

MONTHLY MONITORING REPORT

Transbay Downtown Rail Extension Project, Phase 2

Transbay Joint Powers Authority (TJPA)
San Francisco, CA

November 2022

PMOC Contract Number: 69319519D000031
Task Order Number: 69319522F30068N
OPs Referenced: OP25



75 E. Santa Clara Street
San Jose, CA 95113
408.606.9515

Edwin J. Williamson, PE, 917-715-8651, ejwilliamson@urbanengineers.com

Length of time Assigned: Two Months (October 2022 through November 2022)

Table of Contents

1.0	EXECUTIVE SUMMARY	iv
1.1	Project Description	iv
1.2	Project Status.....	iv
1.3	Major Issues and/or Concerns with Core Accountability Information (?).....	iv
1.4	Status of Key Indicators Dashboard (Post-Grant).....	iv
1.5	Core Accountability Items	v
2.0	OBSERVATIONS AND FINDINGS	1
2.1	Summary of Monitoring Activities	1
2.2	Oversight Triggers.....	1
2.3	Project Management Plan (PMP) and Sub-Plans	1
2.4	Management Capacity and Capability	2
2.5	NEPA Process and Environmental Mitigation.....	2
2.6	Project Delivery Method and Procurement.....	2
2.7	Design.....	2
2.8	Value Engineering and Constructability Reviews	3
2.9	Real Estate Acquisition and Relocation	3
2.10	Third-Party Agreements and Utilities	3
2.11	Construction	3
2.12	Vehicle Technology and Procurement	3
2.13	Project Cost	4
2.14	Project Schedule	5
2.15	Project Risk	5
2.16	Quality Assurance/Quality Control.....	6
2.17	Safety and Security.....	6
2.18	Americans with Disabilities Act (ADA)	6
2.19	Buy America	6
2.20	Start-Up, Commissioning, Testing.....	6
2.21	Before-and-After Study Reporting.....	6
2.22	Lessons Learned	7
2.23	Actions Items Table	7

3.0 PROJECT MONITORING REPORT ATTACHMENTS	8
Attachment A: List of Acronyms	1
Attachment B: Safety and Security Checklist	2
Attachment C: Top 5 Project Risks	3
Attachment D: Awarded Contracts	4
Attachment E: Rolling Stock Vehicle Status Report	5
Attachment F: Project Milestones/Key Events	6
Attachment G: Roadmap to Revenue Operations	7
Attachment H: Project Map.....	8

1.0 EXECUTIVE SUMMARY

1.1 Project Description

The Transbay Joint Powers Authority (TJPA) proposes to extend the Caltrain commuter rail line 2.4 miles from the China Basin/South Park neighborhood near the current Caltrain terminus at Fourth and King Streets to the multi-modal Salesforce Transit Center in downtown San Francisco. The Project's proposed Fourth and Townsend station is near Oracle Park, the home of the San Francisco Giants baseball team. The project's current estimated capital cost is between \$ 4.4 to \$5.0 billion. The TJPA believes that the project will improve public access to bus and rail service and accommodate projected growth in travel demand in the San Jose–San Francisco corridor. The proposed Project will connect Caltrain's regional rail system to the California High-Speed Rail Authority's statewide rail system at the Salesforce Transit Center in downtown San Francisco.

1.2 Project Status

The locally preferred alternative (LPA) was completed in March 2003, and NEPA was completed in February 2005 with a Record of Decision (ROD). FTA amended the ROD in July 2019, and the LPA was adopted into the region's fiscally constrained long range transportation plan in October 2021. The Project plans to formally request FTA approval to Enter Engineering during 1Q-2023 and anticipates FTA approval during 3Q-2023. The Project expects to enter the Engineering phase in 4Q-2023, receive a Full Funding Grant Agreement in 2025 and initiate revenue service in 2033.

1.3 Major Issues and/or Concerns

No major issues or concerns have been identified by the PMOC at this time.

1.4 Status of Key Indicators Dashboard (Post Grant)

The Key Indicators Dashboard will be completed upon award of the Full Funding Grant Agreement and then updated monthly thereafter.

KEY INDICATORS DASHBOARD (POST-GRANT STATUS)	
Project Sponsor:	Transbay Joint Powers Authority (San Francisco, CA)
Project Name:	Transbay Program Downtown Rail Extension Project, Phase 2
Date:	
Project Detail	
Oversight Frequency:	Monthly

<i>Element</i>	Status			Prior Status (G/Y/R)	Issue or Concern
	G	Y	R		
PMP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	G	
MCC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	G	
Cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	R	
Schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	R	
Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Y	
Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	G	
Risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Y	
Legend					
Green	Satisfactory: no Corrective Action necessary.				
Yellow	Caution: Risk/issues exist. Corrective Action may be necessary.				
Red	Elevated for immediate Corrective Action; significant risk to the health of the project.				

1.5 Core Accountability Items

Core Accountability Items				
		Original (Grant)	Current Forecast	PMOC Assessment of Current Forecast
Cost	Capital Cost Estimate	(Note 1)	(Note 2)	N/A

Contingency	Unallocated Contingency	(Note 1)	(Note 2)	N/A
	Allocated Contingency	(Note 1)	(Note 2)	N/A
	Total Contingency	(Note 1)	(Note 2)	N/A
Schedule	Revenue Service Date	(Note 1)	Dec. 21, 2033	Acceptable
Note 1: FFGA anticipated in 2025. Note 2: Sponsor is finalizing the Capital Cost Estimate.				
Project Progress:		Amount (\$M)		Percent of Total
Total Expenditures	Actual cost of all eligible expenditures completed to date	(Note 3)	(Note 2)	
Planned Value to Date	Estimated value of all work planned to date	(Note 3)	(Note 2)	
Actual Value to Date	Actual value of all work completed to date	(Note 3)	(Note 2)	
Note 3: Sponsor is compiling costs/value to date.				
Contract Status:		Amount (\$)		Percent
Total Contracts Awarded	Value of all contracts (design, support, construction, equipment) awarded; % of total value to be awarded	(Note 3)	(Note 2)	
Construction Contracts Awarded	Value of construction contracts awarded; % of total construction value to be awarded	(Note 4)	(Note 2)	
Physical Construction Completed	Value of physical construction (infrastructure) completed; % of total construction value completed	(Note 4)	(Note 2)	
Note 2: Construction start anticipated in late 2023.				
Rolling Stock Vehicle Status		Date Awarded	No. Ordered	No. Delivered
(There are no vehicle procurements included in the project scope of work)		N/A	N/A	N/A
Major Issues	Date Identified	Status	Project Sponsor Action	PMOC Recommendation
N/A	N/A	N/A	N/A	N/A

Date of Next Quarterly Meeting (if known):			Next Monthly Meeting is on December 19, 2022.	

2.0 OBSERVATIONS AND FINDINGS

2.1 Summary of Monitoring Activities

The PMOC started work on the Task Order during October 2022. This report covers the period from mid-October 2022 through November 30, 2022.

PMOC monitoring included the following activities:

- October 2022
 - Met with ACOR to discuss start of PMOC oversight and PMOC staffing, correspondence, coordination with Sponsor including list of requested documents for PMOC review.
 - Prepared agenda for the FTA/PMOC Kickoff meeting with project Sponsor on October 20, 2022 and co-directed the meeting with the FTA. Issued draft meeting notes.
- November 2022
 - Met with ACOR to discuss additional details of PMOC oversight, schedule for OP2 and OP25 reports and coordination with Sponsor.
 - Worked with ACOR and Sponsor on development of detailed OP51 checklist for tracking Sponsor documents submission, PMOC review and finalization.
 - Reviewed Sponsor provided presentations on Transbay DTX Project, Phase 2, that included details of the program status, current initiatives and schedule of major milestones.
 - Prepared agenda for first FTA/PMOC Monthly Monitoring Meeting with Sponsor on November 21, 2022 and co-directed the meeting with the FTA. Issued draft meeting notes. Coordinated future monthly meetings with Sponsor.
 - Attended FTA Monthly CIG check-in meeting.
 - Attended Sponsor program management meetings:
 - Integrated Project Management Team semimonthly meetings (2)
 - Monthly CIG Financial Plan meeting

2.2 Oversight Triggers

The PMOC will perform monthly oversight of the project and continue through the Engineering Phase to award of the Full Funding Grant Agreement in accordance with direction from the FTA.

2.3 Project Management Plan (PMP) and Sub-Plans

The Sponsor is currently preparing the Project Management Plan (PMP) and the associated sub-plans. Upon receipt of the final draft documents, now expected during Q1-2023, the PMOC will complete the OP20 review of the Project Management Plan and the review of the PMP sub-plans under the associated OPs.

2.4 Management Capacity and Capability

The Sponsor is currently preparing documentation, including the PMP, to demonstrate that the Sponsor has adequate capacity and capability to manage the TDTX Project. Upon receipt of the final draft documents, now expected during Q1-2023, the PMOC will complete the OP21 review for Management Capacity and Capability.

2.5 NEPA Process and Environmental Mitigation

The Sponsor is currently preparing documentation, including the 30% Design Package, Design Basis and Design Criteria, to demonstrate that the TDTX Project meets all the NEPA and environmental mitigation commitments found in the FEIS and ROD. Upon receipt of the final draft documents, now expected during Q1-2023, the PMOC will complete the OP32B review for NEPA and Design Document Comparison.

November 2022 Sponsor updates included:

- Examples of preliminary de-scoping or deferral of non-critical project elements include train platform length and pedestrian connection.
- Confirmed that, to date, the NEPA and SEQR processes are independent and being advanced in parallel.

2.6 Project Delivery Method and Procurement

The Sponsor plans to construct the project using three project delivery methods.

TJPA Board-approved delivery approach consists of:

- Enabling Works Program (Early Action contracts) for Utilities and Railyard Infrastructure Relocation, and Site demolition.
- Progressive Design-Build (PDB) for heavy civil/tunnel.
- Construction Manager-General Contractor (CMGC) for systems, track, station fit-out.

2.7 Design

The Sponsor is currently preparing documentation to demonstrate that the TDTX Project 30% Design Package includes all the scope of work detailed in the Design Basis and Design Criteria and is consistent with all approved environmental review results. Upon receipt of the final draft documents, now expected during Q1-2023, the PMOC will complete the OP32C review for Project Scope Review.

November 2022 Sponsor updates included:

- 30% Design status reviewed – several deliverables are outstanding.
- 60% Utilities Design anticipated in February-March 2023 timeframe. Future water main work may be required.
- Caltrans manages the Transbay DTX new construction interface with the existing bridge pier footing for the elevated I-280 structure.

2.8 Value Engineering and Constructability Reviews

The Sponsor has conducted several Value Engineering and Constructability Reviews. The corresponding reports provided to the PMOC will be used for the PMOC's OP32C Project Scope Review.

2.9 Real Estate Acquisition and Relocation

The Sponsor is currently preparing the Real Estate Acquisition and Management Plan (RAMP). Upon receipt of the final draft document, now expected during Q1-2023, the PMOC will complete the OP23 review of the Real Estate Acquisition and Management Plan.

November 2022 Sponsor updates included:

- Caltrain operates under a perpetual surface right.
- Two properties remain to be negotiated, Caltrain and private fee title owner.
- Future development coordination is actively in discussion.
- For the real estate, there are very few full property takings.
- There no aerial rights involved for the Program.

2.10 Third-Party Agreements and Utilities

The project requires multiple third-party agreements and the temporary and permanent relocation of a large number of existing utilities. The PMOC is currently reviewing the presentation material provided by the Sponsor and will continue a more in-depth review of specific project documents.

November 2022 Sponsor updates included:

- "ICA" is an inter-agency agreement that includes all Program stakeholders.
- Joint Trench Agreement (Townsend Street) involves 20 telecom entities.
- TJPA stated that Pacific Gas and Electric (PG&E) is not considered a critical third-party agreement because PG&E uses pre-approved construction contractors and this reduces risk to the Program.

2.11 Construction

Construction is forecast to commence during 4Q-2023 with the Early Action Enabling contracts.

2.12 Vehicle Technology and Procurement

There are no vehicle procurements included in the project scope of work.

2.13 Project Cost

The Sponsor is currently preparing/finalizing the components of the Program Cost Estimate. Upon receipt of the final draft documents, now expected during Q1-2023, the PMOC will complete the OP33 review of the Capital Cost Estimate.

November 2022 Sponsor updates included:

- Program Funding Status
 - Sales tax extension was passed in November 2022.
 - Funding from planned bonds/taxes will be available in January 2023 and will support continued program planning and engineering work.
 - Program is awaiting outcomes of ongoing cost estimate reviews.
 - FTA inquired if the current projected funding range of \$5-7 billion will be narrowed when TJPA locks into the federal grant. TJPA noted the following:
 - Program baseline cost is from 2016.
 - Estimated cost has since been reduced based on more recent scope re-evaluation (reduction/deferral), value engineering, etc.
 - \$5-7 billion is current “public” estimate.
 - Current range is smaller.
 - Cost estimate accuracy will improve significantly based on a new bottoms-up estimate.
- Program Cost
 - Capital Cost Estimate
 - Associated contingency is included in the Engineer’s Estimate.
 - Cost range values are tight.
 - Currently in independent peer review.
 - Program Budget
 - TJPA plans to submit to the FTA the same budget that is presented for Board approval on February 9, 2023.
 - FTA asked about the risk and contingency review outcome. TJPA noted that the risk process will consider the following factors: market interest; cost escalation; program funding. TJPA management will meet during the first week of December 2022 to review.
 - TJPA noted that there is a cost reconciliation process based on the independent peer review of the Capital Cost Estimate. The cost reconciliation is ongoing and is expected to be completed by about December 9, 2022.

2.14 Project Schedule

The Sponsor is currently preparing/finalizing the Project Master Schedule. Upon receipt of the final draft documents, now expected during Q1-2023, the PMOC will complete the OP34 review of the Project Schedule.

November 2022 Sponsor updates included:

- **Project Master Schedule Critical Path**
 - TJPA will be meeting with Caltrain soon on the Enabling Works (Early Action contracts) package for the modifications to and support of the existing rail yard along Townsend Street.
- **Key Milestones – 4Q-2022 and 1Q-2023**
 - Schedule shown is the baseline included in the ROD (2021).
 - PMOC explained the key schedule review elements.
 - PMOC noted that the near-critical activities are also monitored closely.

2.15 Project Risk

The Sponsor is currently updating/finalizing the Project Risk and Contingency Management Plan (RCMP), the Project Risk Register and the Qualitative Risk Assessment. Upon receipt of the final draft documents, now expected during Q1-2023, the PMOC will complete their review of the RCMP and lead the FTA OP40 Risk and Contingency Review process.

November 2022 Sponsor updates included:

- **Risk and Contingency Review**
 - TJPA reviewed the risk trend profile presented in the slide deck.
 - TJPA asked that upon completion of the quantitative risk assessment, does the FTA still use the P65 confidence level as indicated in the 2015 OP40? The PMOC provided the following information:
 - OP40 (Risk and Contingency Review) was recently updated by the FTA in March 2022 and is available on the FTA website.
 - The OP40 workbook is hard-wired to select the P65 confidence level for both cost and schedule. The schedule review uses a Monte Carlo analysis while the cost review uses risk factors based on FTA historical data.
 - Latent contingency embedded in the cost estimate is initially stripped out but is returned through the cost risk analysis process.
 - FTA evaluates construction cost on a risk-informed basis.
 - The FTA “rule of thumb” has been updated in the current OP40 and equates the P65 confidence level for cost at preliminary (30% design) completion to a 33% contingency.

2.16 Quality Assurance/Quality Control

The Sponsor is currently preparing the Project Quality Assurance Plan. Upon receipt of the final draft document, now expected during Q1-2023, the PMOC will complete the OP24 review of the Sponsor's Project Quality Assurance/Quality Control (QA/QC) Program.

2.17 Safety and Security

The Sponsor is currently preparing the Project Safety and Security Management Plan (SSMP). Upon receipt of the final draft document, now expected during Q1-2023, the PMOC will complete the OP22 review of the Project Safety and Security Management Plan.

2.18 Americans with Disabilities Act (ADA)

The PMOC will review ADA compliance during the following reviews:

- OP20 – Project Management Plan
- OP22 – Project Safety and Security Management Plan
- OP32C – Project Scope Review

2.19 Buy America

The PMOC will review Buy America compliance during the following reviews:

- OP20 – Project Management Plan
- OP32C – Project Scope Review

2.20 Start-Up, Commissioning, Testing

Project is currently at the Preliminary Engineering/Design Stage, approximately 30%. The PMOC will evaluate the adequacy of the system start-up, testing and commissioning provisions in the Design Basis and Design Criteria documents that will be reviewed the OP32C Project Scope Review.

2.21 Before-and-After Study Reporting

The PMOC will evaluate the Sponsor's Before-and-After Study Reporting during the following reviews:

- OP21 – Management Capacity and Capability
- OP33 – Capital Cost Estimate
- OP51 – Readiness to Enter Engineering

2.22 Lessons Learned

OP26 – Lessons Learned is currently not included in the PMOC scope of work for either the Regional or Programmatic Task Orders for services on the Transbay Downtown Rail Extension Project, Phase 2.

2.23 Actions Items Table

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status / Action Required

3.0 PROJECT MONITORING REPORT ATTACHMENTS

- A. List of Acronyms
- B. Safety and Security Checklist – In preparation by the Sponsor.
- C. Top 5 Project Risks – Listed upon completion of the OP40 Risk and Contingency Review.
- D. Awarded Contracts – Working with Sponsor to include all current contracts for professional services.
- E. Rolling Stock Vehicle Status Report – N/A.
- F. Project Milestones/Key Events – Will be included in December 2022 Monthly Report.
- G. Roadmap to Revenue Operations – Will provide Roadmaps for Entry to Engineering and FFGA.
- H. Project Map – Will be included in December 2022 Monthly Report

Attachment A: List of Acronyms

ACOR.....Alternate Contracting Officer Representative
ADA.....Americans with Disabilities Act
CIG.....Capital Investment Grant
FEIS.....Final Environmental Impact Study
FFGA.....Full Funding Grant Agreement
FTA.....Federal Transit Administration
LPA.....Locally Preferred Alternative
NEPA.....National Environmental Policy Act
PG&E.....Pacific Gas & Electric
RAMP.....Real Estate Acquisition and Management Plan
RCMP.....Risk and Contingency Management Plan
ROD.....Record of Decision
SEQA.....California Environmental Quality Act
TDTX.....Transbay Downtown Rail Extension Project, Phase 2
TJPA.....Transbay Joint Powers Authority
PMOC.....Project Management Oversight Contractor
SSMP.....Safety and Security Management Plan

Attachment B: Safety and Security Checklist

Attachment C: Top 5 Project Risks

Attachment D: Awarded Contracts

Attachment E: Rolling Stock Vehicle Status Report

Attachment F: Project Milestones/Key Events

Attachment G: Roadmap to Revenue Operations

Attachment H: Project Map