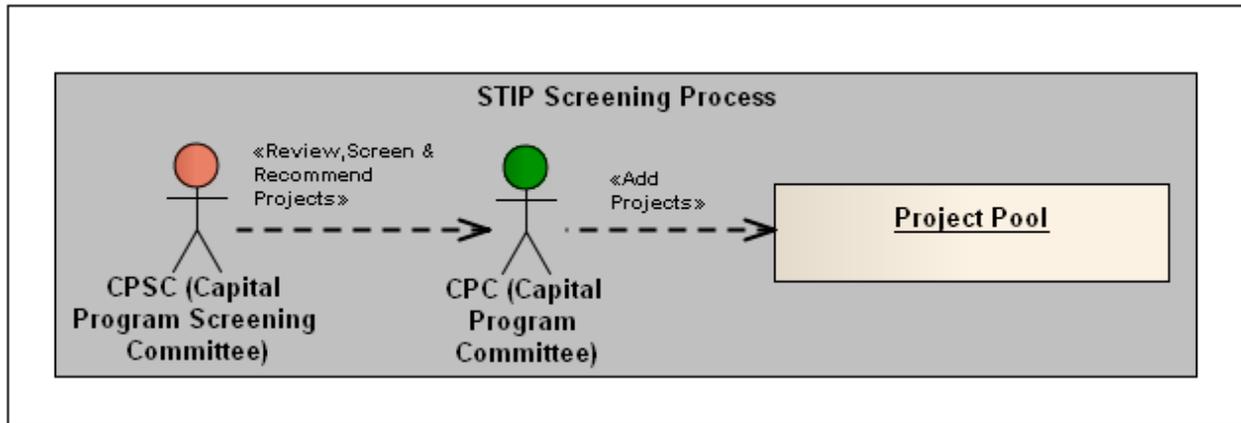


Figure 2: STIP Screening Process

The projects eligible to be added to the STIP via the Project Pool, the Problem Statement Process and the Capital Program Committee recommendations are reviewed, screened and recommended by the Capital Program Screening Committee (CPSC) to the Capital Program Committee (CPC). The Project Manager meets with the CPSC and presents their case. After reviewing the documents presented, the CPSC provides a recommendation to the CPC. If the CPC deems a project to be meritorious, it will be added to the Project Pool for a future STIP or directly to the current year STIP as needed.

STIP Assembly and Approval Process

Figure 3 shows the STIP Assembly and Approval Process. All activities are shown in block arrows, actions are dotted lines, roles are stick figures, and rectangles are documents. It shows the roles, actions, and activities of all the major agencies (MPO, NJDOT and FHWA) involved in this process. This outlines a typical path for a candidate STIP project - assemble, assign funds, prioritize, negotiate and approve, along with each agency's actions and activities. As shown, considerable agency interaction is required throughout the process.

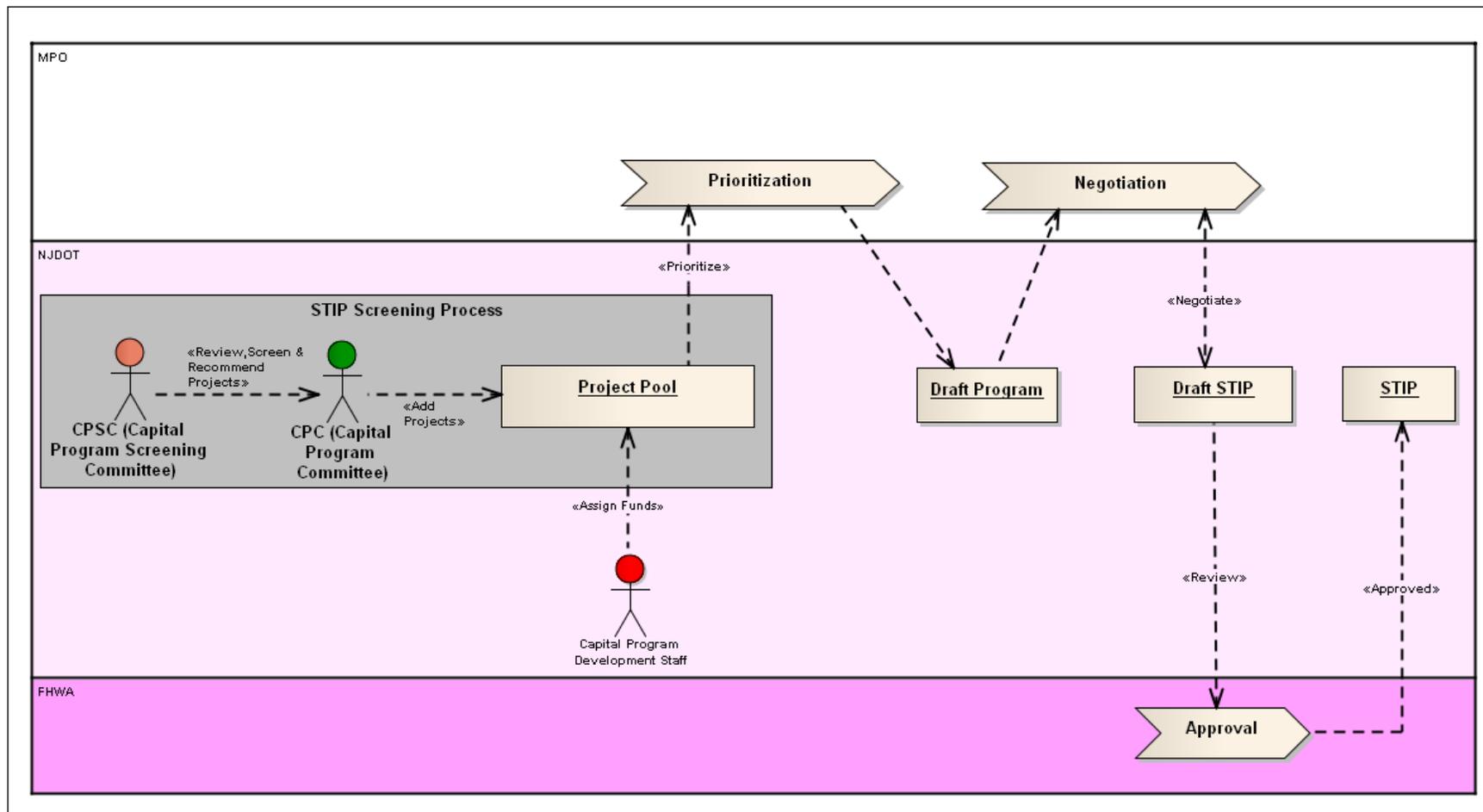


Figure 3: STIP Assembly and Approval Process

Assembling Projects

The process starts with NJDOT soliciting new projects. Projects are eligible to be added into the STIP from various sources:

- Project Pool – eligible agencies fill out a “Project Funding Review and Request” form and submit to the DOT. A copy of the form is attached in Appendix D.
- Problem Statement Process – A problem statement could be submitted by any individual directly to the DOT.
- NJDOT Local Aid Bureau receives the project request from municipalities. Municipalities can submit their projects to the MPOs as well.
- Previous year’s STIP along with amendments and modifications that happened during the current year;
- Capital Program Committee – The committee can also recommend adding a new project, breaking up or consolidating existing projects or terminating a project.

The projects added via the Project Pool, the Problem Statement Process and the Capital Program Committee recommendations will be reviewed, screened and recommended by the Capital Program Screening Committee (CPSC) to the Capital Program Committee (CPC). If the CPC deems a project to be worthy, it will be added to the Project Pool for a future STIP or directly to the current year STIP as needed.

Assigning Funds

The Capital Program Development (CPD) staff estimates funds available from the State’s Transportation Trust Fund and from federal sources. FHWA provides a Status of Funds report for the current year which can be used to project funds for the following year. Even in the current absence of a multi-year federal appropriation act that is succeeding the SAFETEA-LU (Transportation Act in professional parlance), the CPD staff can estimate available funding by assuming a continuity in the federal appropriation and thus available to develop the STIP financial plan.

Working with the list of projects that are in the STIP, the CPD staff assigns the projects to the available funds always mindful of the eligibility of projects for certain funding categories. Various phases of a same project can be funded by different funding sources, state or federal. In deciding which phase gets what funding, the CPD staff follows certain guidelines. For example, the design phase is usually assigned federal funds. On the other hand, ROW acquisition and advance utilities are usually assigned state funds.

Project Approval

Once the funds have been assigned, the DOT sends the Project Pool to the MPOs for prioritization. Based on the decisions made by the MPOs' boards and/or committees, the MPOs come back with a list of their prioritized projects. The DOT negotiates these projects with the MPOs for the draft STIP. The CPD staff sends this draft STIP to the FHWA for review. Once the FHWA approves the revised draft, it becomes the official STIP for that year.

STIP Amendment/Modification Process

Requesting STIP Amendments and Modifications

The requests for amendments and modifications to the current STIP projects can be initiated by various entities:

- MPOs
- NJDOT Project Managers
- Director, Capital Investment Planning & Development and Manager, Capital Program Development
- Capital Program Amendment Coordinator
- NJ Transit Capital Program staff

STIP Amendments and Modifications

The approved TIP/STIP may either be amended or modified based on the level of changes required. A TIP/STIP amendment is required for the following cases:

- Addition of a project to the TIP/STIP
- Deletion of a project from the TIP/STIP
- Major changes to the design or scope of the project that require air conformity determination
- Addition of a development phase that results in re-scheduling the projects (moving all major phases out of the TIP/STIP)

All other changes to the TIP/STIP that are not amendments are handled as modifications. There are three types of modifications based on the level of approval at the MPO:

- Modifications not requiring further MPO action beyond the Memorandum of Understanding (MOU)¹
- Modifications that may be approved by Administrative action
- Modifications that require MPO board or committee action

The procedures for the above mentioned cases of amendments and modifications are discussed in detail in the MOUs for each of the MPOs.

Figure 4 shows the flow of information, actions and events in the STIP Amendment/Modification Process. It is a schematic representation of various levels of interactions between the agencies involved in the STIP Amendment/Modification process.

¹ The MOU establishes procedures for amendments and modifications to the approved TIP/STIP. Please see Appendices A, B and C.

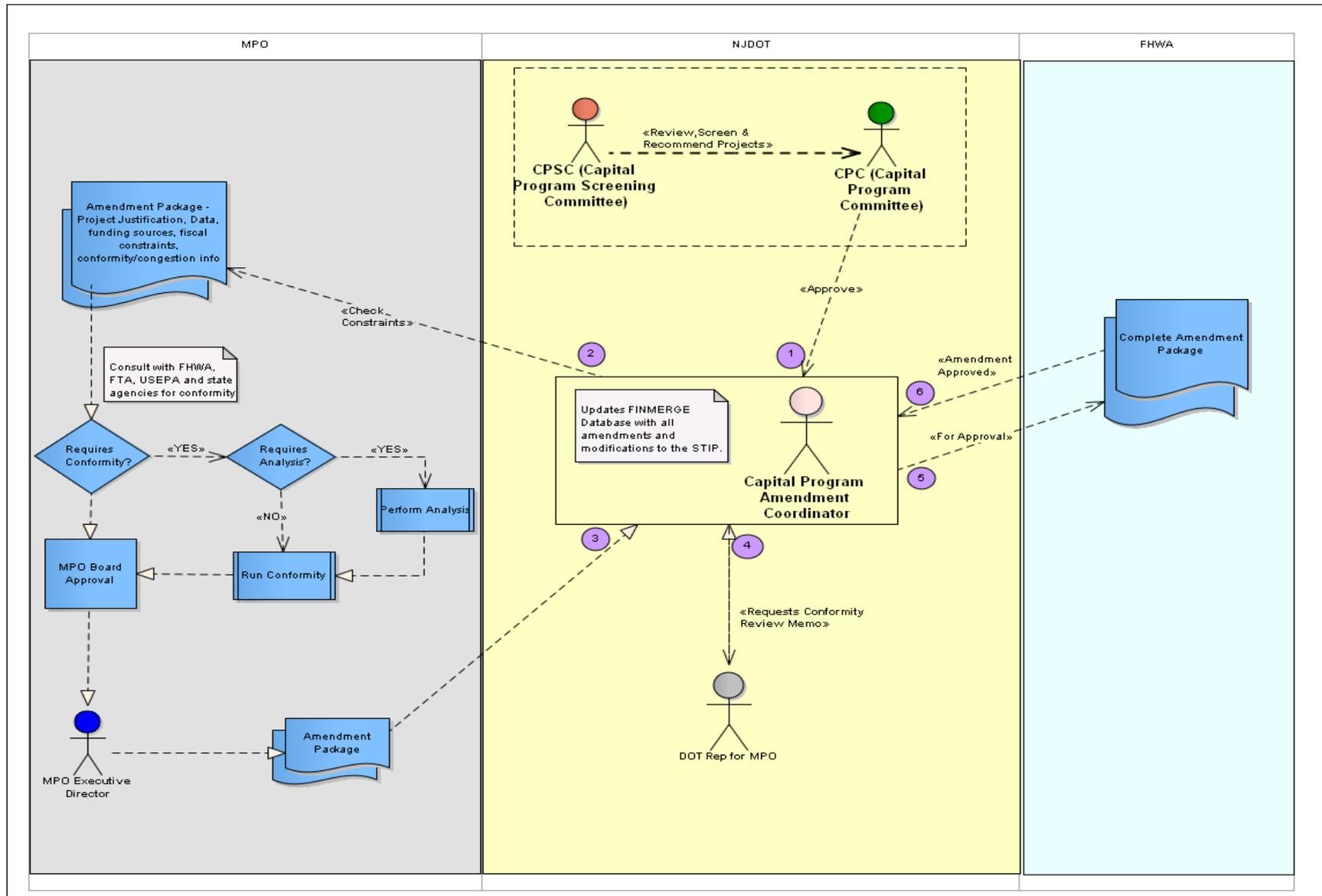


Figure 4: New Jersey STIP Amendment/Modification Process

The Project Manager meets with the Capital Program Screening Committee (CPSC) and presents his/her case justifying the request for amendment or modification. After reviewing the documents presented, the CPSC recommends the project to the Capital Program Committee (CPC). If the CPC sees a reason for amending a project, they will inform the Project Manager to submit an amendment or modification request for the project to the Capital Program Amendment Coordinator.

The amendment or modification request for a STIP project could be initiated either by the NJDOT, NJ Transit or the MPO. Both the processes are explained in detail below.

Amendments and Modifications Initiated by the NJDOT

When the Capital Program Amendment Coordinator receives an amendment or modification request for a STIP project that is initiated by the NJDOT, she checks the fiscal constraint chart to confirm the availability of funds and prepares a package to the MPO containing the following documents:

- Letter requesting approval from the MPO for the Amendment/Modification – Justification
- TIP Mod/Amendment Request Report
- Correspondence between NJDOT and the MPO
- Original (for modifications) and new (for amendments) STIP sheets
- Revised STIP sheets (for modifications)
- Fiscal constraint chart

The Capital Program Amendment Coordinator follows the Memorandum of Understanding (MOU) between the NJDOT, MPOs and the NJ Transit to proceed with these requests. If the Amendment or Modification request is for a statewide project, NJDOT will send this request to all the MPO's that are involved in this project. NJDOT will wait until they receive complete packages from all the MPO's involved in order to take any action.

Once the MPO receives the package, it consults the FHWA, FTA, USEPA and state agencies to determine if the proposed amendments require a new TIP/STIP conformity determination. If the project is exempt under the US Environmental Protection Agency (USEPA) Air Quality Conformity Rule, the amendment will be approved through the normal MPO approval procedures. If the project is not exempt, the MPO will determine through consultation whether a new TIP/STIP air quality conformity determination will require an analysis and perform the analysis as required and run the conformity. The interagency consultation process, required by regulation, is administered by USDOT (FHWA and FTA), the USEPA, the NJDOT and the NJDEP. The group (usually done via email) will review the project(s), and make a determination on status: either exempt from AQ review (lane re-striping, lighting, sidewalks) or non-exempt (requires a federal action, highway on new alignment, addition of SOV capacity, etc.) The group recommends a course of action to the MPO. The MPO forwards to the NJDOT, and the USDOT concurs.

After approval from the MPO board, the MPO's Executive Director sends the complete package back to the Capital Program Amendment Coordinator at NJDOT. He/She adds the memo confirming the conformity results to the complete package and sends it to the FHWA/FTA for approval and joint conformity finding as follows:

- Letter requesting approval from the FHWA for the amendment/modification w/ justification
- Letter from the MPO approving the Department's request
- New (for amendment requests) or revised (for modification) STIP sheets
- Fiscal constraint chart
- Memo confirming the conformity results, if required

The FHWA/FTA consults the EPA to approve/disapprove the project and notifies the NJDOT of their decision. The Capital Program Amendment Coordinator updates the project/funding information for this project in the FINMERGE database and informs the CPD staff so that they can update the FINAN database.

Amendments and Modifications Initiated by an MPO

When the Capital Program Amendment Coordinator receives an amendment or modification request for a STIP project that is initiated by an MPO, he/she checks the fiscal constraint chart to confirm the availability of funds and prepares a package to the FHWA containing the following documents:

- Letter requesting approval from the FHWA for the amendment/modification w/ justification
- Letter from the MPO requesting amendment/modification w/ justification
- New (for amendment requests) or revised (for modification) STIP sheets
- Fiscal constraint chart
- Memo confirming the conformity results contained in the MPO correspondence, if required

The package is then sent to FHWA/FTA for approval and joint conformity finding. The FHWA/FTA consults the USEPA as part of the interagency review process. USEPA has no decision making role in conformity. USDOT can only approve/disapprove such requests. There are MPO projects that do not require conformity analysis but NJDOT as a member agency of the MPO, has a vote in all actions. FHWA notifies NJDOT of its decision to approve/disapprove the project. The NJDOT informs the MPO of the approval/disapproval action. The Capital Program Amendment Coordinator updates the project/funding information for this project in the FINMERGE database and informs the CPD staff so that he/she can update the FINAN database and use it for the next year draft STIP planning.

Fund Authorization Process

Once the project amendment/modification has been approved by the FHWA, it is in the STIP. When the Project Manager for the amended/modified STIP project is ready to start using the approved funds, he/she requests the Capital Program Authorization Coordinator to authorize the funds. The Capital Program Authorization Coordinator and Amendment Coordinator

(responsible for STIP modifications and amendments) use the FINMERGE database to check for updated funding information through out the year. Every time a project is amended or modified, the Capital Program Amendment Coordinator updates the information in the FINMERGE database. *Figure 5* shows the flow of events and actions during the Fund Authorization Process.

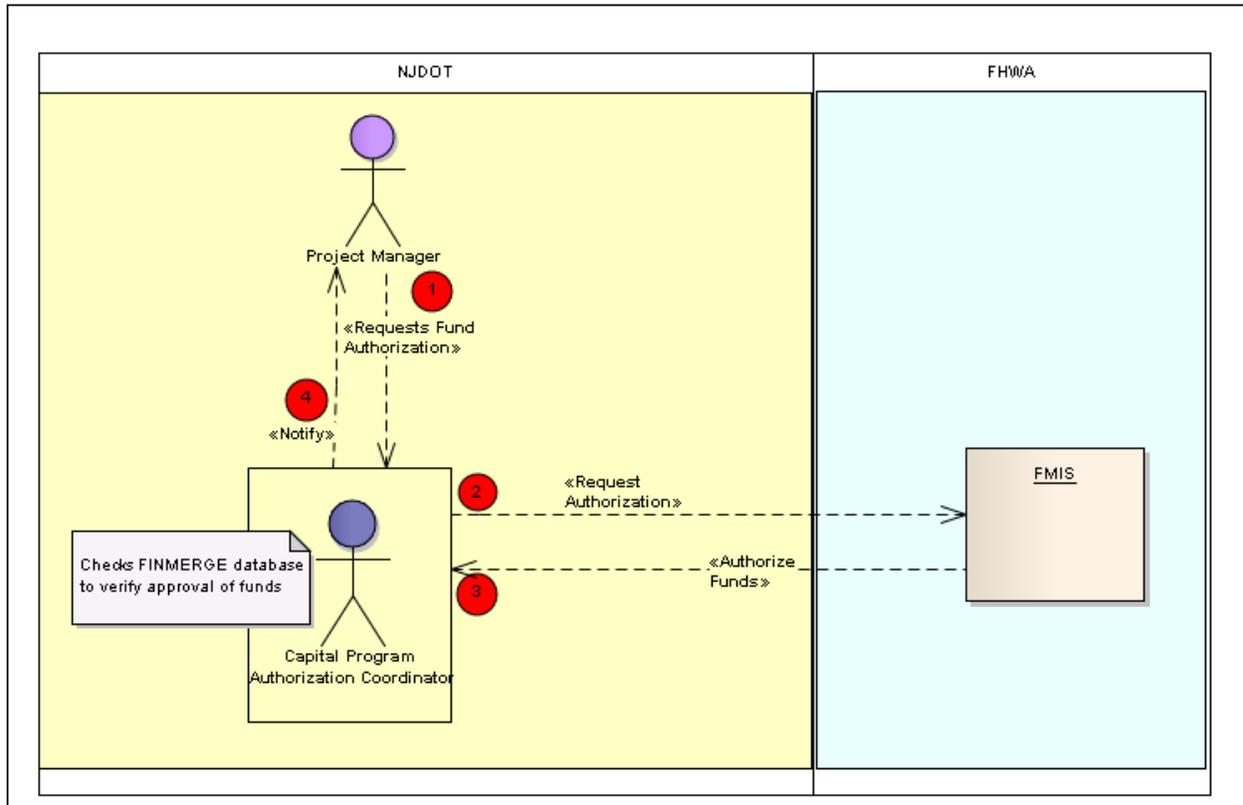


Figure 5: Fund Authorization Process

After receiving the authorization request, the Capital Program Authorization Coordinator uses the FINMERGE database to validate it, namely to check that the project (and its modifications/amendments) have indeed been approved by the FHWA. After validating, the Capital Program Authorization Coordinator sends an authorization package (SOW, plans, specs, estimates, etc.) to the FHWA authorizing official. For example, the planning, research, MPO projects go to the FHWA Planning Director. Other projects, mostly capital, go to the FHWA Area Engineers. On receiving the package, the FHWA authorizes the funds through the FHWA’s Financial Management Information System (FMIS). The Capital Program Authorization Coordinator checks the FHWA FMIS periodically for updates on the requested funding authorizations. He/She updates the NJDOT FMIS accordingly and informs the project manager

once the project funds have been authorized. The project manager then submits the AD12 form to the NJDOT Budget and Accounting Office. The form sets up accounts between the FMIS and NJDOT/State Treasury accounts that enable the Project Manager to issue requests for advertisement and bids and then charge the successful contact against these funds.