

MONTHLY MONITORING REPORT

# **Transbay Downtown Rail Extension Project, Phase 2**

Transbay Joint Powers Authority (TJPA)

San Francisco, CA

April 2024

**Final**

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](mailto:ejwilliamson@urbanengineers.com)

Length of time Assigned: 19 Months (October 2022 through April 2024)

Table of Contents

<b>1.0 EXECUTIVE SUMMARY .....</b>	<b>iv</b>
1.1 Project Description.....	iv
1.2 Project Status.....	iv
1.3 Major Issues and/or Concerns .....	v
<b>2.0 OBSERVATIONS AND FINDINGS.....</b>	<b>1</b>
2.1 Summary of Monitoring Activities .....	1
2.2 Oversight Triggers.....	2
2.3 Project Management Plan (PMP) and Sub-Plans.....	2
2.4 Management Capacity and Capability .....	3
2.5 NEPA Process and Environmental Mitigation.....	4
2.6 Project Delivery Method and Procurement.....	5
2.7 Design.....	6
2.8 Value Engineering and Constructability Reviews .....	8
2.9 Real Estate Acquisition and Relocation.....	8
2.10 Third-Party Agreements and Utilities .....	10
2.11 Construction .....	15
2.12 Vehicle Technology and Procurement .....	15
2.13 Project Cost .....	15
2.14 Project Schedule.....	18
2.15 Project Risk .....	20
2.16 Quality Assurance/Quality Control.....	20
2.17 Safety and Security.....	20
2.18 Americans with Disabilities Act (ADA) .....	20
2.19 Buy America .....	21
2.20 Start-Up, Commissioning, Testing.....	21
2.21 Before-and-After Study Reporting.....	21
2.22 Lessons Learned.....	21
2.23 Actions Items Table .....	21
<b>3.0 PROJECT MONITORING REPORT ATTACHMENTS .....</b>	<b>22</b>
Attachment A: List of Acronyms.....	23
Attachment B: Safety and Security Checklist.....	25

Attachment C: Top Project Risks..... 26

Attachment D: Awarded Contracts ..... 27

Attachment E: Rolling Stock Vehicle Status Report ..... 28

Attachment F: Project Milestones/Key Events ..... 29

Attachment G: Roadmap to Revenue Operations ..... 30

Attachment H: Project Map..... 31

## **1.0 EXECUTIVE SUMMARY**

### **1.1 Project Description**

Transbay Joint Powers Authority (TJPA), the Project Sponsor, proposes to extend the Caltrain commuter rail line 2.2 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 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 the National Environmental Policy Act (NEPA) action was completed in February 2005 with a Record of Decision (ROD). The Federal Transit Administration (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 additional documents required to conduct the Project Rating under the FTA Capital Investment Grants (CIG) 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. The Project expects to enter the Engineering Phase in 2Q-2024, receive a Full Funding Grant Agreement (FFGA) in 2025 and initiate revenue service in 2032.

Based on the TJPA finalized project scope, New Starts Standard Cost Categories (SCC) Workbook and project schedule provided during and following the FTA/PMOC risk workshop in May 2023, the Project Management Oversight Contractor (PMOC) updated its scope, cost, and schedule analyses and re-performed the schedule and cost risk models. After review and concurrence by the FTA, the revised results, which indicated an estimated project cost of \$8,255 million Year of Expenditure (YOE) and an FFGA Revenue Service Date of June 27, 2035 (including both cost and schedule contingency) were shared with TJPA, and the combined Scope, Cost, Schedule, Risk and Contingency Review Report was finalized and issued on August 31, 2023.

The detailed results of the readiness review for Entry to Engineering were documented in the PMOC's OP51 Readiness Review Report (Programmatic) issued on October 17, 2023. Based upon PMOC review of the documentation prepared and submitted by TJPA, it is the PMOC's opinion that TJPA has adequately demonstrated substantial compliance with all the OP51 technical requirements at Entry to Engineering. TJPA's request for Entry to Engineering continues in FTA

Review. During February 2024, the FTA’s Office of Planning and Environment (TPE) advised TJPA that Transbay DTX received an off-cycle Project Rating of Medium-High.

*Through April 30, 2024, TJPA continued work advancing progress in the areas of support to the CIG process, risk management and program funding as well as work on the Right-of-Way property acquisitions, temporary and permanent easements, and critical third-party agreements. TJPA continued engagement with the other 5 project agency partners, including Caltrain and the California High Speed Rail Authority (CHSRA), to prepare the successor San Francisco Peninsula Rail Program (Stakeholder) MOU, now scheduled to be approved during 2Q-2024. TJPA continued to advance design work on the three Advance (Enabling) Works Program projects for utility relocations, work in the Caltrain railyard (Package A and Package B) and the building demolition work. TJPA continued working on the Railyard Agreement with Caltrain for the Transbay DTX work in the existing rail yard at 4<sup>th</sup> and King Streets and will be dividing the work into two packages to reduce schedule risk. Caltrain, the operator for the Downtown Rail Extension, continues its environmental review process for state and federal agencies in advance of the rail yard work. TJPA continued its procurement of the Program Management/Construction Management (PM/CM) contract, now in the final review phase, for anticipated Board action in May 2024 and award in 2Q-2024. TJPA also continued preparation for procurement of the Civil and Tunnel Progressive Design-Build (PDB) contract for anticipated award in 2025 based on the results of the pre-qualification process. TJPA prepared the updated summary third-party agreement matrix and continued providing the agreement documents for the PMOC’s review.*

### **1.3 Major Issues and/or Concerns**

*The PMOC has identified three significant concerns:*

- 1. The Transbay DTX Project was not selected for either the FRA CRISI Grant or Federal/State Partnership Grant awards during 2023, or for the USDOT National Infrastructure Project Assistance (Mega) Grant representing a total of \$241 million in federal funding that was anticipated but not received. This presents an additional challenge to TJPA in their efforts to secure matching funds as required by the FTA CIG Program. TJPA will re-apply for the FRA CRISI Grant and the USDOT (Mega) Grant, jointly with Caltran, in May 2024. See Section 2.13, Project Cost, for further details.*
- 2. The December 2023 Master Schedule update showed a schedule contingency drawdown of 177 work days (WD) from 643 WD to 466 WD remaining contingency. This delay was primarily due to the significant additional time required for the multiple utility agencies’ coordination and decision making which led to a change of scope and concept of the utility relocations under the Advance (Enabling) Works Program. The February 2024 Master Schedule update showed an additional drawdown of 9 WD of schedule contingency from 466 WD to 457 WD remaining contingency caused by delays in the Progressive Design-Build contract procurement. See Section 2.14, Project Schedule, for further details.*
- 3. During April 2024, TJPA reported a significant delay of seven months for the “Clear Right of Way/Start Demolition” activity. A significant amount of the schedule critical path consists of Civil and Tunnel construction. There is a direct schedule connection from ROW*

*procurement to building demolition to access for Civil and Tunnel construction. The unrectified result of the above noted delay would cause a delay to the target revenue date. See Section 2.9, Real Estate Acquisition and Relocation, and Section 2.14, Project Schedule, for further details.*

**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**

<b>Core Accountability Items</b>				
		<b>Original (Grant)</b>	<b>Current Forecast** (Million \$)</b>	<b>PMOC Assessment of Current Forecast</b>
<b>Cost</b>	Capital Cost Estimate	(Note 1)	8,255	Acceptable
<b>Contingency</b>	Unallocated Contingency	(Note 1)	1,251	Acceptable
	Allocated Contingency	(Note 1)	867	Acceptable
	Total Contingency	(Note 1)	2,118	Acceptable
<b>Schedule</b>	Planned Revenue Service Date	(Note 1)	Sep. 30, 2032	Acceptable
	FFGA RSD w/contingency		Jun. 27, 2035	
<b>Note 1:</b> FFGA anticipated in 2025.				
<b>Project Progress:</b>		<b>Amount (\$M)</b>	<b>Percent of Total</b>	
<b>Total Expenditures</b>	Actual cost of all eligible expenditures completed to date	(Note 2)	(Note 2)	
<b>Planned Value to Date</b>	Estimated value of all work planned to date	(Note 2)	(Note 2)	
<b>Actual Value to Date</b>	Actual value of all work completed to date	(Note 2)	(Note 2)	
<b>Note 2:</b> Project Sponsor is compiling costs/value to date.				

<b>Contract Status:</b>		<b>Amount (\$)</b>	<b>Percent</b>	
<b>Total Contracts Awarded</b>	Value of all contracts (design, support, construction, equipment) awarded; % of total value to be awarded	(Note 2)	(Note 2)	
<b>Construction Contracts Awarded</b>	Value of construction contracts awarded; % of total construction value to be awarded	(Note 3)	(Note 3)	
<b>Physical Construction Completed</b>	Value of physical construction (infrastructure) completed; % of total construction value completed	(Note 3)	(Note 3)	
<b>Note 3:</b> <i>Construction start anticipated in early 2Q-2025 for building demolition work under the Advance (Enabling) Works Program. No construction contracts have been awarded to date.</i>				
<b>Rolling Stock Vehicle Status</b>	<b>Date Awarded</b>	<b>No. Ordered</b>	<b>No. Delivered</b>	
(There are no direct TJPA procurements of revenue service vehicles included in the project scope of work)*	N/A	N/A	N/A	
<b>Major Issues</b>	<b>Date Identified</b>	<b>Status</b>	<b>Project Sponsor Action</b>	<b>PMOC Recommendation</b>
N/A	N/A	N/A	N/A	N/A
<b>Date of Next Quarterly Meeting (if known):</b>		Next Monthly Meeting is on May 22, 2024.		

\*Project scope includes cost for Caltrain procurement of five non-revenue Maintenance of Way vehicles, the level-boarding door modifications to the 23 new EMU revenue vehicles from Caltrain under their current procurement 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 April 30, 2024. 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 April 1, 2024 through April 30, 2024.*

PMOC monitoring included the following activities:

- *Prepared draft PMOC Monthly Monitoring Report for March 2024 and finalized report after FTA’s review and the TJPA “fact check” review.*
- *Continued review of updated Sponsor-provided presentations on Transbay DTX that included details of the program status, current initiatives, and schedule of major milestones for advancing program funding, the Advance (Enabling) Works Program contracts, third-party agreements and property acquisitions along the planned project alignment, along with the current cost, schedule and risk/contingency status and procurement of the Program Management/Construction Management (PM/CM) and Progressive Design-Build (PDB) contracts.*
- *Reviewed the March 2024 Master Schedule update and narrative.*
- *Continued work on Review of Third-Party Agreements and prepared the initial draft of the PMOC OP39 Review Report.*
- *Prepared agenda for the FTA/PMOC Monthly Monitoring Meeting with Sponsor on April 17, 2024 and co-directed the meeting with the FTA; focus included funding shortfalls and use of significant schedule contingency.*
- *Attended TJPA internal IQ-2024 Risk Workshop on April 29, 2024.*
- *Attended FTA’s April 24, 2024 meeting to introduce the new FTA Bay Area Office Director.*
- *Attended FTA Monthly CIG check-in meeting on April 18, 2024.*
- *Attended Sponsor program management and technical meetings:*
  - *Integrated Project Management Team semimonthly meeting (April 23, 2024).*

The detailed results of the PMOC readiness review are documented in the PMOC’s final OP51 Readiness Review Report issued on October 17, 2023 under the PMOC’s Project Programmatic Task Order. Based upon PMOC review of the documentation prepared and submitted by TJPA, it is the PMOC’s opinion that TJPA has adequately demonstrated substantial compliance with all of the OP51 technical requirements at Entry to Engineering. TJPA’s request for Entry to Engineering continues in FTA Review. During February 2024, TPE advised that Transbay DTX received an off-cycle Project Rating of Medium-High.

Going forward, the PMOC will monitor the Sponsor’s progress updating the Program Management Plan, along with other subplans, based on the PMOC’s reviews and recommendations and in accordance with the specific time frames directed by the FTA. All plan updates are to be completed prior to TJPA’s application for the FFGA in accordance with the PMOC review comments provided to TJPA in conjunction with the Entry to Engineering reviews.



## **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**

*TJPA advised the FTA and PMOC that the PM/CM consultant joining the TJPA Project Team in early summer of this year will be managing the assignment to update the PMP and associated Sub-Plans as discussed in this section.*

### **Project Management Plan (PMP)**

The PMOC completed the Final OP20 Review Report and submitted the report to the FTA, and the FTA subsequently transmitted the PMOC OP20 Review Report to TJPA on September 22, 2023. The PMOC determined that while the DTX PMP Revision 1 significantly meets the requirements for a project of the size and complexity of DTX at the Entry to Engineering stage of development, there are items that should be addressed in the near future. Accordingly, TJPA was requested to revise and resubmit the PMP within the next six months or prior to the start of construction, including construction under the pre-FFGA Advanced (Enabling) Works scope, whichever occurs first.

### **Safety and Security Management Plan (SSMP)**

The PMOC submitted the Final OP22 Review Report to the FTA on September 8, 2023 and the FTA subsequently transmitted the PMOC OP22 Review Report to TJPA. The PMOC determined that the Final Draft SSMP meets the requirements of OP22 and FTA Circular 5800.1 at Entry to Engineering, except for several elements related to the later phases of project advancement. As a result, TJPA was requested to revise and resubmit the SSMP in the next update of the SSMP, prior to TJPA's request to execute the Full Funding Grant Agreement. 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)**

The PMOC completed its review of the Transbay DTX Draft RAMP Revision D, dated October 2022 and the TJPA's Relocation Assistance Program Summary 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. TJPA completed the PMOC recommended revisions for both the RAMP and the Relocation Assistance Program Summary and resubmitted them on September 1, 2023. The PMOC reviewed the revised documents and determined that both meet the OP23 requirements for a project at Entry to Engineering.

### **Quality Assurance Plan (QAP)**

The PMOC completed its review of the TJPA Quality Assurance Program documents in accordance with OP24, Quality Assurance – Quality Control Review, dated September 2015, and completed the final OP24 report in August 2023. The PMOC found the information provided in the TJPA documents for its Quality Assurance/Quality Control Program meets the requirements of OP24 for a project of the size and complexity of the Transbay DTX Project at its current stage of development at Entry to Engineering. However, there are several areas noted in the PMOC OP24 report that require further development as the project advances into later phases. 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)**

The PMOC analysis found that the combination of documents submitted by Caltrain and TJPA [Caltrain Fleet Management Plan, Revision 3, dated December 7, 2021; TJPA supplemental memo, “Fleet Management Plan Tech Memo to Validate 4 TPH Service” by DB E.C.O North America, Inc., dated April 2023] meets the technical requirements of OP37 at this stage of project advancement and are acceptable for Entry to Engineering. The PMOC’s review noted several areas within the documents where revisions are highly recommended and requested resubmittal prior to application for the FFGA. Results have been shared with the Sponsor and have been formally documented in the separate OP51 report.

### **Risk and Contingency Management Plan (RCMP)**

The PMOC reviewed the RCMP, Revision 0, dated October 27, 2021 in accordance with FTA OP40, “Risk and Contingency Review,” dated March 2022, 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 and recommendations, 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 subsequently revised the RCMP and submitted Revision 2, dated September 2023, on September 1, 2023. The PMOC completed a review of the RCMP Revision 2, and found that it meets the requirements of OP40, including addressing the one remaining draw down curve comment.

## **2.4 Management Capacity and Capability (MCC)**

### **PMOC OP21 Management Capacity and Capability Review**

The PMOC OP21 Review Report was completed and submitted to the FTA, finding that TJPA is a well-developed organization for the current stage of the DTX Project. Based upon PMOC review of the documentation prepared and submitted by TJPA, it is the PMOC’s opinion that TJPA has demonstrated technical compliance with all Management Capacity and Capability requirements for this stage of the project to advance into the Engineering Phase. The FTA forwarded the report

to TJPA on October 5, 2023 and requested that TJPA revise and resubmit the associated MCC documents, including the PMP, prior to the start of construction, including construction under the pre-FFGA Advanced (Enabling) Works scope, but no later than the start of the FFGA application process.

### Procurement of Program Management / Construction Management Services Contract

TJPA currently retains a Program Management / Project Controls (PMPC) consultant that was engaged at the initiation of the Project Development phase approximately two years ago. As the Project advances into the Engineering phase and initiates the procurement of the Civil and Tunnel Progressive Design-Build contract and the CMGC contracts for the station fit-out and rail systems scope of work, TJPA will replace the PMPC consultant with the PMCM consultant during 2024.

During early 2023, TJPA developed the procurement documents for the PMCM contract and the RFP was issued on June 26, 2023. Proposals were submitted on September 22, 2023 and interviews were held during the week of October 23, 2023. Three proposers were evaluated as qualified for providing the required PMCM services. TJPA sent notices of intent to negotiate to all three PMCM proposers on November 1, 2023 and held the initial negotiation kick-off meeting with the top ranked bidder on November 8, 2023. Negotiations with the top ranked firm were completed in March 2024. *TJPA procurement continued work to complete its final review and prepare the Notice of Intent to Award for TJPA Board action in May 2024.*

## **2.5 NEPA / CEQA Process and Environmental Mitigation**

### National Environmental Policy Act

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 had sought 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. *There are currently no open NEPA action items as of April 30, 2024.*

The PMOC OP32B Review Report has been completed and submitted to the FTA. The report found that TJPA's documentation is in general conformance with the FTA requirements for a project of this size and complexity and at its current state of development moving from Planning to the start of Engineering, with several noted exceptions. The FTA forwarded the report to TJPA on September 1, 2023, and requested that TJPA revise and resubmit the preliminary engineering documentation as recommended in the PMOC Report on the NEPA and Design Document Comparison Review within 60 calendar days. TJPA provided their responses to the 13 PMOC review comments on November 28, 2023. The PMOC responded on December 13, 2023 as follows: PMOC had no further comments on six TJPA responses; PMOC provided suggested actions on seven TJPA responses. On February 1, 2024, TJPA provided responses to the seven PMOC suggestions. TJPA plans to implement the PMOC's suggestions in the upcoming quarterly (4Q-2023 and 2024) reports and the annual environmental compliance monitoring report in 2024.

The PMOC took no exceptions to the TJPA responses and closed out the seven comments. *The first quarter 2024 Quarterly Mitigation Monitoring Report (MMRQ) was provided on April 26, 2024 and is under review by the PMOC.*

*TJPA advised that they are initiating the recordation action to fulfill the Section 106, NEPA and CEQA requirements for two commercial buildings designated for acquisition and demolition. The process is in accordance with the TJPA Memorandum of Agreement (MOA) with SHPO and the two amended MOAs. TJPA plans to meet with SHPO to re-introduce the Transbay DTX project and will then submit the draft document once completed. TJPA will coordinate their activities with FTA Region 9.*

### California Environmental Quality Act

Caltrain has started its environmental review process in advance of the 4<sup>th</sup> and King Yard Preparation Package that is part of the Advance (Enabling) Work Program. The first part of the review involves the California Environmental Quality Act (CEQA) Notice of Determination process that will fulfill Caltrain’s CEQA requirement regarding the future DTX construction work planned within Caltrain’s Right-of-Way (ROW) and constitutes a “Discretionary Action.” The second part of the review is for the Caltrain Peninsula Corridor Electrification Project (PCEP) NEPA compliance, focused primarily on potential impacts to the PCEP infrastructure due to the TJPA DTX work within Caltrain’s ROW and, more specifically, for the 4<sup>th</sup> and King Yard (4KY) Preparation work scope in Package 4KYB. *Caltrain has retained an outside consultant to complete the two parts of the review and to determine the documentation requirements. Caltrain now expects to file the Notice of Determination in September 2024, a four-month delay needed to finalize the notice based on additional technical information provided by Caltrain to their consultant in January 2024. TJPA and Caltrain do not foresee any impact due to the delay.*

## **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. To reduce delay risk, TJPA will divide the Railyard Infrastructure Relocation Work scope into two packages: 4KYA will remain Design/Bid/Build for site clearing; 4KYB will change to CMGC for the actual rail infrastructure and systems relocation. Caltrain has agreed to the creation of the two packages and the procurement/delivery approach: TJPA will procure and deliver 4KYA; Caltrain will procure and deliver 4KYB. Both the TJPA and Caltrain boards approved the package divisions and CMGC delivery method for 4KYB in, respectively, November and December 2023. *The division of work scope will be performed at the completion of the 30% Design 4KY package, previously anticipated by March 31, 2024, now completed in April 2024.*

Because the Advanced (Enabling) Works Program had previously been forecast to start during Q2-2024, prior to award of the FFGA that is targeted for 2025, TJPA had earlier 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. *At this time, however, there is no apparent need for a LONP based on the current project plan and schedule that now forecasts the start of the first contract under the Advance (Enabling) Works Program, Building Demolition, in early Q2-2025 under the pre-award authority anticipated to be granted with the FTA approval for Entry to Engineering.*

### Progressive Design-Build Contract

TJPA has selected the Progressive Design-Build (PDB) delivery method for the civil and tunnel scope of work and is currently advancing the procurement of this contract.

Key milestones achieved (A) and planned include the following:

- Informational Session - September 20, 2023 (A)
- Issue Request for Qualifications - October 27, 2023 (A)
- Industry briefing - November 2, 2023 (A)
- Last date for requests for clarification - January 10, 2024 (A)
- Last date for issuance of Addenda - January 17, 2024 (A)
- Four Statements of Qualifications received - January 31, 2024 (A)
- Notification of the three short-listed Respondents - March 2024 (A)
- Issue Draft Contract to short-listed Respondents - *May 2024 [one month delay]*
- Discussions with short-listed Respondents – Spring/Summer 2024
- Issue Request for Proposals – Winter 2024/2025

### **2.7 Design**

As part of the FTA/PMOC-led OP40 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. Based on TJPA's finalization of the project scope in July 2023, the PMOC updated and finalized its OP32C Scope Review during August 2023. The scope review results are detailed in the Final OP32C, 33, 34, 40 Scope, Cost, Schedule, Risk and Contingency Review Report that was submitted to the FTA on August 31, 2023.

The PMOC had previously noted that the as-built PCEP facilities will present conflicts with the planned Transbay DTX work involving or affecting the Caltrain rail yard and rail system infrastructure from the project limits to the existing Caltrain terminal at 4<sup>th</sup> and King Streets. This 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. *The scope of work for relocation of selected PCEP facilities required to resolve conflicts with planned DTX work*

scope is included in the 4<sup>th</sup> and King Yard Preparation Package B for at-grade track and systems work. The 30% Design package was completed in April 2024 but does not include the changes in the 4KYB Revised Concept Design recently developed with Caltrain. Package B was removed from the Advance (Enabling) Work packages in January 2024 and will be procured by Caltrain using the CMGC project delivery method.

The 4KYB Revised Concept Design was developed by TJPA and Caltrain in response to the November 2023 constructability review that concluded that the current design (30% Design – September 2023) did not meet Caltrain operational requirements and would have unacceptable impacts to train service during construction. Additionally, the current design provided little or no opportunity to replace 2,300 feet of lost railcar storage capacity on the 4KY site.

The 4KYB Revised Concept Design provides the following advantages:

- Protects continuous two-track access into the 4KY and station
- Provides 2,100 feet of storage tracks
- Stage 1 will have a duration of 18-24 months and requires only 20-30 nights of work instead of 150+ nights under the current design
- Stage 1 also has fewer impacts to the new Overhead Contact System (OCS) for traction power and existing OCS foundations remain but with modifications
- Stage 2 will have a duration of 6-9 months and minimizes need for de-energizing the OCS
- The overall result is a reduction of construction duration

April 2024 Sponsor updates included:

- Advance (Enabling) Works Program Status
  - Utility Relocation
    - 90% Design work continues; the Dec. 31, 2023 forecast completion was not met; revised forecast is late May 2024.
    - Working with the GEC, TJPA has completed the schedule update and there will be an approximate 5-month delay to completion and acceptance of the 90% Design.
    - TJPA directed GEC to delay 90% submission to allow for key decisions by agencies; all stakeholders will receive the 90% Design package at the end of May 2024.
    - TJPA is incorporating new SFMTA requirements for slot trench permitting process based on coordination meetings.
    - An updated construction schedule is expected in 4-6 months.
  - DTX 4<sup>th</sup> and King Yard Preparation Packages (4KY)
    - Additional site walk for existing utility/civil facilities will be scheduled if needed by GEC based on Caltrain response to GEC utility information request; ; site walk on hold pending completion of review of 30% Design.
    - To reduce delay risk, TJPA is dividing the Yard Preparation Package into Package A (4KYA) for site clearing along the 4th and King Yard north

and east project limits and Package B (4KYB) for at grade track and systems work along the 4th and King Yard south and west project limits. *Division of the final 30% Design into Packages A and B was completed in April 2024.*

- In accordance with TJPA's agreement with Caltrain, the 4KY construction will not start until after award of the FFGA.
- Draft 30% Design Plans and Basis of Design and Cost Estimate have been accepted; cost estimates for the final 30% 4KYA and 4KYB packages are now expected in May 2024.
- Interim Agreement with Caltrain allows for continuing the 4KYA Package design with the GEC.
- *Building Demolition Package*
  - Draft 30% Design package and Basis of Design have been completed and accepted.
  - *60% Design package was completed in February 2024 and is under review; associated cost estimate is anticipated in May 2024.*
  - 60% Design package was sent to San Francisco Department of Building Inspection (SFDBI) for a high-level review; SFDBI will complete its full review at completion and acceptance of the 90% Design.
  - San Francisco MTA will review the traffic/pedestrian protection provisions in the Plans and Specifications.
  - *Updated construction schedule expected in 4-6 months.*
- Progressive Design-Build Contract
  - TJPA has selected the Progressive Design-Build delivery method for the civil and tunnel scope of work.
  - PDB contractor will advance the TJPA 30% design during the pre-construction services period at the start of the contract.
  - Refer to Section 2.6 of this report for details of the PDB contract procurement.

## **2.8 Value Engineering and Constructability Reviews**

The Sponsor has conducted several Value Engineering and Constructability Reviews. The corresponding reports provided to the PMOC were used for the PMOC's OP32C Project Scope Review during 2023.

## **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.

*April 2024 Sponsor updates included:*

- Status of property acquisitions and easements
  - Five total acquisitions, funded through Regional Measure 3 MTC allocation, for FY2023-2024; this represents a second reduction to the 11 acquisitions forecast in September 2023 based on being conservative with the pilot appraisals due to valuation uncertainty; process started in December 2023 (delay of one month from November 2023 forecast date); TJPA notes schedule revised due to earlier pause in advancing Relocation Plan; *TJPA to provide to the FTA, no earlier than May 2024, up to five appraisals and independent reviews for FTA review and approval.*
  - *The Five associated Environmental Site Assessments (ESA) have been completed with no significant findings.; appraisals to start soon.*
  - The subsequent Regional Measure 3 MTC allocations will be used for partial acquisitions and two additional full acquisitions.
  - 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 as available funding allows.
  - Approximately 28 potential displacees have been identified.
  - TJPA previously noted that schedule revisions reported are based on updated anticipated regional funding flow for acquisitions and relocations.
  - Pre-acquisition work for Caltrans-owned property at 2<sup>nd</sup> and Harrison Streets (SE corner) required for DTX tunnel ventilation building.
    - Multi-agency agreement required for the total acquisition process.
    - Phase I Environmental Site Assessment completed.
    - An ALTA/NSPS Land Title Survey was completed meeting the strict standards developed by the American Land Title Association (ALTA) and the National Society of Professional Surveyors (NSPS).
    - Cooperative Agreement signed earlier; transactional documents in development; closing had been anticipated in January 2024 but was not achieved; new forecast is mid-2024 with no schedule impacts due to the delay.
    - *TJPA reported that the overall process is proceeding as planned.*
- 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 2<sup>nd</sup> 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.
    - Remote simulation results validated by noise and vibration measurements taken under actual operating conditions using EMU vehicles at operating speed on the completed southern part (Mountain View area) of the Peninsula Corridor Electrification Project.
    - GEC is managing the site investigations/studies:
      - Building noise/vibration propagation model is completed.
      - GEC has completed the mitigations plan.



- *GEC is preparing the draft report; final draft report had been anticipated by late January 2024 but is now forecast for after June 2024 an approximate 5-6month delay.*
- *Noise and vibration model and mitigation plan are under review by project partner agencies – Caltrain and City/County of San Francisco.*
- *TJPA completed the initial peer review; an omission in the analysis was identified; additional time was required to re-perform a portion of the analysis and revise the draft report; additionally, modelling software verification is taking longer than expected; final internal peer review is anticipated to start in June 2024 followed by owner review upon completion of the Final Report, date to-be-determined.*

### PMOC Concerns and Recommendations

*The PMOC is concerned about the delays reported by TJPA:*

- *Continued slippage of the start of the initial five property appraisals.*
- *Significant delay of 7 months, from April to November 2025, for the “Clear ROW/Start Demolition” activity reported during April 2024.*

*The PMOC recommends that TJPA plan a revised approach to avoid further delays and expedite completion of key real estate acquisition processes to recover some of the schedule delay time.*

## **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.

*April 2024 Sponsor updates included:*

- **San Francisco Peninsula Rail Program MOU**
  - The MOU was executed on June 5, 2020.
  - Agency Partners include:
    - Transbay Joint Powers Authority (TJPA)
    - Metropolitan Transportation Commission (MTC)
    - San Francisco Municipal Transportation Authority (SFMTA)
    - Peninsula Corridor Joint Powers Board – Caltrain (PCJPB)
    - California High Speed Rail Authority (CHSRA)
    - City and County of San Francisco (CCSF)
  - The MOU partners recognize that the Transbay DTX project is a critical link in the Bay Area, mega-region, and state transportation system. The partners believe that the Transbay DTX can be more efficiently and effectively developed through a multi-agency partnership among local, regional and state stakeholder agencies with expertise in developing, funding and implementing major transportation infrastructure projects.

- The MOU had a 3-year term to June 5, 2023 and has been extended twice to May 2024.
- *The 6 agency project partners continued work on the successor MOU that will effectively and efficiently support the Transbay DTX project as it advances from the Project Development phase to the Engineering phase during 2024. Action on the successor MOU by the TJPA Board is anticipated in June 2024.*
- City and County of San Francisco (CCSF) Agencies (10) – 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 was executed on February 7, 2024.
    - *The monthly Technical Advisory Committee Meeting was held during April 2024; TJPA hosts and manages the meeting; the meetings continue to provide an effective clearing house for city and county actions on shared DTX issues, primarily with SFPW, SFPUC, and SFMTA and with other departments as needed for specific input; one critical goal is early identification of potential risks to the Transbay DTX project.*
    - Appendix B to the Agreement addresses scope and budget for FY2024-2025 for each of the 10 agencies; *all 10 budgets have been submitted.*
- Joint Trench Agreement
  - TJPA continues to work on a single agreement for 9 parties (Astound, Comcast, CVIN, Cogent, Extenet, Lumen, Verizon, Zayo, and the San Francisco Department of Technology) and will share the cost estimate with the 9 telecom entities upon design completion. TJPA is responsible for the costs associated with relocating San Francisco Department of Technology facilities while the private utilities are responsible for their share of the costs.
  - The invitation to participate (Form A) was distributed in July 2023; all participating entities had responded in September 2023; *Form A will be modified to reflect schedule changes in accordance with the TJPA notification letter sent in March 2024.*
  - Cost Estimate (Form B) will be distributed upon 100% Design completion.
  - Coordination with the 11 telecom companies, including those who will not relocate in the joint trench facility, 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 PacBell advised TJPA that it plans to relocate all of its existing facilities outside the excavation limits.
  - AT&T-TCA will abandon all existing facilities within the excavation limits.

- The 9 private telecom entities and SFDTPS have agreed to relocate their facilities in the proposed joint trench structure located in the center of Townsend St. between 3<sup>rd</sup> and 7<sup>th</sup> Streets.
  - FTA advised that TJPA needs to check their procurement process regarding technical and legal requirements for executed agreements. FTA requested copies of Forms A and B for their review. *Form A was provided; Form B is in development.*
  - PG&E has made the decision not to participate in the agreement based on the proposed physical location of the joint trench facility.
  - TJPA is making provisions for spare capacity in the trench structure for future use.
  - Horizontal alignment and composition of the joint trench facility has been completed.
  - Vertical alignment is being revised based on updated utility crossing information and to minimize depth of excavation; additional as-built drawings and data from the Central Subway project are being used to inform the Transbay DTX design.
  - TJPA continues development of the shared cost breakdown concept.
- *California High Speed Rail Authority (CHSRA)*
    - *The Master Cooperative Agreement (MCA) with CHSRA will provide the respective roles and responsibilities of TJPA and CHSRA and detail the procedures for both to work cooperatively together for the joint operation of the new rail terminal at the Salesforce Transit Center to be constructed by TJPA as part of the Transbay DTX Project.*
    - *TJPA continues negotiation of the MCA with CHSRA.*
- Peninsula Corridor Joint Powers Board (PCJPB)
    - The Master Cooperative Agreement (MCA) with Caltrain 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 with Caltrain on the new MCA.*
    - Workplan timeline and status:
      - *Completion of the MCA was anticipated in September 2024 but is now targeted for March 2025.*
      - *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. Because of the delay completing the MCA, the Interim Agreement will need to be extended from September 2024 to March 2025.*
      - Interim Agreement features:
        - *Separate, stand-alone Agreement – August 2023 to September 2024; agreement will be extended to March 2025.*
        - *Defers work in Rail Yard to another separate TJPA/Caltrain agreement.*
        - *Focus on Reimbursement Mechanics: Work Scope; Caltrain investments; Resource Scheduling.*

- Other separate agreements:
      - Sitework MOA for Caltrain reimbursement to oversee yard work.
      - Railyard Agreement draft in review; final anticipated in June 2024, a 3-month delay from the previous forecast.
    - Facilitated Partnering Process kick-off meeting held on September 8, 2023.
      - *The most recent Partnering Session was held on March 22, 2024.*
      - Partnering Sessions expected to expand participation to include project senior management from TJPA and Caltrain.
- 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 as well as relocation of existing utilities.
    - 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. A single agreement is anticipated but there may be a need for separate agreements based on work scoping and timing.
    - TJPA has opened a Phase 2 account under gas utilities to engage PG&E review of project submittals.
    - Additional DTX power requirements have been identified and inputs revised; corresponding revised Load Flow Analysis (LFA) and model for the Caltrain Traction Power system is in progress; Caltrain engaged in review of early draft analysis and continues their involvement as the analysis finalization progresses; final approved LFA anticipated May 24, 2024 pending further coordination with Caltrain.
- TJPA/Caltrain Railyard Agreement for Transbay DTX 4<sup>th</sup> and King Railyard Site Work
  - Caltrain (permanent easement holder)
    - Kick-off meeting for Railyard agreement held on December 19, 2023; subsequent meetings were held on January 16 and February 23, 2024.
    - Parties identifying negotiating process, teams, and leads for issues relating to 4KY agreement.
    - *Parties developing CMGC procurement plan for 21-4KYB had anticipated release of RFQ in Q1-2024, but this will be delayed due to design changes to implement the 4KYB Revised Concept.*
    - *Following completion of 30% Design (Final) for both 20-4KYA and 21-4KYB, completed in April 2024, the draft 4KY Railyard Agreement will be completed.*
    - *Draft 4KY Railyard Agreement is anticipated to go to both TJPA and Caltrain Boards in late Summer 2024 and with final agreement in during early 4Q-2024.*
    - *The Sitework MOA is executed, expires on September 30, 2024 and needs to be extended; TJPA plans to include the MOA in the 4KY Railyard Agreement.*

- 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.
  - The PMOC remains somewhat concerned about the apparent lack of reported progress advancing the Caltrain/Prologis agreement. TJPA previously noted that there has been real progress in several areas.
  - *The most recent meeting with Prologis involving both TJPA and Caltrain was held on February 5, 2024.*
  - Prologis has been briefed on the 6<sup>th</sup> Street Sewer re-alignment plans. SFPUC has provided additional information:
    - The sewer outfall to Mission Creek has been changed; SFPUC will need to check the hydraulic analysis for any impacts.
    - SFPUC advised that an access road to the re-aligned sewer will be needed for inspection, maintenance and repair.

### PMOC Concerns and Recommendations

The PMOC previously expressed concerns about the challenges presented in negotiating agreements involving three diverse entities: an operating rail transit agency; local city and county 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.

The PMOC had previously expressed the opinion is that, in general, the critical third-party agreements present a significant risk to the project based on the following observations:

- There are 12 critical third-party agreements identified by the Project Sponsor for the project. The PMOC notes one of the agreements, with the City and County of San Francisco, has been completed, a significant achievement given the many City departments involved. The PMOC also notes that during August 2023, the TJPA/Caltrain Interim Agreement was completed and approved by the PCJPB and the TJPA Board. This will serve as a “bridge” agreement until the Final TJPA MCA with Caltrain is completed.
- Many 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 the new rail system extension, station and terminal

## **2.11 Construction**

### **Forecast Construction Start**

In January 2023, construction had been forecast to commence during 4Q-2023 with the Advance (Enabling) Work Program contracts. The forecast changed during March 2023 with the utility relocation work forecast to start late in 2Q-2024, a delay of approximately 5-6 months. *The building demolition work is now forecast to start during early 2Q-2025, a total delay of approximately 15-16 months.* See also Section 2.14, Project Schedule, for additional discussion.

### **Progressive Design-Build Contract**

TJPA has selected the Progressive Design-Build (PDB) delivery method for the civil and tunnel scope of work and is currently advancing the procurement of this contract. See Section 2.6, Project Delivery Method and Procurement, for details.

## **2.12 Vehicle Technology and Procurement**

There are no direct revenue service vehicle procurements by TJPA included in the final DTX Project scope of work.

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. However, at the end of July 2023, TJPA decided not to include the one trainset in the Transbay DTX Project, 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 Caltrain project. During August 2023, TJPA included in the Transbay DTX Project scope of work 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, prior to the FTA/PMOC Risk and Contingency Assessment, 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 and Contingency Assessment, the Total Project Cost is \$8,255 million YOE, including financing cost and contingency, as presented in TJPA's revised SCC workbook dated August 25, 2023.

*April 2023 Sponsor updates included:*

### **1. Program Funding Status**

- In September 2023, FRA announced CRISI awards. Transbay DTX was not selected for the anticipated \$60 million award. *TJPA will be re-applying for this grant in May 2024.*
- In December 2023, Federal/State Partnership Grant awards were announced. Transbay DTX was not selected for the anticipated \$194 million award. TJPA is seeking replacement funding sources.

- TJPA submitted its application for the USDOT \$227 million National Infrastructure Project Assistance (Mega) Grant on August 21, 2023. In January 2024, TJPA was notified that Transbay DTX was not selected for the award. *TJPA will be re-applying for this grant, jointly with Caltran, in May 2024.*
- For the Community Facilities District Bond Capital Funding Source (CCSF), the updated CCSF forecast has been included in the 20-Year Financial Plan.
- CTC action on budgeted \$60 million from TIRCP (Cycle 6):
  - In October 2023, CTC programmed \$60 million and allocated \$15.5 million.
  - Allocation of \$44.5 million balance expected in early FY24-25.
  - This funding source is for professional services and will be used for engineering/design work.
- *Under California TIRCP Cycle 7 for Greenhouse Gas Reduction, TJPA will be submitting its application in July 2024.*
- Regional Measure 3 funding: MTC allocated \$100.7 million in November 2023 for ROW acquisition, relocation, and professional services.
- *Under the SFCTA 5-Year Prioritization Program, the Transbay DTX Project's cashflow was changed slightly from the 20-Year Financial Plan; instead of \$25 million in FY25 the planned cashflow will be \$10 million in FY25 and \$15 million in FY26.*
- In response to the FTA's recent inquiry, TJPA advised that it is still evaluating a loan from the USDOT's Transportation Infrastructure Finance and Innovation Act (TIFIA) program.
- In response to the need to secure funding to replace recent lost opportunities, TJPA has revised and adjusted its funding strategies to optimize approaches for federal discretionary funding and increase focus on additional state, regional and local funding sources.

2. Program Cost Status

- Reflecting the results of the FTA/PMOC Risk Assessment, TJPA submitted an updated SCC Workbook dated August 25, 2023. This Workbook is inclusive of the train box constructed under DTX Phase 1, the acquisition of five non-revenue Maintenance of Way (MOW) vehicles and the level-boarding door modifications to the 23 new EMU revenue vehicles from Caltrain under their current procurement. The Workbook also includes contingency and finance costs and reflects a total project cost of \$8,255 million YOE. 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. TJPA confirmed that its current estimate is reflected in the updated SCC Workbook dated August 25, 2023. *A summary version of the SCC Workbook is shown below:*

<i><b>DTX Project SCC Cost Workbook Summary</b></i>		
<i><b>SCC Category</b></i>	<i><b>Description</b></i>	<i><b>YOE \$'s (\$B)</b></i>
<i>10</i>	<i>Guideway &amp; Track Elements</i>	<i>\$2.5</i>
<i>20</i>	<i>Stations, Stops, Terminals, Intermodal</i>	<i>\$1.5</i>
<i>30</i>	<i>Support Facilities (Yards, Shops, Admin. Buildings)</i>	<i>\$0.003</i>
<i>40</i>	<i>Sitework &amp; Special Conditions (incl Temp Facilities)</i>	<i>\$0.8</i>

50	<i>Systems</i>	<i>\$0.3</i>
<i>Subtotal</i>	<i>Construction</i>	<i>\$5.1</i>
60	<i>ROW, Land, Existing Improvements (incl Purchase or Lease of Real Estate)</i>	<i>\$0.4</i>
70	<i>Vehicles</i>	<i>\$0.06</i>
80	<i>Professional Services (incl Design and CM)</i>	<i>\$1.1</i>
<i>Subtotal (10-80)</i>	<i>Construction, Real Estate, Vehicles &amp; Prof Services</i>	<i>\$6.6</i>
90	<i>Unallocated Contingency</i>	<i>\$1.2</i>
<i>Subtotal (10-90)</i>	<i>All Costs except Finance Charges</i>	<i>\$7.9*</i>
100	<i>Finance Charges</i>	<i>\$0.4</i>
<i>Total (10-100)</i>	<i>Total Project Cost</i>	<i>\$8.25B</i>
<i>* Where costs do not precisely add, this is due to rounding of numbers above.</i>		

- Current forecast of cost estimate updates for Advance (Enabling) Works Program:
  - 90% Utilities Relocation Design – November 2023 (not achieved).
  - 30% 4<sup>th</sup> and King Railyard Site Work Design – Completion delayed from January to March 2024.
  - 60% Building Demolition Design – completed in April 2024.
- TJPA continues to work on detailing the \$25 million Rail Yard Allowance cost item.
  - Detailed cost breakdown will be based on 30% Design for 4<sup>th</sup> and King Railyard sitework; 30% Design completion delayed until April 2024 when work scope will be divided into Packages 4KYA and 4KYB and separate cost estimates will be developed.
  - Ongoing coordination with Caltrain continues on approach and schedule to develop the cost update; schedule and constructability reviews completed in December 2023.
- Bottom-Up Cost Estimate for SCC 80 Elements
  - TJPA is finalizing the Staffing Plan with the remaining additional 3rd-party staffing from Caltrain, CCSF, the five agency project partners and the PMCM that is based on the top-ranked firm’s staffing plan.

PMOC Concerns and Recommendations

Program Funding

The PMOC notes that the Transbay DTX Project was not selected for three key funding source awards (FRA CRISI Grant, Federal/State Partnership Grant, National Infrastructure Project Assistance (Mega) Grant) representing a total of \$241 million in federal funding for the project.



This presents an additional challenge to TJPA in their efforts to secure matching funds as required by the FTA Capital Investment Grants Program. The PMOC recommends that TJPA continue to maintain program funding as a critical priority and seek other available funding sources either as a direct recipient or through eligible project stakeholders. *The PMOC notes that TJPA is actively working on funding sources through new applications to USDOT, FRA and California programs.*

### Program Cost

At the February 21, 2024 FTA/PMOC monthly meeting with TJAP, the PMOC requested that TJPA commence more detailed cost reporting against the established project budget. This approach would be similar to the current TJPA schedule reporting that includes a detailed quantitative monthly update with a narrative that discusses changes, impacts of current and anticipated project issues and use of contingency. TJPA responded that the incoming PMCM consultant will be developing this reporting for the project cost as a key initial task when the consultant is mobilized, now anticipated in early 3Q-2024.

## **2.14 Project Schedule**

The Project Master Schedule, prior to the FTA/PMOC Risk and Contingency Assessment, was approved at the TJPA February 9, 2023, Board meeting. Reflecting the result of the FTA/PMOC Risk Assessment completed in August 2023, TJPA accepted the results of the schedule analysis and finalized their updated Master Schedule to align with the analysis outcomes for Planned Revenue Service Date (RSD) of September 30, 2032 and FFGA RSD of June 27, 2035 with contingency.

*April 2024 Sponsor updates included:*

- *The March 2024 Master Schedule update was provided in early April 2024 and has a data date of February 29, 2024.*
- *The critical path remains unchanged since the last update and includes the following elements:*
  - *Development of the Civil and Tunnel contract documents.*
  - *Advertise and award the Civil and Tunnel contract (pre-construction) by August 2025*
  - *Preconstruction design development, pricing negotiations and construction NTP by December 2026*
  - *Construct the 4<sup>th</sup> and Townsend Station by October 2031*
  - *Construct the 4<sup>th</sup> and Townsend headhouse by October 2032*
  - *Complete Stations Fit-Out systems testing by March 2033*
  - *Complete Pre-revenue testing by August 2033*
- *TJPA is working with utility agencies, GEC and PMPC scheduling specialists to optimize the utility design and construction schedule to mitigate any future schedule impacts.*
- *Although not shown in the schedule update, discussions with TJPA revealed that real estate progress may fall behind schedule. There may be schedule complications if the real estate processes are not maintained. The schedule currently shows a December 2026 required date for the Civil and Tunnel contractor access. By logic, demolition of a few structures is*

*required to start by June 2026. Based upon recent verbal discussion and a high-level graphic, the ROW clearance may not be ready until November 2026. The schedule for these activities currently has a total float of 29 work days, Slipping the ROW procurement by about five months will consume all of the float and may cause the project critical path to include ROW procurement. Efforts should be made to advance the ROW activities to preclude any shift in the projected revenue date.*

- *The Master Schedule has a secondary path of 12 work days consisting of completion of utility design and conducting utility relocations on Townsend Street. These activities were on the critical path last month.*
- *The Master Schedule has an additional secondary path with a total float of 105 work days. This is a decrease of 1 WD since the last update. Those activities include:*
  - *Building Demolition Design 100% by September 2024*
  - *Advertise and award Building Demo contract by March 2025*
  - *Complete the Real Estate process by June 2026*
  - *This tied to critical tunnel work and access by the Civil and Tunnel contractor.*
- *An additional path with total float of 159 work days. This is an increase of 1 WD since the last update and includes the following work:*
  - *4<sup>th</sup> and King Yard Design Package B 60% by November 2025*
  - *4<sup>th</sup> and King Yard Design Package B 90% by May 2026*
  - *4<sup>th</sup> and King Yard Design Package B 100% by August 2026*
  - *Package B Long lead procurements by August 2027*
  - *4<sup>th</sup> and King Yard construction stages 2 through 7 and U wall by May 2030.*
  - *Ties to Test and Revenue Service*
- *The target for revenue service remains at August 31, 2033.*
- *March 2024 Master Schedule Update Look-Ahead*
  - *Industry Review of Civil and Tunnel (PDB short-listed) RFP documents will be performed.*

#### *PMOC Concerns and Recommendations*

*The delay noted in the January 2024 schedule update was the recognition of extended time needed to finalize the utility relocation plans. This is a concern because the utility relocations are an early work item that controls access to most of the project. Additionally, the PMOC remains concerned that the project is using valuable schedule contingency prior to the actual start of construction when contingency is most needed. The PMOC notes that the total use of schedule contingency remains at 186 WD. TJPA is in the process of assembling a team to address the best and most efficient approach to expedite the utility relocation work.*

*The PMOC is also concerned that the continued lack of progress in real estate procurement and the recognition of a seven-month delay to the start of building demolition may have significant negative impacts to the project schedule. By the reasoning above, a significant impact to the program schedule could occur if the required schedule adjustments and modifications are not implemented to address the delays discussed above.*

## **2.15 Project Risk**

The Sponsor updates the Project Risk Register and provides 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.

Based on TJPA's finalization of the DTX Project scope of work during July 2023, the PMOC updated its initial scope, cost estimate, schedule, and risk analyses developed in the May 2023 Risk Workshop 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 completed updates of any affected project documents required for project rating and/or acceptance to advance the project into the Engineering phase. The PMOC completed the Final OP32C, 33, 34, 40 Scope, Cost, Schedule, Risk and Contingency Review Report and submitted the report to the FTA on August 31, 2023.

During October 2023, TJPA held its scheduled 4Q-2023 internal risk workshop. The resulting Risk Update Memo presenting the workshop details and outcomes was provided in January 2024. The updated Q3-2024 Qualitative Risk Analysis Report was provided in February 2024 and has been reviewed by the PMOC. The PMOC and TJPA met in early March 2024 to discuss the report, and the PMOC provided feedback concurring with TJPA's approach to aligning the project's bottom-up cost model with the FTA's top-down model and provided guidance on updating the cost and schedule contingency drawdown curves.

*The PMOC attended the TJPA 1Q-2024 internal Risk Workshop on April 29, 2024 and will review the associated Risk Update Memo when published.*

## **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 discussion in Section 2.3 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 discussion in Section 2.3 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**

The project is currently at the Preliminary Engineering/Design Stage, approximately 30%. The PMOC evaluated the adequacy of the system start-up, testing and commissioning provisions in the Design Basis and Design Criteria documents, as well as in the SSMP, that was 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
23-5.	Provide summary and status of required permits, agreements and approvals for Early Action (Enabling) Work Packages: Utility Relocations;4KY	TJPA	Oct. 18, 2023 @ Monthly Meeting with FTA/PMOC	For start of OP39 Review Dec. 2023	Feb. 5, 2024	<b><i>Resolved</i></b>

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status / Action Required
	Preparation; Building Demolition.					
23-6.	Provide Utility Relocation Forms A and B for FTA review.	TJPA	Nov. 15, 2023 @ Monthly Meeting with FTA/PMOC	Dec. 2023	Feb. 1, 2024	<b><i>Resolved</i></b>

### 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
- I. Monthly FTA/PMOC Meeting Agenda

## **Attachment A: List of Acronyms**

ACOR	-	Alternate Contracting Officer Representative
ADA	-	Americans with Disabilities Act
ALTA	-	American Land Title Association
CAO	-	City Attorney’s Office
CCSF	-	City and County of San Francisco
CEQA	-	California Environmental Quality Act
CHSRA	-	California High Speed Rail Authority
CIG	-	Capital Investment Grants
CMGC	-	Construction Manager/General Contractor
CRISI	-	Consolidated Rail Infrastructure and Safety Improvements Program (FRA)
CTC	-	California Transportation Commission
DTX	-	Downtown Rail Extension (as in “Transbay DTX Project”)
DBB	-	Design/Bid/Build
EMU	-	Electric Multiple-Unit (rail car vehicle)
ESA	-	Environmental Site Assessment
FEIS	-	Final Environmental Impact Statement
FFGA	-	Full Funding Grant Agreement
FMOC	-	Financial Management Oversight Contractor
FRA	-	Federal Railroad Administration
FTA	-	Federal Transit Administration
GEC	-	General Engineering Consultant
ICA	-	Interagency Cooperative Agreement
IPMT	-	Integrated Program Management Team
LFA	-	Load Flow Analysis (related to Caltrain’s traction power system)
LONP	-	Letter of No Prejudice
LPA	-	Locally Preferred Alternative
MCA	-	Master Cooperative Agreement (TJPA/Caltrain <u>or</u> TJPA/CHSRA)
MCC	-	Management Capacity and Capability
MMR	-	Mitigation Monitoring Report
MMRQ	-	Quarterly Mitigation Monitoring Report
MOA	-	Memorandum of Agreement

MOU	-	Memorandum of Understanding
MOW	-	Maintenance of Way
MTC	-	Metropolitan Transportation Commission
NEPA	-	National Environmental Policy Act
NSPS	-	National Society of Professional Land Surveyors
NTP	-	Notice to Proceed
OCS	-	Overhead Contact System
PCEP	-	Peninsula Corridor Electrification Project (Caltrain)
PCJPB	-	Peninsula Corridor Joint Powers Board
PD	-	Project Development
PDB	-	Progressive Design-Build
PG&E	-	Pacific Gas & Electric
PMCM	-	Program Management/Construction Management
PMOC	-	Project Management Oversight Contractor
PMPC	-	Program Management/Project Controls
PMP	-	Project Management Plan
QAP	-	Quality Assurance Plan
QA/QC	-	Quality Assurance/Quality Control
QRA	-	Quantitative Risk Assessment
RAMP	-	Real Estate Acquisition and Management Plan
RCMP	-	Risk and Contingency Management Plan
RFMP	-	Rail Fleet Management Plan
RFP	-	Request for Proposal
RFQ	-	Request for Qualifications
ROD	-	Record of Decision
ROW	-	Right-of-Way
RSD	-	Revenue Service Date
SCC	-	Standard Cost Categories
SEQA	-	State Environmental Quality Act (California)
SFDBI	-	San Francisco Department of Building Inspection
SFDTPS	-	San Francisco Department of Technology
SFMTA	-	San Francisco Municipal Transportation Agency
SFPUC	-	San Francisco Public Utilities Commission

- SFPW - San Francisco Public Works
- SHPO - State Historic Preservation Office (California)
- SSMP - Safety and Security Management Plan
- TIFIA - Transportation Infrastructure Finance and Innovation Act
- TIRCP - Transit and Intercity Rail Capital Program
- TJPA - Transbay Joint Powers Authority (Project Sponsor for Transbay DTX)
- WD - Work Day
- YOE - Year of Expenditure
- 4KY - 4<sup>th</sup> and King (Streets) Yard

**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):

<b>Risk ID</b>	<b>Description</b>	<b>Score</b>
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*

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

Key for Risk “Score”: 10-25 High (Red), >3-<10 Medium (Yellow), ≤3 Low (Green)

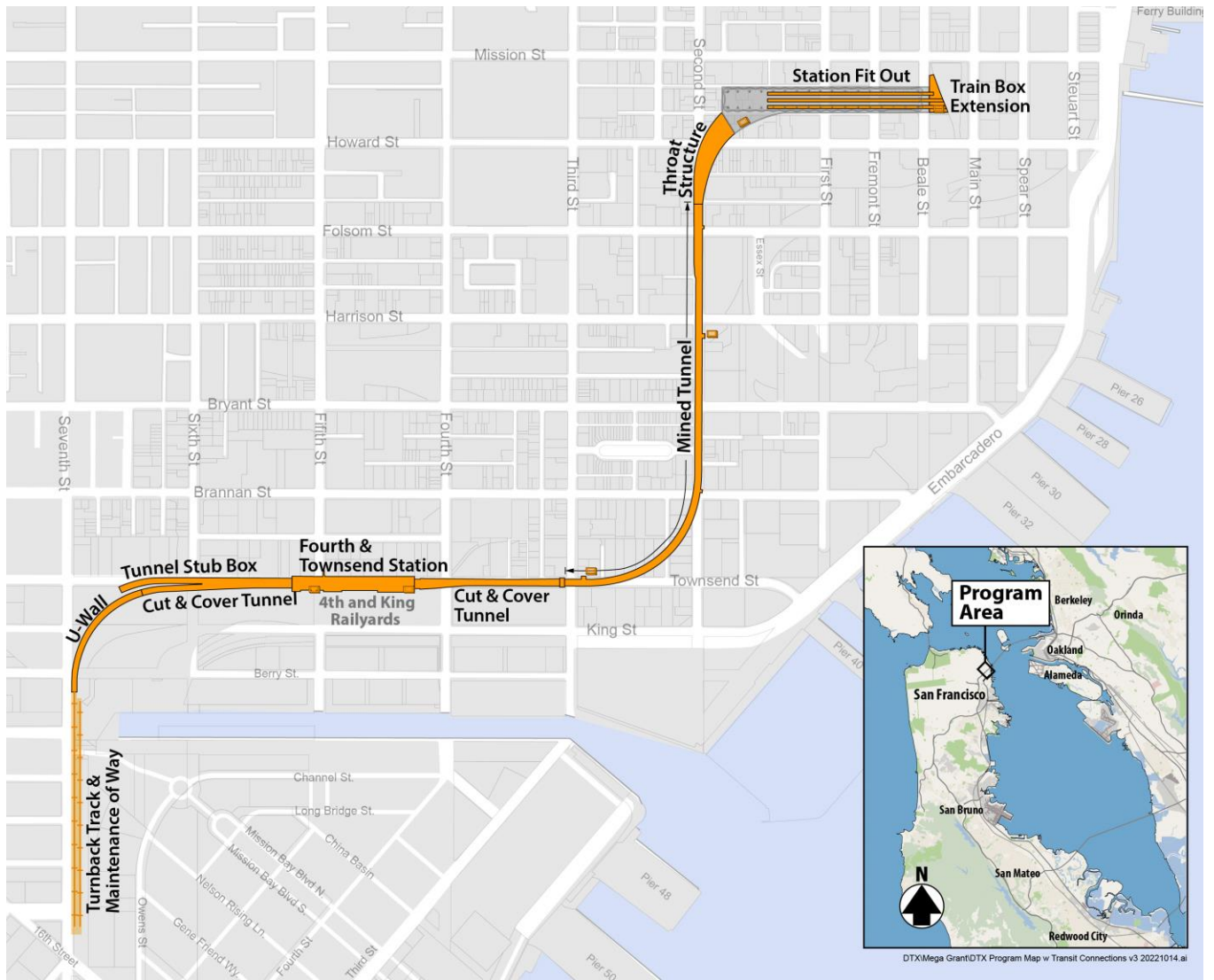
**Attachment D: Awarded Contracts**

**Attachment E: Rolling Stock Vehicle Status Report**

**Attachment F: Project Milestones/Key Events**

**Attachment G: Roadmap to Revenue Operations**

# Attachment H: Project Map



## **Attachment I: Monthly FTA/PMOC Meeting Agenda**

### *Transbay Downtown Rail Extension Project, Phase 2*

*Grantee/Sponsor: Transbay Joint Powers Authority  
FTA/PMOC Monthly Review Meeting – April 17, 2024*

#### AGENDA

1. *Entry into Engineering Phase [5 min.]*
  - *Process Status*
  
2. *Environmental Process [5 min.]*
  - *National Environmental Policy Act (NEPA)*
    - *Mitigation Monitoring Reports*
  - *California Environmental Quality Act (CEQA)*
    - *Notice of Determination Process – Caltrain*
      - *Consultant Evaluation – May/June 2024 for Filing of Notice*
      - *Status of Review against PCEP NEPA – Forecast Completion*
  
3. *Engineering/Design – Advance (Enabling) Works [15 min.]*
  - *Utility Relocation Package*
    - *90% Design Submittal Hold – Status of Issues*
    - *Updated Schedule – Forecast Completion Date*
  - *DTX 4<sup>th</sup> and King Yard Preparation Packages*
    - *30% Design Progress - 4KYA and 4KYB Packages*
    - *Caltrain Asset Survey - Finalization*
  - *Building Demolition Package*
    - *60% Design Review Status*
    - *Cost Estimate Status*
  
4. *Program Funding [10 min.]*
  - *Anticipated Funding Applications for CY2024*
  - *CTC Action on budgeted \$60M from TIRCP – October 2023*
  - *Community Facilities District Bond Capital Funding Source (CCSF)*
  - *Regional Measure 3 Funding - MTC allocated \$100.7 million (Nov. 2023)*
  - *SFCTA 5-Year Prioritizations Program*
  
5. *Program Cost Status Update [10 min.]*
  - *Bottom-up Cost Estimate: SCC80 Elements – Staffing Plan Update Progress*
  - *\$25 million Rail Yard Allowance Analysis – Progress Summary*
  - *Reporting Cost Performance Against Budget – Evaluation and Set-Up*

6. *Program Schedule [10 min.]*
  - *Monthly Schedule Discussion – Feb. 2024 Update [Jan. 31, 2024 Data Date]*
    - *Critical Path and Progress on work to Key Milestones*
    - *Report on any late/delayed activities*
  - *Status of Critical Path activities scheduled for 2Q-2024*
  - *90% Utility Relocation Design Delay – Impacts and Mitigations*
  
7. *Risk and Contingency Review [10 min.]*
  - *January 2024 Quarterly Risk Workshop (Q4-2023)*
    - *Quarterly Risk Update Memo*
    - *Discuss any Significant Changes to Risk Profile*
  
8. *Critical Third-Party Agreements – Status [15 min.]*
  - *San Francisco Peninsula Rail Program MOU*
    - *Status of MOU updates/revisions*
  
  - *ICA with (10) CCSF Agencies*
    - *Appendix B status*
    - *April 2024 Technical Advisory Meeting Outcomes*
  
  - *Master Cooperative Agreement (MCA) with Caltrain*
    - *Overall Progress on MCA*
    - *Progress on 4KY Railyard Agreement*
    - *Progress on Sitework MOA*
  
  - *Joint Trench Agreement*
    - *Discuss delay impacts due to 90% Design hold*
    - *Status of Form A Modifications Reflecting Schedule Changes*
  
  - *Pacific Gas & Electric Agreement*
    - *Status of determination of total power requirements for Transbay DXT*
    - *Caltrain review – Traction Power LFA; study finalization*
  
  - *Transbay DTX work at Fourth and King Streets*
    - *Caltrain and Prologis*
      - *Progress on term sheet development/finalization*
      - *Target date for transactional approach selection: Caltrain, TJPA*
      - *Status of timeline development for agreement with TJPA/Caltrain*
  
  - *Tishman Speyer MOU*
    - *Scope/Timing for Construction Coordination Agreement*



9. *Real Estate Acquisitions [10 min.]*

- *Status of Balance of Acquisitions and Easements*
  - *Environmental Site Assessments*
  - *Notices of Decision to Appraise*
  - *Total Acquisition Offers*
- *Status of Total Acquisition of Caltran Property at SEC 2<sup>nd</sup> & Harrison*
- *Status for Additional Study Required for Property at 235 2<sup>nd</sup> Street*
  - *Noise/Vibration Mitigation Plan Review by Project Partner Agencies*
  - *Status of Draft Report Peer Review*

10. *Procurement [10 min.]*

- *Progressive Design-Build Contract (40-CT)*
  - *Notification of Short-Listed Respondents*
  - *Issue Draft Contract*
- *Program Management/Construction Management Contract*
  - *Status of TJPA Board Action – April 11, 2024*

11. *Letter of No Prejudice (LONP) [\\]*

- *No need for LONP at this time*

12. *FTA/PMOC Review of TJPA Third-Party Agreements [10 min.]*

- *Configuration Summary*
  - *48 Stakeholders*
  - *22 Third-Party Agreements*
  - *13 Critical Agreements - TJPA*
- *Review Process*

13. *2024 Project Management Plan Update [5 min.]*

- *TJPA Approach and Schedule*

14. *Additional Discussion [5 min.]*

15. *Next Monthly Meeting*

- *Date/Time: Wed., May 22, 2024 / Time: 11:30 AM-1:30 PM (PDT)*

*Location: Virtual MS Teams Meeting*