

Transbay Downtown Rail Extension Project, Phase 2

Transbay Joint Powers Authority (TJPA)
San Francisco, CA

March 2023

PMOC Contract Number: 69319519D000031

Task Order Numbers: 69319522F30068N; 69319520F300044

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: 6 Months (October 2022 through March 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.

On February 17, 2023, the TJPA Executive Director formally submitted TJPA's requests to the FTA for approval to Enter Engineering and to conduct the New Starts Project Rating. On March 8, 2023, TJPA provided the FTA with most of the remaining documents required to conduct the Project Rating for the FTA New Starts Program. TJPA continued work on planned monthly, quarterly and targeted progress updates in the areas of risk management, value engineering, program funding and constructability as well as work on the property acquisitions, 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 (Million \$)	PMOC Assessment of Current Forecast	
Cost	Capital Cost Estimate		(Note 1)	6,987	Under Review
Contingency	Unallocated Contingency		(Note 1)	494	Under Review
	Allocated Contingency		(Note 1)	1,226	Under Review
	Total Contingency		(Note 1)	1,720	Under Review
Schedule	Revenue Service Date		(Note 1)	Sep. 30, 2032	Acceptable
Note 1: FFGA anticipated in 2025.					
Project Progress:		Amount (\$M)		Percent of Total	
Total Expenditures	Actual cost of all eligible expenditures completed to date		(Note 2)	(Note 2)	
Planned Value to Date	Estimated value of all work planned to date		(Note 2)	(Note 2)	
Actual Value to Date	Actual value of all work completed to date		(Note 2)	(Note 2)	
Note 2: 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 2)	(Note 2)	
Construction Contracts Awarded	Value of construction contracts awarded; % of total construction value to be awarded		(Note 3)	(Note 3)	
Physical Construction Completed	Value of physical construction (infrastructure) completed; % of total construction value completed		(Note 3)	(Note 3)	
Note 3: Construction start anticipated in late 2Q-2024 for Early Action contracts. No contracts awarded to date.					

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 April 27, 2023</i>	

2.0 OBSERVATIONS AND FINDINGS

2.1 Summary of Monitoring Activities

This report covers the period from February 25, 2023 through March 22, 2023.

PMOC monitoring included the following activities:

- *Continued readiness review of documents verified by TJPA as ready for PMOC review.*
- *Continued to monitor and review document status in the detailed OP51 checklist for tracking Sponsor documents submission, PMOC review and finalization.*
- *Worked on draft PMOC Monthly Monitoring Report for February 2023.*
- *Reviewed updated Sponsor provided presentations on Transbay DTX Project, Phase 2, that included details of the program status, current initiatives, and schedule of major milestones for advancing the utility relocation design to 60%, the 20-year Financial Plan, Critical Third-Party Agreements and Property Acquisition along the planned project alignment.*
- *Prepared the agenda and co-directed the following meetings with the FTA:*
 - *OP40 Risk and Contingency Review Kick-Off Meeting on March 9, 2023.*
 - *Caltrain Peninsula Corridor Electrification Project on March 21, 2023.*
 - *Focus Meeting for Critical Third-Party Agreements, Property Acquisition and Enabling (Early Action) Work Program on March 22, 2023.*
- *Prepared agenda for the FTA/PMOC Monthly Monitoring Meeting with Sponsor on March 22, 2023 and co-directed the meeting with the FTA. Coordinated future monthly meetings with the FTA and Sponsor.*
- *Attended FTA Monthly CIG check-in meeting.*
- *Attended Sponsor program management and technical meetings:*
 - *Integrated Project Management Team semimonthly meetings (Feb. 28, Mar. 14, 2023)*

In addition to the above periodic monitoring activities, the PMOC has also commenced a review in support of TJPA's request to advance the project into the Engineering phase. This review is being conducted in accordance with FTA OP51, Readiness to Enter Engineering, dated September 2015. under the PMOC's Project Programmatic Task Order. However, many of the PMOC's OP51 review activities in that effort overlap with the periodic monitoring activities and are therefore also summarized in the applicable sections of this report. The detailed results of the readiness review will be documented in a separate report issued under the PMOC's Project Programmatic Task Order.

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

Project Management Plan (PMP)

FTA requested a review be undertaken of the Transbay DTX Project's PMP as part of the PMOC Readiness for Entry to Engineering review. The Transbay DTX Program Management Plan Revision 0, dated February 2023, was prepared by TJPA and submitted for FTA/PMOC review in March 2023. The PMP is currently undergoing PMOC review for a project entering Engineering in accordance with FTA OP20, Project Management Plan, dated September 2015.

Safety and Security Management Plan (SSMP)

A Transbay DTX Project SSMP is currently under development by TJPA, with an anticipated submittal to FTA/PMOC in April 2023. When received, TJPA's SSMP will be reviewed by the PMOC in accordance with OP22, Safety and Security Management Plan Review, dated September 2015, in for a project requesting Entry to Engineering. The PMOC also expects that in the future as contractors are added to the project implementation team, their safety and security plans will be incorporated under TJPA's program, and their plans will also be reviewed by FTA/PMOC once they are approved by TJPA.

Real Estate Acquisition and Management Plan (RAMP)

In March 2023, TJPA submitted its Transbay DTX Draft RAMP Revision D, dated October 2022, for FTA/PMOC review in support of the PMOC's Readiness for Entry to Engineering review. The submittal of the RAMP was accompanied by a copy of TJPA's Relocation Assistance Program Summary. Both documents are currently undergoing PMOC review in accordance with OP23, Real Estate Acquisition and Management Plan Review, dated September 2015, for a project prior to entering Engineering.

Quality Assurance Plan (QAP)

TJPA submitted its Transbay DTX QAP to the extent that it has been developed at this stage of the project. The March 2023 submittal consisted of the following documents:

- TJPA's overarching Quality Management System, Revision 3, dated December 28, 2022.*
- The Program Management / Project Controls (PMPC) consultant, AECOM / Mott McDonald, Quality Management Plan Revision 1, dated March 1, 2022.*
- The General Engineering Consultant (GEC), Parsons, Design Quality Management Plan Revision 1, Parts 1 and 2 of 2, dated July 12, 2021.*
- Documentation of the PMCM review and acceptance of the GEC Design Quality Management Plan*

The PMOC is currently reviewing the above documents in accordance with OP24, Quality Assurance – Quality Control Review, dated September 2015. The PMOC also expects that in the future as contractors are added to the project implementation team, their quality plans will be incorporated under TJPA's program, and their plans will also be reviewed by FTA/PMOC once they are approved by TJPA.

Rail Fleet Management Plan (RFMP)

Since Caltrain will be the operator of the Transbay DTX project when it goes into revenue service, TJPA submitted Caltrain's RFMP, the Caltrain Fleet Management Plan, Revision 3, dated

December 7, 2021, in March 2023 in support of the Transbay DTX project review for readiness to enter Engineering. The PMOC's cursory review noted that while this Fleet Plan reflects operations as of the completion of the electrification of the system and includes the new electric fleet, it does not reflect the operation over the extended distance and additional station and terminal added by the Transbay DTX project. The PMOC advised of the need for an update or amendment to the Caltrain Fleet Management Plan that addresses operations over the added Transbay DTX territory to demonstrate that the system will provide the level of service committed in the project documents. TJPA stated that an addendum to the Fleet Plan will be prepared and submitted. Once received, the PMOC will analyze it under the eight-step approach for vehicle demand forecast as outlined in the FTA Guidance (referenced in OP37, Fleet Management Plan Review, dated September 2015).

Risk and Contingency Management Plan (RCMP)

TJPA submitted its Transbay DTX RCMP, the Transbay Program Downtown Rail Extension Risk and Contingency Management Plan, Revision 0, dated October 27, 2021, in March 2023. The PMOC commenced a review of the RCMP Revision 0 following the guidance of FTA OP40, "Risk and Contingency Review," dated March 2022. The PMOC found that the Plan is comprehensive and well-written but is still missing several elements due to the stage of advancement of the project. These sections will be able to be completed after the results of the FTA Risk Assessment are available and reviewed by TJPA. The PMOC plans to return any preliminary comments on the Revision 0 in advance of the workshop to facilitate a quicker turn-around of an updated revision before Entry to Engineering.

2.4 Management Capacity and Capability

As part of the FTA/PMOC review of the project's readiness for Entry to Engineering phase, in March 2023 TJPA provided the PMP and supporting documentation to demonstrate that the project team has the management capacity and capability successfully advance implementation of the Transbay DTX project. The PMOC commenced a review of the TJPA applicable documentation in accordance with OP21, Management Capacity and Capability Review, dated September 2015. The results of this review will be summarized in this Monthly Monitoring Report, with the details documented in a separate OP21 report.

2.5 NEPA Process and Environmental Mitigation

The project received a Record of Decision (ROD) from the FTA for the Transbay Terminal / Caltrain Downtown Extension / Redevelopment in 2005, a ROD from the Federal Railroad Administration (FRA) for the Transbay Transit Center Trainbox in 2010, and an amended ROD from FTA for the Transbay Terminal / Caltrain Downtown Extension / Redevelopment in 2019. Prior to the completion of the current Project Development (PD) phase, the project is seeking FTA NEPA clearance related to several subsequent modifications of the project's footprint.

March 2023 Sponsor updates included:

- The National Environmental Policy Act (NEPA) process is on schedule.*
- TJPA 2nd Administrative Draft is complete except for Cultural Resources and Section 4 (f) pending SHPO consultation.*

- *After review, FTA Region 9 is to send the Section 106 package to SHPO.*

As part of the FTA/PMOC review of the project's readiness for Entry to Engineering phase, in March 2023 TJPA provided the 30% design and supporting documentation to demonstrate that the Transbay DTX Project meets all the NEPA and environmental mitigation commitments found in the FEIS and ROD. The PMOC commenced a review of the TJPA applicable documentation in accordance with OP32B, NEPA and Design Document Comparison, dated September 2015. The final results of this NEPA comparison review will be summarized in this report, with the details documented in a separate OP32B report.

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:

- Design-Bid-Build (DBB) for 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 previously noted 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 has completed preparing documentation to demonstrate that the Transbay DTX 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. *As part of the FTA/PMOC-led Risk Assessment that is underway to support the review of the project's readiness to enter the Engineering phase, the PMOC has commenced a review of the project scope in accordance with OP32C, Project Scope Review, dated September 2015. For the purpose of the Risk Assessment, the versions of the scope, cost estimate, schedule and risk register are selected to be mutually and internally consistent. For that reason, the 30% "Combined PE Final Plans" and its supporting studies, investigations, design criteria, PE report, etc., have been provided by TJPA and are undergoing the PMOC's OP32C review. Separate "break-out" meetings between the applicable Subject Matter Experts of TJPA and the PMOC are being scheduled to resolve any questions, clarification requests, etc. in advance of the Risk Workshop in May 2023. The final results of this scope review will be summarized in this Monthly Monitoring Report, with the details documented in a separate report issued under the PMOC's Project Programmatic Task Order.*

March 2023 Sponsor updates included:

- *Advance (Enabling) Works Status*
 - *Utility Relocation*
 - *60% Utilities expected by April 3, 2023; delay used 30 CDs of 110 CDs of available schedule float.*
 - *DTX Railyard Infrastructure Relocation*
 - *Schedule workshop with Caltrain held on February 2, 2023; updated schedule is under development.*
 - *Caltrain PMs continue on-boarding process.*
 - *Survey scheduled to start April 3, 2023.*
 - *TJPA reached agreement with Caltrain on 30% Design Basis*
 - *Design Kick-Off meeting scheduled for March 30, 2023*
 - *Site Demolition*
 - *Scope anticipated in a future NTP to GEC*
 - *Scheduled start in early June, completion in August 2023*
 - *Demolition involves work on 3 land parcels.*

2.8 Value Engineering and Constructability Reviews

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

2.9 Real Estate Acquisition and Relocation

The Sponsor has completed the Real Estate Acquisition and Management Plan (RAMP). The PMOC continues its OP23 review of the Real Estate Acquisition and Management Plan.

March 2023 Sponsor updates included:

- *Status of property acquisitions and easements*
 - *11 total acquisitions, 3 in early stages – Phase I ESAs completed appraisals in April 2023*
 - *14 partial acquisitions of subsurface easements and temporary construction easements*
 - *7 rock dowel easement acquisitions*
 - *Approximately 28 potential displacees identified – Relocation Impact Study underway, draft due April 1, 2023 for initiation of public comment period*
 - *Public hearing on the Relocation Impact Study is scheduled for May 2023.*

- *Transbay DTX work at 4th and King Streets:*
 - *Caltrain (permanent easement holder)*
 - *TJPA continued its discussions with Caltrain on the term sheet with the goal of achieving a preliminary agreement with Caltrain prior to approaching Prologis.*
 - *Prologis (property fee owner)*
 - *TJPA advised that the agreement timeline development continues to make progress but remains dependent on outcomes of TJPA's work with Caltrain.*

The PMOC previously expressed concerns 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 continues to review the updated presentation material provided by the Sponsor and will continue in-depth reviews of specific project documents as they are made available.*

March 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:*
 - *Final draft completed on February 28, 2023*
 - *Final document expected by March 31, 2023*
 - *April-June 2023 – Action by department boards and commissions (approvals/sign-offs)*
- Joint Trench Agreements
 - *TJPA is targeting a single agreement for all 12 parties.*
 - *TJPA noted progress in discussions with the public utilities.*
 - *Coordination with multiple telecom companies continues 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 and status:*
 - *By June 15, 2023, draft Term Sheets are expected to be completed by TJPA and Caltrain working group.*
 - *By August 12, 2023, final approval by TJPA and Caltrain boards*
 - *TJPA noted areas of technical discussion and coordination with Caltrain on tunnel ventilation and fire & life safety.*
- Pacific Gas and Electric (PG&E)
 - TJPA continues negotiating an agreement with PG&E for providing power to the Transbay DTX project and the new underground rail station located at Fourth and Townsend Streets.
 - Agreement targeted completion date – August 2023.
 - Includes relocation of multiple gas, electric and telecom lines located along the project ROW.
 - Project liaisons actively working with PG&E for utility line relocations.
 - Coordination is actively ongoing as design is advanced to 60% stage.

The PMOC had previously expressed the 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 had been forecast to commence during 4Q-2023 with the Early Action Enabling contracts. *The forecast changed during March 2023 with the utility relocation work now scheduled to start at the end of 2Q-2024.*

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 current acquisition of electric rail vehicles as described in the 2018 Caltrain Rail Fleet Management Plan (RFMP) does not include a sufficient number of trains to support a 6 trains per peak hour per direction service to the Salesforce Transit Center terminal in 2032. The Sponsor's current plan is

to provide 4 electrified trains per peak hour per direction to Fourth and Townsend and Transit Center Stations, and 2 diesel peak hour per direction trains to Fourth and King Station, for a total of 6 peak hour trains to and from San Francisco. 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. The planned changes to the 2018 RFMP (addendum, Tech. Memo, or White Paper) are expected in April 2023.

2.13 Project Cost

The Sponsor has completed preparing/finalizing the components of the Program Cost Estimate. The Final Capital Cost Estimate was approved at the TJPA Board meeting on February 9, 2023.

March 2023 Sponsor updates included:

- **Program Funding Status**
 - *Final Draft Joint TJPA/Caltrain 20-Year Financial Plan is completed.*
 - *TJPA submitted its application for \$60 million in TIRCP Project Development/Engineering funds on February 10, 2023. Awards are anticipated in April 2023. TJPA reported positive discussions with California State Transportation Authority. Additionally, the Metropolitan Transportation Commission prioritization list includes Transbay DTX.*
 - *New Starts – Proposed real estate as in-kind match.*
 - *Parcel F property to be developed as 40-story residential/commercial property.*
 - *Parcel Q property is a no-cost transfer; TJPA needs to research the status of the existing parking lease.*
- **Program Cost Status**
 - *Final Capital Cost Estimate, including recommended cost escalation, was approved by the TJPA Board on February 9, 2023, and included in the package submitted to the FTA for conducting the New Starts Project Rating*
 - *February 2023 Draft Full Transbay DTX Project Cost Estimate is \$6,987 million including finance cost.*
 - *Final Capital Cost Estimate was submitted to the FMOC on March 8, 2023.*

As part of the FTA/PMOC-led Risk Assessment underway to support the review of the project's readiness to enter the Engineering phase, the PMOC has commenced a review of the project cost estimate in accordance with OP33, Capital Cost Estimate Review, dated September 2015. For the purpose of the Risk Assessment, the versions of the scope, cost estimate, schedule and risk register are selected to be mutually and internally consistent. For that reason, the February 28, 2023 version of the FTA Standard Cost Category Workbook and its supporting detailed cost estimate backup information is undergoing the OP33 review. The final results of this cost estimate review will be summarized in this Monthly Monitoring Report, with the details documented in a separate report issued under the PMOC's Project Programmatic Task Order.

2.14 Project Schedule

The Sponsor has completed preparing/finalizing the Project Master Schedule. *The Master Schedule was approved at the TJPA February 9, 2023 Board meeting.*

March 2023 Sponsor updates included:

- *Critical Path Work/Activities:*
 - *Real Estate Relocation Impact Study – public comments April 2023; Board adoption May 2023*
 - *3 parcels scheduled for the next 6 months.*
 - *Railyard/Access/Permits*
 - *Work continues to amend the initial service agreement from 2021 with Caltrain for railyard access.*
 - *60% Utility Design*
 - *Design submittal is anticipated by April 3, 2023*
 - *Relocation of selected Caltrain yard facilities*
 - *Design scope has been agreed to, initial NTP issued to GEC.*
 - *Survey work scheduled to begin April 3, 2023, pending availability of flaggers.*
 - *30% design for building demolition to start June 2023*
 - *Environmental Site Assessment to begin June 2023*

As part of the FTA/PMOC-led Risk Assessment underway to support the review of the project's readiness to enter the Engineering phase, the PMOC as commenced a review of the project schedule in accordance with OP34, Project Schedule Review, dated September 2015. For the purpose of the Risk Assessment, the versions of the scope, cost estimate, schedule and risk register are selected to be mutually and internally consistent. For that reason, the January 2023 progress update of the schedule is undergoing the OP34 review to support the Risk Assessment. The final results of this schedule review will be summarized in this Monthly Monitoring Report, with the details documented in a separate report issued under the PMOC's Project Programmatic Task Order.

2.15 Project Risk

TJPA had a comprehensive risk management process in place prior to the assignment of the PMOC during the Project Development phase. The process is guided by the project's RCMP, initially dated October 2021. (See Section 2.3 of this report for the current status of the RCMP.) The Sponsor is currently updating the Project Risk Register and providing a summary report to management on a quarterly basis. The top project risks as of the latest update of TJPA's Risk Register are presented in Attachment C of this report.

TJPA also completed a Quantitative Risk Assessment in late 2022, which informed the project cost estimate and schedule that was submitted in support of TJPA's request to enter the Engineering phase. The PMOC has commenced with the project scope, cost, and schedule characterization reviews to support the FTA/PMOC led Risk Assessment that will validate the FTA expectations for a project requesting entry to the Engineering phase. The FTA/PMOC Risk Assessment will be conducted in accordance with OP40, Risk and Contingency Review, dated March 2022. The OP40

Risk Workshop has been scheduled for May 8-11, 2023. The final results of this Risk Assessment will be summarized in this Monthly Monitoring Report, with the details documented in a separate report issued under the PMOC's Project Programmatic Task Order.

TJPA's next Quarterly risk update is scheduled for late March 2023 to review characterization of all current risks and to identify new risks.

The PMOC previously observed 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.

Based on the Caltrain Peninsula Corridor Electrification Project (PCEP) presentation to the FTA/PMOC on March 21, 2023, the PMOC observes that a significant scope change will now be required regarding Transbay DTX work involving or affecting the Caltrain rail yard and rail system infrastructure from the project limits to the existing Caltrain terminal at 4th and King Streets. TJPA has agreed that Transbay DTX work within Caltrain's property cannot start until after the PCEP work has been completed and is in revenue service that is currently forecast for September 2024. The as-built PCEP facilities will present conflicts with the planned Transbay DTX work and will require TJPA to relocate some Overhead Contact System (OCS) support structures. This additional work scope will need to be performed during overnight track outages and on weekends and will require close coordination with Caltrain operations and force account resources. As such, this development has created a significant new risk with potentially high cost and schedule impacts.

2.16 Quality Assurance/Quality Control

The Sponsor has completed preparing the Project Quality Assurance Plan. The PMOC continues its 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 by April 28, 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 confirm that the Sponsor has addressed the requirements for the 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 April 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 April 2023 Monthly Report based on the Final Draft Master Schedule and current schedule updates.*
- G. Roadmap to Revenue Operations – Will provide Roadmaps for Entry to Engineering and FFGA.
- H. Project Map

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 Project Risks

The following are the top Transbay DTX Project risks and the associated unmitigated risk scores as of the Sponsor's Q4 2022 Risk Register update:

Risk ID	Description	Score
138	Delay due to scope adjustment to advance work package for Caltrain 4th & King site work	25
137	Design and cost estimate impact due to unresolved design criteria variances with Caltrain	20
CR13	Failure to secure cut and cover off-street muck-out staging area and having to muck out through ports in decking	20
CR3	Delay in acquisition of funding – risk that 100% committed funding plan is not identified by time of FFGA approval (2025).	20
CR10	Delays in property acquisition could prolong the schedule.	15
37	Delays/Design Changes Resulting from Agency Reviews	15
CR2	Delay in acquisition of funding – risk that 30% of non-New Starts funds are not committed by February 2023	15
130	Inability to secure infusion of funds for right-of-way and other advance work packages causes delay	15
132	Delay in acquisition of funding – risk that 50% of non-New Starts funds are not committed by August 2023	15
133	Delay in acquisition of funding – Operating & maintenance funding plan for New Starts	15

Risk Score/Rank

		Probability/Likelihood				
		1	2	3	4	5
Consequence / Severity	1	1	2	3	4	5
	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25

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

