

MONTHLY MONITORING REPORT

Transbay Downtown Rail Extension Project, Phase 2

Transbay Joint Powers Authority (TJPA)

San Francisco, CA

January 2023

PMOC Contract Number: 69319519D000031

Task Order Number: 69319522F30068N

OPs Referenced: OP25



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Length of time Assigned: 4 Months (October 2022 through January 2023)

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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 Street 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, known as the Transbay Downtown Rail Extension Project, Phase 2 (Transbay DTX), 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 Salesforce Transit Center in downtown San Francisco, along with the future California High-Speed Rail Authority's statewide rail system.

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 in February 2023 and anticipates FTA approval in August 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 2032.*

Through January 31, 2023, TJPA continued working on preparation of the final draft Master Schedule and Capital Cost Estimate for presentation to the TJPA Board in February 2023. TJPA also continued work on planned monthly, quarterly and targeted progress updates in the areas of risk management, value engineering and constructability as well as work on the critical third-party agreements and engagement with the other 5 project stakeholders.

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.

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)	Sep. 30, 2032	Acceptable
<i>Note 1: FFGA anticipated in 2025. Note 2: Sponsor is finalizing the Capital Cost Estimate.</i>				
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)	
<i>Note 3: Sponsor is compiling costs/value to date.</i>				
Contract Status:		Amount (\$)	Percent	
Total Awarded	Contracts 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)	
<i>Note 4: Construction start anticipated in late 2023 for Early Action contracts.</i>				

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):			<i>Next Monthly Meeting is on February 24, 2023</i>	

2.0 OBSERVATIONS AND FINDINGS

2.1 Summary of Monitoring Activities

This report covers the period from January 1, 2023 through January 31, 2023.

PMOC monitoring included the following activities:

- *Continued to monitor and review anticipated document completion dates in the detailed OP51 checklist for tracking Sponsor documents submission, PMOC review and finalization.*
- *Worked on draft PMOC Monthly Monitoring Report for December 2022.*
- *Reviewed Sponsor provided presentations on Transbay DTX Project, Phase 2, that included details of the program status, current initiatives and schedule of major milestones for the 20-year Financial Plan, Critical Third-Party Agreements and Property Acquisition along the planned project alignment.*
- *Prepared agenda for the FTA/PMOC Monthly Monitoring Meeting with Sponsor on February 1, 2023 and co-directed the meeting with the FTA. Coordinated future monthly meetings with the FTA and Sponsor.*
- *Traveled to project site and met with TJPA staff in their office. TJPA provided a comprehensive tour of the Salesforce Transit Center and the subgrade train box that will be fit-out as the rail terminal for Caltrain service to the transit center.*
- *Attended FTA Monthly CIG check-in meeting.*
- *Attended Sponsor program management and technical meetings:*
 - *Integrated Project Management Team semimonthly meeting*
 - *Constructability Review Workshop*
 - *Risk Register Update*

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 in February 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 Transbay DTX Project. Upon receipt

of the final draft documents, now expected in February 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 Transbay DTX Project meets all the NEPA, and environmental mitigation commitments found in the FEIS and ROD. Upon receipt of the final draft documents, now expected in February 2023, the PMOC will complete the OP32B review for NEPA and Design Document Comparison.

January 2023 Sponsor updates included:

- *FTA responded during week of Jan. 23, 2023 to TJPA 2nd Administrative Draft sent on Nov. 23, 2023; Phasing Study deferrals/de-scoping.*
- *FTA letters to 8 Native American tribes sent Dec. 16, 2022: only 1 response; TJPA to follow-up with remaining 7 to close.*
- *CEQA Addendum has been approved by TJPA Board of Directors.*

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.

The PMOC notes that the proposed approach using three different project delivery methods will require a high level of both design and construction interface coordination and management.

Additionally, because the Enabling Works Program is scheduled to start during Q4-2023, prior to award of the FFGA that is targeted for 2025, TJPA has acknowledged the need for development of the basis for a Letter of No Prejudice (LONP) to qualify the costs of the Enabling Works Program under the FFGA.

2.7 Design

The Sponsor is currently preparing documentation to demonstrate that the TDTX Project Preliminary 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 in February 2023, the PMOC will complete the OP32C review for Project Scope Review.

January 2023 Sponsor updates included:

- *All remaining outstanding 30% Design deliverables are now completed with the exception of Design Basis document, now expected by Feb. 6, 2023.*
- *Basis for 30% design is the 2009 design criteria; design directives during the preliminary design resulted in the 2022 updated design criteria; the design criteria document includes the design basis.*
- *TJPA noted that the Early Action Contracts (Enabling Works Program) will include relocation of selected Caltrain rail yard facilities and the delivery method will be Design-Bid-Build.*

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.

January 2023 Sponsor updates included:

- *Right-of-Way acquisition budget estimate is \$340 million.*
- *There are 9 full-take parcels.*
- *By Spring 2023, TJPA expects to make offers for 3 properties.*
- *The TJPA Real Estate Acquisition and Management Plan (RAMP) is in progress.*
- *TJPA provided the status of remaining negotiations:*
 - *Caltrain*
 - *TJPA continued its discussions with Caltrain with the goal of achieving a preliminary agreement with Caltrain prior to approaching Prologis.*
 - *Prologis*
 - *TJPA advised that the agreement timeline development continues to make progress but remains dependent on outcomes of TJPA's work with Caltrain.*

The PMOC is concerned about the challenges presented in negotiating agreements involving three diverse entities: an operating rail transit agency; local city government; private sector property fee owner. Under these circumstances, the negotiation process can require additional time and may require revisions to the project design, including acquisition of the project Right-of-Way (ROW)

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 as they are made available.*

January 2023 Sponsor updates included:

- *City and County of San Francisco (CCSF) Agencies (8) – Interagency Cooperative Agreement (ICA).*
 - *The ICA will provide a single agreement between CCSF and TJPA for Phase 2 of the Transbay Program, with a common set of terms negotiated with TJPA counsel and one team from City Attorney’s Office (CAO). The ICA is supplemented by two sets of appendices:*
 - *Appendix A: Real Estate*
 - *Appendix B: Technical Scopes by Agency*
 - *ICA Drafting and Approval Timeline:*
 - *Weekly negotiation meetings and monthly agency staff meetings*
 - *Late January/early February 2023 – first full draft, department technical scopes finalized; ROW plan finalized*
 - *Late February 2023 – overall ICA finalized*
 - *March-May 2023 – Action by department boards and commissions*
- *Joint Trench Agreements*
 - *For public and private utilities, TJPA may consolidate dry utilities such as communication optical fiber into joint trenches. Limited joint trench agreements are being considered for communication utilities along Townsend Street due to the high density of subsurface existing utilities and limited clearance above the new rail tunnel.*
 - *The joint trench agreements are anticipated to be drafted in 2023 as the utility relocation design progresses and shared costs are determined.*
 - *Coordination with multiple fiber companies has been underway as the utility relocation design is advanced from 30% to 60%. There are 9 private telecom companies currently included in coordination discussions.*
- *Peninsula Corridor Joint Powers Board*
 - *The Master Collaborative Agreement with Caltrain (MCA) will provide the respective roles and responsibilities of TJPA and Caltrain and detail the procedures for both to work cooperatively together for the design, construction, commissioning, operation, maintenance, funding, risk allocation and asset disposition of the Transbay DTX Project. TJPA continues working on the new MCA.*
 - *Workplan timeline:*
 - *By February 14, 2023, submit to FTA a defined process and schedule for achieving a complete and signed MCA.*
 - *By June 15, 2023, draft Term Sheets completed by TJPA and Caltrain working group*

- *By August 12, 2023, final approval by TJPA and Caltrain boards*
- *Pacific Gas and Electric (PG&E)*
 - *TJPA is currently negotiating an agreement with PG&E for providing power to the Transbay DTX project and the new rail station located at Fourth and Townsend Streets.*
 - *Agreement targeted completion date – August 2023.*
 - *Includes relocation of gas, electric and telecom lines along project ROW.*
 - *Project liaisons were established with PE&G for utility line relocations.*
 - *Coordination is actively ongoing as design is advanced to 60% stage.*

The PMOC’s opinion is that the critical third-party agreements present a significant risk to the project based on the following observations:

- *There are four critical third-party agreements identified for the project.*
- *Three of the agreements involve multiple parties with diverse interests in both the private and public sectors.*
- *The scope of the agreements is wide and includes various combinations of the following key project elements:*
 - *Project design coordination*
 - *Modifications to existing infrastructure not owned by TJPA*
 - *Cost sharing*
 - *Construction coordination and support*
 - *Operation and maintenance of new rail system and terminal*

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.

At the January 2023 Monthly Meeting with the FTA and PMOC, the Sponsor indicated that the 2018 Caltrain Rail Fleet Management Plan does not include the rail vehicle fleet changes needed to provide new service to the Salesforce Transit Center terminal in 2032. It was agreed that an RFMP addendum should be considered to address the needed fleet and operational changes that would be needed to support the new service. Alternatives to an addendum included a Technical Memorandum or White Paper.

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 in February 2023, the PMOC will complete the OP33 review of the Capital Cost Estimate.

January 2023 Sponsor updates included:

- Program Funding Status
 - Progress continues on the Joint TJPA/Caltrain 20-Year Financial Plan, preparing for interfacing with Financial Management Oversight Contractor (FMOC) (TBD).
 - Transbay DTX Project is next in line for TIRCP funding.
 - TJPA reported on progress to achieve 30% of the program funding through non-CIG sources. The finance team provided a detailed breakdown of the non-CIG funding sources totaling \$1,064 million, approximately 31% of the current estimated program cost.
 - TJPA identified significant additional work over the coming 24 months to complete funding plan and secure remaining funding commitments needed for FFGA, including:
 - Pursuit of competitive grants at all levels.
 - Coordinated state and federal advocacy.
 - Regional prioritization and support.
 - Development of new/expanded local funding sources (e.g., Tax Increment term extension).
 - Consideration of financing strategies (e.g., USDOT TIFIA loan).
 - Incorporation of capital cost savings from Value Engineering results.

- Program Cost Status
 - Final Draft Capital Cost Estimate, including recommended cost escalation, presented to Executive Steering Committee on January 20, 2023.
 - January 2023 Draft Full Transbay DTX Project Cost Estimate is \$6,680 million.
 - Based on discussion with FTA-HQ, financing cost will be added to Estimate.
 - TJPA summarized the changes to the cost estimate based on the peer review and the cost reconciliation:
 - Adjustments to haul cost and disposal fees
 - Adjustments to reinforcement allowance
 - Adjusted pier/pile quantities.
 - Adjusted indirect costs based on latest schedule.
 - Adjusted bond, insurances and permits.
 - Adjusted Design fee.
 - Reduction in number of traffic crossing
 - TJPA summarized the key assumptions for the February 2023 Capital Cost Estimate:
 - Escalation – 6.0% for 2023, 3.5% per year thereafter.
 - Risk – based on the Integrated Program Management Team (IPMT) Quarterly Risk register scoring.
 - Design and Construction Contingency - budgeted contingency dollars to a P65 level of confidence for completing on budget, per FTA OP40.
 - Program Reserve – 8% of total program costs (excluding program reserve).
 - Program-wide Costs – 22.5% of escalated measured construction, design and construction contingency total.

- *Estimated cost is exclusive of financing costs, maintenance of way vehicles, level boarding vehicle retrofits, or additional rolling stock.*

2.14 Project Schedule

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

January 2023 Sponsor updates included:

- *Presentation of the project at the TJPA February 9, 2023 Board meeting will reflect the current September 2032 revenue service date which is revised from the December 2033 date reported in November 2022.*
- *Ongoing Adjustments and Refinement to the Schedule continue for:*
 - *Procurement Phase activities*
 - *Construction activities updates (Q4 Constructing Sequencing and Staging Memo)*
 - *Real estate acquisition activities*
 - *Final design milestones updates*
- *Critical Path Work/Activities:*
 - *Real Estate Relocation Impact Study*
 - *Relocation of selected Caltrain yard facilities*

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 in February 2023, the PMOC will complete their review of the RCMP and lead the FTA OP40 Risk and Contingency Review process.

TJPA has developed a comprehensive document checklist/tracking spreadsheet that it has made available on the document SharePoint site established for upload of TJPA documents for FTA and PMOC use. The spreadsheet will support document handling and status in support of three processes:

- *TJPA request for the Transbay DTX Project rating by the FTA*
- *FTA/PMOC Risk and Contingency Review (OP40)*
- *FTA/PMOC Readiness Review to Enter Engineering (OP51)*

The Entry to Engineering Comprehensive Document Checklist/Tracking Spreadsheet is being actively used by the Sponsor and the PMOC. At the January 2023 Monthly FTA/PMOC meeting with the Sponsor, TJPA provided additional updates and explanations as follows:

- *TJPA summarized near-term document status.*

- PMOC requested TJPA estimated completion dates, not yet included, for documents in progress or pending.
- FTA requested email confirmation from TJPA that specific OP51 deliverable documents designated complete are ready for PMOC review.
- The 11 remaining documents for PMOC review will be completed in February 2023.
- Document “Status” definitions per TJPA:
 - Future Submittal – TJPA seeking further FTA guidance.
 - Pending – OP51 deliverable not yet started
 - In Progress – OP51 deliverable in active preparation
 - Complete – Ready for PMOC review.

January 2023 Sponsor updates included:

- Risk and Contingency Review
 - Quantitative Risk Analysis Report – In final draft and will include the results of the December 2022 Quarterly QRA update; report will be issued shortly.
 - Next Quarterly Quantitative Risk Analysis update scheduled for early March 2023.
- TJPA Comparison of Approaches to Contingency Cost Estimate Approach
 - Variable Design Contingency (up to 30% by item)
 - Construction Contingency (10% of construction subtotal including allocated contingency)
 - Program Reserve (10% of Total cost excluding construction contingency)
 - Total estimated Contingency is 44% of Construction, ROW & Professional Services
- Based Quantitative Risk Analysis Review
 - Risk Allowance (15% of construction)
 - Quantitative Risk Assessment output (P65, P80 level of confidence)
 - Program Reserve (8% of Total cost excluding construction contingency)
 - Total estimated Contingency is 37% of Construction, ROW & Professional Service

The PMOC observes that the total count of risks included in the current version of the Project Risk Register is significantly less than expected for a project of this magnitude at the planning and 30% design stage. This will be a key focus of the PMOC work during the OP40 Risk and Contingency Review.

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 in February 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 in February 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 for 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

Action Items on significant issues/needs will commence during Q1-2023.

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 March 2023 Monthly Report based on the Final Draft Master Schedule.*
- G. Roadmap to Revenue Operations – Will provide Roadmaps for Entry to Engineering and FFGA.
- H. Project Map – *Will be included in the February 2023 Monthly Report*

Attachment A: List of Acronyms

ACOR.... Alternate Contracting Officer Representative
ADA..... Americans with Disabilities Act
CAO.....City Attorney’s Office
CCSF.....City and County of San Francisco
CIG.....Capital Investment Grant
DTX.....Downtown Rail Extension (as in “Transbay DTX Project”)
FEIS.....Final Environmental Impact Study
FFGA.....Full Funding Grant Agreement
FTA..... .Federal Transit Administration
ICA.....Interagency Cooperative Agreement
IPMT.....Integrated Program Management Team
LONP.....Letter of No Prejudice
LPA.....Locally Preferred Alternative
MCA.....Mater Collaborative Agreement
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.... ..State Environmental Quality Act (California)
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