

VTA's BART Silicon Valley Phase II Extension Project

Community Meeting

October 27th, 2021



Agenda

- Welcome and Introductions
- Phase II Overview & Update
- Stations
- Additional Project Elements
- Contracting Methodology
- Early Construction Activities
- Community Outreach
- How to Get Involved

Zoom Introduction

Communication Protocols:

- There is a Q&A feature at the bottom of the screen for you to type your questions in advance. We will be using this to manage questions.
- At the end of every presentation, we will devote up to 5 minutes per agenda item for Q&A.
- Joe or Kate will ask questions to our Subject Matter Experts.



Meet the Team Here Today



Adriano Rothschild
BSV External Affairs



Bernice Alaniz
BSV Director of External
Affairs



Erica Roecks
BSV External Affairs



Erin Sheelen
BSV External Affairs



Gabriela Newell
BSV External Affairs



Joe Clayton
BSV External Affairs



Kristen Mei
BSV External Affairs



Paul Hetu
Contract Package 2
Construction Manager



Phase II Overview & Update



Please be sure to share your questions in the Q&A box!

Phase II Project Leadership



Carolyn Gonot
General Manager / CEO



Takis Salpeas
BSV Project Delivery Chief



Bernice Alaniz
BSV Director of External Affairs



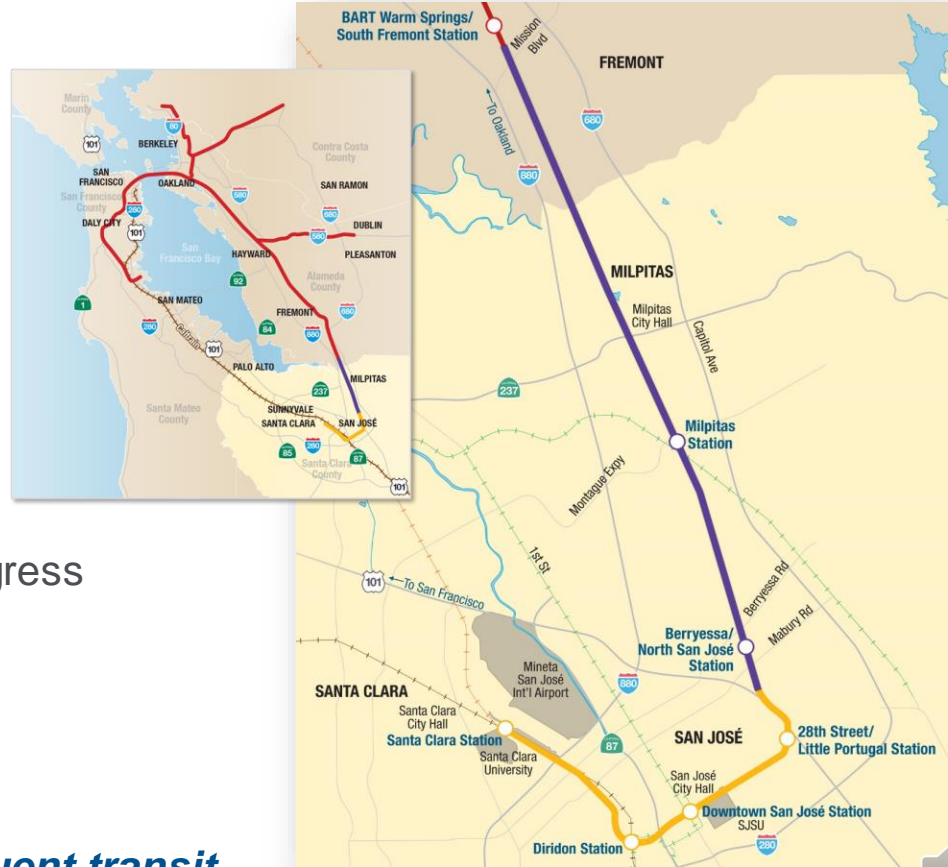
VTA's BART Silicon Valley Program

Phase I Extension (Complete)

- 10-mile extension
- 2-stations
- BART service started in 2020

Phase II Extension

- 6-mile extension (5-mile subway)
- 4-stations
- 2 Mid-Tunnel Ventilation/Emergency Egress Facilities
- Newhall Maintenance Facility



Ringling the Bay with fast, frequent transit



Project Benefits

Benefits



Ringling the Bay

Enjoy a one seat ride from San José and Santa Clara to destinations all around the Bay Area through frequent and reliable transit.



A faster ride

Skip traffic lights and congestion by hopping on BART. Read, text, or listen to music and you'll be at your destination before you know it.



Economic vitality

In addition to jobs created during engineering and construction, the Phase II Project will connect communities to thousands of jobs around the Bay.



Reducing Construction Impacts

Our innovative single-bore construction style keeps most impacts below ground, leaving streets and services largely undisturbed, minimizing impacts to the extent possible.



Spurring transit oriented communities

A once in a century opportunity to create equitable and walkable places to live, work, shop, and play through compact, mixed-use development around transit.







Cleaner air

With improved transit and transit oriented communities, there's less need to drive. Fewer car trips means reductions in greenhouse gas emissions.





VTA & BART Partnership

Santa Clara County is not part of the BART district. A “Comprehensive Agreement” and an “Operations and Maintenance Agreement” provide a framework for the partnership.

Santa Clara Valley Transportation Authority (VTA) Responsibilities

-  Pay all costs associated with the extension
-  Contracting/Procurement
-  Construct to applicable BART/industry standards, codes, and regulations
-  Retain ownership of infrastructure

Bay Area Rapid Transit (BART) Responsibilities

-  Technical assistance
-  Operations
-  Maintenance
-  Service planning

An integrated VTA and BART team, the Rail and System Organization (RSO) has been established and is responsible for developing project specific requirements defining the applicable BART, federal, state, and local industry standard.

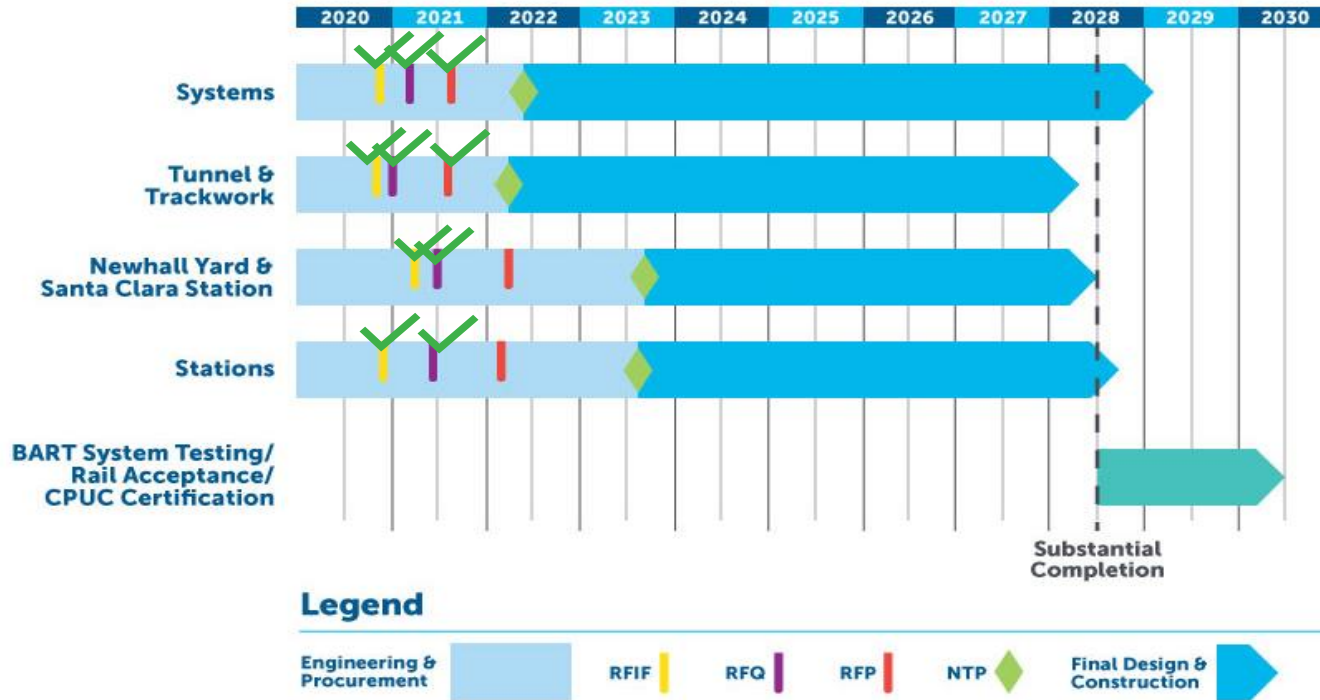


Timeline

Schedule



Contracting Updates



- **Stations Request For Proposal** to be released February 2022
- **Santa Clara Station & Newhall Yard Request For Proposal** to be released March 2022



Funding Strategy

- 75% of the project is funded by Local sales tax (2000 Measure A & 2016 Measure B) and state grants
- Remaining 25% of project funding from Federal Transit Administration (FTA)
- VTA's BART Phase II is the first project to be accepted into FTA's Expedited Project Delivery (EPD) Pilot Program
- FTA has pledged a total of \$225M towards Project funding as of January 2021
- VTA received a Letter of Intent for a Full Funding Grant Agreement (FFGA) from FTA on October 25, 2021



Former FTA Acting Administrator Williams (second from left) announcing \$125 million funding pledge to VTA's BART Silicon Valley Extension in August 2019.

Questions & Comments



Stations



Please be sure to share your questions in the Q&A box!

Phase II Project

6-Mile Extension of BART Service

Innovative Single-Bore Tunnel

- 1.5-mile single-bore stacked
- 3.5-mile single-bore side-by-side
- 1-mile at-grade

4 New BART Stations

- 3 underground platforms with above-ground station entrance buildings
- 1 ground-level platform

2 Mid-Tunnel Facilities

Newhall Yard & Maintenance Facility



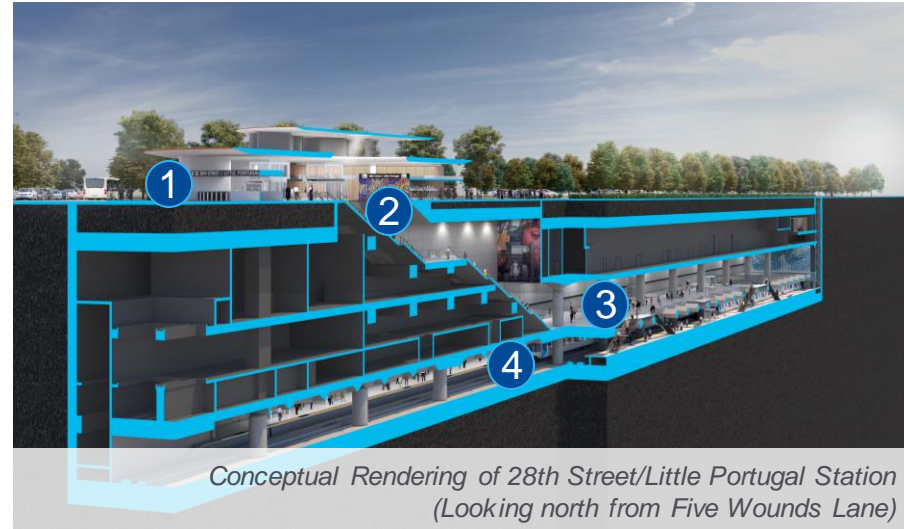
28th Street / Little Portugal Station

LEGEND

- Station Entrance Building
- Station Platform (Underground)
- At-Grade Vent/Egress Facilities
- Station Access Facilities, Parking, and Future Potential Transit-Oriented Development
- Construction & Staging Areas (under consideration)
- Station Entrance & Exit
- Tunnel

NOTE:

- Temporary and intermittent lane and street closures expected in Construction & Staging Areas.
- This is a planning document subject to change.



- 6,700 weekday riders anticipated by 2040
- Onsite parking for 1,200 vehicles
- Bicycle parking
- Short walk from future Bus Rapid Transit stop

- 1 Station entrance building at street level
- 2 Vertical circulation elements
- 3 Concourse
- 4 Side-by-side platforms

28th Street / Little Portugal Station



- Potential for Transit-Oriented Development
- Connection to future Five Wounds Trail
- Station Plaza for community events



PRELIMINARY IMAGES. SUBJECT TO CHANGE.

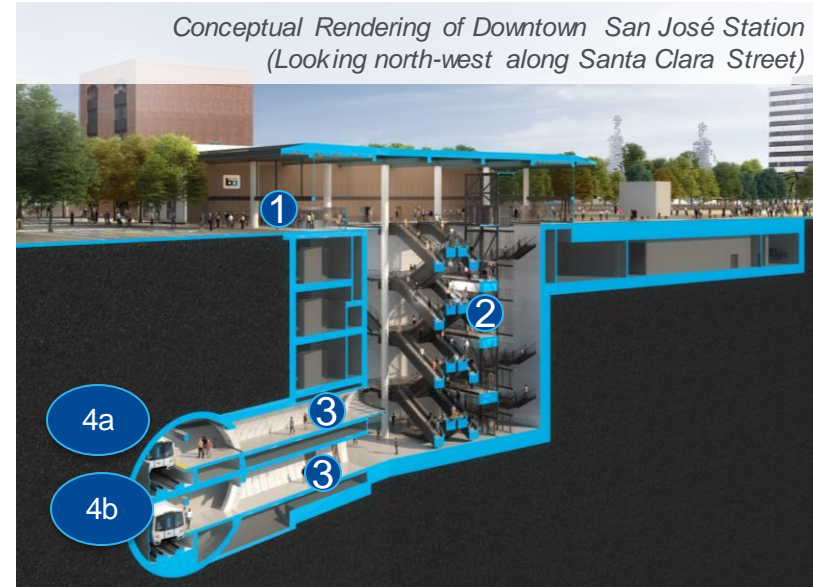
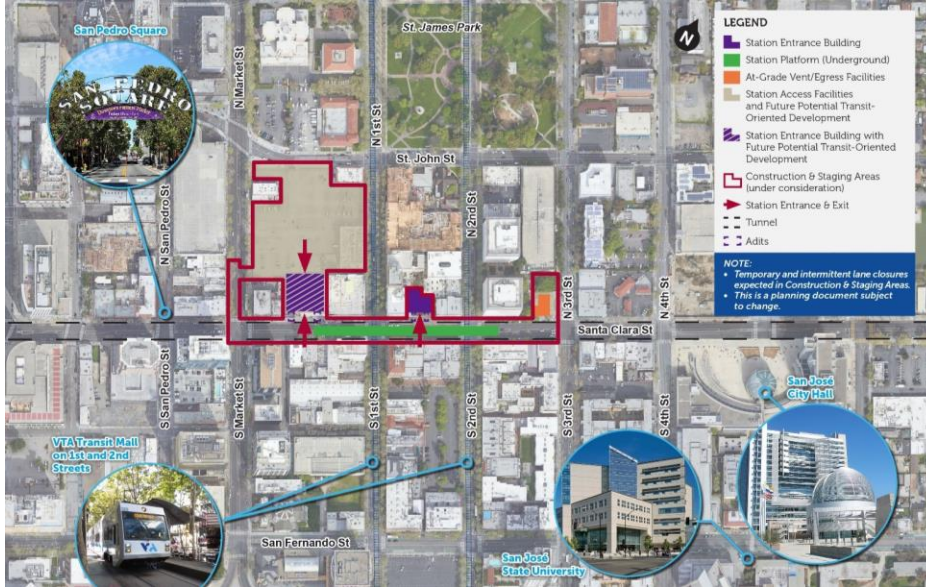


An architectural rendering of a transit station. The station features a prominent, curved, light-colored roof that extends over a wide, open plaza. The plaza is populated with various people, including a man in a suit playing a saxophone, a woman in a black top and patterned skirt, and a man in a red shirt. In the background, the station's entrance is visible, with people walking through it. The scene is set outdoors with trees and a clear sky.

DISCLAIMER

Video is for illustrative purposes only to provide insight into layout of core station components. Not all information in this video is current. Please see website and survey for current information on specific architectural finishes and to provide your feedback.

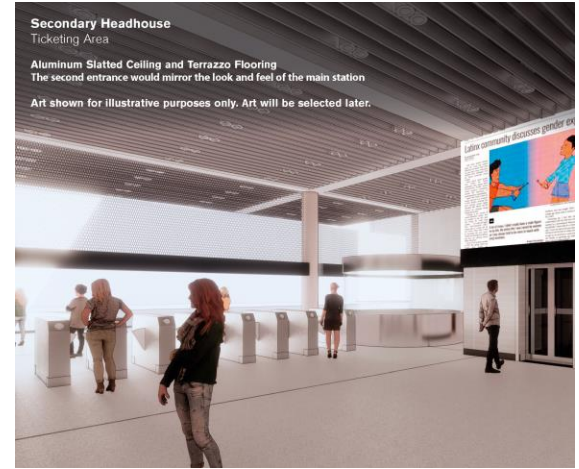
Downtown San José Station



- 27,900 weekday riders anticipated by 2040
- Two entrances on Santa Clara Street
- Ticketing and fare gates at street level
- Integrated with future potential TOD

- 1 Station entrance building at street level
- 2 Escalators and Elevators
- 3 Concourses
- 4 Stacked platforms: 4a – southbound
4b – northbound

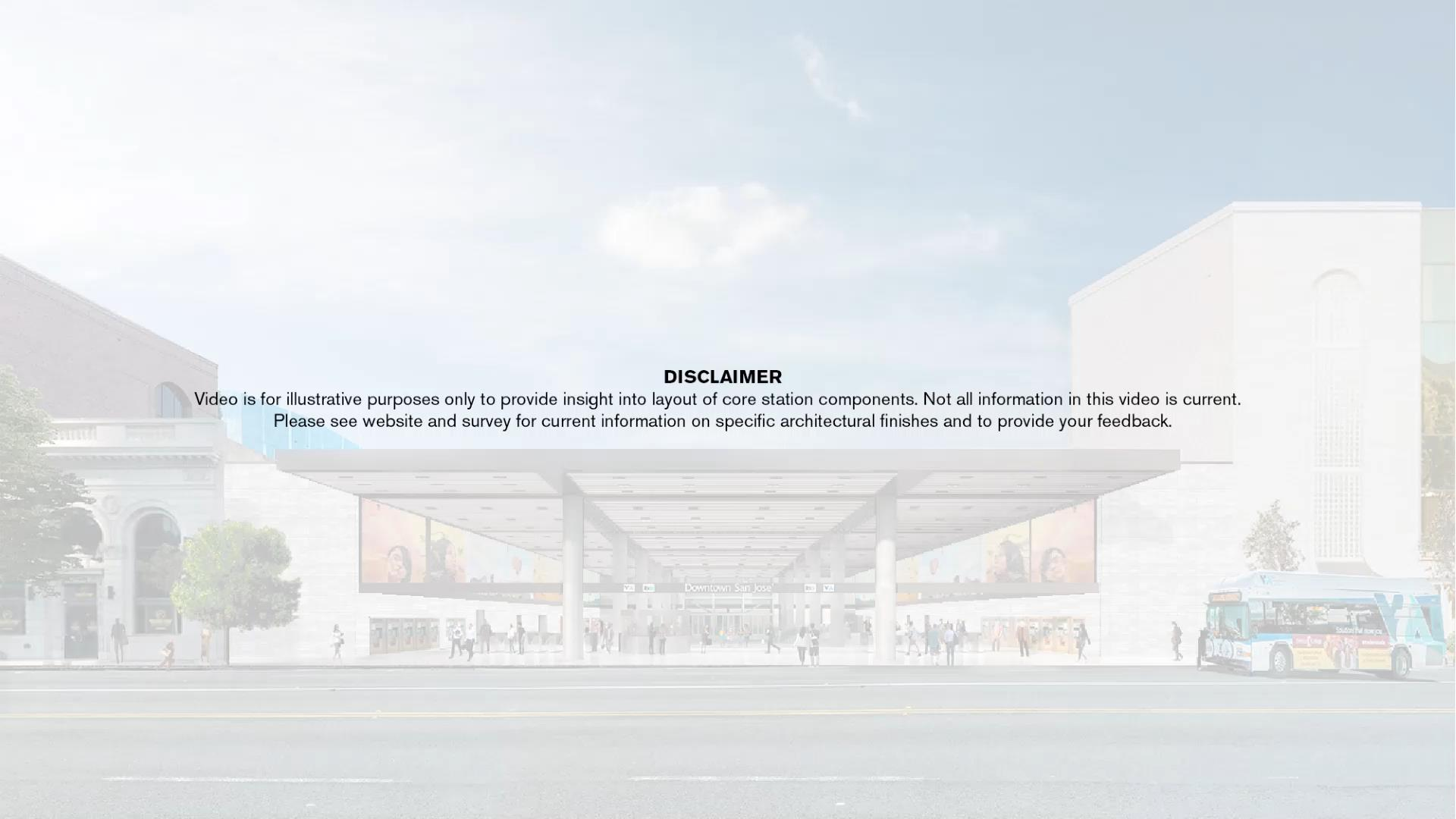
Downtown San José Station



- Bike parking will be provided and easy connections to VTA bus and light rail
- Within walking distance to SJSU, City Hall, and numerous restaurants and venues

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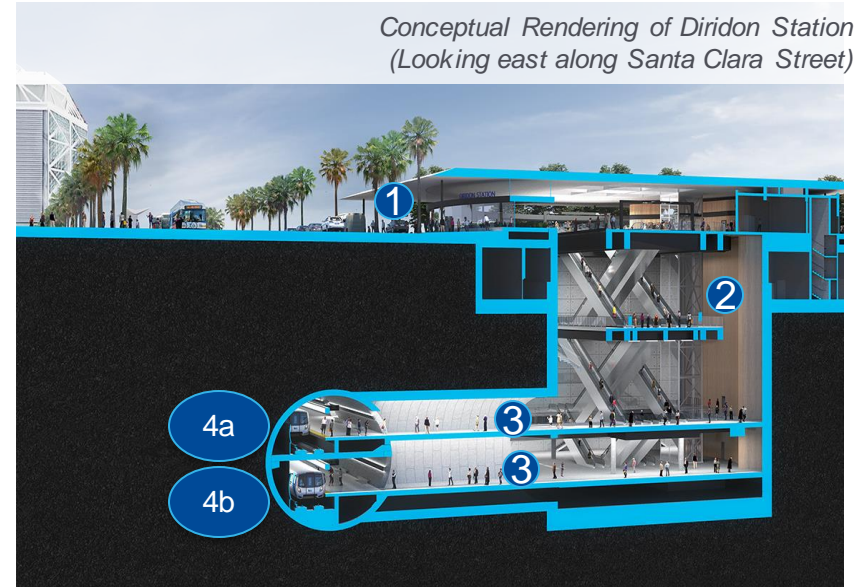
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Diridon Station

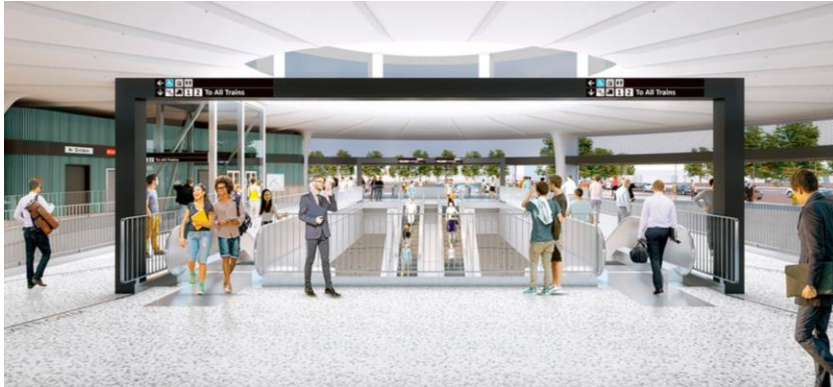


- Station entrances on Cahill and Montgomery Streets
- 9,900 weekday riders anticipated by 2040
- Ground-level connections to Diridon Caltrain Station and Transit Center



- 1 Station entrance building at street level
- 2 Escalators and Elevators
- 3 Concourses
- 4 Stacked platforms: 4a – southbound
4b – northbound

Diridon Station



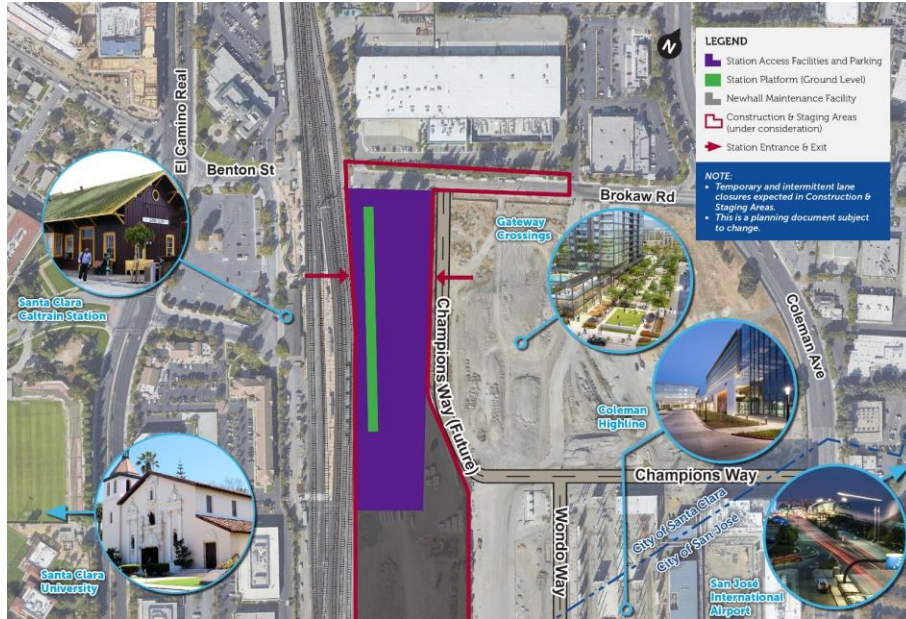
- Across from SAP Center, Downtown West, and the future Diridon intermodal station

An architectural rendering of the Diridon Station entrance. The building features a large, curved, light-colored roof that extends over the entrance area. The entrance itself is a wide, open space with glass doors and walls. Above the entrance, the words "DIRIDON STATION" are written in large, white, sans-serif capital letters. To the left and right of the entrance, there are small logos for "VA" and "BART". The scene is populated with numerous people of various ages and styles of dress, walking in different directions, suggesting a busy transit hub. The sky is a clear, light blue with some light clouds. The overall aesthetic is modern and clean.

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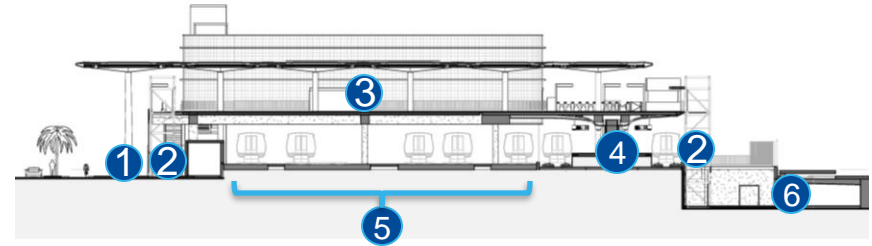
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Santa Clara Station



- The station is a two-track, center platform at grade structure with an elevated concourse
- Adjacent 500 space parking garage situated above yard storage and transfer tracks

Conceptual Rendering of Santa Clara Station
(Looking southeast from Brokaw Road)



- 1 Station entrance
- 2 Escalators and Elevators
- 3 Elevated Concourse
- 4 Platform
- 5 BART Storage Tracks
- 6 Existing Pedestrian Undercrossing

Santa Clara Station



- 10,100 weekday riders anticipated by 2040
- Connection to Gateway Crossings and Santa Clara Caltrain Station
- Bike parking
- Walking distance to Santa Clara University, PayPal Park



PRELIMINARY IMAGES. SUBJECT TO CHANGE.



An architectural rendering of a transit station. On the left, a modern building with vertical wooden slats and a large, white, curved canopy supported by tall columns. The canopy covers a walkway with a bicycle lane and a pedestrian path. People are walking and cycling. In the foreground, a road with cars is visible. On the right, a brick building and trees are shown. The sky is blue with some clouds.

DISCLAIMER

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Questions & Comments



Additional Project Elements



Please be sure to share your questions in the Q&A box!



NOT TO SCALE

LEGEND

- Phase I (Complete)
- Phase II Ground-Level
- Phase II Subway
- Maintenance Facility

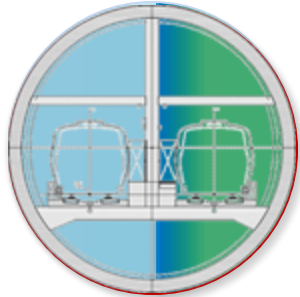


Single-Bore Tunnel

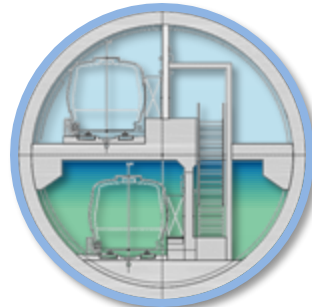
- 5-mile long single-bore tunnel
- First use of single-bore for transit in North America
- Approximately 43 ft. internal diameter
- Allows for construction of station platforms within tunnel lining
- Substantially reduces street-level construction impacts
- Throughout the tunnel, track configuration will change between side-by-side and stacked



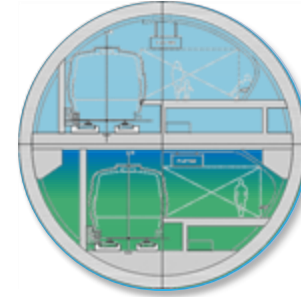
*Example Tunnel Boring Machine
Photo Credit: Herrenknecht*



Side-by-side Track Configuration



Stacked Track Configuration



Stacked Station Platforms

Mid-Tunnel Facilities

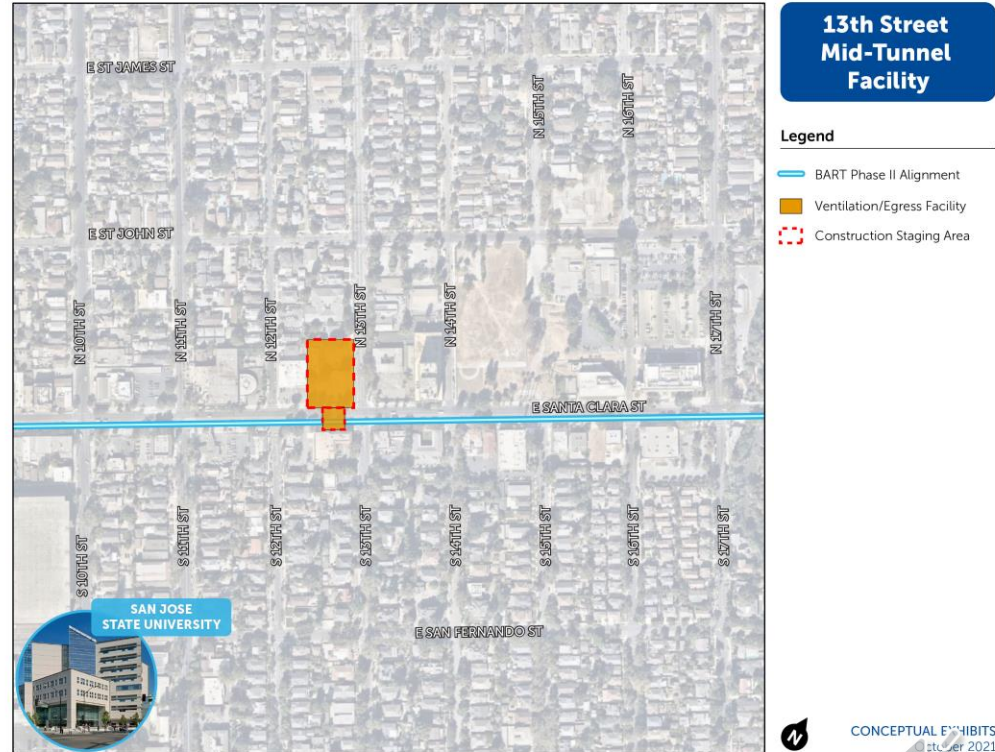


*Example of a mid-tunnel facility on Stockton Avenue
Source: Final SEIS/SEIR*

- Phase II will have two mid-tunnel facilities:
 - Santa Clara Street at 13th Street
 - Stockton Ave at Schiele Ave
- Mid-Tunnel Facilities provide:
 - Air pressure relief from passing trains
 - Emergency egress
- Facility will be enclosed designed to be unified with the surrounding urban environment.

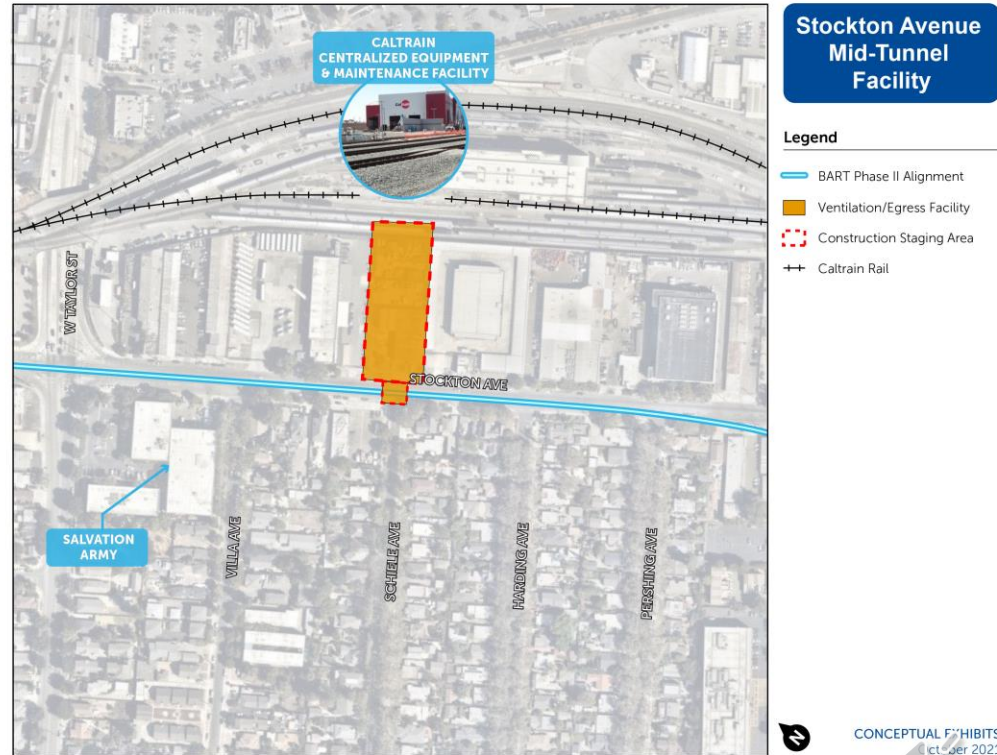
13th Street Mid-Tunnel Facility

- Located on the northwest corner of 13th and Santa Clara Streets
- Frontage along Santa Clara Street will allow for future potential Transit-Oriented Development (TOD)
- VTA engaged surrounding community in 2008 to collect feedback on future facility's aesthetics
- VTA will engage community on facility's construction methods



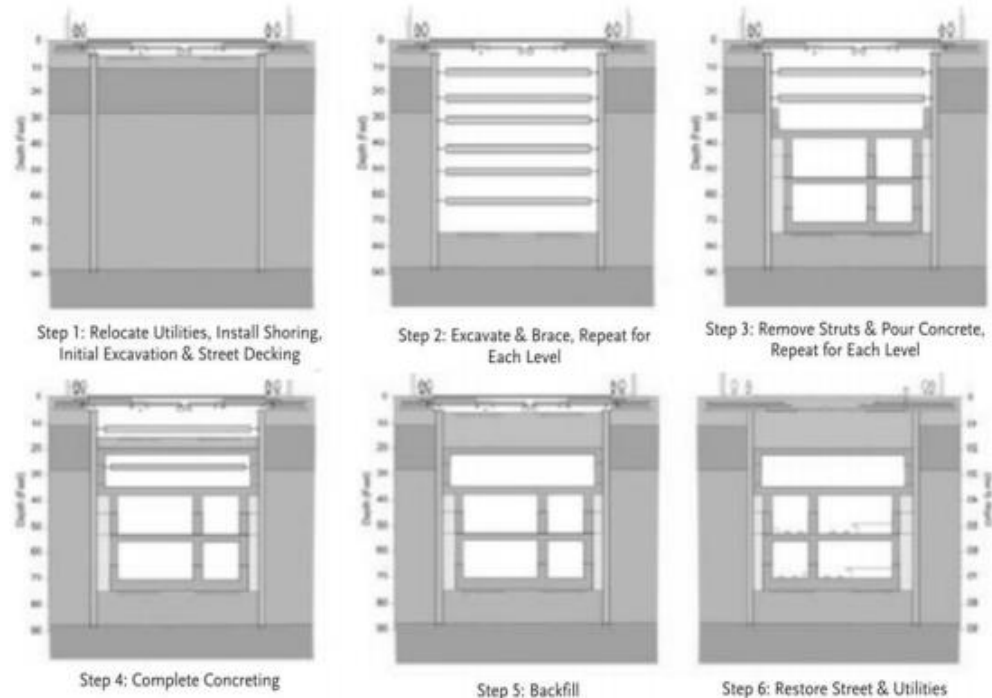
Stockton Avenue Mid-Tunnel Facility

- Located on Stockton and Schiele Avenues
- VTA will integrate the facility into the existing neighborhood characteristics and include mixed-use development.
- VTA to engage the surrounding community on facility's aesthetics and construction methods



Mid-Tunnel Facilities Construction Method

- **Cut-and-cover construction** involves digging down from the ground surface, installing decking over the street, constructing the underground facilities, and then backfilling and restoring the surface once construction is completed
- Current engineering includes limited cut-and-cover construction at the two mid-tunnel facilities



Cut-and-cover construction process

Example of Street Decking – Cut-and-cover Construction



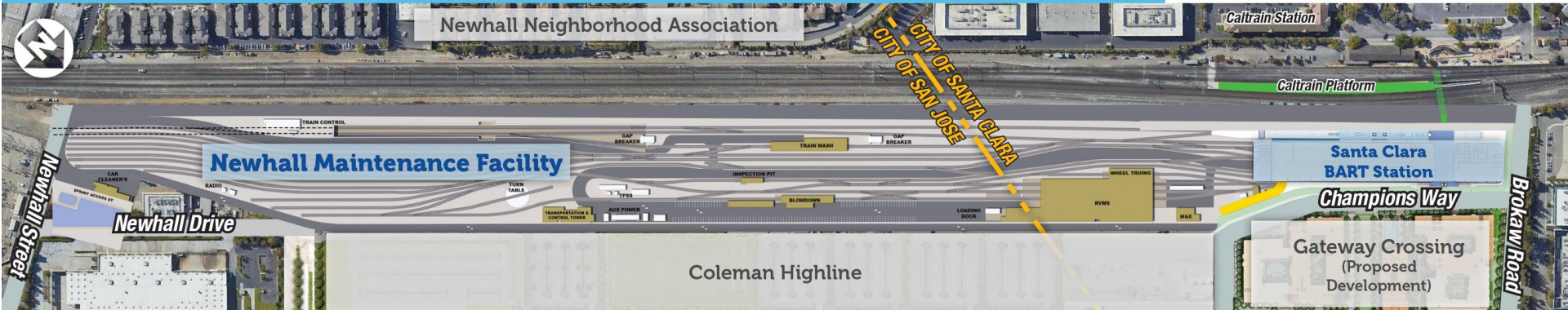
Newhall Maintenance Facility

The Newhall Maintenance Facility will consist of the following structures:

- Vehicle Maintenance Shops
- Control Tower
- Train Car Wash Facility
- Various train control, power, and communications facilities

Newhall Maintenance Facility and Santa Clara Station

VTA's BART Silicon Valley Phase II Extension Project



Preliminary Concept - Subject to Change (Draft as of 10/15/21 - For Internal Discussions Only)

Questions & Comments



Contracting Methodology



Please be sure to share your questions in the Q&A box!



BSV Phase II Contracting Plan

Contract Package	Title	Delivery Method	General Scope*
CP1	Systems (Approx. contract value \$500M)	Design-Build (DB)	<ul style="list-style-type: none"> All rail system elements
CP2	Tunnel & Trackwork (Approx. contract value \$2,500M)	Progressive Design-Build (PDB)	<ul style="list-style-type: none"> Tunnel & trackwork Mid-tunnel facilities 28th Street/Little Portugal support of excavation Utility relocations as required Stations Support of Excavation & Connecting Adits
CP3	Newhall Yard & Santa Clara Station (Approx. contract value \$500M)	Design-Build (DB)	<ul style="list-style-type: none"> Yard & Maintenance Facility Line & track Santa Clara Station 500 space parking garage Utility relocations as required
CP4	Underground Stations (Approx. contract value \$500M)	Design-Build (DB)	<ul style="list-style-type: none"> 28th Street/Little Portugal, Downtown and Diridon stations 1,200 spaces parking (28th Street/Little Portugal Station) Utility relocations as required

**Final scope elements under evaluation.*



Progressive Design-Build

- Similar to Design-Build but incorporates contractor involvement earlier. Ability to mobilize design efforts earlier
- Contractor selection primarily qualifications based
- VTA provides preliminary design and works with the contractor in collaborative process through the initial design phase and construction
 - Avoids creating a design that is less feasible and/or more expensive to construct.
 - Cost is evaluated iteratively using transparent “open book” estimates
 - Maximizes innovation and progressive de-risking of the project



BSVII Progressive Design Build Process

Stage 1

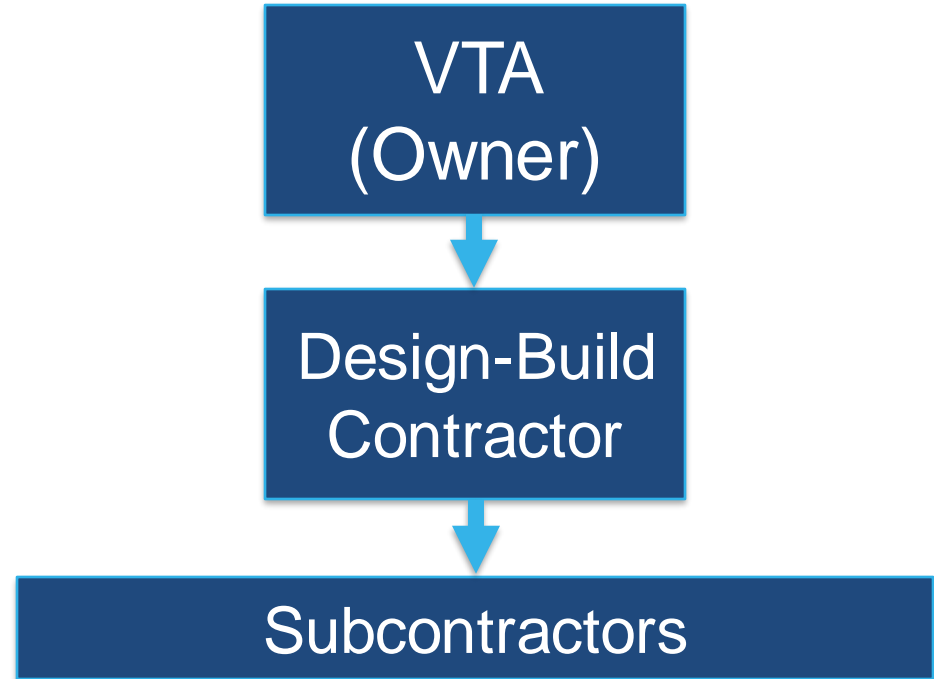
- Progressive Design Build Contractor to collaborate with VTA, City of San José, and the community
- Advance preconstruction design (10% to 90%)
- Preconstruction activities, such as any additional geotechnical work and utility relocation
- Early work items such as Tunnel Boring Machine portal preparation and temporary power

Stage 2

- Progressive Design Build Contractor to provide proposal including construction cost, schedule, and risk mitigation proposals
- Complete design
- Progress construction to completion

Design-Build

- Combines architectural, design, and construction services into one contract:
 - Single-point of management
 - Simplified procurement but requires detailed scope of work, specification and performance criteria
- Cost competitive but driver is usually schedule as opposed to price
- Not a risk transfer tool
- Cost known for provided scope of work at contract award
- VTA involvement minimal after selection



Questions & Comments

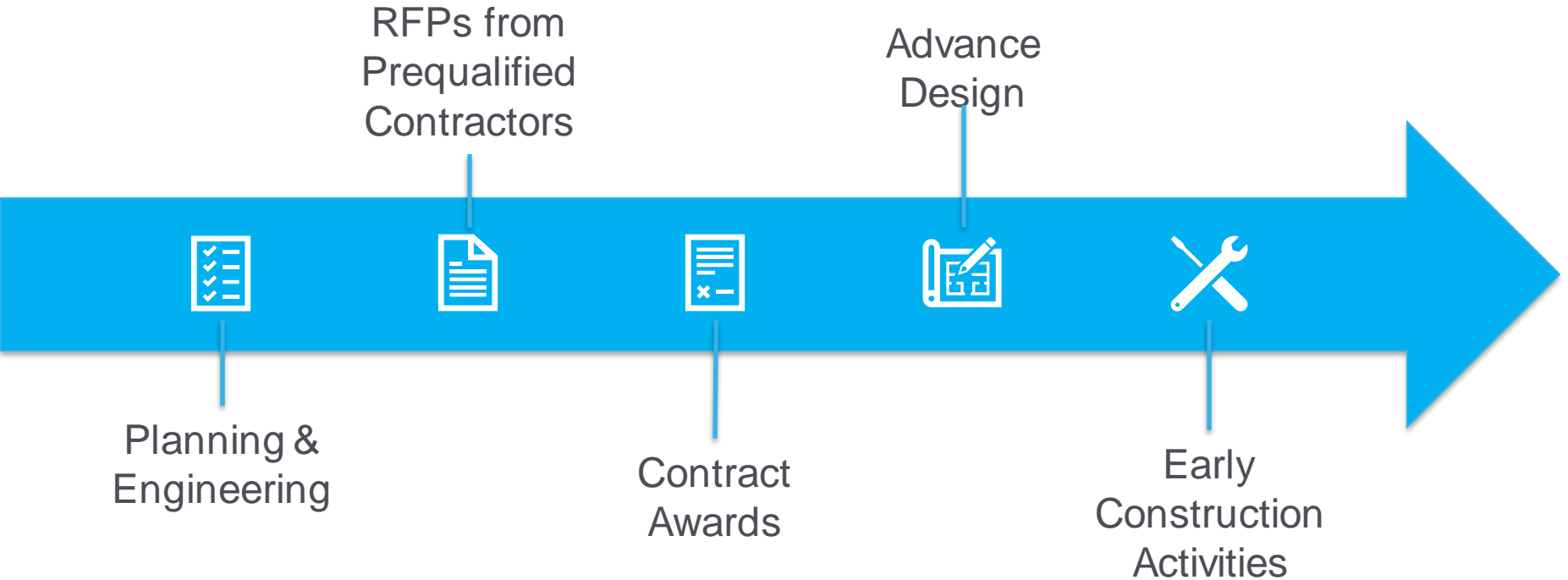


Early Construction Activities









Please be sure to share your questions in the Q&A box!

What is the Process?



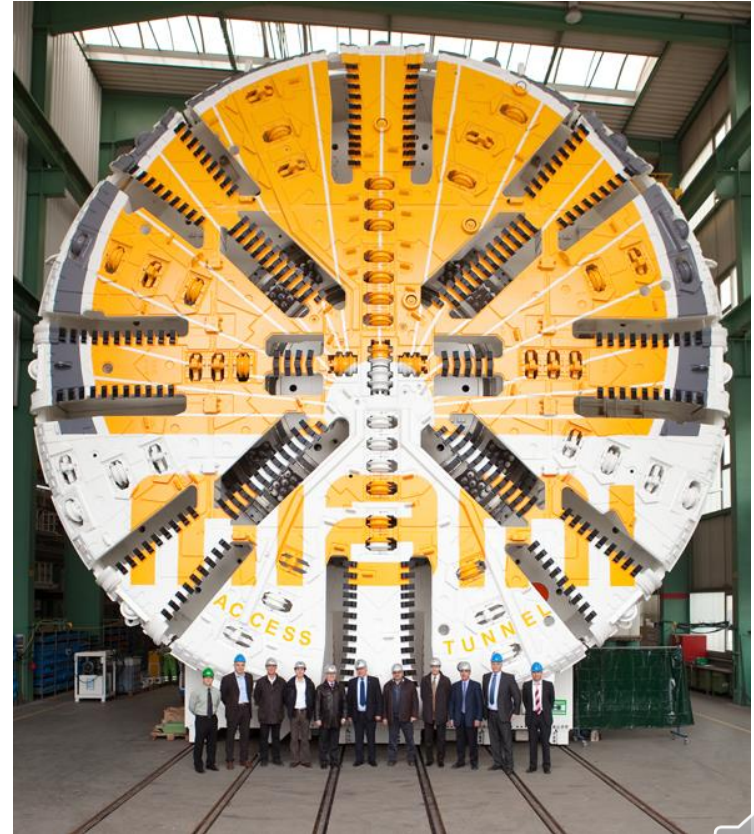
What to Expect

- Preparatory work will happen at various sites along the alignment
- Preliminary list of work types that are subject to change
- Once the Contract is awarded, a more defined schedule will be available

	Type of Work	Location	Activities & Purpose
	Utility Relocations	West Portal, Stockton Avenue Mid-Tunnel Facility	Relocate utilities to provide space for facility footprint
	Building Demolition	Downtown San José Station	Remediate hazardous materials and demolish buildings for station entrances
	Soil Sampling	West Portal, Newhall Yard and Maintenance Facility	Establish amount of soil that require remediation and special handling
	Preliminary Excavation	West Portal	Build Tunnel Boring Machine launch pit at West Portal
	Production & Storage of Tunnel Lining Segments	West Portal	Prepare for tunneling operations with a supply of concrete tunnel segments
	Survey & Instrumentation Installation	Alignment-wide	Establish monitoring and survey baseline measurement along the tunnel alignment

Pressurized Tunnel Boring Machine

- Tunnel Boring Machine (TBM) methods must match ground conditions
 - Phase II alignment has soft soil conditions
- TBM creates tunnel as it removes soil, rocks, and debris (together known as 'muck') and progresses through the alignment



Example TBM

Tunnel Boring Machine Assembly



Portal (Tunnel Boring Machine Launch and Exit Area)



TBM Launch Portal



TBM Exit Portal

Tunnel Boring Machine Start of Excavation

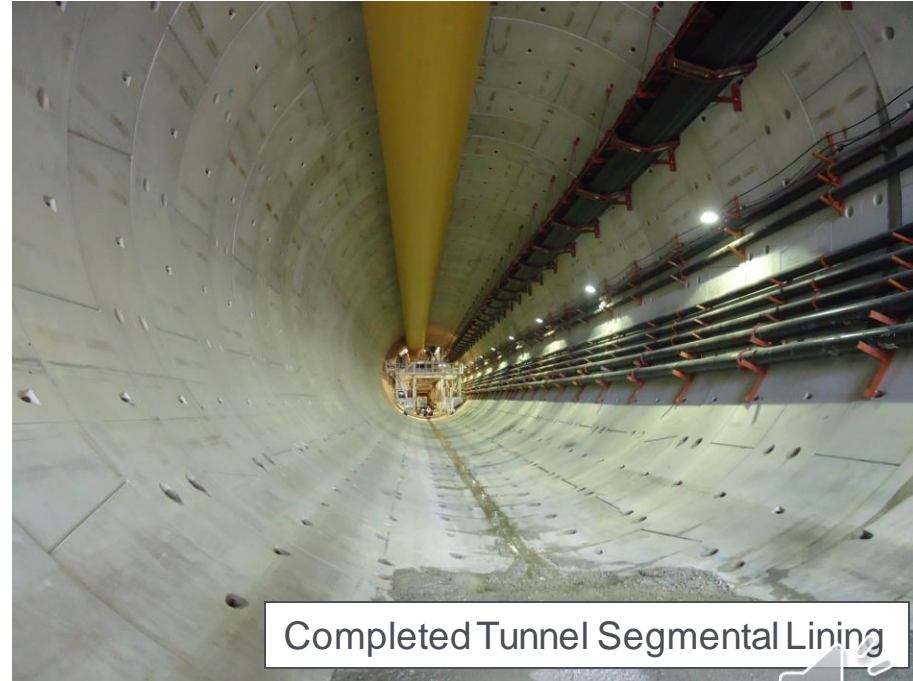


Tunnel Segmental Lining

The tunnel is made up of pre-cast segments. Segments will be stored at Newhall Yard and transported into the TBM. The TBM puts segments in place and seals to create the tunnel.



Tunnel Segment Lining Storage

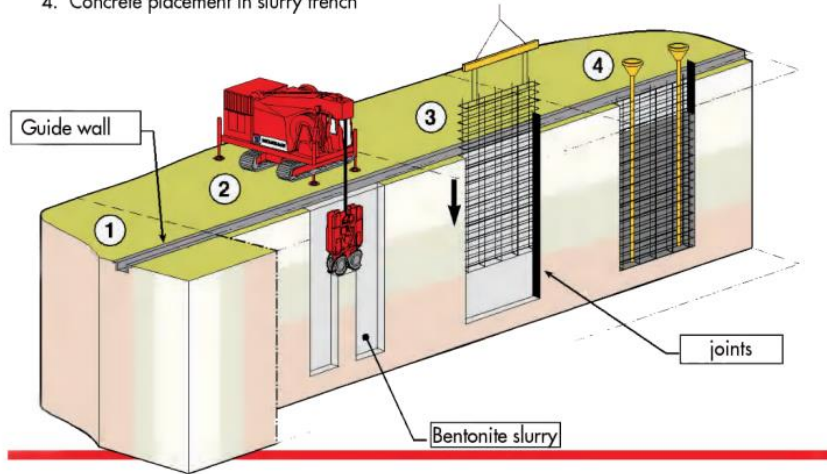


Completed Tunnel Segmental Lining

Support of Excavation (SOE) - Slurry Wall

In general, slurry wall construction consists of four major steps:

1. Guide wall construction
2. Panel excavation in slurry trench
3. Rebar cage placement
4. Concrete placement in slurry trench



Source: VTA, 2011

A slurry wall is an engineering technique used to build reinforced concrete walls in areas of soft ground with a high groundwater table. This technique is typically used to build walls surrounding tunnels and open cuts.

Construction Outreach Channels

- Field offices with signage
- 24/7 Hotline will be available in English, TTY, Español, Tagalog, Português, 粵/華語, Tiếng Việt, 한국인
- Email at vtabart@vtabsv.com



Questions & Comments



Community Outreach



Please be sure to share your questions in the Q&A box!

Construction Outreach Management Program

Construction Outreach Management Program



Construction Education and Outreach Plan (CEOP):

communication during construction between VTA, cities of San José and Santa Clara, and the public



Construction Transportation Management Plan (CTMP):

coordinate circulation and access needs within and around the construction areas for all transportation options



Emergency Services Coordination Plan (ESCP):

coordinate with local emergency services to minimize impact to emergency service routes and response times due to construction activities

Construction Education & Outreach Plan (CEOP)



Five Elements

- **General Outreach** – Raise visibility along the alignment and beyond
- **Stakeholder Engagement** – Build relationships with those most touched by the project
- **Business Resources** – Support during construction
- **Placemaking/Activation** – Enhance access and awareness during construction
- **On the Radar** – Coordinate with other projects in area on messaging and communications

General Outreach



Examples of General Outreach



24/7 Emergency Hotline



Field Offices

Location:
On the western side of Stockton Avenue, just south of Emory Street.

Approximate Start Date and Duration of Work:
January 26 - January 31, 2020
Up to two weeks in the area shown on the map.

General Work Hours:
8 a.m. - 4:30 p.m., Monday - Friday
No weekend work is anticipated.

Impacts:
At least one lane of traffic will be open at all times when the work is being performed. Street areas will be restored once work is complete.
Parking will be impacted.
Neighbors can expect noise and

Notice of Construction
The first utility field work of VTA's BART Phase 8 Project is starting, although major construction is not expected to begin until summer 2022. Geotechnical, utility, and other sub-surface data is required to further develop design plans for the project's four stations and tunnel.

VTA's BART Silicon Valley Phase 8 Project is a six-mile, four-station extension that will bring BART train service from Fremont/San Jose Area through downtown San Jose to the City of Santa Clara. The Phase 8 Project is planned to include an approximately 1.5-mile tunnel with includes three underground stations (20th Street, de Portugal, Downtown San Jose, Lincoln), one ground-level station (Santa Clara), as well as several road construction

Construction notifications two weeks prior to activity



Coordinate construction activities around public events and holidays

Stakeholder Engagement



Examples of Stakeholder Engagement



Monthly construction coordination meetings



Safe Routes to Schools Engagement
(28th Street/Little Portugal)



Coordination meetings with transit providers as needed



Outreach effort for Stockton Avenue mid-tunnel facility

On the Radar



Coordinate with Cities and developers on ongoing and upcoming adjacent construction projects



Coordinate with Cities on wayfinding, messaging, street closures, and detours



Monitor that all construction parking is within the construction staging areas

Business Resources



Examples of Business Resources



Design and implement business-oriented marketing campaign



Promote access to businesses during construction



Develop and implement a social media campaign supporting businesses



Continue Small Business Task Force

Placemaking & Activation



Host milestone events



Install and maintain graphic panels along construction staging areas

Construction Transportation Management Plan



Construction Transportation Management Plan (CTMP):

- Developed for upcoming construction annually to reflect upcoming construction activities
- Conducted over 30 business interviews & surveys
- Coordinated with fire and emergency services

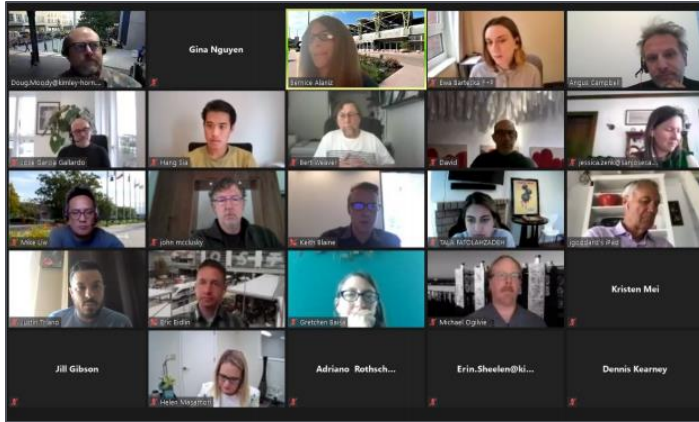


Emergency Services Coordination Plan (ESCP):

- Developed in close coordination with fire & police representatives
- Sets requirements & processes for coordination between contractor(s) & local emergency services to minimize construction-related impacts to emergency service routes and response times.
- Included as an attachment to the Draft CTMP and will be reviewed and finalized concurrently with each Contract-Specific CTMP.



Community and Stakeholder Input



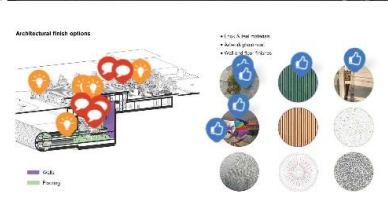
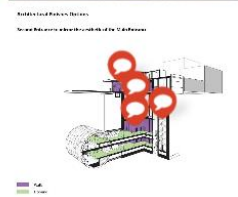
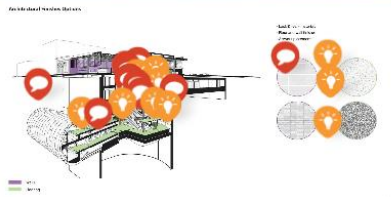
VTA collects community and stakeholder input through:

- Quarterly Community Working Groups
- Board Meetings
- Design Review Committees
- Response to community inquiries
- Small Business Operations Survey
- Small Business Task Force
- Access & Service Needs Interviews
- One-on-One stakeholder briefings



Community Engagement – Stations Look & Feel

- Interactive online platform for community feedback on station aesthetics
 - **270+** comments from **2,000+** visitors
- Five tabling events in September
 - **500+** people engaged, **400+** responses from **120+** respondents



Questions & Comments

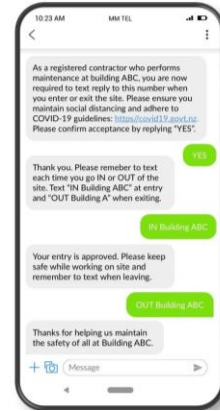


How to Get Involved



How do I learn more about the project?

- MyVTA (SMS alerts)
- Website
- Fact sheets
- Social Media
- Community Meetings
- Tailored Group Presentations



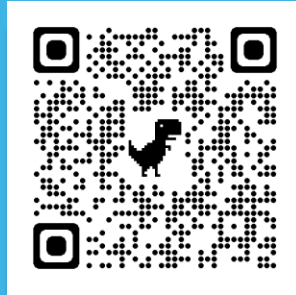
Get Involved with the Phase II Project!

- Subscribe to Updates
www.vta.org/bart
- Email vtabart@vtabsv.com
- Follow us on Facebook and Twitter @bartsv



Visit and sign up to receive updates at

www.vta.org/bart



Thank you!