

BART SILICON VALLEY PHASE II EXTENSION PROJECT
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
CITIES OF SAN JOSÉ AND SANTA CLARA, CA

FTA Region IX

Status as of June 30, 2024

PROJECT MONITORING REPORT

Draft – July 21, 2024

Final – July 30, 2024

PMOC Contract Number: 69319519D000021

Task Order Number: 69319522F30057N

Project Number: 1

Project Type: New Starts

Project Phase: Project Delivery

Task Order Issued September 21, 2022

OP Nos. Referenced: 1, 25



AtkinsRéalis USA Holdings LLC

580 California Street, Suite 1248

San Francisco, CA 94105

Nadeem Tahir, Program Manager, 301.928.3288, Nadeem.Tahir@AtkinsRealis.com

(On project since April 2024)

Emile Jilwan, Task Order Manager II, 510.506.3697, Emile.Jilwan@AtkinsRealis.com (On project since August 2021)

TABLE OF CONTENTS

1.	Executive Summary	i
A.	Project Description.....	i
B.	Project Status.....	i
C.	Major Issues and/or Concerns	iii
D.	Table 1 Core Accountability Items	iv
2.	PMOC Observations and Findings.....	1
A.	Summary of Monitoring Activities	1
B.	Project Management Plan (PMP) and Sub-Plans.....	2
C.	Management Capacity and Capability	4
D.	National Environmental Policy Act (NEPA) Process and Environmental Mitigation.....	4
E.	Project Delivery Method and Procurement.....	5
F.	Design.....	7
G.	Value Engineering and Constructability Reviews	9
H.	Real Estate Acquisition and Relocation	9
I.	Public Involvement/Outreach/Communications	10
J.	Third-Party Agreements and Utilities	11
K.	Construction	13
L.	Vehicle Technology and Procurement	14
M.	Project Cost	14
N.	Project Schedule.....	15
O.	Project Risk	17
P.	Quality Assurance/Quality Control.....	20
Q.	Safety and Security.....	20
R.	Americans with Disabilities Act (ADA)	21
S.	Buy America	21
T.	Start-Up, Commissioning, Testing.....	22
U.	Action Items Table	23
3.	Project Monitoring Report Attachments	24
A.	List of Acronyms.....	25
B.	Monthly Meeting Agenda	26
C.	Monthly Meeting Attendees.....	28
D.	List of Documents Received	29

E. VTA Top 10 Project Risks 30

F. Project Milestones/Key Events 32

G. Project Map 33

1. Executive Summary

A. Project Description

Bay Area Rapid Transit (BART) Silicon Valley Phase II (BSVII) is an approximately 6.0-mile extension of the BART system from the existing terminus at the Berryessa / North San José BART Station through downtown San José to the proposed Santa Clara Station in the City of Santa Clara.

BSVII includes four stations (three located in San José and one in Santa Clara) along with a maintenance facility at Newhall Yard. The project's easternmost station, 28th Street/Little Portugal, will be located underground near Santa Clara Street and U.S. 101. Two stations, also underground, are planned for downtown San José: Downtown San José Station at Santa Clara Street near Market Street; and Diridon Station at the Diridon Intermodal Transit Center. The westernmost station in the City of Santa Clara is planned to be at-grade adjacent to the Santa Clara Caltrain Station. The Newhall Yard and Maintenance Facility is planned to be located at the end of the alignment directly adjacent to the Santa Clara Station. Forty-eight vehicles will be paid for with project funds but are included in the procurement for BART Federal Transit Administration (FTA) Core Capacity grant program fleet upgrades.

The project is being designed and constructed by Santa Clara Valley Transportation Authority (VTA), will be owned by VTA, and operated and maintained by BART. Service is planned to operate in the opening year from 4:00 AM to 1:00 AM on weekdays and from 6:00 AM to 1:00 AM on weekends, with trains every 7.5 minutes during the weekday peak period, every 7.5-15 minutes off-peak during the weekday, and every 20 minutes on evenings and weekends.

B. Project Status

BSVII is in the New Starts Project Development phase.

VTA selected the locally preferred alternative (LPA) in November 2001. The project originally entered the Capital Investment Grants (CIG) program Project Development phase in March 2016. The locally Preferred Alternative (LPA) was adopted into the Metropolitan Transportation Commission's financially constrained Long-Range Plan [Final Plan Bay Area 2040.pdf](#) (planbayarea.org) on July 26, 2017.

VTA began pursuing FTA's Expedited Project Delivery (EPD) Pilot Program in early 2018. In April 2018, FTA agreed to extend CIG Project Development while VTA pursued funding through the EPD Pilot Program and stated the Project would be allowed to return to CIG Project Development without penalty should the EPD Pilot Program be determined to no longer be a good fit. Per the National Environmental Policy Act of 1969 (NEPA), BSVII received a Record of Decision (ROD) from FTA on June 18, 2018. In April 2021, VTA submitted an EPD Pilot Program application to FTA. In October 2021, FTA issued a Letter of Intent (LOI) indicating it would obligate funds under the EPD Pilot Program on the condition that VTA demonstrate local funding commitment and readiness to receive a grant within two years.

In October 2022, VTA submitted a letter to FTA requesting the BSVII project be allowed to re-enter the New Starts Project Development phase of the Capital Investment Grants (CIG) program and seeking a Letter of No Prejudice (LONP). On December 1, 2022, FTA agreed to move the project from the (EPD) Pilot Program back into the Project Development phase as a New Starts project. FTA also approved a LONP covering expenses VTA incurred when it started in New Starts Project Development in March 2016, through the Project's migration to the EPD Pilot Program, as well as for all remaining work on the project, thereby matching the pre-award authority VTA had been given while it was in the EPD Pilot Program for the 2022 New Starts Basis total project cost of \$9.318 Billion.

The project's new baseline cost and schedule estimates for a New Starts Entry to Engineering review and risk assessment were submitted to FTA/PMOC on October 11, 2023. The project's new baseline cost and schedule estimates include a total project cost of \$12.237B and Revenue Service Date in October of 2036.

FTA/PMOC held a Risk Workshop with VTA on January 16-18, 2024. Risk review results advised an increase in costs to \$12.746B and a recommended RSD of February 2039 based on the use of 125% of the remaining critical path Stripped and Adjusted Base Schedule (SABS) duration.

Since FTA issued the ROD in 2018, VTA has closely coordinated with FTA to determine when and if additional analysis was needed to maintain compliance with NEPA. FTA determined that a NEPA Re-evaluation was required for project changes at the EPD stage and again for project changes introduced by the Progressive Design Builder Innovations and Value Engineering initiatives adopted for the Entry to Engineering design. Both Re-evaluations confirmed the conclusions in the 2018 ROD are still valid. FTA approved the Re-evaluation associated with the Entry to Engineering preliminary design baseline in March of 2024.

VTA formally requested FTA's approval to enter Engineering Phase in a letter dated March 29, 2024, with a total project cost of \$12.746B and a Revenue Service Date (RSD) of February 2039.

The project implementation plan had previously been that BSVII would be delivered through four major design-build construction contract packages: Systems Construction Package 1 (CP1); Tunnel and Trackwork Construction Package 2 (CP2); Newhall Yard and Maintenance Facility and Santa Clara Station Construction Package 3 (CP3); and Underground Stations Construction Package 4 (CP4).

CP2 has progressed based on its original procurement. The VTA Board of Directors approved the award of the CP2 Progressive Design Build contract on May 5, 2022. CP2 Limited Notice to Proceed (LNTP) for a 90-day innovations phase was issued on June 9, 2022; NTP1 was issued for Programming Services on September 7, 2022; and NTP1A was issued for Stage 1 Design Professional Services on February 21, 2023. Early Works Packages are progressing through design, pricing, and negotiations to support the launch of the Tunnel Boring Machine (TBM) that was ordered on October 31, 2023.

All major packages other than CP2 were re-evaluated and subject of a Peer Review in November 2022. Since then, VTA has selected Design-Bid-Build delivery for all work previously identified

as CP1 – Systems, CP3 – Newhall Yard, Santa Clara Station and Parking Garage, and CP4 – Underground Stations.

VTA is in the process of determining how this remaining construction work will be packaged for bids. Then it can be communicated to the PMOC and incorporated into the project management documents.

C. Major Issues and/or Concerns

PMOC is concerned that a key VTA BSVII position (Construction Director) is currently vacant. PMOC is aware that the VTA is currently recruiting for this position. PMOC is expecting that the qualifications and experience bar is quite high for this position considering that it will be managing one of the nation's most difficult and challenging underground deep single bore tunnel and stations transit construction project.

PMOC is concerned about the recent and unanticipated vacancy for the key (Quality Manager) BSVII position.

PMOC is suggesting that VTA should consider succession planning and transition planning for staff turnover situations.

PMOC is concerned that VTA may have difficulties filling key positions with qualified transit individuals due to the high demand for transit professionals in the U.S. and especially in the California market.

PMOC is concerned about differences in BART and VTA understanding of BART staff roles and authority in the review and approval process during various phases of project implementation (Engineering, Construction, Testing and Start-up).

PMOC is concerned about the delay in executing the UPRR draft Mitigation and Reimbursement Agreement (formerly called the Final Engineering Cost Reimbursement Agreement) prior to the Support of Excavation Early Works at the West portal.

D. Table 1 Core Accountability Items

		FTA P65 Forecast (EPD Letter of Intent) (Oct 2021)	VTA New Starts Basis (Sept 2022)	New Baseline New Starts – Entry to Engineering (Oct 2023)	FTA P65 Forecast - Entry to Engineering (Mar 2024)
Cost	Capital Cost Estimate	\$9.148B	\$9.318B	\$12.237B	\$12.746B
Contingency	Allocated and Unallocated Contingency	\$2.653B	\$1.729B	\$2.878B	\$3.119B ¹
Schedule	Revenue Service Date	June 21, 2034	March 1, 2033	October 22, 2036	February 28, 2039 ²
Project Progress		Amount (\$M)		Percent of Total	
Total Expenditures	Actual cost of all eligible expenditures completed to date ³	\$1,013.8		9.3%	
Planned Value to Date	Estimated value of work planned to date	N/A		N/A	
Actual Value to Date	Actual value of work completed to date	N/A		N/A	
Contract Status		Amount (\$)		Percent	
Total Contracts Awarded	Value of all contracts (design, support, construction, equipment) awarded: % of total value to be awarded	\$1,378		N/A	
Construction Contracts Awarded	Value of construction contracts awarded: % of total construction value to be awarded	0		0	
Physical Construction Completed	Value of physical construction (infrastructure) completed: % of total construction value completed	0		0	
Rolling Stock Vehicle Status	Date Awarded	No. Ordered		No. Delivered	
Heavy Rail Vehicles	N/A	48 (planned)		0	

¹ Includes \$1.657 of Unallocated Contingency.

² Recommended Revenue Service Date of February 28, 2039, based on the use of 125% of the remaining critical path Stripped and Adjusted Base Schedule (SABS) duration.

³ Includes standard cost categories (SCC) 10, 40, 60 and 80 expenditures in Project Development, reported through May 31, 2024, based on accruals.

2. PMOC Observations and Findings

A. Summary of Monitoring Activities

The PMOC oversight commenced in July 2020. PMOC has since received documents and coordinated with VTA via email and telephone conversations. *This report covers project status and documents received through June 30, 2024 (and including the May 2024 monthly progress reporting received June 28, 2024). The monthly PMOC oversight call was conducted on July 11, 2024, discussion at which covered those documents received in May 2024.*

VTA submitted their Expedited Project Delivery (EPD) Pilot Program application on April 7, 2021, and FTA/PMOC Risk Workshops were held on May 10-12, 2021. FTA selected the Bay Area Rapid Transit (BART) Silicon Valley Phase II (BSVII) project to advance in the EPD Pilot Program in September 2021 and on October 25, 2021, FTA issued a Letter of Intent (LOI) to obligate funds for BSVII contingent upon VTA meeting specified conditions by October 25, 2023.

In October 2022, VTA submitted a letter to FTA requesting the BSVII project be allowed to re-enter the New Starts Project Development phase of the Capital Investment Grants (CIG) program and seeking a Letter of No Prejudice (LONP). On December 1, 2022, FTA agreed to move the project from the (EPD) Pilot Program back into the Project Development phase as a New Starts project. FTA also approved a LONP allowing the extension of pre-award authority to the activities that are not allowed under Project Development phase of the New Starts (NS) CIG program, activities such as long lead procurement and construction.

In October 2022, VTA also presented FTA with a roadmap of activities and milestones assuming they progress to a Full Funding Grant Agreement (FFGA) in the CIG Program. FTA will continue to work with VTA regarding the roadmap and anticipated time limits for the various milestones and activities with initial focus on the roadmap to Entry to Engineering.

VTA staff presented the BSVII cost and schedule new baselines to the VTA Board of Directors on October 5, 2023, as an Information Item. On October 20, 2023, VTA staff and VTA Board of Directors held a workshop and discussed the BSVII Cost and Schedule new baselines. VTA transmitted to FTA/PMOC on October 11, 2023, these new baseline cost and schedule estimates including a total project budget of \$12.237B and Revenue Service Date (RSD) in October of 2036.

FTA/PMOC held a Risk Workshop with VTA on January 16-18, 2024. Risk review results advised an increase in costs to \$12.746B and a recommended RSD of February 2039 based on the use of 125% of the remaining critical path Stripped and Adjusted Base Schedule (SABS) duration.

VTA adopted the results of January 2024 Risk review and formally requested FTA's approval to enter Engineering Phase in a letter dated March 29, 2024, with a total project cost of \$12.746B and a Revenue Service Date (RSD) of February 2039.

B. Project Management Plan (PMP) and Sub-Plans

The following PMP and Sub-Plan documents include documents that were reviewed by the PMOC for BSVII program EPD readiness:

Document Title	Revision	
	No.	Dated
Project Management Plan (PMP)	0.C	April 9, 2021
Management Capacity and Capability Plan (MCCP)	0.E	April 16, 2021
Risk and Contingency Management Plan (RCMP)	0.C	April 16, 2021
Quality Management Plan (QMP)	0.D	April 19, 2021
Real Estate Acquisition Management Plan (RAMP)	0.B	September 30, 2020
Safety and Security Management Plan (SSMP)	0.B	April 20, 2021
BART Rail Fleet Management Plan (RFMP) FY2020 to FY2036	D	September 2019
Third Party Agreement Management Plan	0.C	April 18, 2021
Project Delivery and Procurement Plan	0.F	April 16, 2021
Project Implementation Plan	C	September 30, 2020

On December 1, 2022, FTA agreed to allow the BSVII program to re-enter the New Starts Project Development phase of the Capital Investment Grants (CIG) program. Around the same time as the change in federal funding source and the update of the project budget, VTA also re-evaluated the project delivery scheme. Looking ahead to the New Starts Entry to Engineering request, VTA submitted 39 documents on May 26, 2023, including the following updates to the PMP and sub-Plans to FTA to be reviewed by the PMOC:

Document Title	Revision	
	No.	Dated
Project Management Plan (PMP)	1	May 1, 2023
Management Capacity and Capability Plan (MCCP)	1.A	May 1, 2023
Risk and Contingency Management Plan (RCMP)	0.D	May 22, 2023
Quality Management Plan (QMP)	2	May 1, 2023
Real Estate Acquisition Management Plan (RAMP)	0.C	May 1, 2023
Safety and Security Management Plan (SSMP)	0.C	May 1, 2023
BART Rail Fleet Management Plan (RFMP) FY2020 to FY2034	F	February 2023
Third Party Agreement Management Plan	1	May 1, 2023
Project Delivery and Procurement Plan	0.G	May 1, 2023

Document Title	Revision	
	No.	Dated
VTA Bus Fleet Management Plan	1	May 2023
VTA LRT Fleet Management Plan	1	April 2023

PMOC recommendations and comments from the EPD readiness review as related to OP20, OP22, OP23, and OP24 were provided to VTA informally to help VTA prepare for the submissions needed for Entry to Engineering readiness. PMOC conducted an initial review of the new submissions in support of the Entry to Engineering risk assessment and readiness review and provided preliminary summary comments regarding inconsistencies and incomplete elements to VTA on June 27, 2023.

VTA submitted 37 documents in November 2023 and 11 additional documents in December 2023, including the following updates to the PMP sub-Plans to FTA:

Document Title	Revision	
	No.	Dated
Project Management Plan (PMP)	2	December 15, 2023
Management Capacity and Capability Plan (MCCP)	2	December 15, 2023
Risk and Contingency Management Plan (RCMP)	B	September 14, 2023
Safety and Security Management Plan (SSMP)	0.D	December 8, 2023
Real Estate Acquisition Management Plan (RAMP)	0.C	December 8, 2023
Quality Management Plan (QMP)	2	November 1, 2023
VTA 2023 Bus Fleet Management Plan (BFMP)	1.0	November 2023
VTA 2023 Light Rail Fleet Management Plan (LRFMP)	1.0	April 2023
BART Rail Fleet Management Plan	F	February 2023
Third-Party Agreement Management Plan	1.0	November 1, 2023
Project Delivery and Procurement Plan	0.G	November 1, 2023

PMOC reviewed the new submissions from November 2023 and December 2023 and provided input to PMOC’s risk assessment and Oversight Procedure (OP) 51 Readiness to Enter Engineering review. PMOC’s OP 51 report will be one input to FTA’s determination regarding Santa Clara Valley Transportation Authority’s (VTA’s) Capital Investment Grants (CIG) Program application. On March 29, 2024, along with the application to enter the New Starts Engineering Phase, VTA submitted revised PMPs and sub-Plans. The PMOC current assessment of the PMP and sub-Plans is based on the PMP and Sub-Plans submissions from November 2023 and December 2023 and only includes significant changes from the revised PMPs and sub-Plans that were submitted on March 29, 2024.

On July 2, 2024. FTA transmitted to VTA the final PMP and sub-Plans PMOC review reports. Over-the-shoulder review sessions with VTA PMOC and FTA have been scheduled to clarify and review VTA's responses to FTA/PMOC comments on PMP and sub-plans.

C. Management Capacity and Capability

Refer to Section B above for revision and submittal status of the Management Capacity and Capability Plan (MCCP) and other PMP Subplans to support VTA's New Starts request to enter Engineering.

VTA has several professional services contracts awarded by which consultants have been supporting VTA in the project development phase. VTA consultants are managed under the HNTB/WSP joint venture Project Management Team (PMT), the MM/W joint venture General Engineering Consultant (GEC) and the Bechtel Infrastructure Corporation Construction Management Services (CMS). The PMT, the GEC, and the CMS include professional resources providing program management and multiple specialized engineering and construction management services.

At the July 11, 2024, monthly meeting, VTA presented the VTA's BART Silicon Valley Phase II Extension Program Organization and provided the following updates:

- *Actively recruiting for the VTA Construction Director position.*
- *The next updates of the Project Management Plan and the Management Capacity and Capability Plan will describe VTA's Succession Planning and Transition of key positions.*
- *The next updates of the Project Management Plan and the Management Capacity and Capability Plan will provide clear descriptions of the VTA/BART roles, authorities and responsibilities during all the phases of BSVII*
- *Actively recruiting for the key (Quality Manager) BSVII position currently filled by an interim Quality Manager.*
- *VTA plans to extend the current Program Management Services (PMS) contract that is set to expire on October 31, 2024. VTA is planning to release a Request for Proposal (RFP) for the next PMS contract in early summer 2024. VTA will ensure there is enough transition time between the current and future PMS contractors for knowledge transfer.*
- *VTA's approach to implementation of the CM Services contract through Annual Work Plans (AWPs). The AWPs will be tailored to meet the project requirements on a year-over-year basis ensuring funding availability through the lifecycle of the project. In addition, VTA processing of contract extensions/amendments will be governed by VTA's administrative codes.*
- *VTA and BART staff roles have been described in the VTA-BART Comprehensive Agreement, and further defined in the recently executed Implementation Letter (IL49) for BART FY2025 staffing. VTA will submit IL49 to the PMOC.*

D. National Environmental Policy Act (NEPA) Process and Environmental Mitigation

FTA signed the BSVII Record of Decision (ROD) in June 2018. BSVII project staff converted the Mitigation Monitoring and Reporting Program (MMRP) from the ROD into a new format for tracking called the Environmental Commitments Record (ECR). Applicable environmental

mitigation requirements were integrated into each of the contract packages via the ECR and the Design Requirements and Best Management Practices matrix. A NEPA re-evaluation was completed, submitted to FTA, and approved by FTA HQ in March 2021 in support of the requirements associated with VTA’s EPD selection. On December 1, 2022, FTA agreed to allow the BSVII program to re-enter the New Starts Project Development phase of the Capital Investment Grants (CIG) program.

At the July 11, 2024, monthly meeting, VTA reported the following NEPA / Environmental Mitigations Status:

- *NEPA document approved March 2024*
- *CEQA document approved June, 2024*
- *Ongoing preparation of the quarterly Environmental Commitments Record (ECR)*
- *Ongoing review of KST submittals for conformance with environmental requirements*
- *Ongoing implementation of the Archaeological Testing Program*

E. Project Delivery Method and Procurement

VTA’s plan for project delivery has evolved over recent years. VTA developed a Project Delivery and Procurement Plan (Revision 0.F dated April 16, 2021) which referenced the Project Implementation Plan. Those documents reflected the BSVII project baseline contracting plan which consisted of four distinct Design-Build contract packages for Systems (CP1), Tunnel and Trackwork (CP2), Santa Clara Station/Newhall Yard (CP3), and Underground Stations (CP4).

Package Number	Construction Contract Package Name	2022 Delivery Method
CP1	Systems	Design Build
CP2	Tunnel and Trackwork	Progressive Design Build
CP3	Newhall Yard, Santa Clara Station and Parking Garage	Design Build
CP4	Underground Stations	Design Build

VTA determined in early 2023 that Design Bid Build will be used to procure the Systems and Facilities construction that is not completed by the Progressive Design Builder for CP2. VTA has yet to determine, and communicate, the contract packaging scheme for all scope other than CP2 and the Diridon Temporary Parking. This remaining scope is sometimes still referred to as CP1, CP3, and CP4 as identified above, but more generically described as Systems and Facilities. In the below table, the decision to procure the Systems and Facilities construction via Design Bid Build is documented.

Construction Contract Package Name	2023 Delivery Method
Systems (formerly CP1)	Design Bid Build
Tunnel and Trackwork (CP2)	Progressive Design Build
Facilities (formerly CP3 and CP4)	Design Bid Build

Between fall 2020 and 2022, VTA initiated a three-step procurement process for the BSVII contract packages, including Requests for Industry Feedback (RFIF), Requests for Qualifications (RFQ), and Requests for Proposals (RFP). Historic data documenting dates for select procurement activities are reported in the following table for the four contract packages included in baseline contracting plan.

Milestones		Contract Packages			
		CP1	CP2	CP3	CP4
Request for Qualifications	RFQ Release	2/26/21	12/29/20	9/13/21	6/29/21
	SOQ Response	5/18/21	3/19/21	11/30/21	9/23/21
	Shortlist	6/30/21	5/11/21	2/3/22	RFQ was cancelled 3/1/2022.
Request for Proposals	Pre-Final	4/15/22	7/19/21	5/20/22	
	Final	RFP was cancelled 12/31/2022.	9/24/21	RFP was cancelled 12/31/2022.	
	RFP Response		12/10/21		

Requests For Qualifications were issued for all 4 packages. The RFQ of CP4 (Stations) was cancelled on March 1, 2022. The Statements of Qualifications (SOQs) for CP1 (Systems), CP2 (Tunnel and Trackwork), and CP3 (Newhall Yard and Santa Clara Station) were evaluated and resulted in the following:

- CP1 (Systems) – 2 Prime contractors being shortlisted.
- CP2 (Tunnel and Trackwork) – 3 Prime contractors being shortlisted.
- CP3 (Newhall Yard and Santa Clara Station) – 3 Prime contractors being shortlisted.

The Final Tunnel and Trackwork (CP2) RFP was released on September 24, 2021, with the final addendum to this RFP released November 24, 2021. BART Silicon Valley Phase II Tunnel Partners (B2TP) and Kiewit Shea Traylor (KST) Joint Venture submitted proposals on December 10, 2021. VTA completed negotiations with the highest ranked team and issued a Notice of Recommended Award to KST. The Contract award was approved by the VTA Board of Directors on May 5, 2022. Limited Notice to Proceed (NTP) was issued June 9, 2022, NTP1 was

issued for Programming Services on September 7, 2022, and subsequently increased the lump sum not to exceed with Letter #12, dated November 10, 2022, authorizing KST to proceed with Early Works Packages design and estimating. VTA issued KST NTP1A for Stage 1 Design Professional Services on February 21, 2023. Amendment #1, valued at \$144M was executed in October 2023 for the Tunnel Boring Machine Purchase Order.

In November 2022, VTA held the Contract Packaging and Delivery Peer Review to receive feedback on the delivery approaches to be used for all contract packages other than CP2 (Tunnel and Trackwork). The RFPs for CP1 (Systems) and CP3 (Newhall Yard and Santa Clara Station) were cancelled on December 31, 2022, pending reevaluation of contract packaging and delivery methods.

On March 2, 2023, VTA transmitted to FTA and the PMOC the “Contract Packaging and Project Delivery Draft Report” dated February 28, 2023. Taking the Contract Packaging and Project Delivery Peer Review panel feedback into account, VTA concluded that Design-Build (DB) was not the preferred approach for the remaining contracts other than CP2. Since then, VTA has selected Design-Bid-Build delivery for all work previously identified as CP1, CP3 and CP4, and now described as Systems and Facilities.

The Construction Management Services (CMS) Request for Proposal (RFP) was released on September 25, 2023. VTA Board authorized the award of the CMS contract to Bechtel Infrastructure Corporation on April 4, 2024. The CMS contract was executed on April 11, 2024. The scope of the CM Services contract is for the first ten years of the project.

At the July 11, 2024, monthly meeting, VTA provided the following updates:

- *Anticipate advertising for Bid*
 - *CP1 – Systems (Design-Bid-Build) in 2028;*
 - *CP3 - Newhall Yard and Santa Clara Station (Design-Bid-Build) in 2026; and*
 - *CP4 - Underground Stations (Design-Bid-Build) in 2027.*
- *A six months CMS Task Order /Annual Work Plan 1 was executed on July 3, 2024.*

F. Design

VTA has been progressing designs and reassessing the division of scopes of work for all major packages other than CP2.

CP2 Tunnel and Trackwork

At the July 11, 2024, monthly meeting, VTA noted the following progress:

- *Ongoing design optimization process to evaluate possible savings.*
- *Advance Partial Design Units (APDU):*
 - *APDU 2 Pre-Cast tunnel liner 100% complete design – In VTA review.*
 - *APDU 3C - West Portal design-Wall SOE Rev. 2 - 100% Design Rev.2 review complete, all comments resolved.*

- *APDU 3D – West Portal Caterpillar SOE Final Design Rev. 2– 100% Design Rev.2 review complete, all comments resolved.*
- *APDU 3E – West Portal Ground Improvement Design Rev. 2 - 100% Design Rev.2 review complete, all comments resolved.*
- *APDU 5A - DTSJ Chase building demolition, civil & Maintenance of Traffic (MOT) – 100% Rev. 1 design in VTA/Stakeholder review.*
- *APDU 8B – East Portal Enabling Works - Over the Shoulder (OTS) review of 85% complete, comment resolution in progress.*
- *APDU 11B – West portal Temporary Power High Voltage Sub-station - 85% design review complete, VTA/Stakeholder review in progress.*
- *APDU 12A – Diridon Station Enabling Works and Utilities – APDU 12A Rev. 1 pending.*
- *APDU 14 – 28th Street Station Enabling Works – APDU 14 Rev. 1 pending.*
- *APDU 20 – Track and Tunnel Alignment– Comment resolution on 100% complete. Updates to DU20 expected.*
- *D05 – Program-wide Specifications – 85% review complete, resubmittal required.*
- *D10 – Bored Tunnel Design –85% design review complete, KST reviewing comments.*
- *D15 – Tunnel Internal Structures - 85% design review complete, KST reviewing comments.*
- *D20 – Track and Tunnel – 85% design submittal received, VTA review in progress.*
- *D25 – Diridon Station Design –60% Design review complete, comment resolution complete, 85% pending.*
- *D30 – Downtown San José Station - 60% Design submittal received, VTA review in progress.*
- *D35 – 28th Street / Little Portugal Station - 60% Design review complete, comment resolution complete, 85% pending.*
- *D40 – East Portal Design - 60% Design review complete, comment resolution complete, 85% pending.*
- *D45 – West Portal Design – 60% Design review complete, comment resolution in progress, 85% pending.*

Program-wide, Facilities and Systems Engineering

At the July 11, 2024, monthly meeting, VTA noted the following progress:

- *Design Status and advancing to FFGA submission.*

<i>CP1</i>	<i>CP3</i>	<i>CP4</i>
<i>Design</i>	<i>Design</i>	<i>Design</i>
62%	57%	63%

- *Continuing to advance designs and respond to stakeholder queries.*
- *Reviews of CP1, CP3, and CP4 Interim Design Submittals.*
- *Technical assurance / design reviews continue with KST submittals in support of the CP2 Management Team.*
- *Continue the collaborative development of interface design requirements definition (KST & GEC).*

- *Supporting BART engagement by participating in technical working groups.*
- *Implementing changes to the technical requirements within the BSVII Program DCM*

It was noted that the track configuration in the Newhall Yard had to be revised due to recent comments from BART. These revisions resulted in the Design Status of CP3 dropping to 57% from 59% in the previous months.

G. Value Engineering and Constructability Reviews

VTA conducted a Value Engineering (VE) workshop in early 2020 based upon the 10% design (submitted December 2019) which consisted of a revised design of a 53-foot diameter deep single bore running tunnel with center platform stations with the addition of station mezzanines for platform access. The VE workshop was facilitated by a third-party consultant and the resulting report remains in draft status. The workshop was “a shortened version of a formal Value Engineering Study” required by FTA for Capital Investment Grants (CIG) projects. However, several of the recommended VE elements were applicable and incorporated into the EPD configuration. Stage 1 initial innovations vetting, as well as iterative design and cost estimating exercises, will accomplish further value engineering under the CP2 PDB procurement.

The DRAFT Constructability Review Report was written in August 2020 addressing biddability and buildability of the EPD configuration.

VTA conducted a peer review September 22, 23, and 25, 2020. VTA established action items to implement based on the peer recommendations and is tracking the implementation of those action items in their risk register.

A three-day facilitated Value Engineering (VE) workshop was held the week of June 19, 2023, and the Value Engineering Workshop Report was submitted to FTA/PMOC, documenting VE efforts from June 2023 through September 2023.

Constructability reviews were held on July 20 and 21, 2023. and the Draft Constructability Review Report was submitted to FTA/PMOC in December 2023.

H. Real Estate Acquisition and Relocation

Refer to Section B above for revision and submittal status of the Real Estate Acquisition Management Plan (RAMP) and other PMP Subplans to support VTA’s New Starts request to enter Engineering.

VTA’s implementation of the acquisition program is in progress. VTA has identified 75 total parcels with acquisitions needed, including full and partial acquisitions, subsurface tunnel easements, temporary construction easements (construction staging areas), and permanent easements.

During the July 11, 2024, monthly meeting VTA presented a high-level summary, as of March 2024, of the Real Estate Acquisition / Relocation Status per the following Real Estate Summary Table:

PROJECT ACQUISITION STATUS											
Description	Total	Possession Obtained	In Acquisition Process	Status of "Parcels in Acquisition Process"						Relocation ****	
				Eminent Domain Actions Filed ***	Board Adoption of RON	Offers Made	Appraisal Process Completed	Legals and Plats Approved	Pending Legals and Plats	Required	Completed
SUMMARY OF REQUIRED TAKES											
Total Parcels: 75 *	77	26	51	16	7	10	0	2	16	37	12
Type of Take: Quantity											
BPE ** & Other Takes:	4		4	1		2			1	3	
Full Fee:	9	7	2	1					1	15	8
Other Multiple Takes (Easement/Fee):	3		3	1				1	1	15	4
Tunnel Easement:	47	19	28	13	6	2		1	6		
Roadway Easement:	3		3						3		
Utility Easement:	4		4						4		
Temporary Construction Easement:	7		7		1	6				4	

* Six Building Protective Easements were removed due to elimination of DTSJ Secondary HH; pending Property Protection Study report
 ** BPE: Building Protective Easements – Parcels have additional acquisitions, such as Tieback Easement
 *** Total includes two parcels removed from the elimination of DTSJ Secondary HH
 **** Represents total tenants not parcels

During the July 11, 2024, monthly meeting VTA reported the following changes for May 2024:

1. BPE Removed from B4505 to Tunnel Easement;
2. B3100 Kolander L&P approved 5/7/2024

During the July 11, 2024, monthly meeting VTA reported the following progress as of May 2024 (75 active parcels):

- Legal/Plats Approved: 79%
- Appraisals Completed: 77%
- Offers made: 77%
- Purchase Agreements Signed: 34%

I. Public Involvement/Outreach/Communications

At the July 11, 2024, monthly meeting, VTA provided the following Public Involvement/Outreach/Communications updates:

- **Public and Stakeholder Meetings and Presentations**
 - Community Working Group Series –July 23-25
 - 5th Advocacy Breakfast (July)
 - Design Review Committee Meetings
 - Santa Clara (Summer)

- Downtown San Jose (Summer)
- Diridon and 28th Street / Little Portugal (Fall)
- Downtown/Diridon Construction Transportation Management Plan – City & Stakeholder Engagement Kickoff (June – July)
- Third Party Interim Design Review (July)
- 28th Street / Little Portugal Community Meeting (August)
- **Communications and Public Relations**
 - TBM Naming Selection June
 - Business Resource Program Launch (Summer 2024)
 - Website launch (July)
 - West Portal Early Construction Elements Social Media Series
 - Spotlight Project Feature August

J. Third-Party Agreements and Utilities

Refer to Section B above for revision and submittal status of the Third-Party Agreement Management Plan and other PMP Subplans to support VTA’s New Starts request to enter Engineering.

The Third-Party agreement tracking matrix is updated and submitted to the FTA/PMOC monthly. The third-party agreement tracking matrix provides detailed information including a listing of all the critical and non-critical agreements and permits, and their anticipated or actual execution dates. Per OP39, “critical third-party agreements are required before Construction, or Operations can begin, the absence of which may significantly change the cost, scope, and schedule.”

At the July 11, 2024, monthly meeting, VTA provided the following Third-Party Agreements updates:

- *Based on the requirements of the Mitigation and Reimbursement Agreement for the West Portal, this agreement needs to be executed when the West Portal excavation starts, currently scheduled in Q1 2026. As a result, the need for the execution of this agreement has been moved to Critical Agreements Post FFGA (Construction).*
 - *▪ VTA will continue to coordinate with UPRR to resolve all comments on the draft agreement and finalize the agreement as quickly as possible.*
- *UPRR and JPB ROE Agreements have been executed and provided to KST*
- *▪ VTA is reviewing KST's Property Protection Studies and Instrumentation & Monitoring Plan includes all major utilities. Excerpts of the 85% PPS and I&M Plan related to PMOC utilities of concern will be provided to PMOC.*
- *The total number of Third-Party Agreements is now 43*
- *Critical Agreements prior to FFGA (all executed)*
- *Critical Agreements post FFGA (Construction): 5 (BART IL, UPRR WP Mitigation & Cost Reimbursement, UPRR C&M, and SJWC (2))*

- *Critical Agreements post FFGA (Operations): 5 (BART, JPB, CT, CSJ, CSC)*

As noted in previous reports, VTA is pursuing a re-use strategy for the tunnel spoils that will require environmental clearance (by a lead agency other than FTA) and permits prior to implementation of that sustainability solution. The latest Third-Party Agreement tracking log has a separate tab that identifies associated permits needed for the re-use of the tunnel spoils at the South San Francisco Salt Pond. This is regardless of the funding source for the environmental clearance and with the understanding that if not obtained (either by BSVII or others), the contractor will use alternative disposal.

Summary of Utility Relocation Design and Construction Progress

LOCATION	RELOCATIONS DESIGN	RELOCATIONS IN CONSTRUCTION
OWNER LED RELOCATIONS		
West Portal / NHY / SCS	7	3
Diridon Station	8	6
Downtown San José Station	5	2
28 th Street / Little Portugal Station	7	0
East Portal	5	0
Sub Total	32	11
CONTRACTOR LED RELOCATIONS		
West Portal / NHY / SCS	3	0
Diridon Station	3	0
Downtown San José Station	0	0
28 th Street / Little Portugal Station	3	0
East Portal	2	0
Sub Total	11	0
Total	43	11

During the July 11, 2024, monthly meeting VTA reported the following:

- *West Portal:*
 - *PG&E 115kV interconnection Construction started April 30, 2024*
 - *Cogent/Sprint relocation design review complete – awaiting KST and UP approval of final design*
- *Diridon Station and West Vent Shaft:*
 - *Zayo pre-construction activities to begin early July – pending CSJ permit*
 - *AT&T pre-construction activities ongoing*
 - *SJWC construction complete pending final pavement restoration*
 - *PG&E Elec design near completion*
- *PG&E Gas relocation pending delivery of long lead materials Downtown Station:*
 - *PG&E gas and Electrical relocations in-progress*

- *AT&T design review complete – awaiting submittal of final design package by At&T*
- *East Portal:*
 - *SJWC reviewing/updating w/ alignment to accommodate KST design updates*

K. Construction

During the July 11, 2024, monthly meeting VTA reported the following early works procurement / negotiations activities and status of progress:

- *Early Works Package Negotiations:*
 - *EWP 2A – Precast Final lining, Material & Plant Procurement: negotiations ongoing.*
 - *EWP 3A – West Portal Initial Sitework: Construction ongoing.*
 - *EWP 3B – West Portal Sitework (Phase 2): negotiations ongoing.*
 - *EWP 3C.1 – Preparation for West Portal Enabling Works: partial NTP issued May 2024.*
 - *EWP 7A – West Portal Instrumentation & Monitoring: installations started in June 2024.*
 - *EWP 9A – TBM Tunnel Support Equipment: negotiations ongoing.*
 - *EWP 11A – West Portal TBM and Plant Power: KST receiving the initial equipment shop drawings.*
 - *EMP 11B – West Portal TBM and Plant Power Phase 2: NTP issued May 2024.*
- *Construction – West Portal:*
 - *Ongoing weekly construction meeting with KST*
 - *Continued Site Clearing and Removal of existing facilities*
 - *Continued Site Grading operations, (scarify and compact subgrade).*
 - *Completed Milestone Event (Groundbreaking) June 14, 2024*
 - *Started installation of track monitoring devices at West Portal (UPRR & Caltrain)*
 - *Started Fence removal and Replacement*
 - *Ongoing weekly construction meetings with KST.*
 - *Continuing coordination with Caltrain and UPRR for the installation of existing track instrumentation and monitoring devices.*
 - *Updating VTA policies and procedures for construction – Construction Completion Procedures.*
 - *Reviewing Construction site specific work plans.*
 - *Preparing for Milestone Event (Groundbreaking) in June 2024.*
- *Construction – Facilities–Downtown San José, Diridon Station, 28th Street/ Little Portugal:*
 - *Property protection assessment development ongoing.*
 - *Developing Enabling Works packages for the station facilities.*
 - *Started property security for Downtown, 13th Street, and 28th Street/Little Portugal locations.*
- *Construction – Project-wide:*
 - *KST developing Pre and Post Construction Property Survey plans.*
 - *Reviewing obstructions report/plan for existing structure foundation investigations along the tunnel alignment.*

L. Vehicle Technology and Procurement

Expansion of BART’s existing fleet to serve the BSVII service to Santa Clara is included in BART’s Rail Fleet Management Plan (RFMP). Forty-eight vehicles have been identified in the BSVII budget. However, all vehicles will be procured under BART’s vehicle procurement contracts not through a separate VTA procurement.

On May 2, 2024, the VTA Board of Directors authorized the General Manager/CEO to enter into an agreement with the San Francisco Bay Area Rapid Transit (BART) for the purchase of 48 revenue vehicles for the BSVII Extension Project through BART’s existing contract with Alstom (formerly Bombardier). The costs related to these revenue vehicles are estimated to total \$172,600,000.

At the July 11, 2024, monthly meeting, VTA reported that BART executed the option with Alstom to purchase 48 revenue vehicles for the BSVII Extension Project.

M. Project Cost

VTA transmitted to FTA/PMOC on October 11, 2023, their new baseline cost estimate that included a total project budget of \$12.237B. The new baseline cost, with a status date of June 30, 2023, was developed reflecting the CP2 Stage 1 baseline, and the updated design-bid-build (DBB) contract packaging strategy for CP1, CP3 and CP4.

This new baseline cost estimate was reviewed in accordance with FTA’s OP 33 Project Cost Review in coordination with the January 2024 Entry to Engineering risk assessment. The risk review resulted in P65 Forecast cost of \$12.746B that was accepted and adopted by VTA. VTA formally requested FTA’s approval to enter Engineering Phase in a letter dated March 29, 2024, with a total project cost of \$12.746B and a Revenue Service Date (RSD) of February 2039.

The BSVII project budget of \$12.746B supporting VTA’s March 29, 2024, request for FTA’s approval to enter Engineering is summarized below.

SCC	Title	Cost Estimate – YOE (in \$M)
10	Guideway & Track Elements	\$2,900
20	Stations, Stops, Terminals, Intermodal	\$2,037
30	Support Facilities: Yards, Shops, Admin. Buildings	\$352
40	Sitework & Special Conditions	\$582
50	Systems	\$1,409
	Construction Subtotal (10 – 50)	\$7,280

60	ROW, Land, Existing Improvements	\$241
70	Vehicles (48)	\$205
80	Professional Services	\$2,973
Subtotal (60 – 80)		\$3,419
90	Unallocated Contingency	\$1,657
100	Finance Charges	\$390
TOTAL (SCC 10-100)		\$12,746

VTA has reported expenditures through April 30, 2024, including accruals, which total \$1,013.8M. Project costs have been expended in SCC 10, SCC 40, SCC 60, and SCC 80. Project commitments include SCC 10, SCC 40, SCC 60, and SCC 80 and total \$11,378M through May 31, 2024.

At the During the July 11, 2024, monthly meeting VTA reported the following Budget / Cost updates for the May 2024 reporting period:

- *No changes to budgets in current period.*
- *Budget updates / transfers in process to reflect executed CP2 amendments, including EWP3.*
- *Vehicle Purchase Agreement with BART commitment of \$12M is not yet committed in SAP (\$173M executed contract)*

N. Project Schedule

VTA provided an May updated schedule with a data date of 01Jun24. A full analysis was completed on this schedule.

The new VTA baseline schedule has a target Revenue Service Date (RSD) of Q2-2037. The preliminary risk assessment by PMOC indicated a projected RSD of February 2039, inclusive of FTA-assessed schedule contingency. VTA is adopting the FTA-recommended schedule contingency that indicates a Q1-2039 RSD while managing to the target RSD of Q2-2037.

The activities for “VTA Target RSD” with a date of 12MAY37, and “FFGA RSD” with a date of 28FEB39 have remained the same, along with the Substantial Completion (Completion of Phase 2 Testing, Systems (CP1) Contractor Oversight by BART) activity with a date of 09NOV35.

VTA noted that the critical path excluding the contingency and reserve includes the following items:

1. West Portal Enabling work and Launch Structure (CP2)
2. TBM Procurement: Assembly and Testing (CP2)
3. Tunnel mining from West Portal to East Portal (CP2)
4. West Portal: Final concrete work and finishes (CP2)
5. West Portal: Train Control Building (CP2)
6. Newhall Yard: Systems installation (CP1)

7. Phase 2 testing by CP1 with BART oversight
8. BART OCC Validation / Testing

The near-critical items as of this update are:

1. CP2 – TBM procurement, fabrication, and delivery
2. TBM Plant temporary power at the West Portal

The Master Project Schedule (MPS) is comprised of a summary schedule plus the following twelve individual schedules:

1. Program Management and Administration
2. Right-of-Way Acquisition
3. Design
4. Advertise, Bid, and Award
5. Utilities
6. Third Party
7. Vehicles & Parking
8. Testing and Commissioning
9. Systems
10. Contract Package 2
11. Yard/SC Station
12. Underground

The critical path on the overall schedule has total float at 0. There are three activities driving the critical path. One of the activities is the CP2 Santa Clara Station Enabling Works Demolition Concrete Silo. Then there is CP2 Santa Clara Station Enabling Works Site Grading and finally CP2 Newhall Yard Enabling Works I&M Installation. After CP2 the path leads to Systems (CP1) to Testing.

Within the Program Management and Administration schedule the activity for FTA Review/Approve NSEE is indicating it will take longer than what was estimated by 29 working days and now will not complete until 12JUL24. The delivery of the BART vehicles has been adjusted to show they will be delivered by 31DEC25 and the OCC by BART Validation has been moved up to show 15FEB36 instead of 28FEB39. OCC By BART Validation has been removed from the longest path.

The ROW, Design and Third-Party schedules have a mix of Duration percent complete and Physical percent complete. With Physical percent default, the percentage must be manually entered along with the actual finish date. It appears as if the information is not being manually entered as the percentages have remained at zero. This continues to be an issue.

Right of Way: The overall ROW schedule remained the same in duration, however there were many parcels which had movement some in the positive direction and other in the negative direction. The reason for the no overall movement is the effective possession and construction need by dates activities. There has been adjustment to these activity durations.

Utilities: Utility Owner Final Design MCImetro WP-FO-02 was deleted from the schedule while seven (7) activities were added for final design with different owners. All the added activities have actual start dates in the past as early as July 2022. There are thirty-one (31) activities with no finish relationships. These are all utility construction activities but for one which is Test and Commission of Temporary Power Contingency. Constraint dates on eight (8) activities have been moved out. But due to these activities not having relationships within this schedule the overall schedule did not move out.

Vehicles & Parking: The activity for Vehicle Testing / Commissioning has been changed from a task activity to a Level Of Effort (LOE) with its successor to Project Contingency. Not sure why Project Contingency would be the end point for this LOE. Due to relationship changes Vehicle Manufacturing & Delivery has no relationship within the Vehicles & Parking schedule. Vehicle Testing / Commissioning is on the longest path this month.

For the CP2 Construction: There was slippage on all sections of the design with added durations. There has been no progress on Agency Utility Relocations Final Design for DTSJ Station, East Portal, West Portal, and Diridon Station. Both the Enabling Works NTPs for 28th Street Station and DTSJ Station Secondary East Vent have been moved up by 95 and 90 days respectively. Constraint dates have been added or modified with no explanations. .

For the Underground Stations (CP4): There were summary activities added to the schedule and they do not have any relationships.

O. Project Risk

Overall Status

The PMOC reviewed various versions of the Risk and Contingency Management Plan (RCMP) leading up to VTA's EPD selection. On May 26, 2023, VTA submitted an updated RCMP (Rev. 0.D dated May 22, 2023) with the above-noted PMP Subplans to support VTA's New Starts request to enter Engineering. On October 11, 2023, VTA submitted another revision of the RCMP (Rev B dated September 14, 2023) associated with the new baseline cost and schedule.

VTA reported having continued their on-going risk review meetings with project and discipline teams, updating risk response plans and risk register. VTA has included the FTA and PMOC in the BSVII Risk review sessions for May, June, July, August, September, and October 2023. *VTA has now included the PMOC in their monthly risk review meetings going forward.*

VTA has indicated, as per CP2 contract requirements, the KST team is expected to include a risk register after the review of the Configuration Design submittal. The BSVII team will review KST's identified risks with BSVII disciplines, revise the Program Risk Register as appropriate and establish a joint VTA/KST CP2 Project Risk Register that will be reviewed with the KST team regularly. As of the risk workshop held in January 2024, this register has not been provided to PMOC.

The project risk profile may well have changed either favorably or unfavorably since the EPD submission and is likely further impacted as the project has moved back into the New Starts program. *The PMOC has completed a refreshed risk assessment given the new baseline cost and*

schedule by VTA that reflects their planned delivery and updated packaging strategy, along with awarded CP2 contractor (KST) approved innovations. The Entry to Engineering risk workshop for the project was conducted in January 2024 with the FTA, the project sponsor and PMOC. The PMOC has proposed a few new risks related to geotechnical conditions, Buy America requirements, interface requirements associated with changing scope, Real Estate management plan, TBM productivity assumptions, agency capacity, timely decision with BART and external stakeholder impacts including potential delays from Board of Directors. VTA has incorporated the FTA/PMOC risk assessment results into their new baseline and request to Enter Engineering.

New Risk: None for the period

Retired Risk: None for the period

Increased Risk: None for the period

Reduced Risk: None for the period

Miscellaneous Risk Updates:

BSV-196 - Failure to secure a lump-sum price with KST resulting in Off-ramp: Per VTA, based on trending of current EWP cost estimates, this risk continues to be one of the top program risks. To mitigate this risk, the PMT has initiated an advisory group led effort to review various options and provide recommendations to the BSVII Program senior leadership on initial recommendations. In addition, VTA is looking to combine multiple work package proposals into 1 lump sum proposal and has directed KST to provide information on the contents of work plans, method of procurement, etc.

BSV-203 – Higher cost of West Portal launch facility: VTA is progressing to obtain VTA Board approval on the negotiated cost of West Portal early work packages and continues to work with KST to identify potential items that should be considered as value engineering/ optimization items and directing KST to implement additional value engineering on the scope.

BSV-213 - Additional redesign costs and design time to address optimizations: This risk was added in the previous reporting period and pertains to additional design costs associated with implementing optimizations. Implementing optimizations may require a redo of 85% design and, in some cases, potentially going back to 60% design. Optimizations are being reviewed by the steering committee, expecting a final direction by the end of June 2024.

BSV-214 - Diridon Station design changes due to stakeholders' input: Per VTA, the City of San Jose has requested changes to Station Redesign of BOH to put it below ground, providing underground connection for the future Diridon Station. This will require significant re-configuration of the Diridon Station to account for the City's request, which may add capital cost thereby reversing the value engineering savings. This new risk is added to capture the redesign cost and design delay of this effort. To address this risk, the Diridon Task Force team is currently progressing Diridon station options evaluation and anticipate initial findings to be

P. Quality Assurance/Quality Control

PMOC reviewed various versions of the Quality Management Plan (QMP) leading up to VTA's EPD selection. On May 26, 2023, VTA submitted an updated QMP (Rev. 2 dated May 1, 2023) with the above-noted PMP Subplans to support VTA's New Starts request to enter Engineering. PMOC reviewed the revised QMP and provided preliminary summary comments to VTA on June 27, 2023. The QMP (Rev. 2 dated November 1, 2023) was submitted to the PMOC on November 22, 2023

During the July 11, 2024, monthly meeting VTA reported the following quality activities:

- *Contract Package-2 KST*
 - *Completed Early Works Construction Audit Part 1 of KST Inspection & Test Plans, Construction Quality Management Plan and Requirements Management Plan – resulting in three Findings*
 - *Contracted QA Oversight Laboratory for QA Oversight testing of KST construction QC testing, Signet Testing Laboratories Inc. Hayward, CA*
 - *Initiated Design Work Plan Audit of KST Design Work Plan Rev. 4.01*
- *General Engineering Consultant*
 - *Coordination with GEC Quality Manager on closure of outstanding audit Findings and upcoming audits on the Interim 60% Design (Systems, Maintenance Facility and Surface Station, Underground Stations)*
 - *Initiated Document Control Plan Audit of GEC Document Control Plan Rev. 1.*
- *BSVII Program*
 - *Initiated Third-Party Utility Coordination Procedure Audit of PMT Third-Party Utility Coordination Procedure Rev. 1*
 - *Initiated Document Control Plan Audit of PMT Document Control Plan Rev. 3*

Q. Safety and Security

VTA and BART previously indicated an intent to conduct joint Fire Life Safety and Security Committee (FLSSC) and Safety and Security Review Committee (SSRC) meetings for the early phase of the BSVII program.

The monthly SSRC meetings commenced in January 2021, with the latest meeting held October 25, 2023. On August 30, 2023, VTA issued the SSRC charter. The SSRC is chaired by VTA Program Administrator and includes VTA (Security Specialist, Chief of System Safety & Security, System Safety & Security Lead, and project managers), BART (engineering, operations, system safety, and police), BSVII Program Management Team, Federal Transit Administration, and the Project Management Oversight Contractor.

The first FLSSC meeting was conducted on October 7, 2021. FLS (Fire Life Safety) continues to monitor project progress, but there are no significant updates to report. The second FLSSC meeting was scheduled for May 11, 2023, then cancelled; the next meeting was held on October 18, 2023, when removal of the mid-tunnel ventilation facilities and the current design for the EVS were discussed.

On August 30, 2023, VTA issued the FLSSC charter. The FLSSC charter is co-chaired by VTA Chief Program Delivery Officer and BART Assistant General Manager of Operations. It includes committee members from the Cities of San José and Santa Clara fire and police departments, Santa Clara Sheriff, California Public Utilities Commission (CPUC), BART (engineering, system safety, and police), and VTA (System Safety & Security, and project managers). The CPUC is the State Safety Oversight Agency (SSOA) as certified by FTA.

During the July 11, 2024, monthly meeting VTA reported the following System Safety and Security Risk Management / Certification activities:

- *Safety and Security Review Committee (SSRC):*
 - *The June 24, 2024, SSRC meeting included a Record of Decision for tunnel safety decisions forwarded from the FLSSC*
 - *Tunnel (cross-passage) door spacing of nominal 500', allowing for two doors between each EVS vent stack*
 - *A manual, single header standpipe system for the tunnel*
 - *A single fire equipment storage room for each underground station platform, with a nominal 180 sq ft*
- *Fire Life Safety and Security (FLSS) Activities:*
 - *A FLSS working group meeting was held with San Jose FD Committee Meeting to finalize the agreements subsequently finalized through the FLSSC and SSRC*
 - *The Fire Life Safety and Security Committee meeting was held June 23, 2024, with a recommendation for approval to the items finalized at the SSRC meeting. There was also a scenario discussion related to train evaluation from a disabled train to a station platform through a cross-over. This the third of a series of mini-tabletop discussions to explore potential issues in the tunnel that might require first responder involvement.*
 -

R. Americans with Disabilities Act (ADA)

VTA produced an Accessibility Report to meet the EPD application requirements specified in the NOFO (Notice of Funding Opportunity).

S. Buy America

VTA has committed to meeting the Buy America requirements in their PMP documentation. Additional details regarding how they intend to meet the 70-percent content threshold and their management of contractor requirements have yet to be made available to the PMOC for review.

VTA is including a notification in the RFQ to all prospective bidders that Buy America requirements will be part of each contract. VTA sets the expectation that each supplier and subcontractor will be required to research and present findings for verification. Additional work is needed to coordinate the requirements and compliance at a program level. VTA indicated that their contract technical teams will provide input regarding that program coordination.

No update was provided at the July 11, 2024, monthly meeting. PMOC recommends that VTA revisit their plan for Buy America implementation and management with respect to Buy America Build America changes as well as the program's adjusted delivery plan.

T. Start-Up, Commissioning, Testing

VTA and their contractors will be responsible for Phase 1 and 2 system integration testing. Upon successful completion of Phase 2 system integration testing, the system will be turned over to BART to complete Phase 3 system integration and pre-revenue testing. As noted above, VTA has established a Rail Systems Organization (RSO) teaming with BART to manage systems and operations input to project development and address related issues. The RSO is developing the System Integration Testing Program Plan. The testing plan will define BART Phase 3 System Integration Testing (SIT) to be Operations Control Center (OCC) validation of tests previously performed. The intent of Phase 3 SIT is not to introduce new tests to be performed. However, if there are system validation failures during SIT Phase 3 BART will have the right to perform new tests until all testing discrepancies are cleared.

As previously noted, VTA has determined that CBTC design will be progressed for implementation on the BSVII extension. To accommodate the technology, BART CBTC implementation from Warm Springs to Berryessa needs to be completed. VTA provided the following milestones related to this phase/segment of BART's project:

- Migration design from Q3 2025 to Q4 2029
- Procurement from Q4 2025 to Q3 2028
- Installation from Q1 2029 to Q4 2029
- Testing and Commissioning from Q3 2029 to Q4 2030
- Revenue service expected at the end of 2030.

No update was provided at the July 11, 2024, monthly meeting.

U. Action Items Table

Item		Responsible Party	Date			Status / Action Required
No.	Description		Identified	Due	Complete	
155	Notify PMOC when EWP's are executed	VTA	2/8/2024	3/1/2024		In-Progress 7/11/2024 – VTA notified PMOC about execution of additional EWP's
160	VTA to provide UPRR and JPB agreements impacts on EWP's	VTA	4/11/2024	5/9/2024	7/11/2024	Closed
162	Provide PMOC with Valley Water's letter confirming their preference to use its permit process	VTA	5/9/2024	6/13/2024	5/21/2024	Closed
163	Provide PMOC with a job description / qualifications of the Construction Director position	VTA	6/13/2024	7/11/2024	6/20/2024	New & Closed
164	Provide PMOC with a job description / qualifications of the Quality Manager position	VTA	7/11/2024	8/8/2024		New
165	Provide PMOC with BART Implementation Letter (IL) 49	VTA	7/11/2024	8/8/2024		New
166	Provide Correlation of the MPS with Early Work Packages	VTA	7/11/2024	8/8/2024		New

3. Project Monitoring Report Attachments

Attachment A. List of Acronyms

Attachment B. Monthly Meeting Agenda

Attachment C. Monthly Meeting Attendees

Attachment D. List of Documents Received

Attachment E. VTA Top 10 Project Risks

Attachment G. Project Milestones/Key Events

Attachment H. Project Map

A. List of Acronyms

ADA	Americans with Disabilities Act
BART	Bay Area Rapid Transit
BSVII	BART Silicon Valley Phase II
CBTC	Communications Based Train Control
CIG	Capital Investment Grants
CPUC	California Public Utilities Commission
CSC	City of Santa Clara
CSJ	City of San José
DCM	Design Criteria Manual
EVS	Emergency Ventilation Structure
EPD	Expedited Project Delivery
FLSS	Fire, Life, Safety and Security
FTA	Federal Transit Administration
LS	Lump Sum
MCCP	Management Capacity and Capability Plan
NDA	Non-disclosure Agreement
NEPA	National Environmental Policy Act
NOFO	Notice of Funding Opportunity
OP	Oversight Procedure
PDB	Progressive Design Build
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
QMP	Quality Management Plan
RAMP	Real Estate Acquisition Plan
RCMP	Risk and Contingency Management Plan
RFIF	Request for Industry Feedback
RFMP	Rail Fleet Management Plan
RFP	Request for Proposal
RFQ	Request for Qualifications
ROW	Right of Way
RSO	Rail Systems Organization
SCC	Standard Cost Categories
SOQ	Statement of Qualifications
SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency
SSRC	Safety and Security Review Committee
STOPS	Simplified Trips-On-Project Software
SVBX	Silicon Valley Berryessa Extension
SVTC	Silicon Valley Transit Consultants
TBM	Tunnel Boring Machine
VE	Value Engineering
VTA	Santa Clara Valley Transportation Authority

B. Monthly Meeting Agenda

Monthly Coordination Meeting/Teleconference
VTA BART Silicon Valley Extension Phase II
Thursday, July 11, 2024 – 10:00am (Pacific)
Conference Connection: MS Teams

1. Introductions/Roll Call
2. Key Agency-level updates (organization, financial, legal, safety, etc.)
3. Action Items from latest Monthly Call
4. Issues and Concerns from latest Monthly Meeting
5. Project Status
 - a. Project Management Organization Updates
 - i. PMP and sub-plans
 - ii. Management Capacity and Capability
 - b. Project Summary Description
 - c. Key Project Issues
 - i. Key Personnel staffing update
 - ii. Construction Management Services Onboarding update
 - iii. Program Management Services Procurement Update
 - iv. Update on Agreements for Early Works Packages
 - v.
 - d. NEPA / Environmental Mitigations
 - e. Project Delivery Method and Procurement Status
 - i. Project-Wide
 - ii. Systems DBB
 - iii. CP2 PDB
 - iv. Facilities DBB
 - v. Stations DBB
 - f. Design Status
 - i. Project-Wide
 - ii. Systems
 - iii. CP2 – Tunnel & Trackwork
 - iv. Facilities
 - v. Stations
 - g. Real Estate Acquisition/Relocation Status
 - h. Public Involvement/Outreach
 - i. Third-Party Agreements
 - j. Utilities
 - k. Construction
 - l. Project Controls
 - i. Schedule Updates
 - ii. Cost and Expenditures Updates
 - iii. Change Order Status
 - iv. Contingency Status
 - m. Project Risk Management
 - n. Quality Assurance / Quality Control

C. Monthly Meeting Attendees

Organization	Name	E-mail
FTA	Serra Marquez	serra.marquez.ctr@dot.gov
FTA	Murat Omay	murat.omay@dot.gov
FTA	Khalid Salahuddin	kalid.salahuddin@dot.gov
VTA	Afshin Abtahi	aabtahi@vtabsv.com
VTA	Bernice Alaniz	bernice.alaniz@vta.org
VTA	Khair Amini	KhairMohammad.Amini@vta.org
VTA	Kannu Balan	kbalan@vtabsv.com
VTA	Hassan Basma	hassan.basma@vta.org
VTA	Erik Blum	eblum@vtabsv.com
VTA	Monica Born	mborn@vtabsv.com
VTA	Krishna Davey	krishna.davey@vta.org
VTA	Chris DuVilla	cduvilla@vtabsv.com
VTA	Andrwe Ghofrani	aghofrani@vtabsv.com
VTA	Keith Gilliam	kgilliam@vtabsv.com
VTA	Rosemarrie Gonzalez	rosemarrie.gonzalez@vta.org
VTA	Kevin Kurimoto	kevin.kurimoto@vta.org
VTA	Tom Maguire	tom.maguire@vta.org
VTA	Ronak Naik	ronak.naik@vta.org
VTA	Rob Ostermiller	rostermiller@vtabsv.com
BART	Ni Lee	nlee@bart.gov
CPUC	Daniel Kwok	daniel.kwok@cpuc.ca.gov
CPUC	Rupa Shitole	rupa.shitole@cpuc.ca.gov
HNTB	Craig Constant	cconstant.hntb.com
HNTB	Suresh Kataria	skataria@hntb.com
WSP	Raul Laborin	raul.laborin@wsp.com
HNTB	Sean Libberton	slibberton@HNTB.com
BKF	Andrew Michel	AMichel@BKF.com
HNTB	Chuck Morganson	cmorganson@hntb.com
WSP	Anthony Murphy	tony.murphy@wsp.com
PMOC	Emile Jilwan	emile.jilwan@atkinsrealis.com
PMOC	Kyle Knudson	kyle.knudson@atkinsrealis.com
PMOC	Don Schneck	donald_schneck@msn.com
PMOC	Laurel Espenlaub	laurel.espenlaub@atkinsrealis.com
PMOC	Beth Sprague	beth.sprague@atkinsrealis.com
PMOC	Nadeem Tahir	nadeem.tahir@atkinsrealis.com
PMOC	Frank Ward	fward@dovetailconsulting.net

D. List of Documents Received

Document	Received
<i>BSVII FTA-VTA PMOC Monthly Meeting 2024-06-13 Draft.pdf</i>	6/7/2024
<i>BSV Phase I Before and After Study FINAL DRAFT TM changes 240509.doc</i>	6/26/2024
<i>BSVII Monthly Progress Report May 2024.pdf</i>	6/28/2024
<i>BSVII-ProjectRiskRegister MAY-2024 Clean Draft 06-03-2024.xlsx</i>	6/28/2024
<i>third party agreement tracking 5.31.24.xlsx</i>	6/28/2024
<i>VTA BSVII Detailed Schedule May 2024 Update.pdf</i>	6/28/2024
<i>VTA BSVII MPS May 2024 Update.XER</i>	6/28/2024
<i>2024-06-CA-BSVII-OP25-ProjectMonitoringReport_Draft.docx (comments)</i>	6/30/2024

E. VTA Top 10 Project Risks

Risk ID	Risk Title	Risk Description	Risk Score	Action Items Description
BSV-203	Higher cost of the West Portal TBM launch facility	Cause: Finalized negotiations that have resulted in agreed value of EWPs (3A and 3C). Risk: Higher than anticipated cost and longer time to construct the West Portal facility Impact: Delays to launch of TBM operations	20	2. Develop documentation for VTA Board approval on remaining EWP 3C Budgets during June 2024 Board meeting. 3. Implementing partial NTP for KST sub-contractor to start submittals, shop drawings and procurement long lead items prior to start of Caterpillar Shaft construction. Incorporate partial NTP into the schedule to evaluate time savings / critical path. 4. Strategic review of EWP 3C scope to validate going ahead with balance of 3C.
BSV-196	Failure to secure a lump-sum price with KST resulting in Off-ramp.	Cause: KST's unwillingness to accept reasonable risk strategies/sharing within VTA budget. Risk: Failure to agree on lump-sum and come to terms with KST. Impact: Off-ramp with CP2 contract scope, resulting in increased interface risk, design completion delays, construction escalation costs, etc.	20	1. Implement EWPs (like West Portal development) as early construction item during Stage 1 to lessen the impacts/delays of implementing an off-ramp. 3. Identify KST costs by Work Packages versus the budget to identify potential options to have KST perform vs Subcontracting to others either via KST or separate procurement packages. 4. Develop details of off-ramp plan (including options for design completion, novating TBM procurement contract), partial termination, and other procurement packages to reduce costs and complete the remaining Work Packages.
BSV-211	Opportunity for eliminating DTSJ Secondary Headhouse	Cause: VTA's VE study identified elimination of DTSJ Secondary Headhouse Risk: Reduction in capital cost for eliminating DTSJ SH as well as all ROW parcels associated with it Impact: Direct cost savings	15	1. Implement the approved VE and realize savings as part of 60% design estimate.
BSV-005	Unanticipated damage to historic buildings, critical utilities & other structures	Cause: Vibration and/or settlement during construction. Risk: Unanticipated or inadvertent damage to buildings (especially historic buildings), structures and/or utilities. Impact: Additional cost to mitigate. Mainly focused downtown along Santa Clara St, but extending to the area encompassed by settlement trough.	12	7. Obtain access (PTE) to perform structural inspection on historic, sensitive structures and utilities. 8. KST to develop instrumentation and monitoring program for the sensitive structures. VTA to support KST in obtaining access to install and monitor instrumentation as appropriate.
BSV-029	VTA financial capacity / funding plan to finance potential future project cost increases	Project is currently at an early stage of design. Changes in cost may result from further design development and coordination with stakeholders. It is conceivable that future cost estimates will exceed current available funding and/or local funds may expire, necessitating the identification of additional funding sources and/or debt financing. This could result in a) delays in progressing the project, b) changes to scope in order to align with identified funding and project cost.	12	3. Identify secondary mitigation and review with BART if additional cost pressures arise as applicable. 4. VTA CFO continues to perform stress test of the financial plan to address potential cost increases
BSV-036	General construction labor shortage / labor premiums resulting in delays or increased cost	With so many on-going concurrent projects in the state, and the potential for more projects ramping up due to Federal /State stimulus to create jobs, there may be a shortage of skilled labor to support aggressive project milestones. In addition, competition of resources for skilled labor (operators, electricians, tunnel moles, etc.) and equipment may create the need to pay a premium.	12	2. Continue to monitor economic trends. 3. Continue project public outreach efforts.
BSV-096	Testing and Commissioning delays due to various factors	Testing and commissioning delays due to: - Insufficient time allocated to the schedule for testing activities. - Unanticipated systems integration/interface issues. - Inadequate installation verification and QA/QC processes implemented. - Failed testing of equipment and/or testing parts requiring major rework. - Improper handoff from other CPs to systems contractor.	12	2. Develop detailed resources loaded schedule for system's testing, commissioning and training activities. 3. Rigorous implementation of lessons learned including integrating BART's Operations (Maintenance and Engineering) team into the design, construction and testing phases of the program. 4. PMT to work with GEC to ensure clear definition of the inspection and test conditions to be included in the CP1/3/4 contract documents as they constitute SOW definition. Also, PMT to work with the CP 2 Management Team to ensure KST technical deliverables clearly specify equivalent requirements for their contracted SOW. As part of the review process with BART and other stakeholders the intent is to give reviewers the opportunity to comment on the stated installation and test conditions specified. 5. Introduce the Rail Acceptance Officer early on during the testing phase. 6. Establish joint testing and commissioning organization, under an experienced systems integration manager. Ensure Project key personnel include: Interface/Integration Manager (Facilities Design), Systems Design Integration and Systems Testing/Start-Up Manager.

Risk ID	Risk Title	Risk Description	Risk Score	Action Items Description
BSV-152	Truck traffic volume for disposal of muck from the tunnel resulting in additional costs	The Oct 2023 revised cost estimate already includes cost of muck disposal via traditional haul/disposal (i.e., at disposal sites with added cost) via trucks at market rate. As the muck disposal is very costly, there is a risk that eventual disposal cost may be higher than currently estimated due to actual volume of trucks at West Portal that may strain public traffic requiring additional work constraints or limitations.	12	<ul style="list-style-type: none"> 4. Determine maximum and average truck count per day during TBM mining for removal of spoils. 5. Investigate market capacity of trucks. 6. Maximize truck capacity (load size) to increase spoils removal per truck. 7. Establish potential overflow location(s) on-site. 8. Consider weekend, extended hour hauling if required and allowed.
BSV-170	KST proposed Stage 2 Lump Sum price increase VTA CP2 budget	During the design development, potential challenges arising with scope growth, complicated means and methods, and current market conditions may result in KST proposed Stage 2 GMP higher than VTA's preliminary baseline.	12	<ul style="list-style-type: none"> 4. Review KST's 60% Design estimate to identify potential areas of major difference between VTA and KST and work throughout the Stage 1 period to resolve the difference. 5. Identify secondary mitigations to relieve pressure on VTA budget. 6. Collaborate on potential optimizations to reduce price of CP2 Lump Sum.
BSV-204	Delays in Temporary Power SNH construction and long-lead transformer procurement	Cause: Long-lead procurement of step-down transformer (from 115kV to 34.5kV) for TBM temporary power. Impact: Delays in construction of Substation Hameline (SNH) and power ready for PG&E drop-in.	12	<ul style="list-style-type: none"> 4. Coordinate with KST to obtain status of transformer order.

Source: BSVII Monthly Progress Report May 2024

F. Project Milestones/Key Events

Milestone	Planned Date
General Key Milestones	
Contract Package 1_Systems Design Bid Ready & Review	9-Mar-28
Contract Package 3_Newhall Yard and Santa Clara Station Design Bid Ready & Review	22-Jan-27
Contract Package 4_Stations and Support Facilities Design Bid Ready & Review	5-Oct-27
VTA Target Start of Revenue Service	12-May-37
FTA Target Start of Revenue Service	28-Feb-39
Construction Contracts Key Milestones	
Contract Package 1_Systems	
Contract Package 1 NTP Systems	18-Apr-29
Track Testing Completion	16-Oct-34
Systems Testing Completion Turn Over to BART	9-Nov-35
Contract Package 2_Tunnel and Trackwork	
Order TBM	31-Oct-23
Contract Package 2 NTP2 Tunnel & Trackwork	6-Jan-25
Deliver TBM	21-May-26
Start of Tunneling	6-Nov-26
Start of Trackwork	1-Nov-29
Contract Package 3_Newhall Yard and Santa Clara Station	
Contract Package 3 NTP Newhall Yard and Santa Clara Station and Parking Garage	3-Feb-28
Santa Clara Station Fit-Out Completion	4-Feb-32
Santa Clara Station Parking Garage Construction Completion	18-Dec-31
Newhall Yard Trackwork Completion	22-Jul-33
Contract Package 4_Stations	
Contract Package 4 NTP Stations and Support Facilities	18-Dec-28
Diridon Station Fit-Out Completion	12-Dec-33
DTSJ Station Fit-Out Completion	19-Aug-33
28th Street Station Fit-Out Completion	26-Aug-33
28th Street Station Parking Garage Construction Completion	5-Dec-33

Source: VTA's BART Silicon Valley Phase II Extension Project Basis of Schedule, New Starts Entry to Engineering Revision 0, March 25, 2024

G. Project Map

