



Oversight Procedure 21 - Management Capacity and Capability Review

1.0 PURPOSE

The purpose of this Oversight Procedure (OP) is to describe the review, analysis, and recommended procedures and reporting requirements that the Federal Transit Administration (FTA) expects from the Project Management Oversight Contractor (PMOC) with regard to the Sponsor's management, organization, and capability to effectively and efficiently plan, develop, manage and complete a Federally-assisted capital project.

2.0 BACKGROUND

The PMOC shall review and evaluate a Project Sponsor's management capability and capacity to efficiently and effectively develop a Federally-assisted project for implementation by evaluating the organizational structure of the Sponsor, qualifications of personnel, as well as the policies, procedures, and implementation methods. Pay particular attention to the Sponsor's abilities, resources, staff organization and third-party consultants since these are essential to develop and manage project cost and schedule risks, real estate acquisition, safety and security, quality assurance and quality control, and other activities of Federal concern. The results of this evaluation shall serve as an input for the FTA in making programmatic decisions regarding the Sponsor's readiness to advance the project.

3.0 OBJECTIVES

Perform evaluations and render professional opinions regarding the Sponsor's capacity and capability to successfully implement, manage, and complete a major Federally-assisted capital project, and to recognize and manage project risk factors and implement mitigation measures. The evaluations shall cover the following:

- 1) Organization, Personnel Qualifications, and Experience;
- 2) Sponsor's approach to the work, ability to perform the work including its methods, policies, and procedures for developing and updating reasonable and realistic project cost estimates and schedules and the abilities to identify, analyze, manage and mitigate project risks.
- 3) Sponsor's ability to collect costs and measure performance against line items in a robust Work Breakdown Structure (WBS), forecast cost to complete through an industry-accepted cost analysis technique, and identify variances and report on project status and recovery action plans on a monthly basis.

4.0 REFERENCES

The following are the principal, but by no means the only, references to Federal legislation, regulation, and guidance which the PMOC should review and for which it should develop a strong understanding as related to the Sponsor's project work being reviewed under this OP:

4.1 Regulations

- 49 CFR Part 633, Project Management Oversight
- 49 CFR Part 659, Rail Fixed Guideway Systems; State Safety Oversight

4.2 FTA Circulars

- C5010.1D, Grants Management Guidelines
- C5200.1A, Full-Funding Grant Agreements Guidance
- C4220.1F, Third-Party Contracting Requirements
- C5800.1, Safety and Security Management Guidance for Major Capital Projects

4.3 Guidance

- Terms of the Full Funding Grant Agreement and referenced documents
- System safety Certification Guidelines
- FTA's Project and Construction Management Guidelines, 2011 update
- FTA's Quality Management System Guidelines, December 2012

4.4 Oversight Procedures

- OP20 Project Management Plan Review
- OP23 Real Estate Acquisition and Management Plan Review
- OP24 Quality Assurance / Quality Control Review
- OP25 Recurring Oversight and Related Reports
- OP32C Project Scope Review

The PMOC shall refer to other applicable regulations, policies, guidelines and circulars in determining the capacity and capability of a Sponsor to advance a major capital project as relevant and necessary.

5.0 SPONSOR SUBMITTALS

The submittals to be secured by the PMOC from the Sponsor shall be appropriate with the phase of project development. Such submittals include, but are not limited to, the following:

- Management Capacity and Capability (MCC) documents (See Table of Contents in Appendix B);
- Project Management Plan (PMP) and other associated sub-plans, e.g., QAP, SSMP, RAMP;
- Work Breakdown Structure (WBS), detailed project schedule, and the Agency's latest monthly project report; and,
- Description of management tools (if not in the PMP) for controls and reporting of scope, cost, schedule, quality, safety and security.

6.0 SCOPE OF WORK

The PMOC should review the Sponsor's MCC documents to ascertain the ability to fulfill the demands of implementing a major capital project. An important aspect is the Sponsor's staff qualifications and experience and their ability to implement methods, policies, and procedures for developing and updating reasonable and realistic project cost estimates and schedules along with the ability to identify, analyze, manage and mitigate project risk from scope, schedule and cost. Another important aspect is each staff understanding of their role on the project and the project's critical issues.

While the MCC documents make up part of the PMP, the review of the entire PMP is central to the PMOC's determination regarding the Sponsor's MCC and its preparedness to advance a project into the next phase.

The FTA normally engages a PMOC to review the Sponsor's MCC as necessary throughout the life of the project. This includes the Readiness Reviews for entry into Engineering, and for FFGA.

The FTA may request the PMOC perform an MCC review at other times such as:

- post-FFGA but before construction to verify continued capability and capacity;
- at 15% to 20% construction completion to confirm that the Grantee has the MCC to deliver the project;
- when Sponsor performance in areas such as vehicle maintenance, procurement, safety, and quality is a cause for concern;
- as required for high risk Sponsors;
- when Sponsors exhibit less than satisfactory performance in past oversight reviews; and, when a Sponsor engages in non-FFGA projects such as multi-modal centers, bus and maintenance facilities, new Bus Rapid Transit (BRT), or a streetcar.

6.1 General Review of Sponsor's Management Capacity and Capability Documents

Appendix B identifies the MCC documents required at specific project milestones. This table also indicates when to submit preliminary information as well as when the Sponsor shall augment or modify existing information. The PMOC, during its review of the MCC documents, shall verify that the Sponsor has completed and submitted the required documents given the project phase. Further, as the project progresses, the PMOC shall ensure that the Sponsor is updating or modifying its existing information as necessary.

At a minimum, the following items are reviewed by the PMOC to reach a determination of a Sponsor's capability and capacity to successfully manage and complete a major Federally-assisted capital project:

- 1) Organization, Personnel Qualifications and Experience:
 - a) Review the complete organization of the Sponsor to determine the likelihood of the project management team successfully implementing the project. Determine whether the Sponsor has an effective and efficient organizational structure.
 - b) Review the assigned and supporting staff qualifications, including but not limited to the review of resumes and conduct of personal interviews of key agency and project leadership, based on PMOC generated questionnaires. The purpose of the questionnaire is to gain insight into the interviewees' background and experience, to understand their

concept of their project role, and to obtain their input as to the critical issues that must be managed and/or resolved to successfully complete the project. Sample questionnaires are in Appendix C. The PMOC can use the sample questionnaires as a guide, but should also use judgment about the right approach to achieve the objective of the review.

- c) A sample Summary Staff Qualifications/Experience Chart to document information gathered during interviews and resume reviews is included in Appendix D. These interviews and reviews should determine whether the Sponsor has the appropriately qualified staff and/or third-party consultants to:
 - i) design and manage the construction of the project;
 - ii) obtain support and incorporate requirements from the multiple jurisdictions through which the project may pass;
 - iii) obtain cooperation and incorporate requirements from third parties including railroads, utility companies, and adjacent parcel owners;
 - iv) deliver the project, given the form of project delivery method(s) it plans to use, e.g. design/bid/build, design/build, Construction Management/General Contractor (CM/GC), etc.;
 - v) develop and implement a sound Project Management Plan and its required sub-plans;
 - vi) secure and administer the required local funding;
 - vii) maintain the Sponsor's existing transit system with the addition of the project.
 - d) Review the Sponsor's staffing plan. A sample staffing plan is shown in Appendix E to this document. The staffing plan should be adjusted to the project. Assess the reasonableness of the hours for each project team component over the life of the project and whether the costs for professional services in the cost estimate accurately reflect the labor required. (Note: staffing plans can be shown in hours per month or full time equivalents (FTE) per month. The tables in Appendix E show examples of both. If FTEs are used, the industry standard is one FTE equals 160 hours per month.
 - e) Analyze whether the Sponsor has the physical resources, such as sufficient office space, equipment, and furnishings to effectively and efficiently advance the project.
 - f) Assess the agency's history of performance, financial stability, adequacy of management systems, and conformance with the terms of previous awards, etc.
- 2) Sponsor's approach to the work, understanding of the work, ability to perform the work:
- a) Review the adequacy of the Sponsor's methods, policies, and procedures for developing, and its ability to develop and update reasonable and realistic project budgets, cost estimates, and schedules and the control mechanisms in place to monitor and ensure adherence with said budgets, estimates, and schedules. Evaluate the Sponsor's methods, policies, and procedures for identifying, analyzing, managing, and mitigating project risks and disputes.
 - b) Evaluate the Sponsor's approach to:

- i) satisfying FTA grant reporting requirements and responding in a timely manner to specific requests from Congress, the FTA, and the PMOC for project-related information;
 - ii) packaging, procuring, and managing third-party contracts in compliance with FTA and other Federal requirements;
 - iii) developing and implementing a sound community relations program;
 - iv) developing and implementing land acquisition and relocation program;
 - v) accounting for project property and maintenance of project property inventory;
 - vi) developing and implementing a force account plan;
 - vii) developing and implementing safety and security measures and a Safety and Security Management Plan;
 - viii) complying with contract terms of the Full Funding Grant Agreement;
 - ix) entering into clearly defined intergovernmental and other local agreements (e.g. agreements with utilities or railroads) in a timely manner to secure sources of local funding and cooperation.
- c) Evaluate the Sponsor's understanding of
- i) its obligations under Title VI of the Civil Rights Act of 1964, the Disadvantaged Business Enterprise (DBE) Program, and the Americans with Disabilities Act;
 - ii) the requirements associated with real estate acquisition and relocation in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and FTA Circular 5010.D either with its own staff or with qualified consultants.

If the PMOC determines that the Sponsor's MCC is inadequate or weak in terms of (1) organization, personnel qualifications and experience, and/or (2) approach to the work, understanding of the work, or ability to perform the work, then the PMOC should make recommendations for corrective action along with a time frame for these actions.

7.0 REPORT, PRESENTATION, RECONCILIATION

The PMOC shall provide FTA with a written report of its findings, analysis, recommendations, professional opinions, and a description of the review activities undertaken. After FTA approval, the PMOC may share the report with the Sponsor. In the event that differences of opinion exist between the PMOC and the Sponsor regarding the PMOC's findings, the FTA may direct the PMOC to reconcile with the Sponsor and provide FTA with a report addendum covering the modifications agreed to by the Sponsor and PMOC.

The report formatting requirements of OP 01 apply. When necessary, PMOC shall perform data analysis and develop data models that meet FTA requirements using Microsoft Office products such as Excel and Word and use FTA-templates when provided. The PMOC may add other software as required, but documentation and report data shall be made available to FTA.

APPENDIX A

Acceptable Quality Level

	DESIRED OUTCOME	PERFORMANCE REQUIREMENT	CHECK LIST	ACCEPTABLE QUALITY LEVEL	PERFORMANCE MEASURE	MONITORING METHOD
1	The PMOC shall review and analyze the Sponsor's management capability and capacity to develop a Federally-assisted Project.	R1a. The PMOC shall develop and document a process for review and analysis of the management capability and capacity of Sponsor to develop a Federally-assisted capital project.		Q1a. PMOC provides documentation of the process.	M1a. Review of the process documentation.	MM1a. Periodic review by FTA or its agent.
		R1b. The PMOC shall use its process and project management judgment to review and analyze Sponsor's management capability and capacity to develop a Federally-assisted Project.		Q1b. Review must be made and PMOC provides internal verification that the process, as documented, has been followed.	M1b. Documented review and analysis of Sponsor's management capability and capacity to develop a Federally-assisted Project.	MM1b. Periodic review by FTA or its agent and the PMOC's internal verification.
2	The PMOC shall, through review of Sponsor's organization, personnel qualifications, and experience, form a professional opinion of the Sponsor's ability to successfully manage and complete the project.	R2a. The PMOC shall review the Sponsor's complete organization to determine if the Sponsor has a suitable management team and organizational structure to successfully accomplish the project in an effective and efficient manner.		Q2a. Professional opinion of the ability of the Sponsor's organization and management team to successfully accomplish a major Federally-assisted capital project.	M2a. PMOC's review and opinion as to the Sponsor's organization and management team and its ability to successfully accomplish a major Federally-assisted capital project demonstrates sound management and engineering practices and professional experience.	MM2a. Periodic review by FTA or its agent.
		R2b. The PMOC shall review the Sponsor's staffing plan and staff qualifications, including third-party consultants, to determine if the Sponsor has adequately qualified staff to effectively and efficiently plan, manage, and deliver the project.		Q2b. Professional opinion of the adequacy of the Sponsor's staffing plan and staff qualifications.	M2b. PMOC's review and opinion as to the Sponsor's staffing plan and staff qualifications demonstrates sound management and engineering practices and professional experience.	MM2b. Periodic review by FTA or its agent.
3	The PMOC shall, through a review of the Sponsor's approach to the work, understanding of the work, and ability to perform the work, form a professional opinion as to the adequacy of the (1) the Sponsor's abilities to identify, analyze, manage and mitigate project risks, and (2) the Sponsor's methods, policies, and procedures for developing and updating reasonable and realistic cost estimates and schedules.	R3a. The PMOC shall form a professional opinion of Sponsor's ability to manage project risk and clearly identify potential risks while rendering its professional opinion as to their possible impacts on the scope, cost, and schedule of the Project.		Q3a. Professional opinion of the potential project risks and possible impacts on Project scope, cost and schedule and the Sponsor's ability to manage such risks.	M3a. PMOC's review and opinions as to the potential risks, project impacts and the Sponsor's risk management abilities demonstrates sound management and engineering practices and professional experience.	MM3a. Periodic review by FTA or its agent.
		R3b. The PMOC shall review the Sponsor's approach to the work to determine if the Sponsor has suitable methods, policies, and procedures for developing and updating reasonable and realistic cost estimates and schedules.		Q3a. Professional opinion of the adequacy of the Sponsor's methods, policies and procedures for developing and updating reasonable and realistic cost estimates and schedules.	M3a. PMOC's review and opinions as to the adequacy of the Sponsor's methods, policies and procedures for developing and updating reasonable and realistic cost estimates and schedules demonstrate sound management and engineering practices and professional experience.	MM3a. Periodic review by FTA or its agent.
4	The PMOC shall provide FTA with a written report of the review activities it undertook, and its findings, analysis, recommendations and professional opinions.	R4. The PMOC shall present its findings, analysis, recommendations, and professional opinions to FTA in a written report and, when so directed by FTA, seek to reconcile its findings with Sponsor to the extent possible. A supplemental report shall be filed describing the results of reconciliation attempts.		Q4. Reports and presentations are professional, clear, concise, and well written. The findings and conclusions have been reconciled with other PMOC reports and have been reconciled with the Sponsor to the extent possible.	M4. Review of the PMOC's presentation of findings, analysis, recommendations and professional opinions by the FTA.	MM4. Periodic review by FTA or its agent.

Appendix B

Management Capacity and Capability Document Requirements for Milestone Reviews

Management Capacity and Capability Documents	Readiness Review for Engineering	Readiness Review for FFQA	In Bid / Award and / or Constr.
Description (two page max) of Sponsor's Approach to Project covering:			
Entry to Project Development			
Entry to Engineering	●		
Bidding of Major Contracts through Construction, Testing, Start-up, Revenue Operations		●	○
Organizational Charts			
Agency	○	○	○
Project Team (agency staff and consultants)	●	○	○
Staff Qualifications/Experience Chart	●	○	○
Description of roles, responsibilities, interfaces among key project team members through responsibility matrix	●	○	○
Staffing Plan - Labor Hour Distribution over Life of Project	●	○	○
Copies of Relevant RFPs / Contracts / Agreements	▲	●	○
Description of Management Processes and Procedures			
Agency Board decision-making authority	○	○	○
Agency Leadership and Executive Staff decision-making authority	○	○	○
Project Leadership and Executive Staff decision-making authority	▲	○	○
Legal services for contracts, Alternative Dispute Resolution (ADR)	○	○	○
Financial Management, Funding Approval processes and authorities	○	○	○
Procurement services	○	○	○
Community outreach and relations, interface with State and Local Agencies and Media; Public Hearings	○	○	○
Resumes of project team members			
Project Management			
Agency Leadership	○	○	○
Project Management Lead	○	○	○
Legal Services Lead	○	○	○
Financial Management and Funding Leads	○	○	○
Grants Management Lead	○	○	○
Procurement Lead	○	○	○
Agency Force Account Work Lead	●	○	○
Community Outreach Lead	○	○	○
Environmental Assessment and Mitigation Leads			
Environmental study and NEPA document	●		
Environmental Coordination with Design / Monitoring	●	○	
Environmental Mitigation Monitoring During Construction		●	○
Travel Forecasting Lead	○	○	
Operations Planning, Fleet Management Planning Leads	○	○	
Design Team Lead			
Civil	●	○	
Structural	●	○	
Guideway and Track Design	●	○	
Architectural	●	○	
Mechanical	●	○	
Electrical	●	○	

Appendix B

Management Capacity and Capability Document Requirements for Milestone Reviews

Management Capacity and Capability Documents	Readiness Review for Engineering	Readiness Review for FF&A	In Bid / Award and / or Constr.
Plumbing	●	○	
Communications	●	○	
Vehicle Design and Manufacture	●	○	
Special Equipment Design and Manufacture	●	○	
Investigation and Testing lead	●	○	
Coordination with Third Parties Lead	●	○	
Quality Assurance and Quality Control lead	○	○	
Project Controls			
Project controls lead	○	○	○
Cost Estimating and Cost Estimating Review Leads	○	○	○
Scheduling and Schedule Review Leads	○	○	○
Risk Assessment and Mitigation Lead		●	○
Construction, Permits, Testing, Start-up Leads			
Construction Administration		●	○
Construction Management		●	○
Acquisition of Permits		●	○
Testing of systems and vehicles		●	○
Start-up and transition into Revenue Operations		●	○
Real Estate Lead	○	○	○
Safety and Security Review Lead	○	○	

NOTE: ▲ – Preliminary information required; ● – Element to be completed; ○ – Element to be modified or augmented with additional information as necessary.

NOTE: ▲ – Preliminary information required; ● – Element to be completed; ○ – Element to be modified or augmented with additional information as necessary.

Appendix C

Sample Questionnaire

1. Organizational Experience- AGENCY Project History

Agency to describe all projects in the last 5 years with a construction cost of \$100M or more - provide description, cost, schedule, project delivery methods, issues, personnel, etc.

2. Questions for Key Individuals within AGENCY or on Project Team – note that the questions are tailored to the position within the organization.

VP / DIRECTOR OF CAPITAL PROJECTS

1. What is your educational background? Do you have a copy of your resume?
2. Briefly describe your work experience prior to coming to AGENCY, especially on rail projects. On projects of comparable dollar volume. On projects in similar municipalities.
3. Describe AGENCY experience on large dollar projects in the last 5 years. Budget performance. Schedule performance.
4. How long have you worked with AGENCY and what positions have you held?
5. Briefly describe your role and responsibilities as VP/Director of Capital Projects as they relate to the AGENCY's Project.
6. Describe actions taken by you to complete other similar sized projects on budget and schedule. What actions would you take if you saw the project overrunning the project budget and schedule?
7. Describe your working relationship with other AGENCY Departments. What resources, if any are available for this project from the AGENCY's Capital Projects Group?
8. What level of personal involvement do you anticipate in the following project activities?
 - a) Project management
 - b) Financial management
 - c) Design and engineering
 - d) Environmental monitoring and reporting
 - e) ROW acquisition
 - f) Grants administration
 - g) Project Controls
 - h) QA/QC
 - i) Safety and security
 - j) Change order negotiation
 - k) Dispute resolution
 - l) Final acceptance
9. Who do you report to and how do you interface with your boss? Did you work with your boss prior to this project?
10. Who reports to you, what are their responsibilities and how do you interface with each? Did you work with them prior to this project?
11. Who has the authority to make personnel changes on this project?
12. What additional AGENCY staff will be required beyond that described in PMP dated _____ (or the current staffing plan)? When do you plan to bring on the additional staff?
13. Please describe your interface with:
 - a) Project Director (AGENCY)

Appendix C

Sample Questionnaire

- b) Chief Operating Officer (AGENCY)
 - c) Manager of Project QA QC and Safety (AGENCY)
 - d) Dep. Director Project Development (AGENCY)
 - e) Dep. Director Design (AGENCY)
 - f) Dep. Director Construction (AGENCY)
 - g) Manager of Rail Communications (AGENCY)
 - h) Dep. Director Project Finance (AGENCY)
 - i) Contracting Officer (AGENCY)
 - j) Project Manager
 - k) Other parties as required
14. What do you see as the main challenges to completing the project on schedule and within budget?
15. What do you see as the greatest engineering challenge and how would you address it?
16. What do you see as the greatest construction challenge and how would you address it?
17. What is your role in addressing those challenges?
18. Describe AGENCY management approach to limit scope increase changes to the project. How will scope issues (scope creep) generated by Third Parties or Operating Entity review/technical support involvement be managed?
19. If you had to start over again, what would you do differently?

PROJECT DIRECTOR

1. What is your educational background? Do you have a copy of your resume?
2. Briefly describe your work experience prior to coming to AGENCY, especially on rail projects. On projects of comparable dollar volume.
3. How long have you worked with AGENCY and what positions have you held?
4. Briefly describe your role and responsibilities as Project Director.
5. Describe your prior project experience that gave you the skills to perform the duties of project director on a project of this size.
6. Do you have a copy of PMP? Do you have any concerns about assigned responsibilities?
7. What are your personal responsibilities and what AGENCY resources are available to assist you to fulfill your assigned responsibilities in following areas?
8. What key support staff are assigned to assist in specific disciplines.
 - a) Environmental monitoring and reporting
 - b) IGA interpretation/compliance
 - c) Third Party coordination (treat these individually)
 - d) ROW acquisition
 - e) Grants administration
 - f) PMP updating
 - g) Project Controls (AGENCY staff)
 - h) Contract administration
 - i) Estimating
 - j) CO/Claims
 - k) Consultant oversight

Appendix C

Sample Questionnaire

- l) DBE monitoring
 - m) Document control
 - n) Reporting
9. Who do you report to and how do you interface with your boss? Did you work with your boss prior to this project?
 10. Who reports to you, what are their responsibilities and how do you interface with each? Did you work with them prior to this project?
 11. Describe your working relationship with the AGENCY Operations? Engineering? Procurement?
 12. Do you envision AGENCY staff beyond that described in PMP (or current staffing plan)? Will this be adequate?
 13. Please describe your interface with: (go up a level and down two levels on org chart)
 14. What do you see as the main challenges to completing the project on schedule and within budget?
 15. What is your role in addressing those challenges?
 16. Describe role of Operating Agency or Other Third Party Agency in submittal review/approval process. How will scope issues (scope creep) generated by them, review/technical support involvement be managed?
 17. What do you see as the greatest engineering challenge and how would you address it?
 18. What is your role in addressing those challenges?
 19. What do you see as the greatest construction challenge and how would you address it?
 20. What is your role in addressing those challenges?
 21. Were you involved in the development of the Quality Assurance Program Plan? If so what was your responsibility?
 22. If you had to start over again, what would you do differently?

PROJECT QA/QC MANAGER

1. What is your educational background? Do you have a copy of your resume?
2. Briefly describe your work experience prior to coming to AGENCY, especially on rail projects. What is your experience on projects of comparable dollar volume?
3. How long have you worked with AGENCY, and what positions have you held?
4. Briefly describe your role and responsibilities as Project QA/QC & Safety Manager.
5. What AGENCY resources are available to assist you to fulfill your assigned responsibilities in following areas?
 - a) Preparation of AGENCY Quality Program Plan (QPP)
 - b) Implementing and maintaining QPP
 - c) Preparation of AGENCY Safety and Security Management Plan (SSMP)
 - d) Implementing and maintaining SSMP
 - e) Review of DESIGNER OR CONSTRUCTION CONTRACTOR OR DESIGN BUILD CONTRACTOR System Safety/Security Certification Management Plan
 - f) DESIGNER OR CONSTRUCTION CONTRACTOR OR DESIGN BUILD CONTRACTOR Environmental, Safety and Health Plan
 - g) DESIGNER OR CONSTRUCTION CONTRACTOR OR DESIGN BUILD CONTRACTOR procedures related to system and construction safety

Appendix C

Sample Questionnaire

- h) Audits/ reviews of AGENCY and consultants
- 6. Whom do you report to, and how do you interface with them? Did you work with this individual prior to this project?
- 7. Who reports to you, what are their responsibilities and how do you interface with each other? Did you work with them prior to this project?
- 8. When will Project QA/QC Supervisor and Project Safety Supervisor be hired?
- 9. Do you envision the need for additional AGENCY staff beyond that described in PMP? Or do you believe staffing is adequately addressed?
- 10. Please describe your interface with: VP/Director of Capital Projects, Project Director, all Deputy Directors
- 11. What do you see as the main challenges to completing the project on schedule and within budget?
- 12. What do you see as the greatest engineering challenge and how would you address it?
- 13. What do you see as the greatest construction challenge and how would you address it?
- 14. What was your responsibility in the development of the Quality Program Plan (QPP)?
- 15. Were you involved in the development of the PMP? Does it reflect the appropriate QPP commitments?
- 16. Are you satisfied with the consultants and AGENCY Quality Plans? What improvements would you like to see?
- 17. Have you prepared a safety certification checklist and schedule? How is it updated?
- 18. Audits
 - a) Who is audited?
 - b) Construction safety?
 - c) Frequency?
 - d) Who assists?
 - e) Follow up on findings?
 - f) Does AGENCY management support this process?
 - g) Are you satisfied with the audit process?
 - h) How can the process be improved?
- 19. What do you see as the main challenges to obtaining safety certification?
- 20. How do you interface with the Operating Agency on this issue?
- 21. What is your recruitment plan for the “QA Specialist” and “Project Safety Supervisor”?
- 22. Describe the process you envision to interface with the Contractor’s Safety and Security Manager.
- 23. Has AGENCY provided training to AGENCY and consultant staff on the Project’s QPP and AGENCY’s Project Management Procedures in accordance with the QPP? If so, is there documentation of training sessions (attendee sign-in sheets, training agenda and materials, etc.)?
- 24. Has the QPP been distributed to all personnel assigned to the Project (AGENCY, THE OPERATING AGENCY, CONSULTANTS, etc.)? Is there documentation of which Project staff members have received the QPP?
- 25. Have the Project Management Procedures established for this Project been distributed to all assigned project personnel (AGENCY, THE OPERATING AGENCY, CONSULTANTS, etc.)? Is there documentation of which Project staff members have received the procedures?

PROJECT SAFETY AND SECURITY MANAGER

Appendix C

Sample Questionnaire

1. What is your educational background? Do you have a copy of your resume?
2. Briefly describe your work experience prior to coming to AGENCY, especially on rail projects. What is your experience on projects of comparable dollar volume?
3. How long have you worked with AGENCY, and what positions have you held?
4. Briefly describe your role and responsibilities as Project Safety & Security Manager.
5. What AGENCY resources are available to assist you to fulfill your assigned responsibilities in following areas?
 - i) Preparation of AGENCY Safety and Security Program Plan (SSPP)
 - j) Implementing and maintaining SSPPP
 - k) Preparation of AGENCY Safety and Security Management Plan (SSMP)
 - l) Implementing and maintaining SSMP
 - m) Review of DESIGNER OR CONSTRUCTION CONTRACTOR OR DESIGN BUILD CONTRACTOR System Safety/Security Certification Management Plan
 - n) DESIGNER OR CONSTRUCTION CONTRACTOR OR DESIGN BUILD CONTRACTOR Environmental, Safety and Health Plan
 - o) DESIGNER OR CONSTRUCTION CONTRACTOR OR DESIGN BUILD CONTRACTOR procedures related to system and construction safety
 - p) Audits/ reviews of AGENCY and consultants
6. Whom do you report to, and how do you interface with them? Did you work with this individual prior to this project?
7. Who reports to you, what are their responsibilities and how do you interface with each other? Did you work with them prior to this project?
8. When will Project Safety & Security Supervisor be hired?
9. Do you envision the need for additional AGENCY staff beyond that described in PMP? Or do you believe staffing is adequately addressed?
10. Please describe your interface with: VP/Director of Capital Projects, Project Director, all Deputy Directors
11. What do you see as the main challenges to completing the project safely and securely?
12. What do you see as the greatest engineering challenge and how would you address it?
13. What do you see as the greatest construction challenge and how would you address it?
14. What was your responsibility in the development of the SSPP and SSMP?
15. Were you involved in the development of the PMP? Does it reflect the appropriate SSPP and SSMP commitments?
16. Are you satisfied with the consultants and AGENCY SSPP and SSMP? What improvements would you like to see?
17. Have you prepared a safety certification checklist and schedule? How is it updated?
18. Audits
 - i) Who is audited?
 - j) Construction safety?
 - k) Frequency?
 - l) Who assists?
 - m) Follow up on findings?
 - n) Does AGENCY management support this process?

Appendix C

Sample Questionnaire

- o) Are you satisfied with the audit process?
 - p) How can the process be improved?
19. What do you see as the main challenges to obtaining safety certification?
 20. How do you interface with the Operating Agency on this issue?
 21. What is your recruitment plan for the “Project Safety Supervisor”?
 22. Describe the process you envision to interface with the Contractor’s Safety and Security Manager.
 23. Has AGENCY provided training to AGENCY and consultant staff on the Project’s SSPP and SSMP and AGENCY’s Project Management Procedures in accordance with the SSPP and SSMP? If so, is there documentation of training sessions (attendee sign-in sheets, training agenda and materials, etc.)?
 26. Have the SSPP and SSMP been distributed to all personnel assigned to the Project (AGENCY, THE OPERATING AGENCY, CONSULTANTS, etc.)? Is there documentation of which Project staff members have received the SSPP and SSMP?

DEPUTY DIRECTOR OF PROJECT FINANCE

1. What is your educational background? Do you have a copy of your resume?
2. Briefly describe your work experience prior to coming to AGENCY, especially on rail projects. In addition, what is your experience on projects of comparable dollar volume?
3. How long have you worked with AGENCY, and what positions have you held?
4. Briefly describe your role and responsibilities as Deputy Director Project Finance. Are you assigned to the Project full time?
5. Do you have a copy of PMP? Do you have any concerns about assigned responsibilities?
6. What are your personal job responsibilities and what AGENCY resources are available to assist you to fulfill your assigned responsibilities in following areas?
 - a) Development of detailed financial plan
 - b) Development of financial documentation in support of New Starts submittal
 - c) Development of financial documentation in support of FFGA
 - d) Development of project funding agreements
 - e) Maintaining cash flow requirements based on contract need
 - f) Management of capital funding sources to ensure funding matches construction draw down schedule
 - g) Coordination with AGENCY Financial Management Division on finance and accounting support
 - h) Coordination with funding partners to identify funding and support debt issuances
7. Whom do you report to, and how do you interface with them (AGENCY VP of Finance)? Did you work with this individual prior to this project?
8. Explain indirect reporting relationship with the Project Director. Do you foresee any problems arising due to this relationship structure? If so, please explain.
9. Who reports to you, what are their responsibilities and how do you interface with each other? Did you work with them prior to this project?
10. Do you envision the need for additional AGENCY staff beyond that described in PMP, or is it adequate?

Appendix C

Sample Questionnaire

11. Please describe your interface with: VP/Director of Capital Projects, Project Director, all Deputy Directors etc.
12. What do you see as the main challenges to completing the project on schedule and within budget?
13. Describe the process of obtaining funding for THE OPERATING AGENCY or local municipality imposed preferential (out of scope) changes.
14. Describe the process of obtaining funding required beyond the budget.
15. Describe how the financial reporting/aspects of the project can be improved.

MANAGER OF PUBLIC AFFAIRS & COMMUNICATIONS

1. What is your educational background? Do you have a copy of your resume?
2. Briefly describe your work experience prior to coming to AGENCY, especially on rail projects, as well as, on projects of comparable dollar volume.
3. How long have you worked with AGENCY and what positions have you held?
4. Briefly describe your role and responsibilities as Manager of Rail Communications.
5. Do you have a copy of PMP dated ____? Do you have any concerns about assigned responsibilities?
6. What are your personal responsibilities and what AGENCY resources are available to assist you to fulfill your assigned responsibilities in following areas?
 - a) Press Releases
 - b) News Conferences
 - c) Ground breaking events
 - d) Town meetings
 - e) Management of Arts In Transit Program
 - f) Communications with public officials
 - g) Communication of traffic impacts (planned and unplanned)
 - h) Media relationships
 - i) Online communications
7. Whom do you report to, and how do you interface with them? Did you work with your boss prior to this project?
8. Who provides you with the approval and/or direction to share information with the public?
9. How do you ensure that a consistent message is sent to community/media from the Project team?
10. Who reports to you, what are their responsibilities and how do you interface with each other? Did you work with them prior to this project?
11. Do you envision the need for additional AGENCY staff beyond that described in PMP? Or is this adequate?
12. Please describe your interface with: VP/Director of Capital Projects, Project Director , all Dep. Directors
13. What do you see as the greatest community impact and how will you address it?
14. Do you have a copy of the Communications and Outreach Plan? Have you reviewed it?
 - a. Has this Plan been shared with the Project team (AGENCY, CONSULTANTS, etc.)? How often will this Plan be updated?
 - b. Who is the individual responsible for the oversight and execution of this Plan?

Appendix C

Sample Questionnaire

15. How often is the Project's website updated? Who is responsible for ensuring the content on the website is accurate and up-to-date?
16. What is the protocol for responding to a media inquiry concerning the Project?
17. Are there strategies/protocols for emergency situations (i.e., construction accident requiring closure of a major roadway)? If so, where can they be found, and is the Project Team (AGENCY, CONSULTANTS, etc.) aware of these protocols?

DEPUTY DIRECTOR OF PROJECT DEVELOPMENT

1. What is your educational background? Do you have a copy of your resume?
2. Briefly describe your work experience prior to coming to AGENCY, especially on rail projects. On projects of comparable dollar volume. On projects in same municipalities.
3. How long have you worked with AGENCY and what positions have you held?
4. Briefly describe your role and responsibilities as Deputy Director of Project Development. How much time do you expect to devote to this project?
5. Do you have a copy of PMP? Do you have any concerns about assigned responsibilities?
6. Describe your prior project experience that gave you the skills to perform the duties of Deputy Director Project Development on a project of this size.
7. At the current stage of the project, please describe the different responsibilities of Project Development and Project Design?
8. What are your personal responsibilities and what AGENCY resources are available to assist you to fulfill your assigned responsibilities in following areas?
 - a) Management of environmental mitigation compliance during design and construction. Explain reporting process.
 - b) Management of coordination with local, state and federal agencies. ROW acquisition. Identify key entities and contact personnel.
 - c) Management of "Before and After Study".
 - d) Development and execution of project agreements. Identify major agreements that you would be responsible for developing and executing.
 - e) Coordination with regional transportation plan. What are your responsibilities in this area?
 - f) Coordination with other active Federal, State and county projects.
 - g) Coordination of ROW acquisition.
 - h) Coordination of permit applications including environmental.
9. Who do you report to and how do you interface with your boss? Did you work with your boss prior to this project?
10. Who reports to you, what are their responsibilities and how do you interface with each? Did you work with them prior to this project?
11. Describe your working relationship with the AGENCY Engineering Dept/.
12. Do you envision AGENCY staff beyond that described in PMP? Is this adequate?
13. Please describe your interface with Project Director, all Dep. Directors, the Operating Agency, other third parties.
14. What do you see as the main challenges to completing the project on schedule and within budget?

Appendix C

Sample Questionnaire

15. What is your role in addressing those challenges?
16. Describe role of THE OPERATING AGENCY in submittal review/approval process. How will scope issues (scope creep) generated by THE OPERATING AGENCY review/technical support involvement be managed?
17. What do you see as the greatest engineering challenge and how would you address it?
18. What do you see as the greatest construction challenge and how would you address it?
19. Were you involved in the development of the Quality Assurance Program Plan? If so what was your responsibility?
20. If you had to start over again, what would you do differently?

For all of the following positions, ask similarly tailored questions:

- **Deputy Director Design/Engineering**
- **Deputy Director of Construction**
- **Contracting Officer**
- **Manager of Real Estate**

Sample Summary of Staff Qualifications Experience

OP 21 Grantee Capacity and Capability Review
September 2015
Page D-1

APPENDIX E

Sample Agency Staff Project Labor Distribution

Table 1: Sample Agency Staff Project Labor Distribution {using full time equivalents (FTE) where 1 FTE = 160 hours/month}

Position	Individual	2008	2008												2009	2009											
			Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Executive Director		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
Deputy Executive Director		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Administrative Specialist		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Administrative Assistant/Reception		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Civil Systems Integration Manager		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4		
Chief of Staff		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Electrical Engineer		0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0		
Senior Civil/Structural Engineer		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Administrative Assistant - Civil Engineering		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Director's Office FTE Total		2.0	1.3	1.3	1.3	1.3	1.3	1.8	2.2	2.7	2.7	2.7	2.7	2.7	2.0	1.3	1.3	1.3	1.3	1.3	1.8	2.2	2.7	2.7	2.7		
Program Manager		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
Project Manager		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Project Development Coordinator		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Project Manager		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Project Manager		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4		
Project Development Manager		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Project Development Coordinator		0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0		
Administrative Assistant		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Project Manager		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Project Development FTE Total			3.2	2.1	1.2	0.2	6.6		3.2	2.1	1.2	0.2	6.6	3.2		3.2	2.1	1.2	0.2	6.6		3.2	2.1	1.2	0.2		
Civil Engineering Manager																											
Senior Civil Engineer																											
Senior Architect																											
Architect																											
Architect																											
Senior Civil Engineer																											
Senior Civil Engineer																											
Civil Engineer																											
Permits Administrator																											
Permit Assistant																											
Senior Civil Engineer																											
Civil Engineer																											
Right of Way Assistant																											
Administrative Assistant																											
CADD Operator																											
CADD Operator																											
Civil Engineering FTE Total																											
Systems Engineering Manager																											
Engineering Systems Inspector																											
Senior Systems Inspector																											
Senior Systems Engineer																											
Senior Systems Engineer																											
Senior Systems Engineer																											
Systems Engineer																											
Senior Systems Engineer																											
Systems Engineer																											
Senior Systems Engineer																											
Administrative Assistant																											
Systems Engineering FTE Total																											
Project Control Manager																											

Sample Agency Staff Project Labor Distribution

OP 21 Grantee Capacity and Capability Review
September 2015
Page E-2

APPENDIX E

Sample Agency Staff Project Labor Distribution

Table 2: Sample Systems Consultant Labor Distribution Plan (Using hours/month instead of FTEs) }

Description	2007												2008											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Project Management and Control							54	77	61	80	61	64	74	58	76	100	80	80	173	144	137	180	137	180
Project Manager						40	50	96	61	80	61	64	74	58	61	80	64	64	192	160	152	200	152	200
Project Controls Mgr						40	8	10	8	10	8	8	9	7	8	10	8	8	19	16	15	20	15	20
Project Controls						8	80	96	76	100	76	80	92	72	76	100	80	80	192	160	152	200	152	200
Administrative Support						40	48	58	15	20	15	16	18	14	15	20	16	16	58	48	46	60	46	60
QA Manager							16	19	15	20	15	16	18	14	15	20	16	16	38	32	30	40	30	40
Diversity Management							16	19	15	20	16	16	18	14	15	20	16	16	19	16	15	20	15	20
Central Link Liaison							8	10	8	10	8	8	9	7	8	10	8	8	19	16	15	20	15	20
HMM Project Manager																								
Systems and Project Integration																								
Systems Integration Mgr							48	58	46	60	48	48	55	43	46	60	48	48	58	48	46	60	46	60
Design Integration Engineer							64	77	61	80	61	64	74	58	61	80	64	64	77	64	61	90	61	80
Light Rail Vehicle (LRV)																								
Light Rail Vehicle (LRV) Mgr						0	0	0	0	0	0	0	0	0	23	30	24	24	29	24	23	30	23	30
Various						0	0	0	0	0	0	0	0	0	15	20	16	16	19	16	15	20	15	20
Inspection						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	152	200	
Inspection						0	0	0	0	0	0	0	0	0	0	0	0	0	77	64	61	80	61	80
Traction Electrification System																								
Traction Electrification System Mgr						40	80	96	76	100	76	80	92	72	76	100	80	80	134	112	106	140	106	140
Simulations						0	0	0	0	20	15	16	18	14	15	20	16	16	19	16	15	20	15	20
TPSS Engineer						0	16	19	15	20	15	16	18	14	30	40	32	32	96	80	76	100	76	100
TPSS Ground Mat Design						0	8	10	8	10	8	8	9	7	8	10	8	8	38	32	30	40	30	40
Ceng						0	16	19	15	20	15	16	18	14	15	20	16	16	19	16	15	20	15	20
OCS Design Engineer						0	16	19	15	20	15	16	18	14	15	20	16	16	154	128	122	160	122	160
OCS Design Engineer						0	0	0	0	0	0	0	0	0	0	0	0	0	58	48	46	60	46	60
OCS Support						0	8	10	8	10	8	8	9	7	8	10	8	8	19	16	15	20	15	20
Corrosion Mitigation						0	8	10	8	10	8	8	9	7	15	20	16	16	38	32	30	40	30	40
EMI Coordinator						0	32	38	30	40	30	32	37	29	30	40	32	32	58	48	46	60	46	60
Utilities Coordination						0	16	19	15	20	15	16	18	14	15	20	16	16	19	16	15	20	15	20
QC Manager						0	0	0	0	0	0	0	0	0	8	10	8	8	38	32	30	40	30	40
Quality Control						0	0	0	0	0	0	0	0	0	8	10	8	8	38	32	30	40	30	40
Systemwide Electrical																								
Systemwide Electrical Mgr						40	80	96	76	100	76	80	92	72	76	100	80	80	96	80	76	100	76	100
Systemwide Electrical						0	16	19	16	20	16	16	18	14	15	20	16	16	96	80	76	100	76	100
Quality Control						0	0	0	0	20	16	16	16	14	15	20	16	16	19	16	15	20	15	20
Signal System																								
Signal System Mgr						48	58	48	60	46	48	55	43	46	60	48	48	115	96	91	120	91	120	86
Design Support						16	19	15	20	15	16	18	14	15	20	16	16	77	64	61	80	61	80	58
Block Design						16	19	15	20	15	16	18	14	15	20	16	16	38	32	30	40	30	40	29
Civil Coordination						48	58	48	60	46	48	55	43	46	60	48	48	98	80	76	100	76	100	72
Quality Control						0	0	0	0	0	0	0	0	8	10	8	8	10	8	8	10	8	10	7
Communications System																								
Communications System Mgr						40	800	96	76	100	76	80	92	72	76	100	80	80	192	160	152	200	152	200
Design Support						0	0	0	0	0	0	0	0	0	0	0	0	0	77	64	61	80	61	80
Central Control Design							16	19	15	20	15	16	18	14	30	40	32	32	96	80	76	100	76	100
Radio							16	19	15	20	15	16	18	14	15	20	16	16	58	48	46	80	46	80
QC and Special Studies							16	19	15	20	15	16	18	14	15	20	16	16	96	80	76	100	76	100
CADD																								
CADD Mgr						40	80	96	76	100	76	80	92	72	76	100	80	80	192	160	152	200	152	200
Design Integration Engineer						0	16	19	15	20	15	16	18	14	15	20	16	16	58	48	46	50	46	60
CADD Support						0	0	0	0	20	15	16	18	14	15	20	16	16	58	48	46	50	46	60
Operations Planning																								
Planner						0	32	38	30	40	30	32	37	29	30	40	32	32	38	32	30	40	30	40

APPENDIX E

Sample Agency Staff Project Labor Distribution

Design Services During Construction																									
LRV P821																									
Signal Systems 822																									
Communication Systems 823																									
TPSS/OCS Systems 827																									
Radio Systems 826																									
Project Manager during Start-up																									
Fare Collection 829																									
Inspectors 822 - No allowance has been made (Current ____ Employee)																									
Total Hours						416	1818	1307	1050	1352	1067	1130	1238	1010	1210	1506	1232	1434	3054	2578	2546	3366	2698	3362	
Total FTE's based on 160hrs/month						2.6	11.4	8.2	6.6	8.5	6.7	7.1	7.7	6.3	7.6	9.4	7.7	9.0	19.1	16.1	15.9	21.0	16.9	21.0	

Table 3: Sample Labor Distribution Summary Plan

Labor Category	FTE's																							
	2007												2008											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Agency Staff	14.8	14.8	14.8	14.9	16.5	16.8	19.1	19.9	21.7	24.3	24.3	24.5	32.2	32.2	32.4	33.6	33.6	33.6	34.1	34.7	34.7	35.2	35.2	35.2
Civil/Arch Consultant	22	35.3	41.5	41.9	44	45.3	82.1	71.7	79.5	85.8	87.1	87.6	88.3	88.6	87.9	87.9	87.8	87.4	88	85.9	78.6	73.8	66.4	53.3
Systems Consultant	0	0	0	0	0	2.6	7.1	8.1	6.6	8.5	6.6	7.1	7.8	6.3	7.6	9.4	7.7	9	19.1	16.1	15.9	21	16.9	20.9
Support Services Consultant	0	0	3.1	3.8	3.6	4.7	4.6	4.6	3.8	5.8	4.2	3.8	8.8	3.7	3.9	7.6	6	3.7	6	3.5	8.3	3.7	3	3.2
Construction Management Consultant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	2.8	4.9	7.5	8.5	8.8	9	16.8	16.8
Agency Resources	2.2	2.2	2.2	2.2	2.2	2.3	3.6	3.8	3.9	3.9	5	5	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7

APPENDIX E

Sample Agency Staff Project Labor Distribution

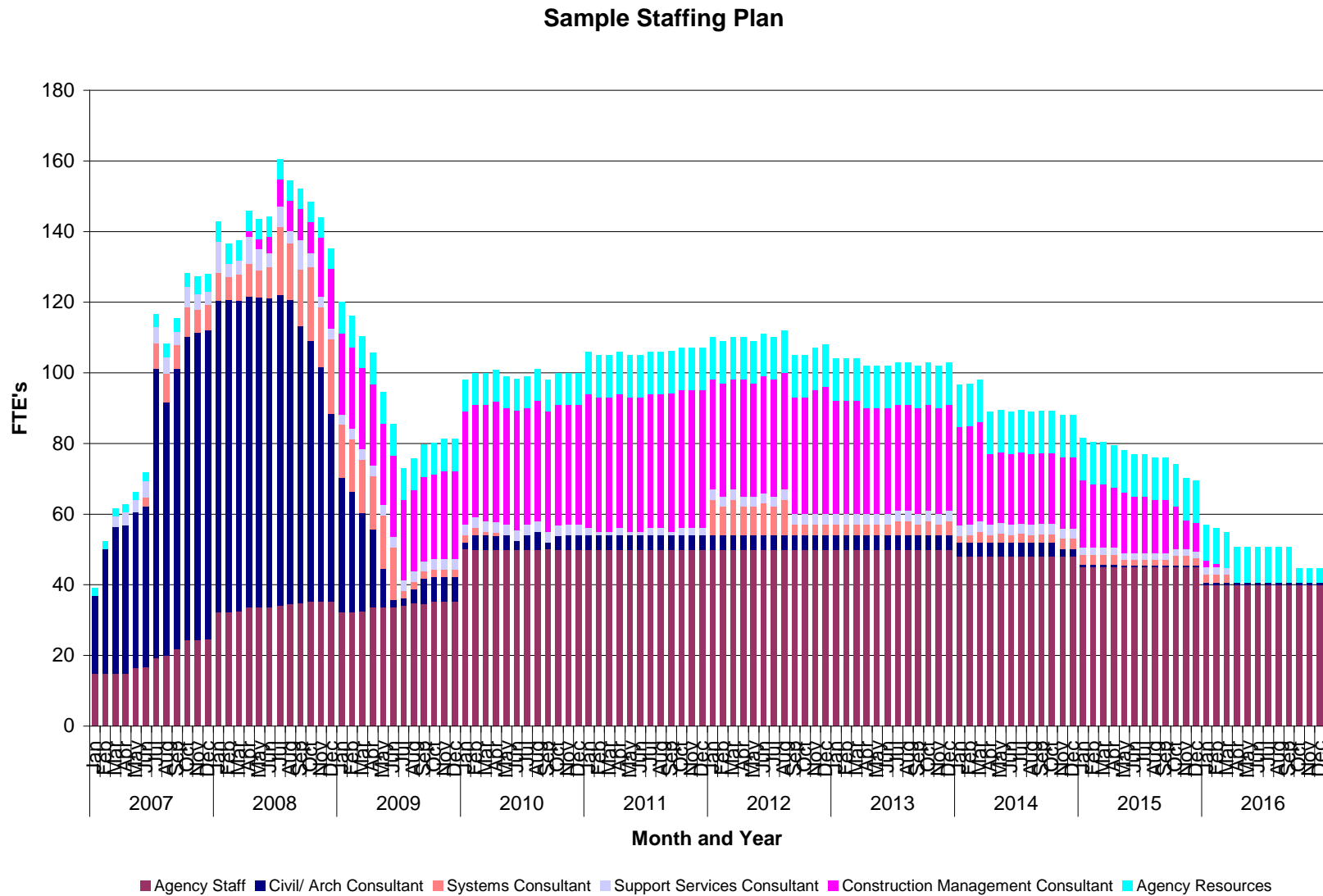


Figure 1: Sample Staffing Plan over project life