



***Management and Technical  
Capacity and Capability  
of the Extended Project Team***

***People Make the Projects:***

***What FRA looks for in project  
organizations and team qualifications***

# **2014 FRA** **Rail Program Delivery**



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# Presentation Goals

## Monitoring Procedures

- MP-21 – Management & Technical Capacity and Capability (MTCC)
- MP-20 – Project Management Plan (PMP) Review

## What to look for in a MP-21 Review

## Organize for Project Success

# **Project Management**

## **~~Technical Capacity and Capability~~ of the Extended Project Team**

**Goal – Complete Project on time and in budget**

### **Organization for Project Management**

- Externally among Stakeholders
- Internally among the PM team members

### **Standards of good practice in use**

- Project Controls: cost, schedule, document control
- Adherence to federal requirements
- Project risk management program
- Best practices: safety, security, asset management

# Launching a Major Capital Project

## Project Definition / Goals – *a major capital project*

- ↳ Organize to accomplish goals – *project success*
- ↳ Develop a project management organization
- ↳ **Project Management Plan (PMP)** to define the project management organization
  - ↳ Is the PMP complete?
  - ↳ Is the project staff qualified and organized?

# Launching a Major Capital Project

## Project Definition / Goals

- ↳ Define Project Scope – *scope drives cost and schedule; its control is a primary PM responsibility*
  - ↳ Develop Schedule and Cost
  - ↳ Identify Project Risks – *risk management is the roadmap for the project management team.*

# The Project and the Project Management Plan



# Background – MP-21 Review

**“A high level of management expertise and technical capacity and capability to conduct the work are fundamental building blocks for project success.” (MP-21 2.0 Key Principles)**

**MP-21 gives FRA’s expectation on how the MTAC will “evaluate the Grantee’s management, organization, and capability to effectively and efficiently plan, develop, manage, and complete a major federally-assisted capital rail project.” (MP-21 1.0 Purpose)**

**“If the MTAC determines that the Grantee is inadequate or weak because of its organization, personnel qualifications, and experience, or approach or ability to perform the work, the MTAC should make recommendations for corrective action and a time frame for the action.” (MP-21 4.0 Scope of Work)**

***Does the Grantee Have What It Takes to Make This Project a Success?***

# Focus Area - Organization

## Evaluate the Grantee's "Extended" Project Team

- Organization
  - Internally
  - With Respect to Other Extended Team Members
- Qualifications/Experience of Individuals
- Understanding of Roles
  - Especially with Respect to the Extended Team Members
- Understanding of the Project

# Focus Area - Organization



# Focus Area – Approach to Work

- **Policies and Procedures for:**

- Budget and schedule control
- Contingency Release
- Reporting

- **Control Methods for:**

- Cost Estimates and Schedules – Develop and Maintain
- Conformance of Systems to FRA Work Breakdown Structure
- Forecasting methods for Cost and Schedule
- Risk Identification / Risk Management – Maintenance of Risk Register
- Design Assurance
- Quality Assurance
- Safety and Security Assurance
- Developing Recovery Plans

# **Needed Grantee Submittals**

## **Management & Technical Capacity and Capability Plan (MTCC)**

- Project Approach
- Organization
- Processes and Procedures
- Personnel Resumes

## **Grantee Agreements / Draft Agreements**

## **Project Management Plan (PMP) and sub-plans**

- Real Estate Acquisition Plan
- Community Outreach / Government Relations
- Financial Plan
- Procurement Plan

# MTCC Plan Contents

1. **Grantee's Approach to the Project**
2. **Organization, Personnel Qualifications, and Experience**
3. **Description of Management Processes and Procedures**
4. **Resumes of Project Team Members**

# Grantee's Approach to the Project

- a) **Management of professional staff and contractors**
- b) **Managing contracts in compliance with Federal requirements**
- c) **Compliance with FRA grant provisions and reporting requirements**
  - i. Civil Rights Act of 1964
  - ii. DBE (Disadvantaged Business Enterprises)
  - iii. ADA (American's with Disabilities Act)
  - iv. Uniform Act (Uniform Property Acquisition and Relocation Act)
  - v. Matching funds requirements

# Grantee's Approach to the Project

## d) Management and technical capacity and capability to:

- i. Conduct planning analyses
- ii. Progress and manage design and engineering
- iii. Maintenance of Project Controls
- iv. Meet stated project goals and objectives
- v. Governmental relations
- vi. Community relations
- vii. Real Estate acquisition
- viii. Asset Management
- ix. Safety and Security Programs

# Organization, Qualifications, Experience

- a) Review Organization (from Top to Bottom)
- b) Evaluate roles and interfaces within organizational structure including:
  - i. Executive level
  - ii. Dedicated project team
  - iii. Partners – railroad, state departments, local governments
  - iv. Other stakeholders – regulators, interest groups, etc.

# Organization, Qualifications, Experience

## c) Is the Staff Qualified to:

- i. Choose the best Project Delivery Method
- ii. Secure Local Funding
- iii. Conduct planning and feasibility studies; environmental reviews
- iv. Address technical requirements of multiple stakeholders including third parties such as railroads, utility companies, and others
- v. Oversee design
- vi. Manage construction
- vii. Maintain railroad operations during construction
- viii. Acquire rolling stock, support vehicles, and roadway equipment

# Organization, Qualifications, Experience

- d) Assess Grantee's history of performance, financial stability, adequacy of management systems, conformance with terms of previous awards, etc.**
- e) Review of Grantee's agreements and draft agreements**
  - i. FRA
  - ii. Railroads
  - iii. Utilities
  - iv. Local Governments
  - v. Funding Partners

# Organization, Qualifications, Experience

## f) Review Grantee's staffing plan

- i. Reasonableness of number of positions
- ii. Hours for each project team component over life of project
- iii. Professional services costs accurately reflect labor requirements

## g) Review Grantee's Physical Resources

- i. Is there sufficient office space, meeting space, etc.?

# Management Policies and Procedures

## Evaluate Grantee policies and procedures:

- i. Grantee Board decision making authority
- ii. Project team leadership decision making authority especially with regard to budget, schedule, change orders, and release of contingency
- iii. Legal services
- iv. Procurement services
- v. Financial planning and cash flow management
- vi. Securing matching funds
- vii. Community outreach / media relations
- viii. Government relations procedures

# **Interview Key Project Staff**

## **Identify Key Project Staff**

## **Develop Interview Questionnaires**

- Sample Questionnaires in MP-21 Appendix D

## **Interview the Key Project Staff**

- Gain insight into personal understanding of project challenges
- Gain insight into the actual interaction among the Key Project Staff and stakeholders

# MTAC Report

## MTAC MP-21 Report Consists of:

- Table of Contents – see MP-21 Appendix A
- Grantee's Approach to the Project
- Organizational Charts
  - Summary of Staff Qualifications/Experience (App. B)
  - Labor Hour Distribution over the Life of Project (App. C)
  - Staffing Plan Graph (Appendix D)
- Description of Management Processes and Procedures
- Resumes of Team Members

# **Process for Report, Presentation, Reconciliation**

**The MTAC Provides a Written Report of Its Findings, Analysis, Recommendations, and Professional Opinions**

**After FRA Approval, the MTAC Shares the Report With the Grantee**

**The FRA May Direct the MTAC to Reconcile the Findings With the Grantee**

# MTAC Sample Report Findings

**The MTAC's Conclusions / Recommendations can be broken down into three Categories:**

1. Organization
2. Procedural
3. Management Approach

**Some sample findings are:**

# 1. Organization

## The MTAC Recommends that the Grantee:

- A. Create Project Controls/Risk Management Manager position responsible for monitoring budget, schedule, and contingency
- B. Create Grantee Design Coordination Manager position reporting directly to Deputy Director Design to assume primary responsibility for coordination/interface with all involved agencies and municipalities
- C. Once construction begins in earnest, determine if a Senior Project Manager for Construction position reporting directly to Deputy Director for Construction is necessary to assist Deputy Director Construction in assigned responsibilities
- D. Add dotted line relationship between Project QA/QC and Safety Manager and Vice President of Engineering
- E. Develop a staffing matrix for the entire project duration.
- F. Fill the Safety and Security Director position as soon as possible.
- G. Create a QA/QC Manager position to be responsible for monitoring the quality of the projects documents and constructed elements. This position must report to the Executive Director to ensure independence.

# 1. Organization

- H. Assign on-site DB Contract Manager who has autonomy to manage prime contract, and who reports directly to Grantee senior management
- I. Assign a Manager to Right-of-Way and Rights-of Entry requirements to ensure that all property rights and property acquisitions are obtained in accordance with area need dates in DB contract
- J. Assign Manager responsible for the Regulatory Approval requirements to ensure that Regulatory Approvals are obtained in accordance with schedule
- K. Assign dedicated Manager to the utility work to control scope and schedule to ensure utility work is performed to the minimum necessary and in support of the need of construction work
- L. Create Executive Project Director position responsible for ensuring requirements of Cooperative Agreement with all project partners are implemented, as well as resolution of any interagency issues

***Generally, Grantees Want to Manage Projects with a Lean Staff and Rely Heavily on Consultants***

## 2. Procedural

### The MTAC Recommended that the Grantee:

- A. Develop a Financial Status Report and routinely conduct a Senior Management / Board of Directors level review. Establish metrics (cost and schedule progress) and demand recovery plans.
- B. Implement a monthly Progress Status Report for submission to FRA prior to regularly scheduled meetings that includes:
  - Invoicing and payments to date for all major contracts
  - Tabulation of change orders
  - Current contract amount and estimated cost to complete by contract
  - Progress achieved versus progress scheduled
  - Progress planned for next period
- C. Establish senior management contingency control procedure so the project cannot use contingency without executive approval

***The Project QA/QC and Safety Manager have the Primary Responsibility to Prepare Project Procedures***

# 3. Management Approach

## A. Adopt a “Design to Budget” mentality

- Extremely important for Subcontract Allowance Items in the construction contract, but equally applicable to the design work
- Challenge those performing the design to meet budget for final product, not just for the design effort

## B. Adopt a “No Change” mentality for project scope

- Keep to the technical and scope commitments made in the construction contract and PMP

# 3. Management Approach

- C. Adopt a “Schedule Adherence” mentality
  - Insist that the contractors and supporting agencies adhere to project schedule. Immediately notify those who do not adhere to the schedule.
- D. Develop ownership matrix of project elements and assign budget/schedule to each element
  - Hold element owners accountable for variances and recovering budget/schedule as needed.

# Summary

**Every Project is unique.**

**Each grantee must:**

1. Plan
  2. Implement
  3. Execute
- their appropriate management plan

*If the MTAC determines that the Grantee is inadequate or weak because of its organization, personnel qualifications, and experience, or approach or ability to perform the work, the MTAC should make recommendations for corrective action and a timeframe for the action.*