

# VTA's BART Silicon Valley Phase II Extension Project

Santa Clara Community Working Group  
September 13, 2018



# Agenda

- Follow-up Items & Work Plan
- Government Affairs Update
- Phase II Update
- Construction Education and Outreach Plan
- Relocation Planning
- Transit Oriented Development Strategy & Access Planning Studies Update
- Next Steps

## Role of the CWG

- Be project liaisons
- Receive briefings on technical areas
- Receive project updates
- Build an understanding of the project
- Collaborate with VTA
- Contribute to the successful delivery of the project



## Your Role as a CWG Member

- Attend CWG meetings
  - Bring your own binder (BYOB)
- Be honest
- Provide feedback
- Get informed
- Disseminate accurate information
- Act as conduits for information to community at large



## Role of the CWG Team

<b>CWG Team Member</b>	<b>Role</b>
Eileen Goodwin	Facilitator
Gretchen Baisa	Primary Outreach Contact
Jill Gibson	Phase II Planning Manager
Erica Roecks	Technical Lead
John Davidson	City of Santa Clara – Planning Liaison
Jessica Zenk	City of San Jose – DOT Liaison
Charla Gomez	City of San Jose – Planning Liaison



# Upcoming Meetings

## **New CWG Dates**

**<http://www.vta.org/bart/upcomingmeetings>**

- November 15, 2018 4:00 – 5:30 PM
- February 7, 2019, 4:00 – 6:00 PM
- April 18, 2019, 4:00 – 6:00 PM

## **VTA Board of Directors**

**<http://www.vta.org/get-involved/board-of-directors>**

- October 4, 2018 – 5:30 PM
- November 1, 2018 – 5:30 PM

## **Diridon Station Joint Policy Advisory Board**

**<http://www.vta.org/get-involved/policy-advisory-board/diridon-station-joint-policy-advisory-board>**

- December 14, 2018 – 3:00 PM



# Follow-Up Items



## Follow-Up Items

- Link to the TOD/Access Study Background Conditions Report and Station Profiles was emailed to CWG members
- Will update CWG members when station naming item is on future VTA Board agendas
- New funding plan will be distributed when it's developed





# Government Affairs Update

Aaron Quigley, VTA



# Proposition 6

## What is it?

- A California constitutional amendment repealing Senate Bill 1 (SB 1)
- On the November 2018 ballot
- VTA Board adopted a resolution in opposition

## Impact

- Eliminates new SB 1 fuel taxes and Transportation Improvement Fees (TIF)
- Requires voter approval of future fuel taxes and vehicle fees
- Jeopardizes BART, Phase II funding from Transit and Intercity Rail Program

# Other Funding Sources

## Regional Measure 3

- A \$3 toll increase on the region's seven state-owned bridges, phased in by 2025
- Provides \$375 million for the BART Silicon Valley Extension, Phase II
- Approved by 55% of voters across the nine Bay Area counties on June 5, 2018
- Legal challenge filed in July, 2018

## 2016 Measure B

Projected to generate \$6.3 billion over 30 years:

- Funding for BART Silicon Valley Extension Phase II capped at \$1.5 billion
- In appellate court, hearing schedule TBD



*Solutions that move you*

# AB 2923 (Chiu)

Promotes transit-oriented development (TOD) near BART stations

- Applies only to the BART district, not Santa Clara County
- Requires new TOD zoning for parcels near stations by July 1, 2022
- Establishes minimum height, density, parking, and floor area ratio requirements

## Status

Sent to the Governor for signature of veto on August 29



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# Phase II Update

**Erica Roecks, VTA**

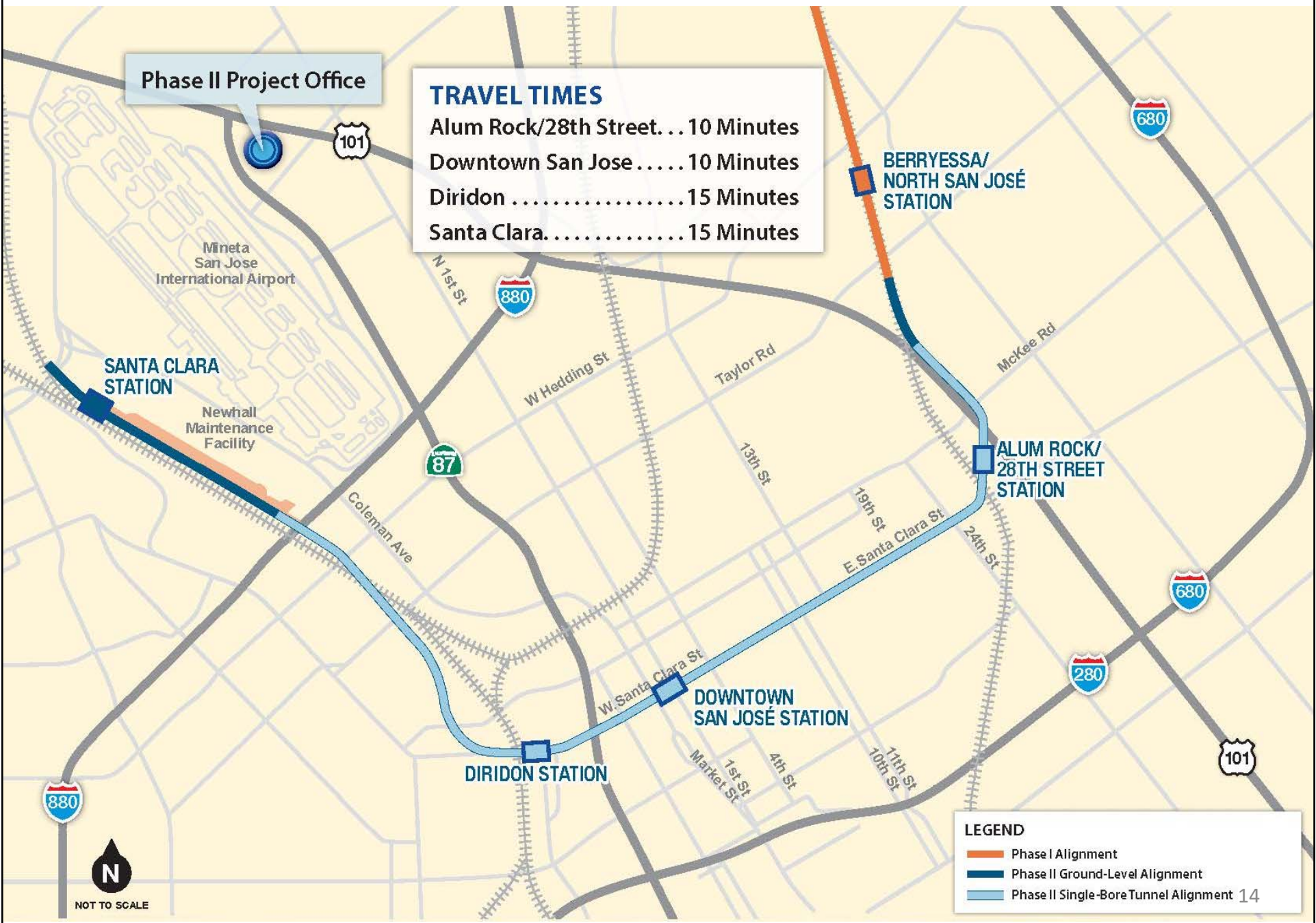
**Krishna Davey, VTA**



Phase II Project Office

**TRAVEL TIMES**

Alum Rock/28th Street	10 Minutes
Downtown San José	10 Minutes
Diridon	15 Minutes
Santa Clara	15 Minutes



**LEGEND**

- Phase I Alignment
- Phase II Ground-Level Alignment
- Phase II Single-Bore Tunnel Alignment 14

**N**  
NOT TO SCALE

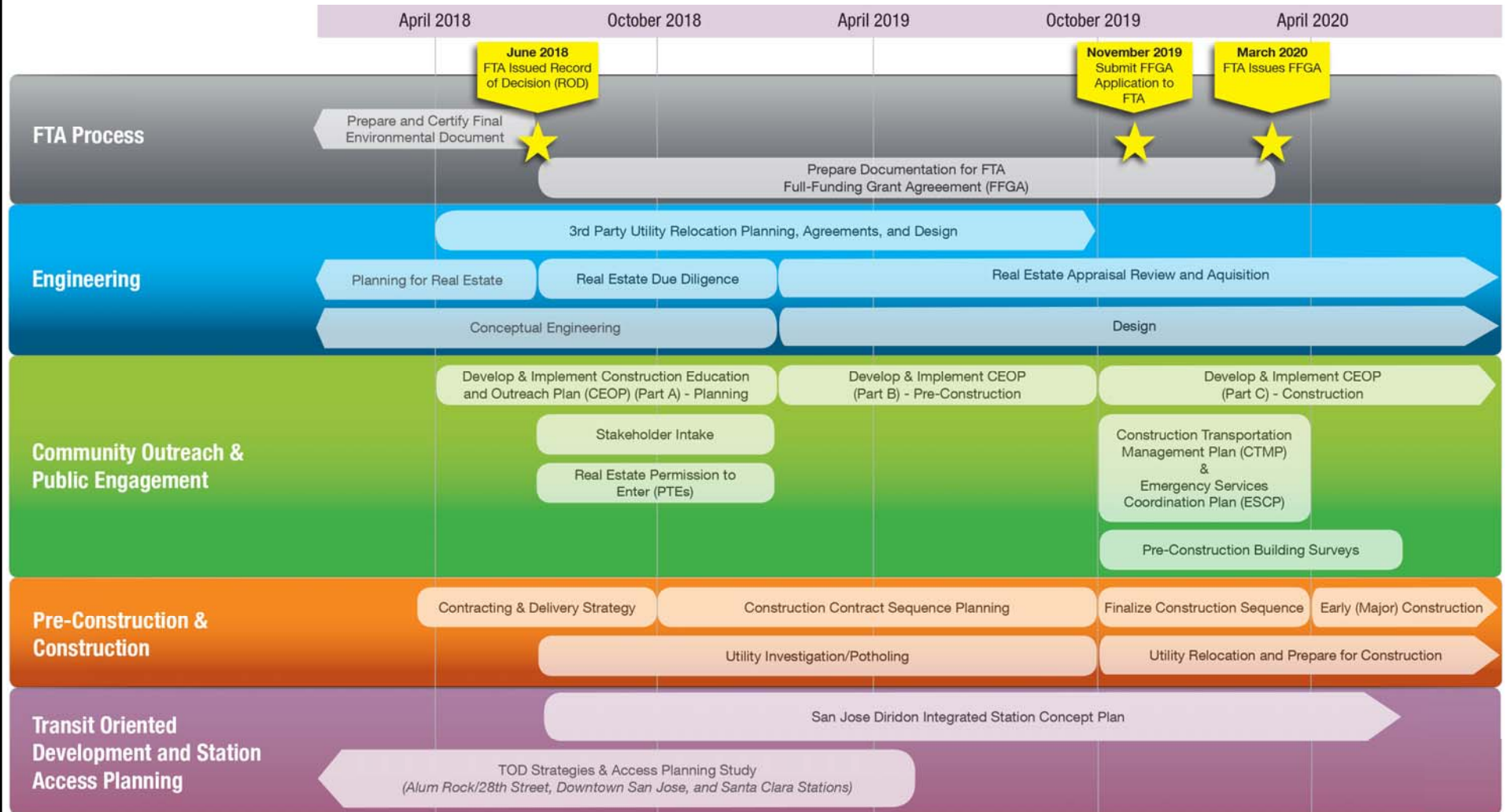
## Phase II Current Activities

- Continued Coordination with FTA on Federal Participation
- Continued Coordination with San José and Santa Clara Planning
- Field Activities: Geotechnical & Utility Investigations
- Planning for 3<sup>rd</sup> Party Agreements
- Right-of-Way Engineering & Real Estate Planning
- Developing Design Parameters & Criteria in Coordination with BART in advance of the General Engineering Consultant (GEC)





# Phase II Two-Year Look Ahead



Legend: ★ FTA Milestones





## FTA Process

*April 2018 – April 2019*

- Certified Final Environmental Document (FTA Issued Record of Decision in June 2018)
- Preparing documentation for FTA Full Funding Grant Agreement

## Engineering

*April 2018 – April 2019*

- Planning for Real Estate, Real Estate Due Diligence & Begin Real Estate Appraisal Review and Acquisition
- Continue Conceptual Engineering
- Procure General Engineering Contractor (GEC) & Begin Design
- Develop Master Cooperative Agreements with City partners
- Begin 3<sup>rd</sup> Party Utility Relocation Planning & Agreements



# Community Outreach & Public Engagement

*April 2018 – April 2019*

- Implement CEOP (Part A) – Planning & Develop CEOP (Part B) – Preconstruction
- Field Investigations Outreach
- Stakeholder Intake & Real Estate Permission to Enters (PTEs)

# Pre-Construction & Construction

*April 2018 – April 2019*

- Develop Contracting & Delivery Strategy
- Begin Construction Contract Sequence Planning
- Begin Utility Investigation/Potholing

# TOD & Station Access Planning

*April 2018 – April 2019*

- TOD Strategies & Access Planning Study
- San Jose Diridon Integrated Station Concept Plan

## Overview - Field Investigations

- The first visible field work on VTA's BART Phase II is starting, although major construction is not expected to begin on the project until early 2020
- Geotechnical and utility data is required to further develop design plans for stations and tunnel
- Short-term, intermittent lane closures will be required at various sites
- Field work is expected to begin as soon as late September 2018



## Utility Investigations

### Equipment:

- Truck-mounted high-powered vacuum to remove soil around each utility
  - Crews will carefully remove soil to verify the precise location of underground utilities such as water, power, communications and sewer lines. Most utilities are located less than 6 feet down from the surface.
- Survey team to record the exact location of the utility
- Crews then backfill the hole and replace the pavement



## Geotechnical Investigations

### Equipment:

- Truck-mounted drill rig
  - Drill small diameter holes (about the size of a soda can) up to 150 feet deep to extract soil and groundwater samples for laboratory testing.
- Cone penetration test (CPT) truck
  - Additional data will be collected by pushing a 1.4” cone through the ground at a rate of 4 feet per minute, measuring resistance at the tip to correlate drill samples.



## General Engineering Consultant (GEC)

RFP Issued:	June 2018
Proposals Submitted:	August 2018
Interviews:	September 2018
Board Approval:	November 2018
GEC Start:	November/December 2018



# Delivery Methods

## Design-Bid-Build:

- Design completed to final level
- Bid, evaluation, and award
- Contractor performs work

## Design-Build:

- Low level of design completed
- Design Build Contractor procured to complete design and build based on their approved means and methods



# Proposed Contracting Strategy

## **Enabling Works**

Design-bid-build

*Advanced work to facilitate tunneling and construction activities. Scope may include building demolition, hazardous material remediation, etc.*

## **Tunnel & Heavy Civil**

Design-build

*Tunneling, excavation and structural concrete work of portals, stations, and ventilation facilities*

## **Station Fit- Out**

Design-bid-build

*Station finishes including exterior, interior architecture, vertical circulation elements, etc.*

## **Track & Systems**

Design-bid-build

*Track and systems installation and testing*

## **Newhall Maintenance Facility/Santa Clara Station**

Design-bid-build

*All work for Newhall Yard and Santa Clara Station including track and systems*

## **Parking Garages**

Design-build

*Parking structures at Alum Rock/ 28<sup>th</sup> Street and Santa Clara Stations*





## GEC Scope of Work

### Duration:

- Estimated 8 years

### Scope includes:

- Development of:
  - Design criteria
  - Technical documents & specifications
  - Preliminary Design
  - Final Design
- System integration



## Preliminary Engineering (PE)

- First 18 months of GEC work
  
- Development of the following to a PE level for all proposed Contracts:
  1. Design Criteria
  2. Plans
  3. Specifications



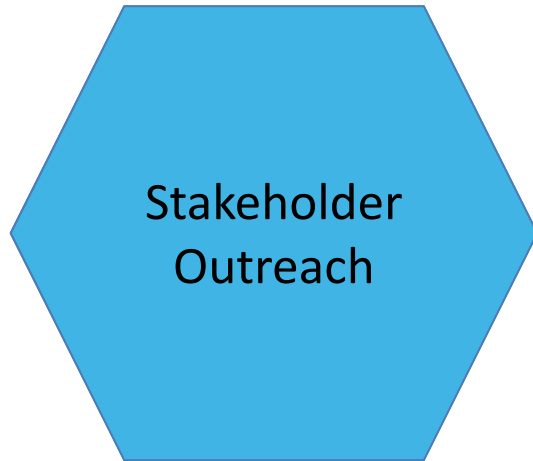
Questions?



# Community Education & Outreach Plan

Gretchen Baisa, VTA





## Field Investigation Outreach

- Mailing to stakeholder lists within 750 feet of alignment
- E-blast newsletter
- Door to door outreach and flyer drop along impacted areas: 2 weeks before construction
- Door to door outreach: 72 hours before construction
- Social media outreach
- Short video clip explaining the overall purpose of this fieldwork
- Content created and shared with stakeholder groups

Phase II Construction Map coming soon:

[www.vta.org/bart/map](http://www.vta.org/bart/map)





## Field Investigation Outreach

### September – October

- San Jose Downtown Association – Commercial Property Owners
- Delmas Park Neighborhood Association
- East Santa Clara Street Business Association
- Shasta Hanchett Park Neighborhood Association
- San Jose District 6 Leadership Group
- San Jose Downtown Association – Historic District Committee



# General Outreach

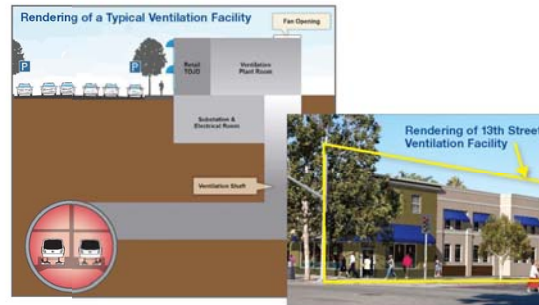
# Phase II Collateral



## FACT SHEET: VTA's BART Silicon Valley Phase II Extension Project

### Ventilation Facility

VTA's BART Silicon Valley Phase II Project is a six-mile, four-station extension that will bring BART train service from Berryessa/North San José through downtown San José to the City of Santa Clara. Phase II will include an approximately five-mile tunnel, two mid-tunnel ventilation facilities, a maintenance facility and storage yard, three underground stations (Alum Rock/28th Street, Downtown San José, Diridon), and one ground-level station (Santa Clara). The subway tunnel will be in one large diameter tunnel.



### What is a ventilation facility?

Ventilation facilities will be located along the tunnel alignment roughly half way between the underground stations. The facilities operate primarily to circulate air in and out of the tunnel during an emergency situation and for ventilation during maintenance. Features include fans, dampers, vent shafts, and associated facilities. Ventilation facilities include an above ground structure that houses equipment and an underground ventilation shaft that connects the facilities to the tunnel.

Ventilation facilities will be constructed outside the public right-of-way, with a shaft connecting to the subway tracks. During construction, including utility relocations, there could be sidewalk and lane closures as well as contained impacts. VTA will continue to work with the cities of San Jose and Santa Clara, the construction contractors, the public, residents, property owners, and businesses to minimize impacts.

### What can be seen from the street?

The area required to accommodate a facility is approximately 110 by 210 feet with the equipment housed in a structure approximately 90 by 140 feet in size and 25 feet in height. The fan opening would be located on the roof of the structure. Proposed Transit-Oriented Joint Development (TOJD) will incorporate the ventilation facilities into the existing neighborhood characteristics and include commercial, residential, or mixed-use development.

Continued

VTA BART Phase II Ventilation 6/20



## FACT SHEET: VTA's BART Silicon Valley Phase II Extension Project

### Tunneling Methodology

VTA's BART Silicon Valley Phase II Project is a six-mile, four-station extension that will bring BART train service from Berryessa/North San José through downtown San José to the City of Santa Clara. The Phase II Project will include underground stations (Alum Rock/28th Street, Downtown San José, Diridon), and one ground-level station (Santa Clara). The subway tunnel will be in one large diameter tunnel.

### Single-Bore Tunnel

The tunnel will be constructed as a single, large diameter tunnel. The approximately 45 foot tunnel will contain two independent trackways, one for each direction of travel. Passenger platforms will be located within the tunnel, connected to station entrances via underground passageways. Depending on the station, platforms will be approximately 65 and 95 feet below ground.

Within the tunnel, there will be emergency egress points spaced every 300 to 500 feet that will allow passengers to reach non-affected areas during an emergency situation. The tunnel will be excavated with a Tunnel Boring Machine (TBM) at an average depth of 60 feet. At stations, soft ground mining techniques will be used to excavate the underground connections between the tunnel (which contain the boarding platforms) and the off-street station concourses.

### How does a Tunnel Boring Machine (TBM) Operate?

A tunnel boring machine (TBM) is a large drill that excavates and installs the initial tunnel lining that supports the tunnel needed for the train to travel underground. The front section of the TBM (the cutter head, seen in photo below on the left) chips, grinds, and removes the dirt.

- Within the large hole created, precast concrete segments will be installed to form rings to support the tunnel. The precast rings will be sealed to prevent water and mud from seeping into the tunnel.
- Soil will be removed via launch portals and either hauled away or reused for the project.
- The TBM will be powered by a temporary electric substation and will enter and exit the tunnel through either of the portals.
- Once the TBM has completed digging the tunnel, the track and facilities can be installed. The specific type of machine and path of travel will be determined as the project progresses.



Wheeler Straight Head Portal



Grubbed on the inside side

**FACT SHEET: VTA's BART Silicon Valley Phase II Extension Project**

**Project Benefits**

VTA's BART Silicon Valley Phase II Project is a six-mile, four-station extension that will bring BART train service from Berryessa/North San José through downtown San José to the City of Santa Clara. The Phase II Project will include an approximately five-mile tunnel, two mid-tunnel ventilation facilities, a maintenance facility and storage yard, three underground stations (Alum Rock/28th Street, Downtown San José, Diridon), and one ground-level station (Santa Clara). The subway tunnel will be in one large diameter tunnel. Benefits from the Phase II project include:

- Fast and reliable train service that will connect BART to VTA light rail and bus, Amtrak, ACE, Caltrain, Capitol Corridor and intercity bus service.**
- Investing in transit-oriented development to provide increased access to jobs, housing and education, making commuting without a car possible.**
- Improving transit hubs to accommodate rail, bus, bicycle and pedestrian travel modes to improve and expand healthy and green travel options.**
- In addition to creating thousands of jobs throughout design and construction, the Phase II Project will boost the economy, which means increased growth and more jobs long after the project ends.**
- Partnering with the community to deliver a project that realizes the surrounding community's vision for each station area.**
- Commercial, retail, and residential development will lead to higher sales tax and property tax revenues, allowing for continued investment by local government.**

**BENEFITS IN 2035**

- Weekly riders on VTA's BART Phase II Extension: **52,000**
- Reduction of Annual Vehicle Miles Traveled (commuter to work) if the project were not built: **27 Million**
- Reduction of Metric Tons of CO<sub>2</sub> from vehicular emissions: **22,340**

**THE PROJECT'S TRANSIT-ORIENTED JOINT DEVELOPMENT WILL INCLUDE**

- 1.675 Million sq. ft.** of new office space
- 160,000 sq. ft.** of new retail space
- 500** new housing units

**PHASE II MODES OF ACCESS TO BART SYSTEM**

- 19%** (Car)
- 34%** (Bicycle)
- 47%** (Walk)

Continued on the reverse side

Solutions that move you

Questions?





# Relocation Planning

Kathy Bradley, VTA

Karen Eddleman, AR/WS



*Solutions that move you*

# Real Estate Planning Process

- Environmental Clearance
- Preliminary Engineering and Testing
- Relocation Planning and Public Comment
- Final Relocation Plan to VTA Board for Adoption
- Property Acquisition and Relocation

# Legal Framework for Relocation Planning

## State Laws and Regulations

- CA Gov Code 7260 et seq.
- CA Code of Regulations, Title 25, Ch.6

## Federal Laws and Regulations

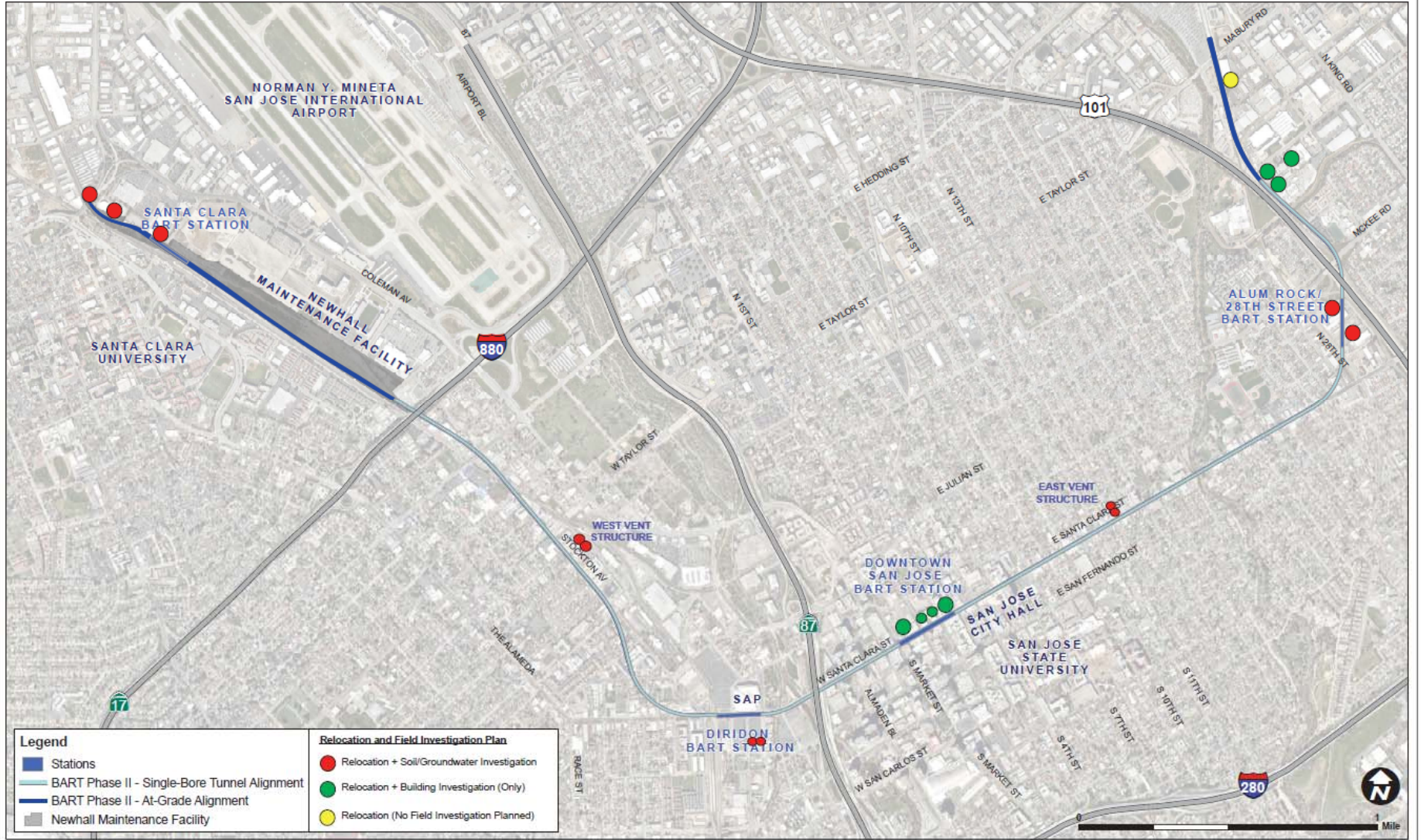
- U. S. Code, Title 42, Chapter 61
- 49 Code of Federal Regulations, Part 24

## Relocation Plan Process

- Engage Property Owners
- Engage Property Occupants
- Present Project Information
- Explain VTA's Relocation Assistance Program
- Conduct Area Research
- Community Engagement

# VTA's Relocation Assistance Program

- Relocation Advisory Assistance
- Assistance with Moving Costs
- Residential Tenant Occupants: Rent Differential Payments
- Business Occupants: Additional Moving Costs & Reestablishment Assistance



# Summary of Potential Impacts

- 9 Residential Tenant Occupants
- 47 Business Occupants
- 4 Personal Property Only

# Draft Relocation Plan Public Review and Comment Period

August 17 – September 17, 2018

[www.vta.org/bart/construction/realestate](http://www.vta.org/bart/construction/realestate)



# Next Steps

November CWG: Real Estate Planning Process



Questions?



# Transit Oriented Development Strategy & Access Planning Studies Update

Adriano Rothschild, VTA



# TOD and Access Strategy Study

## Land Use (TOD) Strategy

- Strategies to increase investment in TOD
- Detailed implementation strategy to catalyze TOD

## Access Planning

- Multimodal access planning around stations
- Designed to meet needs of future TOD

Kick-off: January 2018

Estimated Completion:  
Spring 2019

Alum Rock/28<sup>th</sup>  
Street Station

Downtown San  
José Station

*Diridon Station  
(Separate Effort)*

Santa Clara  
Station



# Study Timeline and Work Plan Elements

## Background Conditions Jan.-May

- Define Study Area Boundaries
- Identify Existing Opportunity Sites
- Evaluate Existing Parking Supply & Demand
- Identify Existing Affordable Housing
- GIS Mapping of Existing and Planned Networks

## Corridor Opportunities & Constraints Mar.-Sept.

- Determine Growth Projections for Study Area
- Determine Development Capacity
- Identify TOD Potential and Barriers to TOD
- Identify Potential for Land Use & Zoning Modifications
- Gaps in Access Network; Transportation Capacity Constraints

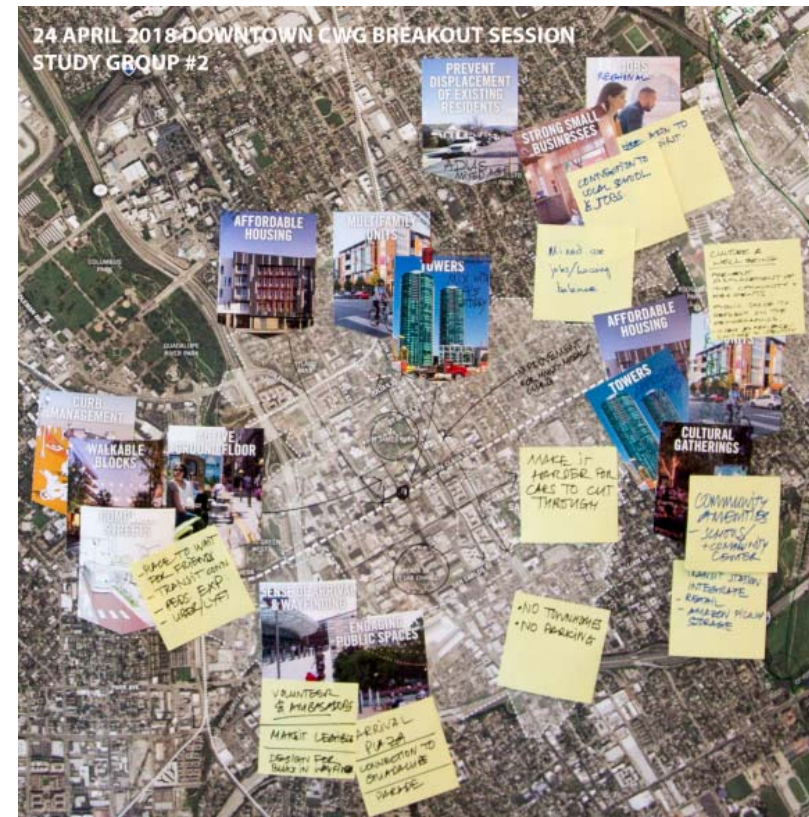
**We Are Here** →

## Implementation Strategies & Tools Oct.-Mar. 2019

- Strategies for Creating a Market for TOD
- TOD Guidelines for public & private space improvements
- Funding and Implementation Strategies
- Visual Renderings with TOD Opportunities/Options



# CWG Workshops



- April – What is Good TOD?
- **September – TOD Opportunities and Constraints**
- November – TOD Strategies and Guidelines
- April 2019 – Final Report, Next Steps



# Questions?



# Next Steps

Eileen Goodwin, Facilitator





## Next Steps

- Next CWG meeting:  
Thursday, November 15<sup>th</sup> - 4:00-5:30 PM  
Santa Clara University 475 El Camino Real, Manrissa Room, Santa Clara
  - Phase II Update
  - Transit Oriented Development Strategy & Access Planning Studies Update
  - Construction Education & Outreach Plan
  - FTA Process
  - Real Estate Planning Process
  - Pre-Construction Activities Update
- Action Items

