



## **Oversight Procedure 25 – Recurring Oversight and Related Reports**

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### **1.0 PURPOSE**

The purpose of this Oversight Procedure (OP) is to describe the oversight practices including review, analysis, and recommended procedures and reporting requirements that the Federal Transit Administration (FTA) expects from the Project Management Oversight Contractor (PMOC) regarding ongoing or recurring monitoring and oversight of major capital transit projects. This OP also describes the expected type and quality of reports indicating the PMOC's findings, conclusions, and recommendations based on oversight activities.

While this OP focuses on Capital Investment Grant (CIG) projects, which have specific requirements by law, it also applies to all capital projects. FTA will issue Implementation Plans (IPs) to clarify the specific reviews and expected deliverables based on the project types.

### **2.0 BACKGROUND**

FTA's Project Management Oversight (PMO) program is a continuous process of review and evaluation of the project sponsor's progress of major capital projects to ensure compliance with statutory, administrative, and regulatory requirements. These projects can extend for miles and cross jurisdictional boundaries while fitting into existing urban, rural, and railroad environments. Oversight begins early in the project implementation, usually during the time of Project Development (PD).

Ongoing and recurring oversight by the PMOC helps FTA accomplish their fundamental stewardship role and provides project sponsors with oversight and technical assistance to identify and avoid problems, capture opportunities, mitigate risks, and meet the requirements of 49 CFR Part 633, the PMO Rule. The PMO Rule describes the roles and responsibilities of FTA and recipients of federal funds (project sponsors) with respect to the PMO program and their Project Management Plans (PMPs).

Effective project management oversight, and its associated reporting, changes as a project moves through the various phases of development. The PMOC, as part of their initial oversight activities, must gain a clear understanding of the project sponsor's management capacity and capability and the project's scope, cost, schedule, and planned delivery method as well as the unique political, environmental, jurisdictional, third-party stakeholders, and regulatory conditions that could affect the project. Prior to a project receiving a Federal funding commitment, FTA's oversight is focused primarily on the project's readiness to advance to the next phase in the major capital project process. Project readiness includes evaluating the project sponsor's management capacity and capability to successfully advance the project, including the development and definition of the fundamental project characteristics including scope, schedule, cost, quality, safety, and the preparation of their PMP and subplans.

Following the award of Federal funds (grant award), the primary focus of oversight is monitoring the project's advancement toward completion or initiation of revenue service as well as the project sponsor's management of those activities, including adherence to their approved PMP and subplans. Toward the end of the project's development, the oversight focus changes once

more to an assessment of the project sponsor's ability to achieve project completion and the project's readiness to enter revenue service.

### **3.0 OBJECTIVES**

The primary objective of the PMO program is to provide FTA with timely information supported by the PMOC's professional opinions and recommendations regarding the project's progress with respect to their intended scope, cost, schedule, risk profile, and compliance with safety and other federal requirements. The PMOC is responsible for: analyzing progress on projects; proactively interacting with the project sponsor to solve problems; and maintaining objectivity in discussions of findings, conclusions, and recommendations with FTA and the project sponsor. The PMOC's reporting and feedback to FTA assists in assessing whether the project complies with their PMP.

While overseeing the project, the PMOC obtains relevant information related to the PD, engineering, and construction phases of the project, as well as the project sponsor's ability to implement the project. The PMOC is expected to promptly inform FTA of any findings, project status, issues of concern, and recommendations for action. The reporting function of the PMOC allows FTA to make proper and timely decisions regarding project advancement and funding, as well as appropriate corrective actions.

In achieving these objectives, the PMOC's main responsibilities include:

- Developing a constructive working relationship with the project sponsor's staff;
- Investigating project conditions and core documents, visiting project sites, reviewing pertinent documents, and performing interviews in sufficient detail to become familiar with the proposed project;
- Developing a thorough understanding of the project's goals, site conditions, design criteria, operating plans, drawings, and specifications,
- Becoming familiar with the project's value engineering studies, peer and constructability reviews, schedules, cost estimates, quality program, risk registers, bid packages and contracts, construction progress, methodology for resolving changes and claims, and plans for conducting project closeout,
- Assessing the project sponsor's management capacity and capability to effectively manage the project, to meet approved project sponsor's policies, procedures, and goals related to design capacity, scope, schedule, cost, quality, and safety both during construction and into revenue service;
- Assessing the project sponsor's use of their PMP and associated subplans;
- Identifying problems and risks in a timely manner;
- Providing recommendations and proactively assisting the project sponsor and FTA in resolving problems;
- Communicating in a timely and effective manner with FTA;
- Providing professional opinions to FTA regarding the project sponsor's work; and
- Providing supporting reports and presentations to FTA.

FTA and the PMOC must be flexible and adapt when encountering issues or challenges that cause changes to the project sponsor's method for implementing the project. If the project sponsor delays in providing information required for the PMOC or FTA to complete a review, there may be a delay to the PMOC's deliverable and FTA's response. The PMOC should notify the Alternative Contracting Officer's Representative (ACOR) if this occurs.

### **3.1 Focus of Monitoring and Oversight**

Upon receiving an oversight assignment, the PMOC should become familiar with the project and the project sponsor's team, including any consultants that will support the project sponsor with the PD, engineering, and construction phases of the project. Typically, FTA will convene a kickoff meeting to introduce FTA's team and the PMOC to the project sponsor. FTA may use the meeting as an opportunity to explain the oversight process and how the project is expected to move through the process. The project sponsor should take the opportunity to provide a detailed introduction to the project and their project team and may also schedule an initial site or alignment tour.

The PMOC should request an initial package of project-related information from the project sponsor. The request should include copies of materials previously submitted to FTA, environmental documents, project description, organization charts and contact information, design information and drawings, project management plan and subplans, project capital cost estimate, project schedule, risk register, and other related materials. Where possible, the cost and schedule information should be obtained in native format to aid analysis. The PMOC should review this information in preparation for their first monitoring site visit. Appendix B<sup>1</sup> provides a list of typical project sponsor submittals that may be requested by the PMOC.

The selection of a project delivery method can have significant consequences on the project management organization and structure, schedule and cost, quality, risk profile, and third-party interface approach. The project delivery method selected for a project will impact the information that must be presented to FTA for its review and acceptance to move the project from PD into Engineering for New Starts and Core Capacity projects or to prepare a grant for a Small Starts project.

#### **3.1.1 Pre-Grant**

Prior to grant award, FTA will determine the frequency of PMOC's monitoring site visits for a given project. The primary focus of monitoring site visits prior to the award of a grant should be on assessing the project sponsor's progress and the project's readiness to advance to the next phase of the process. Readiness includes having a project team that demonstrates the necessary management capacity and capability, as well as the documentation required to effectively manage the project in the upcoming phase. The PMOC should obtain a copy of the list of materials FTA will require before advancing to the next project phase. The PMOC should also develop a general understanding of the proposed timing of the project sponsor's submittals and the associated PMOC review periods.

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<sup>1</sup> Appendices are included within this OP to provide supplemental guidance. Attachments are to be included with Project Monitoring Reports and are listed in Section 8.3.3.

### **3.1.2 Post-Grant**

The PMOC’s recurring oversight activities will occur on a quarterly basis after grant award “unless the Secretary finds that the recipient requires more frequent oversight because the recipient has failed to meet the requirements of such (PMP) plan and the project may be at risk of going over budget or becoming behind schedule...” The frequency will remain on a quarterly basis unless FTA has concerns about the project sponsor’s ability to adequately manage the project, in which case FTA may require more frequent monitoring site visits and oversight.

### **3.1.3 Reporting on Core Accountability Items**

The PMOC should effectively evaluate all core accountability topics (Section 8.3.1.5) during each monitoring cycle at both the pre-grant and post-grant phases. Core accountability is defined by key performance metrics including cost, contingency, and schedule. It also includes percent level of design, percent of contracts awarded, percent construction complete etc. Because all the project sponsor’s management activities and core accountabilities items may not all be available at all phases and cannot be thoroughly evaluated during each monitoring cycle, FTA will consult with the PMOC to determine which areas to include in each review cycle using a risk-based approach that considers the phase of the project and activities underway. This is not intended to restrict the PMOC’s monitoring activities, which should be guided by the PMOC’s professional judgement, but provide additional focus for those monitoring activities.

### **3.1.4 Oversight Triggers and Intensified Oversight**

FTA has established a set of criteria known as “oversight triggers,” which are listed in Appendix C, to help determine when a project requires more frequent oversight. FTA also uses these oversight triggers to describe items that the project sponsor will need to address to resume quarterly oversight.

Following the grant award, a project may encounter problems that require specific attention to one or more significant areas of project management (e.g., adherence to the PMP, management capacity and capability, safety, quality, project schedule, or project cost). The PMOC, through their recurring monitoring and oversight activities, should bring to FTA’s attention any actions, events, or trends that may have a positive or adverse impact on the project sponsor or the project. This information should also be documented in the project monitoring report. The PMOC should monitor any deficiencies regarding project management, which if not corrected, could lead to consideration for more frequent oversight.

FTA, prior to the triggering of more frequent oversight by the PMOC, may request that the PMOC increase their oversight of the problem area. The PMOC should coordinate with the ACOR to determine if more in-depth reviews of the project sponsor’s management practices are needed (e.g., scope, cost, schedule, risk, quality, real estate, Buy America, etc.).

Based on an assessment of the oversight triggers, FTA Headquarters staff, FTA Regional staff, and the PMOC may present a recommendation to FTA senior management, who will make a decision regarding a change in the frequency of oversight. Increased oversight might take the form of a special review of the problem area, a focused workshop, or other activities. FTA will consult with the PMOC in developing an appropriate response to the project’s circumstances, including appropriate changes to the PMOC’s task order and implementation plan.

#### **4.0 REFERENCES**

The PMOC should be familiar with and understand the references listed in Appendix A of OP 01, “Administrative Conditions and Requirements.” This appendix provides a listing of the principal, but by no means the only, references to Federal legislation, regulations, and guidance applicable to the project sponsor’s activities and the PMOC’s oversight function.

#### **5.0 PROJECT SPONSOR SUBMITTALS**

Appendix B of this OP lists some of the project materials the PMOC may review to perform their recurring oversight and monitoring functions.

#### **6.0 SCOPE OF WORK**

The scope of work under OP 25 includes both performing project monitoring and the subsequent preparation of reports (deliverables). Project monitoring activities will consist of project monitoring site visits and quarterly review meetings.

Deliverables may include the following:

1. Recurring Reports:
  - a) Project Monitoring Site Visit Summary via email (optional at direction of ACOR)
  - b) Trip Report
  - c) Project Monitoring Report
2. Quarterly Review Meeting Notes
3. Final Monitoring Report

#### **7.0 PROJECT MONITORING AND REPORTING**

FTA will determine the frequency of recurring PMOC oversight of FTA-funded projects. FTA’s ACOR provides direction to the PMOC regarding the conduct of monitoring activities, including holding meetings with the project sponsor based on the project’s phase of development and activity level. If the PMOC believes a more in-depth review of the project sponsor’s program in accordance with the applicable OP may be warranted, the PMOC should discuss such a need with the ACOR.

At the start of an assignment, the PMOC and FTA should hold a kickoff meeting with the project sponsor to:

- (1) Present an agenda of typical items to be addressed during each project monitoring site visit and quarterly review meeting. It is noted the agenda topics will likely change as the project advances.
- (2) Discuss the expectations for submittal of required information by the project sponsor in advance of the project monitoring site visits and quarterly review meetings (e.g., monthly progress report, schedule, cost information, change orders, etc.).

During the time between site visits, the PMOC should maintain a list of items that arise from news articles, FTA discussions, or new information received from the project sponsor. The PMOC should then prepare and issue an agenda for the upcoming site visit by:

- Reviewing the project status as of the last site visit
- Compiling concerns to be discussed
- Reviewing quarterly review meeting action items
- Identifying project phase-specific activities the project sponsor should be conducting (e.g., preparation of readiness documents, commencement of rail activation activities, etc.).

***The following sections describe how the PMOC should conduct recurring oversight and report the results of this oversight to FTA. For each element, the PMOC should discuss any observations/findings, issues/concerns, and recommendations. All monitoring activities should adhere to applicable OP(s) for each monitoring topic.***

### **7.1 Summary of Monitoring Activities**

The PMOC should review the applicable OP regarding “readiness” for the project’s next FTA approval milestone (e.g., engineering, grant agreement, procurement of construction, or revenue service) and evaluate the project’s status relative to the advancement required to meet the readiness standards. FTA recommends this topic be discussed with the project sponsor during the PMOC’s initial site visit to ensure the project sponsor understands FTA’s expectations and is working to meet them in accordance with the anticipated approval cycles and timelines.

### **PROJECT MONITORING REPORT**

The Project Monitoring Report should include a brief bulleted list of the monitoring activities undertaken during the reporting period that informed the preparation of the Project Monitoring Report (e.g., site visit, attendance at contract meetings, field visits, specific review activities, conference calls, debriefings with project sponsor management, etc.).

The PMOC should identify the current phase of the project (e.g., PD, engineering, construction, testing, revenue operations), ongoing activities to advance to the next phase, and the anticipated date for advancing to the next phase.

### **7.2 Oversight Triggers**

FTA has established a set of criteria, known as oversight triggers, to help determine when a project requires more frequent oversight (see Appendix C). The PMOC, through their recurring monitoring and oversight activities, should bring to FTA’s attention, in a timely manner, any actions, events, or trends that have a positive or adverse impact on the project sponsor or the project. The relevant information should be brought to FTA’s attention using the most appropriate communication method considering the implications of the event or trend.

### **PROJECT MONITORING REPORT**

The PMOC should discuss any actions, events, or trends that have a positive or adverse impact on the project sponsor, or the project, within the Project Monitoring Report. For elements listed on the Key Indicators Dashboard (Section 8.3.1.4) marked as either yellow or red, provide more

detail as needed to explain the PMOC’s observations and findings. This information should be in accordance with the description of oversight triggers identified in Appendix C.

If the PMOC identifies areas of concern (indicators other than green), the PMOC should coordinate with the ACOR to determine if more in-depth reviews of the project sponsor’s management practices are warranted (e.g., scope, cost, schedule, risk, quality, real estate, Buy America, etc.). These types of reviews could occur outside of the major milestone phases due to changes in project scope, delays of stakeholder input, or changes in project sponsor management. FTA will decide whether to pursue enhanced oversight. Such enhanced oversight should not be performed by the PMOC without formal direction from FTA.

### **7.3 Project Management Plan (PMP) and Subplans**

The project sponsor should submit status updates to permit the PMOC to assess the state of the PMP and subplans. The project sponsor should complete periodic updates of the PMP as defined in the PMP and as required in advance of upcoming project activities (e.g., start of construction, testing and start-up of operations, etc.).

## **PROJECT MONITORING REPORT**

The PMOC should include a discussion on the status of the project sponsor’s PMP and subplans currently under development, being updated by the project sponsor, or under review by the PMOC in the Project Monitoring Report. Include any current management plan development or review activities. In cases where the project sponsor is not following the procedures and practices established in the PMP and subplans, provide sufficient detail to explain the nature of the concern, actions being undertaken by the project sponsor to remedy the situation, and any additional PMOC recommendations.

### **7.4 Management Capacity and Capability**

An initial management capacity and capability review may have been performed as a part of a readiness review for project advancement; however, since the project sponsor’s staff and skillsets are subject to change as the project advances through their different phases, additional management capacity and capability reviews may be required. As a result, the PMOC’s assessment of the project sponsor’s management capacity and capability should be an ongoing activity throughout the life cycle of the project. The PMOC should assess the timeliness and quality of the documentation provided for review, such as drawings, schedules, cost estimates, management reports, etc.; results of direct observation/interaction with the project sponsor staff; and discussions on staffing levels and staffing changes conducted during PMOC site visits to evaluate continued capacity and capability to manage the project.

## **PROJECT MONITORING REPORT**

Discuss any changes in project staffing and observations, provide a professional opinion as to the impact of these changes, and detail any recommendations related to the project sponsor’s management of the project.

### **7.5 NEPA Process and Environmental Mitigation**

If applicable, the PMOC should obtain information pertaining to the National Environmental Policy Act (NEPA) Class of Action planned by the project sponsor for projects that have not yet

received an environmental determination. The PMOC should confirm through the review of documents and discussions with the project sponsor that activities are proceeding consistent with that Class of Action and with the project schedule. The PMOC should coordinate with FTA to identify and analyze any issues that could affect project scope, cost, or schedule. During construction, the PMOC should verify that the contract documents and/or third-party agreements incorporate the applicable environmental requirements and that those requirements are being followed (i.e., the project itself and the related mitigation measures are being implemented as called for in the NEPA document and grant agreement).

The PMOC should routinely review the status of the project sponsor's adherence to environmental monitoring matrix. A spot-check of design drawings/specifications and/or construction activities should be completed, and an assessment should be rendered on whether the mitigation actions the project sponsor committed to are being appropriately implemented on the project. The PMOC should identify any items that warrant attention and discuss with the project sponsor.

## **PROJECT MONITORING REPORT**

If applicable, the PMOC should identify the planned NEPA Class of Action and discuss the status of the project sponsor's activities or agency reviews for projects that have not yet received an environmental determination. The PMOC should report any new or significantly changed issues that could affect project scope, cost, or schedule. During construction, the PMOC should report on the project sponsor's compliance with their environmental commitments and report any violations or issues. The PMOC should also report any actions being undertaken by the project sponsor to remedy the situation and provide additional PMOC recommendations.

### **7.6 Project Delivery Method and Procurement**

The project delivery method includes the techniques and processes for soliciting and accomplishing the design and construction of the project. It is important to confirm that the project sponsor's use of a specific delivery method is approved to use in the relevant jurisdiction. The most commonly used methods for delivering major capital projects include:

- Design-Bid-Build (DBB)
- Design-Build (DB)
- Construction Manager/General Contractor (CM/GC) also known as General Contractor Construction Manager (GCCM) or Construction Manager at Risk (CMAR)
- Design, Build, Operate, and Maintain (DBOM)
- Design, Build, Finance, Operate, and Maintain (DBFOM)
- Public-Private-Partnerships (P3)

The PMOC should confirm the project sponsor's procurement activities are proceeding in accordance with their PMP including the following: document preparation; solicitation; receipt and evaluation of bids/proposals; award; and issuance of Notice to Proceed (NTP). In advance of the advertisement of each major procurement, the PMOC should determine if the project sponsor has a plan in place to deal with unacceptable procurement results (e.g., no bid, single bid, bids unacceptably high, etc.)



The PMOC should note any issues encountered (e.g., bid prices exceeding engineer's estimates, lack of or low bid response, extensive bidder questions, frequent bidder requests for due date extensions, etc.) and their potential impact on the project cost and schedule. After issuing the NTP, the PMOC should review the conformed contract to assess risks on the project and understand issues that may develop during contract implementation.

### **PROJECT MONITORING REPORT**

The PMOC should provide an update on the status of the project sponsor's actions to develop a project delivery strategy for the project, including project delivery method(s) selected, the sequencing of contracts, and the advancement of the individual procurement activities. The PMOC should report any significant changes to the delivery method selected and discuss the potential impact of such changes on the project's scope, schedule, cost, quality, and safety.

In their report, the PMOC should provide the status of ongoing procurement activities including the preparation, solicitation, receipt and evaluation of bids or proposals, award, and issuance of NTP for all major contracts on the project. The PMOC should report any unsatisfactory procurement results (e.g., no bid, single bid, bids much higher than expected, etc.). During procurement, the PMOC should identify and report to the ACOR any issues that arise and actions undertaken by the project sponsor to address or remedy the situation. The ACOR should also provide any additional recommendations they may have.

The PMOC should include a list of awarded contracts as an attachment to the Project Monitoring Report.

#### **7.7 Design**

The PMOC should assess the project sponsor's progress in advancing the project design. The PMOC should confirm that the project sponsor has a description of the design roles and responsibilities, milestones, and development and review process in the PMP or in a separate design control plan. If design advancement results in issuing an updated design package, obtain the new design package and perform a cursory review on a spot-check basis. The PMOC should confirm that the project sponsor has a process to ensure review comments have been addressed and any necessary changes have been incorporated into the design.

Verify that there is a quality plan for design and that the requirements of the plan are being properly and fully implemented. The PMOC should also confirm whether design criteria have been established and adhered to in the design effort. Additionally, the PMOC should confirm that the design criteria include compliance with the Americans with Disabilities Act (ADA) regarding platform access, site access, and access within building interiors. The PMOC should identify and analyze any third-party requirements and design issues that have the potential to affect project scope, cost, or schedule.

### **PROJECT MONITORING REPORT**

The PMOC should provide the status of design development, indicate the percent complete of each design package, and provide the status of comments from key stakeholders. If multiple contracts are being used, provide sufficient detail for each contract to convey the status of design, discuss any issues that have the potential to affect project scope, cost, or schedule, actions being undertaken by the project sponsor to address the issues, and any additional PMOC

recommendations. Also, report additional detail related to the level of design intended for the contracting method (e.g., coordination with the contractors or development of performance criteria).

### **7.8 Value Engineering and Constructability Reviews**

The PMOC should assess whether the project sponsor is exercising due diligence in the performance of Value Engineering (VE) and Constructability Reviews (CR) for the project. Confirm the project sponsor is implementing accepted VE or CR items in accordance with their PMP in their contract documents.

## **PROJECT MONITORING REPORT**

Describe any VE or CR activities intended by the project sponsor. Discuss with the ACOR the need to attend workshops or otherwise monitor these activities. Report on the results of the activities, including the project sponsor's evaluation and final determination of value alternatives.

### **7.9 Real Estate Acquisition and Relocation**

The PMOC should assess the project's progress in planning, staffing, and implementing their real estate effort and whether the project's real estate activities are proceeding consistent with the Real Estate Acquisition and Management Plan (RAMP). If significant deviations from the RAMP are noted, the PMOC should discuss the reasons with the project sponsor. The PMOC should assess whether a RAMP revision is warranted. If so, the PMOC should discuss the need for the revision and possible RAMP review with the ACOR. The PMOC should assess real estate acquisition and relocation progress relative to cost and schedule.

The PMOC should identify specific issues and any actions taken by the project sponsor to manage them. If the project delivery method being used requires the project sponsor to provide access to real estate on contractually specified dates, the PMOC should assess the reasonableness and progress of those dates. The PMOC should become familiar with the property acquisition process to be followed and the ordinary and statutory time frames required for property transactions from a willing seller, a property being acquired through eminent domain (condemnation), and the notice periods for possession and relocation actions.

## **PROJECT MONITORING REPORT**

The PMOC should report on the project's progress in planning, staffing, and implementing their real estate effort including the preparation of the project's RAMP and impacts, if any, to the master project schedule due to real estate activities. If significant deviations from the RAMP or project schedule are noted, provide detail on the nature of the deviations and actions being undertaken to remedy the situation. The PMOC should provide a summary of the cumulative real estate acquisition and relocation costs to date and evaluate against the budgeted costs. The PMOC should provide the status of real estate acquisitions and relocations relative to the schedule. The PMOC should report on specific issues and actions the project sponsor is taking to manage them.

### **7.10 Third-Party Agreements and Utilities**

The PMOC should review the project sponsor's list of required third-party agreements and their plan for having all critical agreements executed prior to execution of a grant. Such agreements typically relate to funding and financing, permitting, regulatory compliance, utilities, real estate, railroads, safety and security, operations and maintenance, interlocal/interagency agreements (including in-kind contributions), and governance of the project.

The PMOC should assess the project sponsor's progress in executing such agreements relative to the schedule and should identify any agreements that may have been overlooked or are emerging later in the project, as well as any agreements for which the project sponsor is having difficulty negotiating and executing. The PMOC should obtain and review third-party agreements as they are developed and executed to understand their implications for the project and any allocation of risk and impact on the project.

### **PROJECT MONITORING REPORT**

The PMOC should report on the project sponsor's progress in identifying, negotiating, and executing third-party agreements and how that progress relates to the project schedule. Report on the project sponsor's progress in developing their list of third-party agreements and assist FTA in determining which agreements should be considered "critical," (i.e., must be executed prior to award of a grant). Report on any unique or otherwise unusual agreements and the approach and supporting resources being used by the project sponsor to obtain the agreement. Report any changes to the list of agreements and the implications, if any, to the project. Provide sufficient detail for any agreements the project sponsor is having difficulty negotiating and executing, actions being undertaken by the project sponsor to address the issue, and any additional PMOC recommendations.

The PMOC should include (by reference if needed) a copy of the project sponsor's matrix that provides the status of each agreement, the target date for execution, and any issues that have been identified relative to the agreement.

### **7.11 Construction**

The PMOC should review construction progress for each contract, identify any issues encountered, and assess any potential impacts on the project. The PMOC should perform periodic site tours of the construction activities, observe work in progress, and attend construction progress meetings conducted by the project sponsor. If possible, the PMOC should talk with the contractors and/or evaluate contractors' reports and schedules to obtain their perspectives on project issues.

The PMOC should understand the project sponsor's invoicing process, review contractor payment applications, and evaluate how contractor invoices are rolled up into the total project cost data. The PMOC should confirm the following processes are consistent with the project sponsor's PMP and associated subplans: change orders, nonconformance reports, requests for information, shop drawing submittals, document control, safety, quality control, cost and schedule updates, Buy America compliance, prevailing wage, and DBE compliance. The PMOC should periodically review the various construction documents such as requests for information, change orders, and submittal reviews to assess whether contractually specified review times are being met.

## **PROJECT MONITORING REPORT**

The PMOC should provide a summary on the status of construction activities by the project sponsor. If multiple contracts are being used, provide sufficient detail for each contract to convey the status of construction, discuss any issues that have the potential to affect project scope, cost, or schedule, actions being undertaken by the project sponsor to address the issues, and any PMOC recommendations. The PMOC should report any significant change orders, claims, or delays, and the actions being taken by the project sponsor to address these items.

### **7.12 Vehicle Technology and Procurement**

The project sponsor should provide status updates to the PMOC to document the progress and fulfillment of all vehicle procurements. These updates should include status of the vehicle procurement including design, manufacturing, testing, and delivery schedule. The PMOC should evaluate any technical issues that have been identified regarding design, manufacturing, or testing of vehicles, or Buy America compliance.

## **PROJECT MONITORING REPORT**

The PMOC should report any observations, issues, and recommendations regarding vehicle technology and procurement for the project. The PMOC should describe the number and type of transit vehicles being acquired as part of the project, the procurement method(s) being used, and the status of procurement activities. If vehicles are being procured independent of the project, describe the circumstances and how the vehicles will be made available to the project as required by the master project schedule. If new or innovative technology will be incorporated into the vehicles, describe the technology or features and how the project sponsor is providing appropriately qualified resources to assist in managing the procurement.

Each Project Monitoring Report should contain a Rolling Stock Vehicle Status Report as an Attachment (see Appendix D).

### **7.13 Project Cost**

The PMOC should review cost updates received from the project sponsor including the current budget, expenditures, variances, commitments, forecast cost estimate at completion, percent expended, and contingency. The PMOC should review the logs of executed change orders, pending and potential change orders, and any trends. The PMOC should review the retained contingency versus the expected contingency identified in the Risk and Contingency Management Plan (RCMP) drawdown curves and discuss any anomalies with the project sponsor (e.g., expenditures are greater than committed or budgeted, changes in line items, committed/expended amounts less than previous review, unexpected use of contingency, etc.). If applicable, the PMOC should verify that costs associated with concurrent non-project activities are properly segregated and accounted for.

In accordance with the current FTA Circular Award Management Requirements Circular (C 5010.1E or most recent version), the PMOC should review change orders as reported to FTA to determine the project sponsor's process has been followed, to determine the potential impact on the project scope, schedule, cost, quality or safety, and to confirm the changes are eligible for reimbursement given the scope of work identified in the grant agreement. The PMOC should

evaluate and review trends regarding expenditures and forecasted costs related to completion of the project within the budget.

### **PROJECT MONITORING REPORT**

The Project Monitoring Report should include a table showing original budget, current budget, expenditures to date, earned value (if applicable), estimate to complete, and estimate at completion by Standard Cost Category (SCC) for the subject period. Any variances between planned and actual costs to date and contingency usage should be explained in sufficient detail.

The PMOC should discuss the status of the budget and any issues that have the potential to affect it, actions being undertaken by the project sponsor to mitigate costs, and any PMOC recommendations. The PMOC should include a discussion if there is concern that the project will exceed the approved budget identified in the grant agreement.

#### **7.14 Project Schedule**

The PMOC should review the project sponsor's Master Project Schedule updates in native software file format to identify new or deleted activities, significant changes to activity duration, changes to logic, changes to the project's major milestones, or other significant schedule changes. The PMOC should review the schedule against prior updates to sufficiently evaluate the overall trends and discuss these trends with the project sponsor to understand their basis and potential impact on the project. The PMOC should identify and discuss the critical path(s) and any critical path changes over the past month. The PMOC should evaluate construction progress (earned value) curve against planned value curve to discover any negative trends and report accordingly.

### **PROJECT MONITORING REPORT**

The report should include a table showing key milestone dates (planned and actual) and include discussions on any variances between baseline schedule and current schedule. The critical and near-critical paths should be discussed along with an explanation for changes in critical path from the previous month. The PMOC should discuss the status of schedule contingency and any issues that have the potential to impact schedule, actions being undertaken by the project sponsor to recover time as a result of these impacts, and any PMOC recommendations. The PMOC should include a discussion if there is concern the project will exceed the approved revenue service date identified in the grant agreement.

#### **7.15 Project Risk**

The PMOC should review risks identified in the RCMP, risk register, or those otherwise being tracked by the project sponsor. Risks can be the result of a full risk assessment or risks that have surfaced during ongoing reviews of the project. The PMOC should discuss and evaluate the effectiveness of the proposed mitigation and if any updates are needed. The PMOC should assess whether a risk refresh should be considered based on changes to the scope, schedule, or cost of the project, and if so, the PMOC should discuss such a need with the ACOR.

## **PROJECT MONITORING REPORT**

The PMOC should discuss the project sponsor's risk management and reporting activities, including contractual risk transfers, maintenance of the risk register, identification of risks, risk owners and related mitigation actions, risk assessments or risk refresh activities, the development and maintenance of contingency drawdown curves for cost and schedule, and the status of contingencies. The PMOC should provide any findings, opinions, or impacts of newly identified risks or changes to existing risks to FTA.

### **7.16 Quality Assurance/Quality Control**

The PMOC should review the status of the project sponsor's Quality Assurance/Quality Control (QA/QC) program and activities. The review should include updates on adherence to the project sponsor's QA/QC program, including quality audits and tracking of mitigation activities in cases of noncompliance or findings, and evidence of corrective action plans along with completion timelines as possible.

## **PROJECT MONITORING REPORT**

The PMOC should briefly describe the project sponsor's quality program and the status of current quality activities. The PMOC should provide an update on quality audit activities including the schedule, audit results, and noncompliances, along with any associated corrective actions including timeliness of resolving such discrepancies.

### **7.17 Safety and Security**

The PMOC should review and understand the project's Safety and Security Management Plan (SSMP) and the various activities that contribute to the overall safety and security of the work being performed and the ultimate operation of the project. The PMOC should review construction safety statistics and evaluate the performance of the construction contracts relative to national averages.

The PMOC should receive updates from the project sponsor related to safety and security activities throughout the PD, engineering, and construction phases preceding revenue service. This information should include information from fire, life, and safety meetings, Preliminary Hazard Analyses (PHA), Threat and Vulnerability Analyses (TVA), and development of safety and security design criteria. The PMOC should pay attention to the planning and scheduling of safety related activities and availability of associated resources as the project approaches completion or revenue service. The PMOC should determine if an SSMP adherence review is warranted, and if so, the PMOC should discuss such a need with the ACOR.

## **PROJECT MONITORING REPORT**

The PMOC should briefly describe the project sponsor's safety and security program and the status of current activities. During the early phases of the project, the PMOC should discuss the project sponsor's safety and security program and progress in producing PHA, TVA, design criteria, and actions taken to address issues or conditions identified. The PMOC should describe ongoing safety activities of relevant groups such as fire and life safety committee, safety and security certification committee, coordination with the State Safety Oversight Agency (SSOA) or the Federal Railroad Administration (FRA), if applicable, etc. The report should contain the

results of construction safety efforts, reported accidents, injuries, incidents, and the results of safety investigations. The PMOC should notify FTA of any fatalities or serious incidents occurring on the project immediately.

The Project Monitoring Report should contain a Safety and Security Checklist as an attachment (see Appendix F).

### **7.18 Americans with Disabilities Act (ADA)**

The PMOC should receive regular updates from the project sponsor regarding compliance with the level-boarding and between-car barrier provisions of the Department of Transportation (DOT) regulations during design, construction, and manufacturing of vehicles and station platforms. The PMOC should confirm the design criteria include compliance with the ADA regarding platform access, site access, access within building interiors, signage, and communications.

## **PROJECT MONITORING REPORT**

The PMOC should describe the project sponsor's program to identify and comply with the requirements of the ADA, the status of activities, and any special conditions or issues related to the project. The PMOC should ensure any discussion regarding ADA requirements complement the discussion in Section 7.7.

### **7.19 Buy America**

The PMOC should review activities undertaken by the project sponsor, including appropriate contract requirements, pre-award and post-delivery audits, and project documentation to ensure compliance with Buy America regulations during design, procurement, and construction activities. The PMOC should confirm that the project sponsor understands Buy America compliance applies not only to bus and rail vehicles but is also required for procurement of all manufactured products as defined in 49 CFR Part 661. The PMOC should also confirm that the project sponsor has received and evaluated certifications regarding domestic manufacture of all federally funded procurements per each contract.

## **PROJECT MONITORING REPORT**

The PMOC should describe the project sponsor's approach and actions to comply with and document compliance with Buy America requirements and any unusual or challenging issues. The PMOC should report if the project sponsor will seek any Buy America waivers and provide the reasons for such waivers. For rolling stock procurements, the PMOC should identify the domestic content percentage that applies to the procurement.

### **7.20 Start-Up, Commissioning, Testing**

The PMOC should ascertain whether the project sponsor has developed a reasonable and comprehensive schedule for testing, commissioning, and start-up activities well in advance of the time those activities will be initiated. The PMOC should begin oversight and review of these plans well in advance of any actual activities and encourage the project sponsor to begin planning and assign adequate and qualified staff, so the process can be thoroughly reviewed and planned before implementation begins. The project sponsor should have an updated PMP that reflects the policies and procedures for start-up, commissioning, and testing. Leading up to

revenue service, the PMOC should review the requirements needed in advance of the Readiness for Revenue Operations Report, including the status of the Rail Activation Plan, Systems Integration Test Plan, safety certifications, training, bus and/or rail operations, emergency preparedness, public outreach, and safety and security certification. The PMOC should confirm the project sponsor understands the requirements needed in advance of operations.

### **PROJECT MONITORING REPORT**

The PMOC should discuss the project sponsor's plans and preparations for project completion and/or the start of revenue service. The PMOC should avoid any duplication of discussions on Safety and Security from Section 7.17.

#### **7.21 Before-and-After Study Reporting**

The PMOC should perform routine monitoring of the project sponsor's attention to Before and After studies and should confirm that the appropriate information is being captured at each milestone for the project scope and capital cost outcomes. Activities may include the following:

- Obtaining the FTA-approved plan for the Before and After study
- Understanding the study's requirements, schedule, and milestone dates
- Including progress reports on execution of the study in the agenda for quarterly review meetings, as appropriate
- Reviewing scope and cost information (that are to be included in the project sponsor's final report) for adequacy and completeness

### **PROJECT MONITORING REPORT**

The PMOC should report on the project sponsor's efforts to archive all the materials needed to document the predictions used by FTA to rate the project at Entry to Engineering and prior to execution of the grant agreement.

After the project opening, the PMOC should report on the project sponsor's documentation on scope and cost outcomes and the project sponsor's assessment of predictions at Entry to Engineering and at grant execution for their accuracy and completeness.

#### **7.22 Lessons Learned**

The PMOC should routinely consider whether the project sponsor, or other project participants, have developed any new methods, practices, or procedures, or changed or modified any prior practices in a beneficial way.

### **PROJECT MONITORING REPORT**

If the PMOC or the project sponsor identifies lessons learned, these should be recorded in the Project Monitoring Report with a brief description of the lesson learned and their benefits. The ACOR may direct the PMOC to prepare a specific lessons learned report on one or more of the identified actions.



## **8.0 DELIVERABLES**

The PMOC's findings, analysis, professional opinions, and recommendations should be reflected in the Project Monitoring Report. All reports should be written simply and clearly. The PMOC should use all available tools to convey meaning, such as narrative, photos, tables, etc. The PMOC should reference previous paragraphs if necessary and should minimize repetition within a report. When applicable, the PMOC should suggest alternative approaches and/or recommended courses of action.

### **8.1 Project Monitoring Site Visit Summary**

At the direction of the ACOR, the PMOC shall provide the ACOR, and the FTA Office of Capital Project Management (TPM-20) representative assigned to the project, a summary of the project monitoring site visit via email within 48 hours of the completion of the PMOC's monitoring site visit with the project sponsor. This email should be brief and include the following in bulleted format:

- Assessment of the project status
- Any issues or events of significance that may impact the scope, schedule, cost, risk, quality, or safety of the project
- Other key information obtained during the monitoring site visit the PMOC deems critical to FTA

### **8.2 Trip Report**

At the direction of the ACOR, the PMOC shall prepare a trip report when conducting or attending special meetings or site visits (e.g., visits to vehicle manufacturing facilities, specialized meetings, performance of specific technical reviews, attendance at workshops, etc.). Trip reports are not to be used to capture detailed meetings notes/minutes, but they should provide a summary of activities and key items addressed during the trip in a bulleted format. Trip reports should be brief (no more than seven pages) and should summarize the purpose of the trip, specific activities undertaken, observations and findings, any recommendations, and photographs if appropriate.

### **8.3 Project Monitoring Report**

The PMOC's Project Monitoring Report provides FTA with a current update on the entire project including key indicators or milestones, critical issues, PMOC concerns, professional opinions, and recommendations. The PMOC's report should be based on the PMOC's independent observations and opinions derived from the information provided by the project sponsor. The report should be a reviewed and analyzed version of the previous report and should include information gathered at meetings with the project sponsor or other project participants.

***There must be flexibility for report content since each project is unique.*** Additionally, the focus on key items may change over the course of the project life. For example, procurement monitoring will initially focus on contract preparation and award, but the focus will shift to change management as the project is executed.

See OP 01 for report formatting, including information that should be included on the cover page. The Project Monitoring Report shall include the following content in the following order:

- Cover Page
- Table of Contents
- Executive Summary
- Body of Report (Observations and Findings)
- Attachments

*An example table of contents for the Project Monitoring Report is included as Appendix E. The PMOC should discuss the table of contents with the ACOR, with input from the TPM-20 representative, prior to preparing the first report to identify which items are applicable for the project. The PMOC should periodically review the report and the content with the ACOR to confirm it is meeting the needs of FTA.*

### **8.3.1 Executive Summary**

The Executive Summary shall be succinct and contain information that is of interest to FTA executive management staff. It should brief the reader in a clear, concise manner on the status of the project, including any major issues impacting the project's scope, schedule, cost, quality, and safety. The Executive Summary shall be a maximum of four pages, excluding the Key Indicators Dashboard and Core Accountability Items table, and should include the sections discussed below.

#### **8.3.1.1 Project Description**

The project description should be one paragraph and should include information about the name and location of the project, the mode of the project, the name of the project sponsor, the cost, the scope of the project, and the service provided by the project once it is completed. This section should enable the reader to identify the project and differentiate it from others.

#### **8.3.1.2 Project Status**

In bulleted format, provide the status of the following:

- Scope
- Schedule
- Cost
- Significant Project Activities and/or Key Milestones

The PMOC should only highlight the critical project aspects and most important current information from the body of the report.

#### **8.3.1.3 Major Issues and/or Concerns**

The PMOC should include an action items table within the Project Monitoring Report. Discuss any major issues or concerns impacting the project's scope, schedule, cost, risks, quality, safety, etc. Every major issue or concern identified in a Project Monitoring Report should be reported through its resolution. For example, if an issue is resolved in between Project Monitoring Reports, the actions taken by the project sponsor should be addressed in the report following this action. For each item in the major problems/issues list, the PMOC should provide the following information:

<b>Summary of Issue/Concern</b>	Brief description of issue/concern
<b>Date Identified</b>	Date the issue/concern was first included in the Project Monitoring Report
<b>Status</b>	Status of the issue
<b>Project Sponsor Action</b>	Provide a brief explanation of actions taken by the project sponsor to resolve the issue (e.g., planned action is in conformance with management plans)
<b>PMOC Recommendation</b>	Provide recommendations when applicable

Issues raised should be those of significant concern having a potential impact on the project’s implementation and should be brought to FTA’s attention. The PMOC should provide their opinion and recommendations related to the specific issues. In addition, the PMOC should address whether the project sponsor is acting to resolve the issues in an appropriate manner and if the project sponsor’s actions are in conformance with the approved PMP and/or RCMP (if already approved).

The PMOC should review the list of current action items with the project sponsor. If there are no major issues, then the PMOC should state this within the report.

**8.3.1.4 Status of Key Indicators Dashboard (Post-Grant)**

The Key Indicators Dashboard should be included after a grant is awarded to provide a quick visual representation, accompanied by a brief supporting statement (if necessary) on those topical areas FTA has determined are the most relevant to monitoring the health of the project.

Only a single-color traffic light is indicated for any one topic:

- Green indicates an acceptable or stable condition.
- Yellow indicates an area of concern where specific actions by the project sponsor are needed to address issues (e.g., a declining situation or lack of progress; or improvement in those cases where the light was previously yellow or red).
- Red indicates an unacceptable condition requiring immediate attention.
- Yellow or red indications should include a brief notation in the column labeled “Issue or Concern,” and the topic should be tied to major issues and/or concerns as identified in Section 8.3.1.3 of this OP.

*The PMOC should notify FTA immediately of any situation that would cause one of the indicators to change (condition improves or degrades) from one reporting period to the next.*

KEY INDICATORS DASHBOARD (POST-GRANT STATUS)					
<b>Project Sponsor:</b>					
<b>Project Name:</b>					
<b>Date:</b>					
Project Detail					
<b>Oversight Frequency:</b>		(Monthly/Quarterly)			
Element	Status			Prior Status (G/Y/R)	Issue or Concern
	●	●	●		
	G	Y	R		
<b>PMP</b>					
<b>MCC</b>					
<b>Cost*</b>					
<b>Schedule</b>					
<b>Quality</b>					
<b>Safety</b>					
<b>Risk</b>					
Legend					
<b>Green</b>	<i>Satisfactory: no corrective action necessary</i>				
<b>Yellow</b>	<i>Caution risk/issues exist. Corrective action may be necessary.</i>				
<b>Red</b>	<i>Elevated for immediate corrective action; significant risk to the health of the project</i>				
	*Note: With regard to cost, the PMOC should indicate the following status: <ul style="list-style-type: none"> <li>• Yellow: Forecast cost exceeds the project budget by up to 3 percent.</li> <li>• Red: Forecast cost exceeds the project budget by more than 5 percent.</li> </ul>				

### 8.3.1.5 Core Accountability Items

The Core Accountability Items table should be included to report on the core accountability information before and after a grant is awarded (unless otherwise directed by FTA). If there is no available information to report on a core accountability item because of the phase of the project or otherwise, the PMOC should mark it as “N/A.”

The column identified as “Current Forecast” should include the project sponsor’s forecast for cost, contingency, and schedule for that month. The column identified as “PMOC Assessment” should provide the PMOC’s disposition on the accuracy of this information (e.g., acceptable or

unacceptable). If the PMOC perceives significant inaccuracies or discrepancies with the “Current” information that was reported, this should be identified as a major concern/issue per Section 8.3.1.3 of this OP and should be flagged in the Key Indicators Dashboard.

**CORE ACCOUNTABILITY ITEMS**

		<b>Original (Grant)</b>	<b>Current Forecast</b>	<b>PMOC Assessment of Current Forecast<sup>2</sup></b>
<b>Cost</b>	Capital Cost Estimate			
<b>Contingency<sup>3</sup></b>	Unallocated Contingency			
	Allocated Contingency			
	Total Contingency			
<b>Schedule</b>	Revenue Service Date			
<b>Project Progress</b>			<b>Amount (\$)</b>	<b>Percent of Total</b>
<b>Total Expenditures</b>	Actual cost of all eligible expenditures completed to date			
<b>Planned Value to Date<sup>4</sup></b>	Estimated value of work planned to date			
<b>Actual Value to Date<sup>5</sup></b>	Actual value of work completed to date			

<sup>2</sup> Indicate whether the PMOC concurs with the current forecast of the project — “acceptable” or “unacceptable.” If “unacceptable,” the PMOC should provide detail for any disagreement within the Executive Summary and the Body of the Report.

<sup>3</sup> Report the balance of contingency remaining (current).

<sup>4</sup> In a footnote to the table, indicate basis for “Value to Date” (e.g., earned value, weighted value, contract value, accrued value, etc.).

<sup>5</sup> In a footnote to the table, indicate basis for Value to Date (e.g., earned value, weighted value, contract value, accrued value, etc.).

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<b>Contract Status</b>		<b>Amount (\$)</b>	<b>Percent</b>
<b>Total Contracts Awarded<sup>6</sup></b>	Value of all contracts (design, support, construction, equipment) awarded; percent of total value to be awarded		
<b>Construction Contracts Awarded</b>	Value of construction contracts awarded; percent of total construction value to be awarded		
<b>Physical Construction Completed</b>	Value of physical construction (infrastructure) completed; percent of total construction value completed		
<b>Rolling Stock Vehicle Status</b>	<b>Date Awarded</b>	<b>No. Ordered</b>	<b>No. Delivered</b>
<i>[Insert Vehicle Identifier]</i>			
<b>Next Quarterly Review Meeting Date:</b>			

**Grant Information**

<b>FAIN (Source)</b>	<b>Federal Funds Obligated</b>	<b>Federal Funds Disbursed</b>	<b>% Disbursed</b>

**8.3.2 Body of Report (Observations and Findings)**

For each project monitoring and reporting element listed in Section 7.0 and Appendix E of this OP, the PMOC should provide a status update, observations/findings, issues/concerns, and recommendations. One or two photos may also be included to better convey an issue or key

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<sup>6</sup> In an attachment to the Project Monitoring Report, list the contracts comprising the total value awarded.

milestone activity. The Body of the Report shall be a maximum of 20 pages (excluding attachments). The PMOC should coordinate with the ACOR if additional pages are required to present all relevant information.

### **8.3.3 Attachments**

The following are items that should be included as attachments. Other attachments may be included if deemed necessary or as requested by the ACOR.

- **Attachment A – List of Acronyms**: Reference basic acronyms in the report. Each acronym should be fully spelled out the first time it is used in the report.
- **Attachment B – Safety and Security Checklist**: Include on a quarterly basis, or more frequently if updated prior to scheduled quarterly submission, or at the request of FTA. For required content and format, see Appendix F of this OP.
- **Attachment C – Top 5 Project Risks**: Include on a quarterly basis, more frequently if updated prior to scheduled quarterly submission, or at the request of FTA. The list of risks should correlate with the risk register provided by the project sponsor.
- **Attachment D – Awarded Contracts**: Provide a table that includes the contract number, contract name, contractor/consultant, base contract value, value of changes/amendments, current value, expended amount, start date (NTP), and completion date.
- **Attachment E – Rolling Stock Vehicle Status Report**: Provide an update per Section 7.12 – Vehicle Technology and Procurement of this OP. For required content and format, see Appendix D of this OP.
- **Attachment F – Project Milestones/Key Events**: Include a list of major project milestones and key events in chronological order listing of events over the course of the project. This list should include the date and a summary of the milestone or event.
- **Attachment G – Roadmap to Revenue Operations**: Once a project has a grant agreement, include this submission on a quarterly basis, prior to the Quarterly Review Meeting, unless otherwise required by FTA. This information may be high level at the beginning of the project but will become more granular in detail as the project progresses. Specific detail should be available at least one year from the start of revenue operations. *(Note: The PMOC should obtain the information in the report from the project sponsor’s integrated project schedule.)*
- **Attachment H – Project Map**: Include a map of the project.

### **8.4 Quarterly Review Meeting Notes**

The FTA Regional office, the PMOC, and project sponsor typically meet on a quarterly basis. The FTA Regional Administrator typically leads the meeting, with the project sponsor’s executive management also participating. The Quarterly Review Meeting allows FTA and the project sponsor’s executive management the means to accelerate the resolution of project issues and support the project moving forward.

Prior to the meeting, the PMOC will coordinate with the ACOR, as well as the FTA region, to set the meeting date. In addition, the PMOC will assist in preparing the meeting’s agenda. The

agenda should be tailored to the specific needs of the project sponsor’s program and should include issues that require executive management attention or direction.

Prior to the Quarterly Review Meeting, the PMOC will meet with FTA staff to brief them on the agenda items and major issues. Unless directed otherwise by the ACOR, the PMOC should prepare an annotated agenda that summarizes the status of key items for the project and provides sufficient detail to understand the nature of any major issues. The annotated agenda will be referenced during the Pre-Quarterly Review Meeting with FTA and may be used by FTA participants to guide discussion during the meeting.

The PMOC shall take meeting notes that will serve as the official record of the meeting. The Quarterly Review Meeting notes should completely capture the discussion. They should also include the status of prior and current action items with the responsible party identified, as well as the sign-in sheet of meeting attendees. The format of the meeting notes should be left to the discretion of the ACOR.

**8.5 Final Monitoring Report**

After construction is complete, contracts are closed, and the project is completed or in Revenue Operations, or when a PMOC task order is complete, a Final Monitoring Report shall be submitted to FTA. While this report should be organized according to the outline for the project monitoring reports, it should highlight, in a broad way, the most important events, issues, resolutions, actions taken, and actions pending during the project life, so the report is instructive to others. In addition, the Final Monitoring Report should describe the impacts of the project on the project sponsor’s staff (administration, operations, and maintenance), should include lessons learned and should provide a summary of the transit operations/overall system performance.

**9.0 REPORTS, PAPERS, PRESENTATIONS**

The PMOC shall provide FTA with written reports of their observations/findings, analyses, recommendations, professional opinions, and a description of the review activities undertaken. Reports shall follow the requirements of OP 01, as well as the formatting requirements outlined in this OP.

**9.1 Distribution of Deliverables**

All deliverables shall be submitted electronically. The following table provides detail for the distribution of the PMOC’s deliverables:

<b>DISTRIBUTION OF DELIVERABLES</b>		
<b>Deliverable</b>	<b>Draft</b>	<b>Final</b>
Project Monitoring Site Visit Summary (via email)	N/A	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> </ul>
Trip Reports	N/A	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> </ul>



<b>DISTRIBUTION OF DELIVERABLES</b>		
Project Monitoring Reports	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> </ul>	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> <li>• COR</li> </ul>
Quarterly Review Meeting Notes	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> </ul>	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> <li>• COR</li> </ul>
Final Monitoring Report	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> </ul>	<ul style="list-style-type: none"> <li>• ACOR</li> <li>• TPM-20 representative</li> <li>• COR</li> </ul>

Comments on the DRAFT from both ACOR and TPM-20 representative are transmitted to the PMOC through the ACOR. Upon the incorporation of FTA’s comments, the PMOC shall submit the FINAL deliverable.

At the discretion of the ACOR, the draft Project Monitoring Reports and draft Quarterly Review Meeting notes may be transmitted to the project sponsor for review. The purpose of this review by the project sponsor is to confirm the facts presented in the PMOC’s report are accurate, not to comment on the PMOC’s assessment of the project. Upon FTA’s submission of the PMOC’s final version of the Project Monitoring Reports and Quarterly Review Meeting notes to the project sponsor, if differences of opinion exist between the PMOC and project sponsor regarding the PMOC’s findings, FTA may direct the PMOC to reconcile with the project sponsor. The PMOC should then submit to FTA an amended report that highlights any modifications.

**9.2 Deliverable Submission Due Dates**

Due dates for the various deliverables discussed in this OP shall be identified in the Implementation Plan. Note these due dates may be updated by the ACOR via the Implementation Plan. See Section C of the base contract for instructions on how to submit the revised Implementation Plan.

<b>DELIVERABLE SUBMISSION DUE DATES</b>	
<b>Deliverable</b>	<b>Due</b>
Project Monitoring Site Visit Summary	Within 48 hours of monitoring site visit with the project sponsor (at direction of ACOR)
Trip Reports	Draft and final reports are due as scheduled in the Implementation Plan.
Project Monitoring Reports	Draft and final reports are due as scheduled in the Implementation Plan.

DELIVERABLE SUBMISSION DUE DATES	
Quarterly Review Meeting Notes	Draft and final notes are due as scheduled in the Implementation Plan.
Final Monitoring Report	Draft and final report is due as scheduled in the Implementation Plan.

## 10.0 LIST OF APPENDICES

- A [Acceptable Quality Level](#)
- B [Typical Project Sponsor Submittals](#)
- C [Categories of Oversight Triggers](#)
- D [Rolling Stock Vehicle Status Report](#)
- E [Project Monitoring Report Table of Contents \(Example\)](#)
- F [Safety and Security Checklist](#)
- G [Acronyms](#)



**APPENDIX A: ACCEPTABLE QUALITY LEVEL**

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[PLACEHOLDER FOR AQL TABLE]



## **APPENDIX B: TYPICAL PROJECT SPONSOR SUBMITTALS**

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The following are some of the potential project materials the PMOC may request from the project sponsor to review as part of the PMOC's recurring oversight and monitoring:

- Project sponsor correspondence with FTA, other agencies, third parties, etc.
- Project progress reports
- PMP and subplans and other documents including, but not limited to:
  - Project sponsor management capacity and capability documents – organization charts, project staff resumes, contracts, and RFPs for consultants and other procurement contracts
  - Risk management documents including the Risk and Contingency Management Plan
  - Document control plans and procedures
  - QA/QC plans and procedures
  - Safety and Security Management Plan
  - Fleet Management Plans
  - Real Estate Acquisition and Management Plan
- Third-party agreements
- Environmental documents (e.g., Environmental Assessment, Record of Decision, etc.)
- Environmental monitoring and mitigation reports
- Design documents
  - Plans and specifications
  - Basis of design document
  - Design criteria
  - Preliminary hazard analysis
  - Threat and vulnerability assessment
  - Geotechnical studies and reports
  - Value engineering and constructability review reports
  - Specialty reports
- Project Schedule including Integrated Master Project Schedule and updates and schedule basis document
- Cost estimates in original and SCC format
- Cost estimating methodology report
- Expenditure reports, estimates at completion, and contingency drawdown reports
- Real estate activity reports
- Before and After study plan and documentation
- Permits
- Project delivery and procurement documents
  - Evaluation and selection of project delivery method(s)
  - Organization and coordination of contract packages

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- Terms and conditions of construction contracts
- Solicitation materials such as Invitations for Bid and/or Requests for Proposal
- Addenda to bid packages
- Bid results/tallies
- Independent cost estimates
- Negotiation summaries
- Construction administration/management files
  - Construction contracts
  - Contractor progress reports
  - Contractor pay requests
  - Contractor schedule updates and short-range look-ahead schedules
  - Change order files (including potential change orders)
  - Claims files (including potential claims)
  - Request for Information (RFI) logs
  - Inspection and testing reports
  - Quality and safety reports
  - Meeting minutes
  - Contractor correspondence
  - Contract management reports
  - QA/QC audit reports



## APPENDIX C: CATEGORIES OF OVERSIGHT TRIGGERS

OVERSIGHT TRIGGER	MEASURES TO CONSIDER
<b>Management Capacity &amp; Capability</b>	
<b>Personnel:</b> Issues/concerns identified with project sponsor's capacity and capability. Readiness Review recommendations not implemented.	Review the project sponsor's organizational status for: <ul style="list-style-type: none"><li>• Effects of change in leadership and key personnel</li><li>• MCC recommendations identified in PMOC's Readiness Review and/or other reviews not being addressed or implemented</li><li>• Delayed and/or inconsistent reporting of required information</li><li>• PMP and companion documents not updated to reflect current status or upcoming phase of the project</li><li>• Financial plan updates and financial health of the agency</li></ul>
<b>Process:</b> Issues/concerns identified with third-party and utility agreements that may impact federally approved cost/schedule	Review the status and management of agreements to evaluate impact to the critical path
<b>Process:</b> Issues/concerns identified with ROW acquisitions and relocation activities that may impact federally approved cost/schedule	Review certified parcel matrix and real estate department resources to evaluate impact to the critical path

OVERSIGHT TRIGGER	MEASURES TO CONSIDER
<b>Project Controls</b>	
<p><b>Costs:</b> Forecasted costs continue to increase and may result in cost overruns to federally approved budget</p>	<p>Review forecasted cost increases (including relative percentage increases approaching 5% threshold point)</p> <ul style="list-style-type: none"> <li>• Inability or inconsistency in reporting forecasted costs at completion (EAC)</li> <li>• Significant cost variances</li> <li>• Contingency drawdown drops below threshold (buffer zone) in current RCMP</li> <li>• Lack of contingency management techniques</li> <li>• Cost-related recommendations identified in PMOC's Readiness and/or other reviews not being addressed or implemented</li> </ul>
<p><b>Schedule:</b> Forecasted delay continues to increase and may result in schedule delays to federally approved Revenue Service Date (RSD)</p>	<p>Review forecasted schedule delays (including depletion of schedule contingency relative to threshold point)</p> <ul style="list-style-type: none"> <li>• Inability or inconsistency in reporting forecasted schedule at completion</li> <li>• Not incorporating the requirements under OP 34 for a fully integrated master schedule</li> <li>• Significant schedule variances</li> <li>• Delays in contractor time extension negotiations that impact critical path</li> <li>• Contingency drawdown drops below threshold (buffer zone) in current RCMP</li> <li>• Lack of contingency management techniques</li> </ul>

<b>OVERSIGHT TRIGGER</b>	<b>MEASURES TO CONSIDER</b>
	<ul style="list-style-type: none"> <li>• Schedule-related recommendations identified in PMOC’s Readiness Review and/or other reviews not being addressed or implemented</li> <li>• Recommendations from OP 54 (Readiness for Revenue Services) are not being resolved in a timely manner</li> </ul>
<p><b><u>Modifications:</u></b> Issues/concerns identified with timely processing of change orders continue and may impact federally approved cost/schedule</p>	<p>Review change orders in accordance with current FTA Circular 5010.1E (or most recent version) and change order process to determine:</p> <ul style="list-style-type: none"> <li>• No discernable change in number of unresolved items; backlog is not being reduced in a timely manner</li> <li>• Poor contract structure and delayed contract changes impacting project schedule</li> </ul>



<b>OVERSIGHT TRIGGER</b>	<b>MEASURES TO CONSIDER</b>
<b>Safety</b>	
Issues/concerns identified with safety protocols that may impact acceptable safety thresholds	Review safety protocols to determine: <ul style="list-style-type: none"> <li>• Safety protocols identified in approved SSMP not being utilized; review reveals lacking or compromised processes</li> <li>• Increase in Recordable Injury or Incident Rates</li> <li>• Self-certification, FTA Transit Safety and Oversight (TSO) or State Safety Oversight Agency (SSOA) review reveals safety related issues</li> </ul>
<b>Quality</b>	
Issues/concerns identified with quality protocols that may impact acceptable quality standards	Review quality protocols to determine: <ul style="list-style-type: none"> <li>• Quality protocols identified in approved project sponsor's QA/QC program not being used; review reveals lacking or compromised processes</li> </ul>

<b>OVERSIGHT TRIGGER</b>	<b>MEASURES TO CONSIDER</b>
<b>Risk Management</b>	
Issues/concerns identified with risk management protocols that may impact federally funded cost/schedule	Review risk protocols to determine: <ul style="list-style-type: none"> <li>• Comprehensive risk register does not exist</li> <li>• Lack of effective or inconsistent risk management practices; no regular updates to risk register</li> <li>• RCMP not being followed</li> </ul>



## **APPENDIX D: ROLLING STOCK VEHICLE STATUS REPORT**

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- **Manufacturer/Model Year/Vehicle Model or Type/Propulsion**

*(Example: Eldorado National California 2017 40 ft. transit bus, hybrid diesel-electric power; NovaBus 2018 60 ft. articulated transit bus, battery-electric power; Stadler 2016 Diesel Multiple Unit 80 ft. Light Rail Vehicle)*

- **Piggyback or Option**

*Base contract (project sponsor/manufacturer/model year/vehicle model or type/propulsion/date of first vehicle of first sub-fleet delivery), date of first vehicle delivery of this sub-fleet, if applicable*

- **Number of Vehicles**

- **Contract Advertisement Date**

- **Contract Award Date**

- **Price per Vehicle (Initial Order)**

- **Planned Date of First Vehicle Delivery /Actual**

- **Initial Vehicle Order (Number of Vehicles and Configuration)**

*Example: 96 EMUs delivered as 6-car trainsets*

- **Number of Option Vehicles Included in Contract**

- **Buy America Domestic Content Percentage Required**

- **Domestic Content Percentage per Pre-Award Audit**

- **Latest Domestic Content Percentage Reported and Date**

- **Date of Pre-Award Audit**

- **Pre-Award Audit Report Date**

- **Intermediate Buy America Audit Date (If Planned)**

- **Date of Post-Delivery Audit**

- **Post-Deliver Audit Report Date**

- **Bus Only**

*Model year of bus and status of Federal Motor Vehicle Safety Act Bus testing and certification*



## **APPENDIX E: PROJECT MONITORING REPORT TABLE OF CONTENTS (EXAMPLE)**

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### **1.0 Executive Summary**

- 1.1 Project Description
- 1.2 Project Status
- 1.3 Major Issues and/or Concerns
- 1.4 Status of Key Indicators Dashboard (Post-Grant)
- 1.5 Core Accountability Items

### **2.0 Body of Report (Observations and Findings)**

- 2.1 Summary of Monitoring Activities
- 2.2 Oversight Triggers
- 2.3 Project Management Plan and Subplans
- 2.4 Management Capacity and Capability
- 2.5 National Environmental Policy Act Process and Environmental Mitigation
- 2.6 Project Delivery Method and Procurement
- 2.7 Design
- 2.8 Value Engineering and Constructability Reviews
- 2.9 Real Estate Acquisition and Relocation
- 2.10 Third-Party Agreements and Utilities
- 2.11 Construction
- 2.12 Vehicle Technology and Procurement
- 2.13 Project Cost
- 2.14 Project Schedule
- 2.15 Project Risk
- 2.16 Quality Assurance/Quality Control
- 2.17 Safety and Security
- 2.18 Americans with Disabilities Act (ADA)
- 2.19 Buy America
- 2.20 Start-Up, Commissioning, Testing
- 2.21 Before and After Study Reporting
- 2.22 Lessons Learned
- 2.23 Actions Items Table

### **3.0 Project Monitoring Report Attachments**

- A List of Acronyms
- B Safety and Security Checklist
- C Top 5 Project Risks

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- D Awarded Contracts
- E Rolling Stock Vehicle Status Report
- F Project Milestones/Key Events
- G Roadmap to Revenue Operations
- H Project Map



**APPENDIX F: SAFETY AND SECURITY CHECKLIST**

Safety and Security Checklist			
<b>Project Overview</b>			
Project Mode (Rail, Bus, BRT, Multimode)	<input type="checkbox"/>		
Project Phase (Project Development, Engineering, Construction, Start-Up)	<input type="checkbox"/>		
Project Delivery Method (Design/Build, DBOM, CMGC, etc.)	<input type="checkbox"/>		
Project Plans	Version	Review by FTA	Status
Safety and Security Management Plan (SSMP)		<input type="checkbox"/>	
Safety and Security Certification Plan (SSCP)		<input type="checkbox"/>	
Public Transportation Agency Safety Plan (PTASP)		<input type="checkbox"/>	
System Security Plan or Security and Emergency Preparedness Plan (SEPP)		<input type="checkbox"/>	
Construction Safety and Security Plan (CSSP)		<input type="checkbox"/>	
Safety and Security Authority			
Area of Focus	Y/N	Notes/Status	
Is the project sponsor subject to 49 CFR Part 674 state safety oversight requirements?			
Has the state designated an oversight agency as per 49 CFR section 674.13?			
Has the oversight agency reviewed and approved the project sponsor's security plan or Public Transportation Agency Safety Plan as per 49 CFR section 674.25(b)?			
Did the oversight agency participate in the last Quarterly Review Meeting?			
Has the project sponsor submitted their safety certification plan to the oversight agency?			
Has the project sponsor implemented security directives issued by the Department of Homeland Security and/or Transportation Security Administration?			

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<b>Safety and Security Checklist</b>		
<b>SSMP Monitoring</b>		
<b>Area of Focus</b>	<b>Y/N</b>	<b>Notes/Status</b>
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this?		
Does the project sponsor review the SSMP and related project plans to determine if updates are necessary?		
Does the project sponsor implement a process through which the Designated Function (DF) for safety and DF for security are integrated into the overall project management team? Please specify.		
Does the project sponsor maintain a regularly scheduled report on the status of safety and security activities?		
Has the project sponsor established staffing requirements, procedures, and authorities for safety and security activities throughout all project phases?		
Does the project sponsor update the safety and security responsibility matrix/organizational chart as necessary?		
Has the project sponsor allocated sufficient resources to oversee or carry out safety and security activities?		
Has the project sponsor developed hazard and vulnerability analysis techniques, including specific types of analysis to be performed during different project phases?		
Does the project sponsor implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?		
Does the project sponsor monitor the progress of safety and security activities throughout all project phases? Please describe briefly.		
Does the project sponsor ensure the conduct of preliminary hazard and vulnerability analyses? Please specify the analyses conducted.		

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<b>Safety and Security Checklist</b>		
<b>SSMP Monitoring</b>		
<b>Area of Focus</b>	<b>Y/N</b>	<b>Notes/Status</b>
Has the project sponsor ensured the development of safety design criteria?		
Has the project sponsor ensured the development of security design criteria?		
Has the project sponsor ensured conformance with safety and security requirements in design?		
Has the project sponsor verified construction specifications conformance?		
Has the project sponsor identified safety and security critical tests to be performed prior to passenger operations?		
Has the project sponsor verified conformance with safety and security requirements during testing, inspection, and start-up phases?		
Has the project sponsor evaluated change orders, design waivers, or test variances for potential hazards and/or vulnerabilities?		
Has the project sponsor ensured the performance of safety and security analyses for proposed workarounds?		
Has the project sponsor demonstrated, through meetings or other methods, the integration of safety and security in the following? <ul style="list-style-type: none"> <li>• Activation Plan and Procedures</li> <li>• Integrated Test Plan and Procedures</li> <li>• Operations and Maintenance Plan</li> <li>• Emergency Operations Plan</li> </ul>		
Has the project sponsor issued a final safety and security certification?		
Has the project sponsor issued the final safety and security verification report?		



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<b>Safety and Security Checklist</b>		
<b>Construction Safety</b>		
<b>Area of Focus</b>	<b>Y/N</b>	<b>Notes/Status</b>
Does the project sponsor have a documented/implemented Contractor Safety Program with which they expect to comply?		
Does the project sponsor's contractor(s) have a documented company-wide safety and security program plan?		
Does the project sponsor's contractor(s) have a site-specific safety and security program plan?		
How do the project sponsor's OSHA statistics compare to the national average for the same type of work?		
If the comparison is not favorable, what actions are being taken by the project sponsor to improve their safety record?		
<b>Federal Railroad Administration</b>		
<b>Area of Focus</b>	<b>Y/N</b>	<b>Notes/Status</b>
If a shared track, has the project sponsor submitted their waiver request application to FRA? (Please identify specific regulations for which waivers are being requested.)		
If a shared corridor, has the project sponsor specified specific measures to address safety concerns?		
Is the collision hazard analysis underway?		
Are other FRA required hazard analyses underway — fencing, etc.?		
Does the project have quiet zones?		
Does FRA attend the Quarterly Review Meetings?		



**APPENDIX G: ACRONYMS**

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<b>Acronym</b>	<b>Term</b>
ACOR	Alternate Contracting Officer's Representative
ADA	The Americans with Disabilities Act
AGC	Associated General Contractors of America
ATC	Alternative Technical Concepts
AVS	Associate Value Specialist
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor and Statistics
BRF	Beta Range Factor
BY	Base Year
CATEX or CE or CX or Exclusion	Categorical Exclusion
CCIP	Contractor Controlled Insurance Program
CE	Categorical Exclusion
CER	Cost Estimating Relationship
CFR	Code of Federal Regulations
CIG	Capital Investment Grant
CLIN	Contract Line Item Number
CM	Construction Manager

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<b>Acronym</b>	<b>Term</b>
CM/GC	Construction Manager/General Contractor
CMAR	Construction Manager at Risk
COR	Contracting Officer's Representative
CPM	Critical Path Method
CPTED	Crime Prevention Through Environmental Design
CR	Constructability Review
CVS	Certified Value Specialists
DB	Design-Build
DBB	Design-Bid-Build
DBE	Disadvantaged Business Enterprise
DBF	Design-Build-Finance
DBFOM	Design-Build-Finance-Operate and Maintain
DBOM	Design-Build-Operate and Maintain
DEIS	Draft Environmental Impact Statement
DF	Designated Function
DHS	Department of Homeland Security
DTS	Department of Transportation Services
EA	Environmental Assessment
EIS	Environmental Impact Statement

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<b>Acronym</b>	<b>Term</b>
EMP	Emergency Management Plan
ENR	Engineering News-Record
EPCM	Engineering/Procurement/Construction Management
ESWA	Early Systems Work Agreement
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FLSSC	Fire/Life Safety and Security Committee
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GAO	Government Accountability Office
GC	General Contractor
GC/CM	General Contractor/Construction Manager
GMP	Guaranteed Maximum Price
HAZMAT	Hazardous Materials
IP	Implementation Plan
LONP	Letter of No Prejudice

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<b>Acronym</b>	<b>Term</b>
LPA	Locally Preferred Alternative
MBE	Minority Business Enterprise
MCC	Management Capacity and Capability
MDBF	Mean Distance Between Failures
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NTE	Not-to-Exceed
NTP	Notice to Proceed
O&M	Operation and Maintenance
OCIP	Owner Controlled Insurance Program
ODCs	Other Direct Costs
OHA	Operational Hazard Analysis
OIG	Office of Inspector General
OMP	Operations and Management Plan
OP	Oversight Procedure
P3	Public Private Partnership
PCMG	Project and Construction Management Guidelines
PD	Project Development
PDM	Project Delivery Method

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<b>Acronym</b>	<b>Term</b>
PHA	Preliminary Hazard Analysis
PMO	Project Management Oversight
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
POP	Project Oversight Plan
PTASP	Public Transportation Agency Safety Plan
QA/QC	Quality Assurance/Quality Control
R&D	Research and Development
RAMP	Real Estate Acquisition Management Plan
RAP	Rail Activation Plan
RCMP	Risk and Contingency Management Plan
RET	Risk Evaluation Tool
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications
ROD	Record of Decision
ROW	Right-of-Way
RSD	Revenue Service Date
S/DBE	Small/Disadvantaged Business Enterprises

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<b>Acronym</b>	<b>Term</b>
SABCE	Stripped and Adjusted Base Cost Estimate
SABS	Stripped and Adjusted Base Schedule
SAVE	Society of American Value Engineers
SCC	Standard Cost Category
SCIL	Safety Certifiable Items List
SGR	State of Good Repair
SIT	System Integration Testing
SITP	Systems Integration Test Plan
SOP	Standard Operating Procedure
SOW	Scope of Work
SSCVR	Safety Certification Verification Report
SSGA	Small Starts Grant Agreement
SSI	Sensitive Security Information
SSMP	Safety and Security Management Plan
STIP	Statewide Transportation Improvement Program
SYGA	Single Year Grant Agreement
TAR	Travel Authorization Request
TBM	Tunnel Boring Machine
TCC	FTA Office of the Chief Counsel

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<b>Acronym</b>	<b>Term</b>
TCRP	Transit Cooperative Research Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TIP	Transportation Improvement Program
TOD	Transit-Oriented Development
TPE	FTA Office of Planning and Environment
TPM	FTA Office of Program Management
TRB	Transportation Research Board
TSA	Transportation Security Administration
TVA	Threat and Vulnerability Assessment
URA	Uniform Relocation Assistance and Real Property Acquisition Act
U.S.C.	United States Code
VE	Value Engineering
VECP	Value Engineering Change Proposals
WBE	Women Business Enterprise
WBS	Work Breakdown Structure
YOE	Year of Expenditure