

MONTHLY MONITORING REPORT

Transbay Downtown Rail Extension Project, Phase 2

Transbay Joint Powers Authority (TJPA)

San Francisco, CA

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Final

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Length of time Assigned: 11 Months (October 2022 through August 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. *As of August 31, 2023, the project's estimated capital cost is approximately \$8,255 million Year of Expenditure (YOE), including financing costs, based on finalization of the project scope and FTA/PMOC Risk Assessment during August 2023.* 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.

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 much of the remaining documents required to conduct the Project Rating for the FTA New Starts Program. *On August 14, 2023, TJPA submitted updated documentation and a revised rating package to the FTA in support of their request to enter New Starts Engineering and to rate the DTX Project for a New Starts grant.* 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.

After completion of the OP40 Risk Workshop, held on site in early May 2023, , TJPA continued to provide the FTA and PMOC with additional details on the program schedule and capital cost estimate in support of the PMOC work adjusting the risk model schedule and costs baselines. The PMOC then conducted the risk modeling, and FTA shared the results with TJPA in late May 30, 2023, and provided the draft. However, finalization of the report was held, pending TJPA's planned decision on whether to include one 7-EMU trainset in the scope of the project. TJPA's decision to exclude the trainset, but to include non-revenue vehicles and the train box that was completed under the Transbay DTX Phase 1 Program, was announced at the end of July 2023. As a result, the PMOC requested updated scope descriptions, SCC Workbook, and project schedule to support the re-performance of the FTA/PMOC quantitative cost and schedule risk modeling under OP40. *TJPA provided the updated information on August 1, 2023. The PMOC updated its scope, cost, and schedule analyses and re-performed the schedule and cost risk models. After review and concurrence by FTA, the revised results, which indicated an estimated project cost of*

\$8,255 million and an FFGA Revenue Service Date of June 27, 2035 (both cost and schedule including contingency) were shared with TJPA, and the combined Scope, Cost, Schedule, Risk and Contingency report was then finalized and issued. The PMOC continued working with TJPA to incorporate the results into any other affected documents that were submitted to support the ongoing Readiness for Engineering review.

Through August 31, 2023, TJPA continued work on planned monthly, quarterly, and targeted progress updates in the areas of CIG process, risk management, value engineering, program funding and constructability as well as work on the property acquisitions and critical third-party agreements. TJPA continued engagement with the other 5 project stakeholders, including Caltrain and the California High Speed Rail Authority (CHSRA), to prepare the revised Stakeholder MOU, now scheduled to be approved later this year and to be in effect as of January 1, 2024. TJPA continued to advance design work on the three Early Action (Enabling) Work Program projects. TJPA also continued preparations for procurement of the PM/CM contract later this year. During August 2023, TJPA and Caltrain finalized, and received their respective boards' approval, the Interim Agreement, effective September 1, 2023, as the initial step toward completion of their full Master Collaborative Agreement (MCA) that is targeted for execution in October 2024.

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)	8,255	Acceptable
Contingency	Unallocated Contingency	(Note 1)	1,243	Acceptable
	Allocated Contingency	(Note 1)	875	Acceptable
	Total Contingency	(Note 1)	2,118	Acceptable
Schedule	Revenue Service Date	(Note 1)	Sep. 30, 2032	Acceptable
<u>Note 1:</u> 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 direct vehicle procurements by TJPA 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 September 18, 2023.	

*During April 2023, TJPA notified the FTA and PMOC that Caltrain, under its current procurement of electric multiple-unit vehicles (EMUs), had an option to add additional vehicles and TJPA requested permission to add one

(1) additional 7-EMU trainset to the Transbay DTX program. In July 2023, TJPA removed the additional 7-EMU trainset from the Transbay DTX Phase 2 Program but added five non-revenue maintenance-of-way vehicles and the existing Salesforce Transit Center train box completed under the Transbay DTX Phase 1 Program. Refer to report Section 2.12 for details.

***As of August 31, 2023. Final cost estimates and contingency have been reconciled with the adjusted SCC Workbook based on the final adjustments from the revised FTA Risk Assessment. Current Cost Forecast includes financing costs.*

2.0 OBSERVATIONS AND FINDINGS

2.1 Summary of Monitoring Activities

This report covers the period from August 1, 2023, through August 31, 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 July 2023 and finalized report after FTA's review and the TJPA "fact check" review.*
- Continued review of 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 90%, 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 August 16, 2023 and co-directed the meeting with the FTA.*
- *Attended FTA Monthly CIG check-in meeting on August 17, 2023.*
- *Attended Sponsor program management and technical meetings:*
 - *Integrated Project Management Team semimonthly meetings (August 22, 2023.)*

In addition to the above periodic monitoring activities, the PMOC continued their 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. Many of the PMOC's OP51 review activities in that effort overlap with the OP40 Risk and Contingency Review as well as 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 PMOC has completed its review for a project entering Engineering in

accordance with FTA OP20, Project Management Plan, dated September 2015, and continues to finalize the draft OP20 report. The PMP was updated in conjunction with the revised and updated Risk and Contingency Management Plan, responding to comments from the draft combined Scope, Cost, Schedule, Risk and Contingency Review report. TJPA submitted Rev. 1 of the PMP on August 1, 2023.

Safety and Security Management Plan (SSMP)

A Transbay DTX Project SSMP has been prepared by TJPA and was submitted to FTA/PMOC on April 17, 2023. TJPA's SSMP has been reviewed by the PMOC in accordance with OP22, Safety and Security Management Plan Review, dated September 2015, for a project requesting Entry to Engineering. The PMOC has prepared the initial draft OP22 Report and continues to finalize the report. 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. The PMOC completed its review of both documents in accordance with OP23, Real Estate Acquisition and Management Plan Review, dated September 2015, for a project requesting Entry to Engineering. The review found the RAMP to be in partial compliance with OP23, with comments in the areas of acquisition and relocation processes, real estate team organization, document control, property management, and property disposition. *Since the project is already engaged in real estate acquisition and relocation activities, the FTA notified TJPA, on August 2, 2023, to revise and resubmit the RAMP based on the PMOC Review Report as soon as possible, but no later than 45 calendar days.*

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 has completed its review of the above documents in accordance with OP24, Quality Assurance – Quality Control Review, dated September 2015, and has completed the final OP24 report. The FTA transmitted the PMOC OP24 Review Report to TJPA on August 17, 2023, and requested that TJPA revise and resubmit the QA/QC Program documents prior to application for the project FFGA. 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. In April 2023, TJPA submitted a supplemental memo, "Fleet Management Plan Tech Memo to Validate 4 TPH Service" by DB E.C.O North America, Inc., which the PMOC completed analysis 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). *Results have been drafted and shared with the Sponsor and will be summarized in the separate OP51 report.*

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's cursory review 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's review in accordance with OP40 was completed and results were provided to TJPA within the draft combined Scope, Cost, Schedule, Risk and Contingency Review report. TJPA and the PMOC collaborated on the comments, especially to define the project's "contingency drawdown curves," and TJPA commenced a revision to the RCMP for resubmittal. TJPA submitted the RCMP on August 1, 2023, incorporating the comments from the draft combined Scope, Cost, Schedule, Risk and Contingency Review report. PMOC confirmed that the resubmittal satisfied all comments with the exception of the contingency draw down curves. TJPA will revise the RCMP to include OP40 Forward Pass data and submit in early September 2023.

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. During April 2023, the PMOC submitted a Request for Information (RFI) for documents and items such as organization charts, position descriptions and

other similar documents related to the staffing plan so that the review can be completed. The PMOC met with TJPA on May 5, 2023, to review the RFI in detail and to provide the PMOC with clarification on selected requested items. The initial draft of the OP21 Report has been completed. The PMOC completed the interviews with 10 key staff on the Transbay DTX project team including TJPA, the PMPC and GEC consultants as well as Caltrain. The PMOC is preparing the final draft OP21 Report for the Management Capacity and Capability Review.

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 Train Box 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. Final FTA approval of the NEPA re-evaluation was received on June 9, 2023.

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. During April and May 2023, the PMOC continued its 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. *The PMOC OP32B Review Report has been completed. The FTA will forward the report to TJPA in early September 2023.*

TJPA has provided the FTA and PMOC with the annual (July 2022 – June 2023) Mitigation Monitoring Report (MMR) for cultural resource compliance. Going forward, TJPA will provide the Quarterly Mitigation Monitoring Reports (MMRQ) as well. MMRQ for 2023 Quarter 1 (January to March) was submitted on August 18th, 2023 MMRQ for 2023 Quarter 2 (April - June) was submitted on August 25th, 2023.

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 Advanced Packages Program (Early Action contracts) for Utilities and Railyard Infrastructure Relocation, and Site demolition.
- Progressive Design-Build (PDB) for main civil and tunnel
- Construction Manager-General Contractor (CMGC) for track and rail systems, and for 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 Q2-2024, prior to award of the FFGA that is targeted for 2025, TJPA has acknowledged the possible need for development of the basis for a Letter of No Prejudice (LONP) to qualify the costs of the Enabling Works Program for those elements not otherwise covered under pre-award authority in accordance with the FFGA. *There is no apparent need for a LONP based on the current project plan and schedule. However, at the August 2023 monthly FTA/TJPA/PMOC meeting, TJPA reported that they are evaluating the potential need for a LONP for long-lead Overhead Contact System (OCS) materials procured under the 4th and King Rail Yard Preparation Package B, part of the Advance (Enabling) Works Contract Packages.*

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 and to support the PMOC's OP51 review of the project's readiness to enter the Engineering phase, the PMOC completed its 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 have undergone the PMOC's OP32C review. The draft of the combined Scope, Cost, Schedule, Risk and Contingency Review report was distributed to both FTA and to the Sponsor in May 2023. Comments were received and reconciled; however, the final issue of the report was pending TJPA's decision on whether the one 7-EMU trainset will remain within the scope of the project. TJPA announced on July 24, 2023, that it would not procure the trainset through the existing vehicle procurement option but would instead procure it through a planned future Caltrain procurement. *Subsequently on July 31, TJPA informed FTA and the PMOC that it will not include the 7-EMU trainset in the Transbay DTX scope of work at all, but that the project scope was being expanded to include five non-revenue maintenance-of-way service vehicles, as well as the Salesforce Transit Center train box that had been completed previously under the Transbay DTX Phase 1 Program, and for which inclusion had been approved by FTA after a Headquarters Office of Planning and Environment review. Based on finalization of the project scope, the PMOC updated and finalized its OP32C Scope 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 as well as some wayside signal/train control equipment and associated cabling. 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. *Based on the PMOC's earlier recommendation, TJPA and Caltrain investigated relocation of any PCEP facilities not yet installed to avoid future conflicts with planned DTX work. The investigation determined that 90% of the PCEP facilities have been completed and that there is no opportunity to relocate any remaining PCEP facilities that have not already been installed in the DTX project areas. At the August 2023 Monthly Project Progress Meeting with the FTA and PMOC, TJPA did identify a DTX Project conflict with existing Caltrain wayside equipment at Mission Bay Drive. The GEC is working to resolve the conflict but is facing a number of challenges.*

August 2023 Sponsor updates included:

- *Advance (Enabling) Works Program Status*
 - *Utility Relocation*
 - *60% Design plans, specifications and cost estimate have been accepted.*
 - *Draft Maintenance and Protection of Traffic (MPT) plan in comment resolution phase:.*
 - *Central Subway (T-Line) is impacted at 4th and Townsend Sts.*
 - *Reviewed at ICA Technical Advisory Meeting in August 2023.*
 - *90 % Design work continues; Dec. 1, 2023 forecast completion.*
 - *DTX 4th and King Railway Site Work Packages*
 - *Three standing TJPA weekly meetings with Caltrain, PMPC and GEC.*
 - *Project Delivery Analysis kick-off meeting with Caltrain held Aug. 9, 2023; completion of analysis is planned during September 2023.*
 - *Site walk for Caltrain and GEC was held August 24, 2023; systems focus.*
 - *The site survey is completed; finalization and QA review in progress.*
 - *A major constructability workshop with Caltrain is planned for the first week in September 2023.*
 - *TJPA is proposing splitting the Railway Site Work Packages into Package A (4KYA) along 4th and King Yard north and west project limits and Package B (4KYB) along 4th and King Yard south and east project limits; under discussion with Caltrain.*
 - *Interim Agreement with Caltrain allows for continuing the 4KYA Package design with GEC.*
 - *Building Demolition Package*
 - *30% Design work continues; forecast completion is Nov. 1, 2023.*

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 Draft Real Estate Acquisition and Management Plan (RAMP). Refer to the Project Management Plan and Subplans section of this report for the status of the RAMP.

August 2023 Sponsor updates included:

- Status of property acquisitions and easements
 - 11 total acquisitions for FY2023-2024, forecast to start in November 2023.
 - 3 properties in early stages: Phase 1 Environmental Site Assessments (ESA) completed.
 - Acquisition of 14 subsurface easements, the temporary construction easements and the seven rock-dowel easements is forecast to commence in the first half of FY2024-2025.
 - Approximately 28 potential displacees have been identified.
 - *The Relocation Impact Study has been paused to align with the anticipated schedule for availability for the associated regional funding flow for the acquisitions and easements.*
 - The revised real estate Relocation Plan schedule milestones include:
 - Resume work on the Relocation Impact Study in September 2023.
 - Public comment period completed in October 2023.
 - TJPA Board consideration of study in November 2023.
 - *TJPA advised that the revised schedule does not delay the original acquisition end date.*
 - *Pre-acquisition work for Caltrain-owned property at 2nd and Harrison Streets required for DTX tunnel ventilation building.*
- Transbay DTX 4th and King Railyard Site Work:
 - 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 regarding the DTX scope of work; TJPA continues meetings with Caltrain utilizing focus groups for specific areas and reports that they are making progress in a number of areas.
 - Prologis (property fee owner)
 - TJPA previously advised that the agreement timeline development continues to make progress but remains dependent on outcomes of TJPA's work with Caltrain; Prologis has been briefed on 6th Street sewer re-route plans and met with Caltrain and TJPA on July 13, 2023; TJPA anticipates comments on the proposed sewer plans.
 - *The PMOC is concerned about the apparent lack of reported progress advancing the Caltrain/Prologis agreement. TJPA noted that there has been real progress in several areas and will arrange for a stand-alone briefing for FTA/PMOC.*
- DTX Underpinning Work on Three Existing Structures
 - Detailed review of noise and vibration impacts is required prior to work on the critical property at 235 2nd Street.
 - *The TJPA Executive is in contact with the property owner.*

- TJPA was granted access to the property.
- Background noise and vibration readings were collected.
- Remote noise and vibration simulation of the EMU vehicle was completed.
- GEC consultant is managing the site investigations and studies; consultant is preparing report.

Regarding the Transbay DTX work at 4th and King Streets, 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 additional project Right-of-Way (ROW) property.*

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.

August 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:
 - Approved by full Board of Supervisors on June 27, 2023.
 - Resolution signed by Mayor; ICA being finalized for execution.
 - *The second Technical Advisory Committee Meeting was held in August 2023.*
- Joint Trench Agreements
 - TJPA continues to work on a single agreement for all 12 parties and will share the cost estimate.
 - *The invitation to participate (Form A) was distributed in July 2023; responses are due on Sept. 1, 2023.*
 - Coordination with the 12 telecom companies continues in support of the utility relocation design progression and development.
 - TJPA legal rights have been established under CCSF franchise agreements.
 - *Temporary relocations include water and sewer lines.*
 - *AT&T advised TJPA that it plans to abandon some of its existing facilities.*
 - *FTA advised that TJPA needs to check with their procurement process regarding technical and legal requirements for executed agreements.*
- Peninsula Corridor Joint Powers Board (PCJPB)

- 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:
 - *The TJPS/Caltrain Interim Agreement has been completed and was approved by the PCJPB on August 3, 2023 and by the TJPA Board on August 10, 2023. Completion of the Final MCA is targeted for October 2024.*
 - Interim Agreement features:
 - Separate Agreement – August 2023 to September 2024.
 - Defers work in Rail Yard.
 - Focus on Reimbursement Mechanics: Work Scope; Caltrain investments; Resource Scheduling.
- , Pacific Gas and Electric (PG&E)
 - *TJPA continues negotiating an agreement with PG&E for providing power to the Transbay DTX project for the new underground rail station located at Fourth and Townsend Streets, the new rail terminal at the Salesforce Transit Center and the tunnel ventilation facilities.*
 - *Agreement targeted completion date – August 2023; not achieved.*
 - *Includes both temporary and permanent relocation of multiple gas, electric and telecom lines located along the project ROW.*
 - *TJPA has opened a Phase 2 account under gas utilities to engage PG&E review of project submittals. The updated DTX power load flow analysis report is in review by TJPA.*

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 by the Project Sponsor for the project. *The PMOC notes that as of August 31, 2023, one of the agreements, with the City and County of San Francisco has been completed, a significant achievement given the several City departments involved.*
- Three of the agreements involve multiple parties with diverse interests in both the private and public sectors. *The PMOC also notes that during August 2023, the TJPA/Caltrain Interim Agreement was completed and approved by the PCJPB and the TJPA Board.*
- 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 the new rail system extension, station and terminal*

2.11 Construction

Construction had earlier been forecast to commence during 4Q-2023 with the Early Action Advance Package contracts. The forecast changed during March 2023 with the utility relocation work now scheduled to start late in 2Q-2024, a delay of approximately 5-6 months.

2.12 Vehicle Technology and Procurement

There are no direct vehicle procurements by TJPA included in the original 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 the new underground Fourth and Townsend Station and the new underground Salesforce Transit Center Terminal, and 2 diesel peak hour per direction trains to the existing surface 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 required fleet and operational changes that would be needed to support the new service, and the addendum was submitted in April 2023. Refer to the Rail Fleet Management Plan discussion in Section 2.3 of this report for further details.

During April 2023, TJPA notified the FTA that TJPA was considering a modification to the DTX Project definition to take advantage of a contract option available under Caltrain's current EMU rail car procurement and add one additional 7-car trainset under the Transbay DTX Project, Phase 2. However, at the end of July 2023, TJPA decided not to include the one trainset in the Transbay DTX Phase 2 Program, but Caltrain will continue with its plan to procure four (4) trainsets under the existing option (three diesel replacements and one spare) under a separately funded project. *During August 2023, TJPA included in the DTX Project the acquisition of five non-revenue Maintenance of Way vehicles and the level-boarding door modifications to the 23 new EMU revenue vehicles from Caltrain under their current procurement.*

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. *Based on finalization of the Program scope of work and the results of the FTA/PMOC Risk Assessment, the Total Project Cost is \$8,255 million YOE, including financing cost, as presented in TJPA's revised SCC workbook dated August 25, 2023.*

August 2023 Sponsor updates included:

- **Program Funding Status**
 - *Final Joint TJPA/Caltrain 20-Year Financial Plan has been completed. TJPA is awaiting a response to the applications it submitted for a \$194 million Federal/State Partnership Grant and the \$60 million CRISI.*
 - *TJPA submitted the following Project Rating Package updated documents to the FTA on August 14, 2023:*

- *SCC workbook with updated tabs; no change to project cost*
 - *Pre- and Post-Pandemic travel forecast results report.*
 - *New Starts Template*
 - *20-Year Financial Plan*
 - *Other supporting documents*
 - *TJPA has responded to all questions to date from the FMOC; additional FMOC RFIs anticipated based on the TJPA August 14, 2023, submission of Project Rating Package updated documents to the FTA.*
 - *TJPA will submit its application for a \$220 million National Infrastructure Project Assistance (MEGA) Grant on August 21, 2023. The grant program is focused on intercity rail service.*
- **Program Cost Status**
 - *Reflecting the results of the FTA/PMOC Risk Assessment, TJPA submitted an updated SCC workbook dated August 25, 2023, inclusive of the train box constructed under DTX Phase 1 and the 5 MOW vehicles, and including contingency and finance costs, which reflected a total project cost of \$8.255 million. TJPA completed its bottom-up cost estimate for the SCC80 elements based on its recently developed staffing plan and on the TJPA/Caltrain Interim Agreement and confirmed its current estimate as reflected in the updated SCC workbook dated August 25, 2023.*
 - *Updated forecast of cost estimates updates for Enabling (Early Action) Works Program:*
 - *90% Utilities Relocation Design – November 2023*
 - *30% 4th and King Railyard Site Work Design – January 2024*
 - *30% Building Demolition Design – October 2023*

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 were initially selected as the baseline for the risk assessment and underwent review in accordance with OP33, Capital Cost Estimate Review, dated September 2015. However, during the time period of April through August 2023 while the FTA/PMOC Risk Assessment and its multiple iterations were being conducted, the cost estimate also went through multiple iterations to address changes in scope (to include and then exclude one 7-EMU trainset, include level boarding modifications, include five MOW vehicles, and include the train box constructed under Phase 1) and to incorporate interim results of the FTA/PMOC risk modeling, with the final cost estimate submittal for the risk assessment dated August 1, 2023. The PMOC evaluated each of these updates of the project cost estimate under OP33, with the August 1, 2023 version being reflected in the final combined Scope, Cost, Schedule, Risk and Contingency Review report. Subsequent to receiving that draft combined report, TJPA accepted the results and made the minor changes, primarily to the contingency amount, to incorporate the cost related risk assessment results into one further SCC Workbook update, dated August 25, 2023.

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.

August 2023 Sponsor updates included:

- *The July 2023 Master Schedule update was provided in early August 2023 and has a data date of June 30, 2023.*
 - *Advanced Utility Relocation work is on the project critical path.*
 - *4th and King Railyard Site Work is near critical with less than 15 WD float.*
- *The procurement schedule was revised to include additional activities prior to RFQ and RFP release dates to allow greater review time and preparation for the Progress Design Build and CMGC Package Nos. 1 and 2. No impact to the program critical path or near critical path activities.*

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 was initially selected as the baseline for the risk assessment and underwent a review in accordance with OP34, Project Schedule Review, dated September 2015 to support the Risk Assessment. During the review, the PMOC found that the level of detail in the construction and start-up phases of the project was not sufficient to meet either FTA expectations at Entry to Engineering or to support the schedule risk modeling. Accordingly, a series of workshop meetings with the TJPA and PMOC subject matter experts commenced and resulted in the addition of the rail yard phasing and a greater definition of construction and startup activities. However, during the time period of April through August 2023 while the FTA/PMOC Risk Assessment and its multiple iterations were being conducted, the schedule also went through multiple iterations to address changes in scope (to include and then exclude one 7-EMU trainset, include level boarding modifications, and include five MOW vehicles) and to incorporate interim results of the FTA/PMOC risk modeling, *with the final schedule submittal for the risk assessment being an updated June 30, 2023, data date schedule. The PMOC evaluated each of these updates of the project schedule under OP34, with the June 30, 2023, data date version being reflected in the final combined Scope, Cost, Schedule, Risk and Contingency Review report. Subsequent to receiving that draft combined report, TJPA accepted the results and made minor changes to the July 31, 2023, progress update, primarily to the contingency amount, to incorporate the schedule related risk assessment results.*

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 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 recorded on TJPA's post-PMOC Risk Assessment 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 were initially submitted in support of TJPA's request to enter the Engineering phase. TJPA's most recent internal Quarterly risk update was conducted in mid-July 2023, followed by TJPA's participation in the FTA/PMOC risk assessment that ran from then through August 2023.

The PMOC completed its 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 was conducted under the PMOC's Project Programmatic Task Order in accordance with OP40, Risk and Contingency Review, dated March 2022. During April and May 2023, the PMOC arranged and directed technical working meetings involving the associated subject matter experts (SMEs) from both the PMOC and TJPA for scope, cost, and schedule.

Also, under the PMOC's Project Programmatic Task Order, a hybrid Risk Workshop was then conducted both in person in San Francisco and virtually by Teams during May 8 through May 11, 2023. The workshop concluded with a list of open items with committed submittal dates, which were met by TJPA.

The PMOC then used the information received during pre-workshop reviews, from the workshop, and from the revised documents received throughout the week following the workshop to conduct the Monte Carlo schedule risk analysis model and the FTA top-down Beta Range Factor cost risk analysis model. After concurrence by FTA, the results were shared with TJPA on May 30, 2023. The draft combined Scope, Cost, Schedule, Risk and Contingency Review Report was provided to TJPA on June 15, 2023, followed by a TJPA/FTA/PMOC meeting on the report content on June 22, 2023. However, finalization of the report was held, pending TJPA's planned decision on whether to include the one 7-EMU trainset in the scope of the project. *In late July 2023, TJPA announced its decision to exclude the 7-EMU trainset, but to include five non-revenue vehicles and the train box that was constructed by the Transbay DTX Phase 1 project. As a result, the PMOC requested that updated scope descriptions, SCC Workbook, and project schedule reflecting the final agreed scope be submitted to FTA/PMOC, both to undergo further OP32B, OP33, and OP34 reviews and to support the re-performance of the FTA/PMOC quantitative cost and schedule risk modeling under OP40. TJPA provided the updated information on August 1, 2023. The PMOC then updated its scope, cost estimate, schedule, and risk analyses and provided the results to FTA on August 10, 2023, for review and concurrence. The results, which indicated an estimated project cost of \$8,255 million including finance cost and contingency, and a forecasted FFGA Revenue Service Date of June 27, 2035, including contingency, were then provided to and reviewed by TJPA. TJPA accepted the results and commenced updates of any affected project documents required for project rating and/or acceptance to advance the project into the Engineering phase.*

2.16 Quality Assurance/Quality Control

The Sponsor has completed preparing the Project Quality Assurance Plan, and *the PMOC has completed its OP24 review. Refer to the Project Management Plan and Subplans section of this report for the status of the QAP.*

2.17 Safety and Security

The Sponsor has completed the Project Safety and Security Management Plan (SSMP) and provided the SSMP to the PMOC on April 17, 2023, *and the PMOC completed its review. Refer to the Project Management Plan and Subplans section of this report for the status of the SSMP.*

2.18 Americans with Disabilities Act (ADA)

The PMOC has reviewed 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 has reviewed 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 oversight 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
1.	Confirm inclusion of one 7-vehicle trainset in project scope of work.	TJPA	April 2023	June 30, 2023	July 31, 2023	Awaiting final TJPA, Caltrain decision [RESOLVED]
2.	Updated scope descriptions, SCC Workbook, and project schedule reflecting the final agreed scope	TJPA	July 24, 2023	Aug. 1, 2023	Aug. 1, 2023	[RESOLVED]
3.	<i>Real Estate Acquisition and Management Plan: Revise RAMP and associated documents based on findings in PMOC OP23 Review Report.</i>	<i>TJPA</i>	<i>Aug. 2, 2023</i>	<i>Sept. 16, 2023</i>		<i>Open</i>

3.0 PROJECT MONITORING REPORT ATTACHMENTS

- A. List of Acronyms
- B. Safety and Security Checklist – In preparation by the Sponsor.
- C. Top Project Risks
- 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 a subsequent Monthly Report based on the risk-informed Final Draft Master Schedule and current schedule updates.
- G. Roadmap to Revenue Operations – Will provide Roadmaps for Entry to Engineering and FFGA based on FTA development details.
- 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
CMGC	-	Construction Manager / General Contractor
DTX	-	Downtown Rail Extension (as in "Transbay DTX Project")
DBB	-	Design/Bid/Build
EMU	-	Electric Multiple-Unit (rail car vehicle)
FEIS	-	Final Environmental Impact Study
FFGA	-	Full Funding Grant Agreement
FMOC	-	Financial Management Oversight Contractor
FTA	-	Federal Transit Administration
GEC	-	General Engineering Consultant
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
OCS	-	Overhead Contact System
PCEP	-	Peninsula Corridor Electrification Project (Caltrain)
PCJPB	-	Peninsula Corridor Joint Powers Board
PDB	-	Progressive Design-Build
PG&E	-	Pacific Gas & Electric
RAMP	-	Real Estate Acquisition and Management Plan
RCMP	-	Risk and Contingency Management Plan
RFMP	-	Rail Fleet 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
YOE - Year of Expenditure

Attachment B: Safety and Security Checklist

Attachment C: Top Project Risks

The following are the top Transbay DTX Project risks, and their associated unmitigated risk scores as recorded in the DTX Risk Register (Post PMOC Risk Assessment):

Risk ID	Description	Score
138	Delay due to scope adjustment to advance work package for Caltrain 4th & King site work	25
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
148	Relocating locker room may have union issue if distance is increased. There is uncertainty as to what facilities need to be moved and where	20
45	Addition of floating slab to minimize operating train noise and vibration	16
3	Premium for work adjacent to operating tracks	16

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

