

# VTA's BART Silicon Valley Phase II Extension Project

Construction Network  
February 2, 2023



# VTA's BART Silicon Valley (BSV) Program

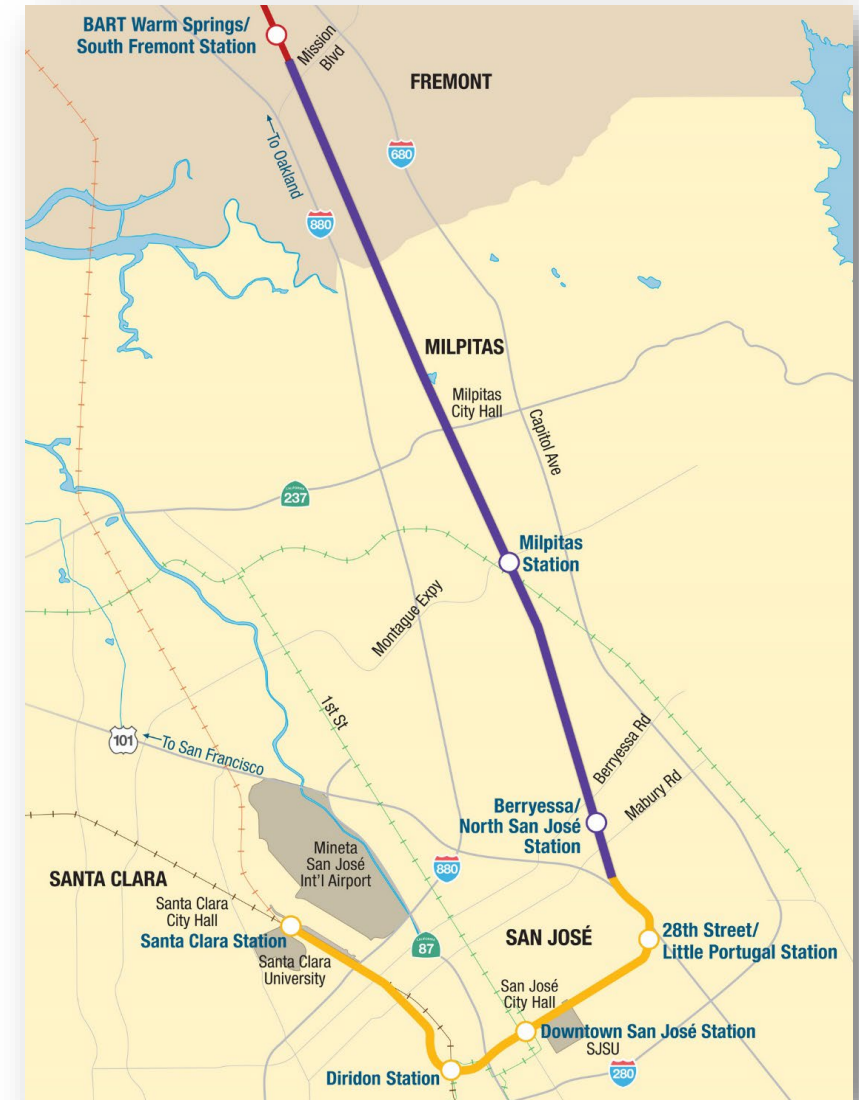


## Phase I Extension

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

## Phase II Extension

- 6-mile extension (5-mile subway)
- 4 stations
- 2 Mid-Tunnel Facilities
- Storage Yard & Maintenance Facility







*Ringling the Bay with fast, frequent transit*

# 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

# Phase I Project – Berryessa Extension



- Two new VTA transit centers with BART stations in Milpitas and Berryessa/North San José
  - Bus transit centers
  - Secure bicycle parking
  - Paid vehicle parking
  - Taxi/TNC/shuttle drop-off/pick-up space
- Opened in 2020



# VTA's BART Silicon Valley (BSV) Phase II Extension Project



6-Mile Extension of BART Service

Project Alignment

- 5-mile single-bore tunnel
- 1-mile at-grade

4 New BART Stations

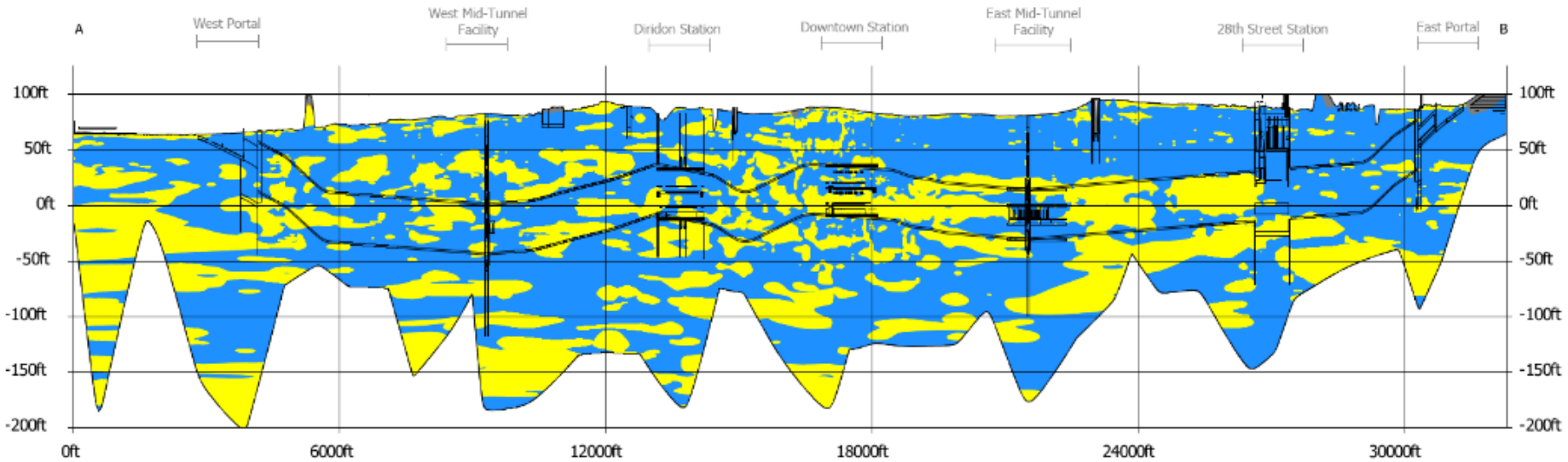
- 3 underground platforms with above-ground station entrance buildings
- 1 ground level platform

2 Mid-Tunnel Facilities

Storage Yard & Maintenance Facility



# Tunnel Profile

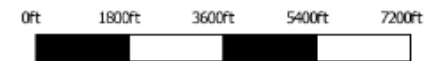


## Legend

### Interpretative Model Geology

- FILL
- Class I: Fine-Grained
- Class II: Coarse-Grained

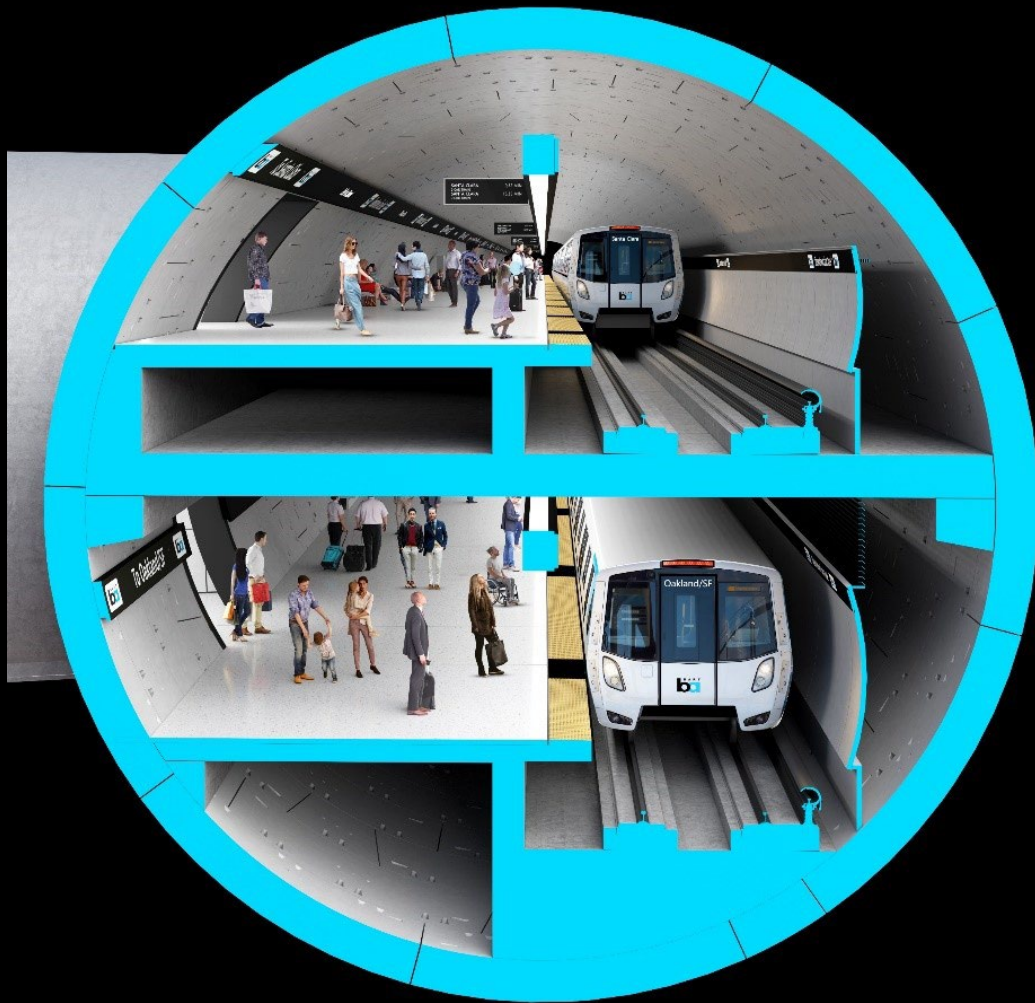
Note:  
Placeholder image; will be replaced with plan and profile  
drawings at larger scale



# Single Bore: Side-by-Side Tracks w/ Center Platform

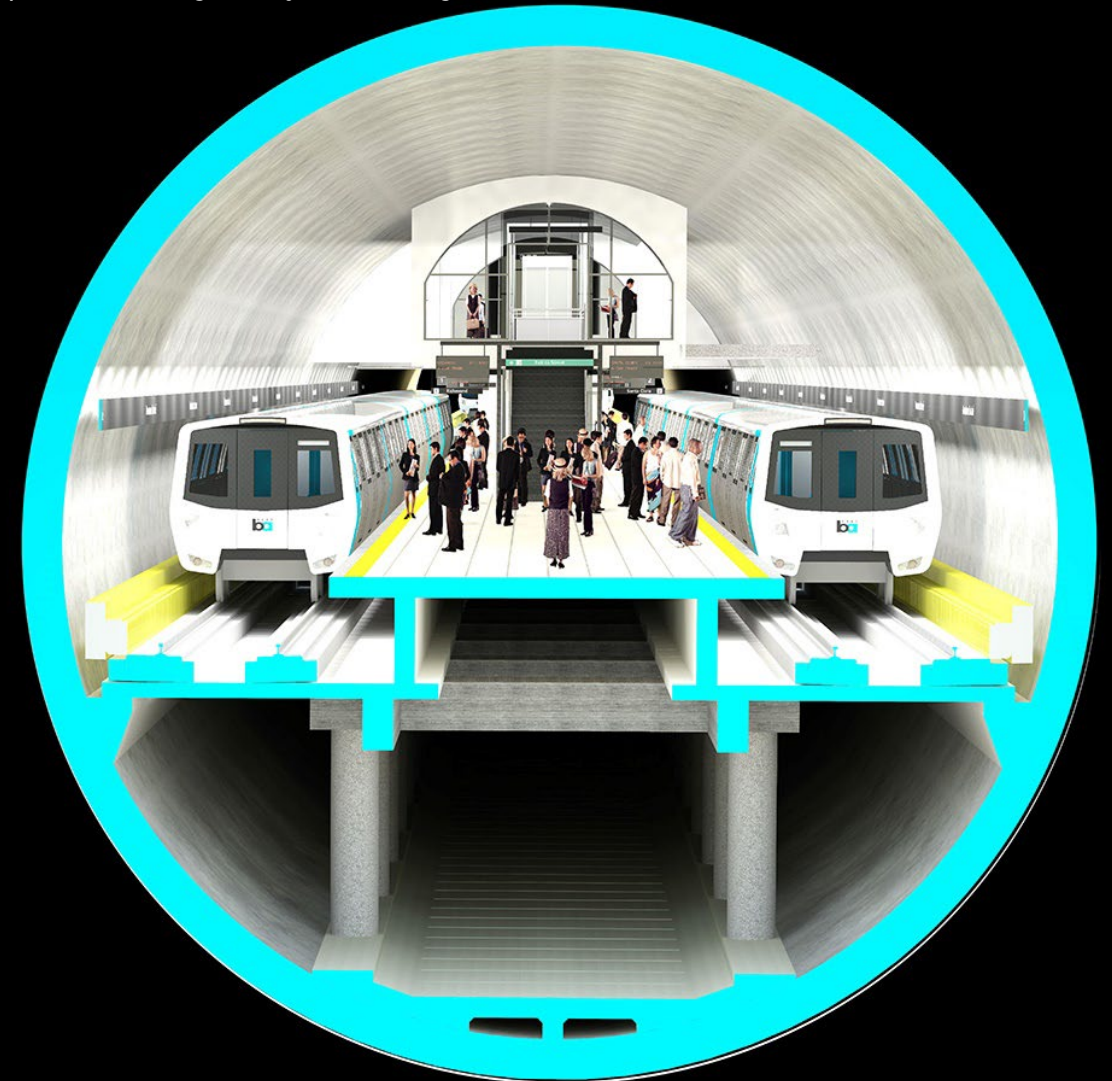


ORIGINAL DESIGN

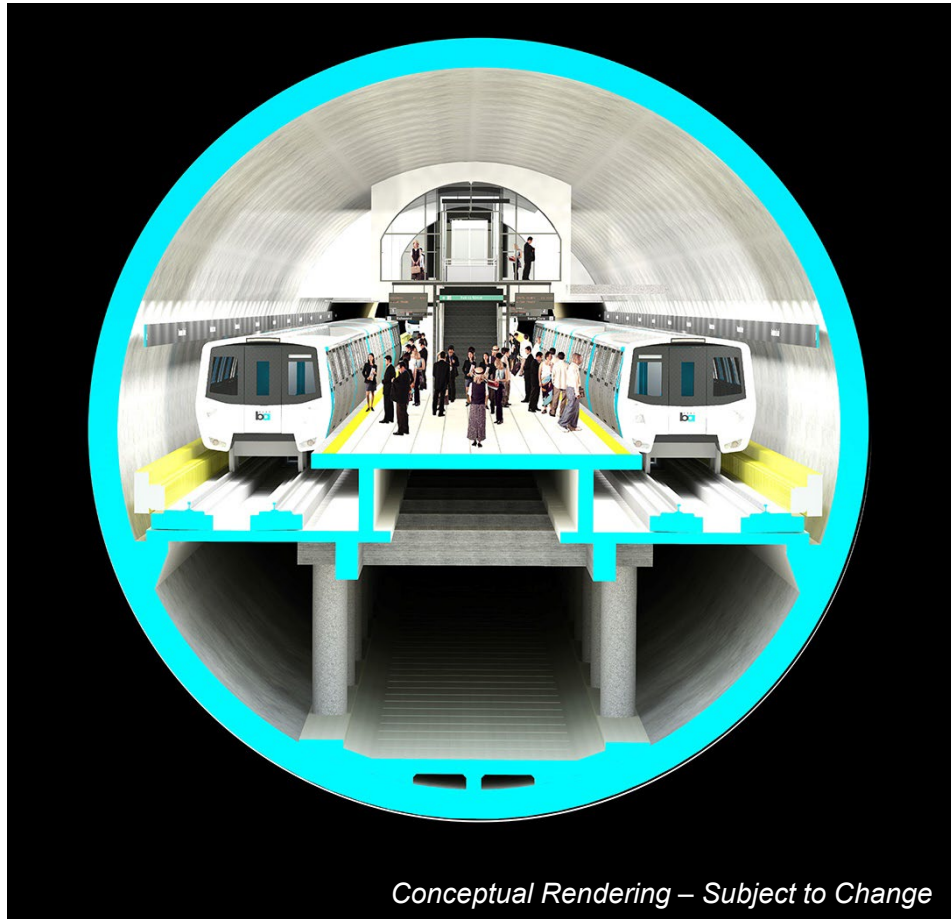


PROPOSED INNOVATION

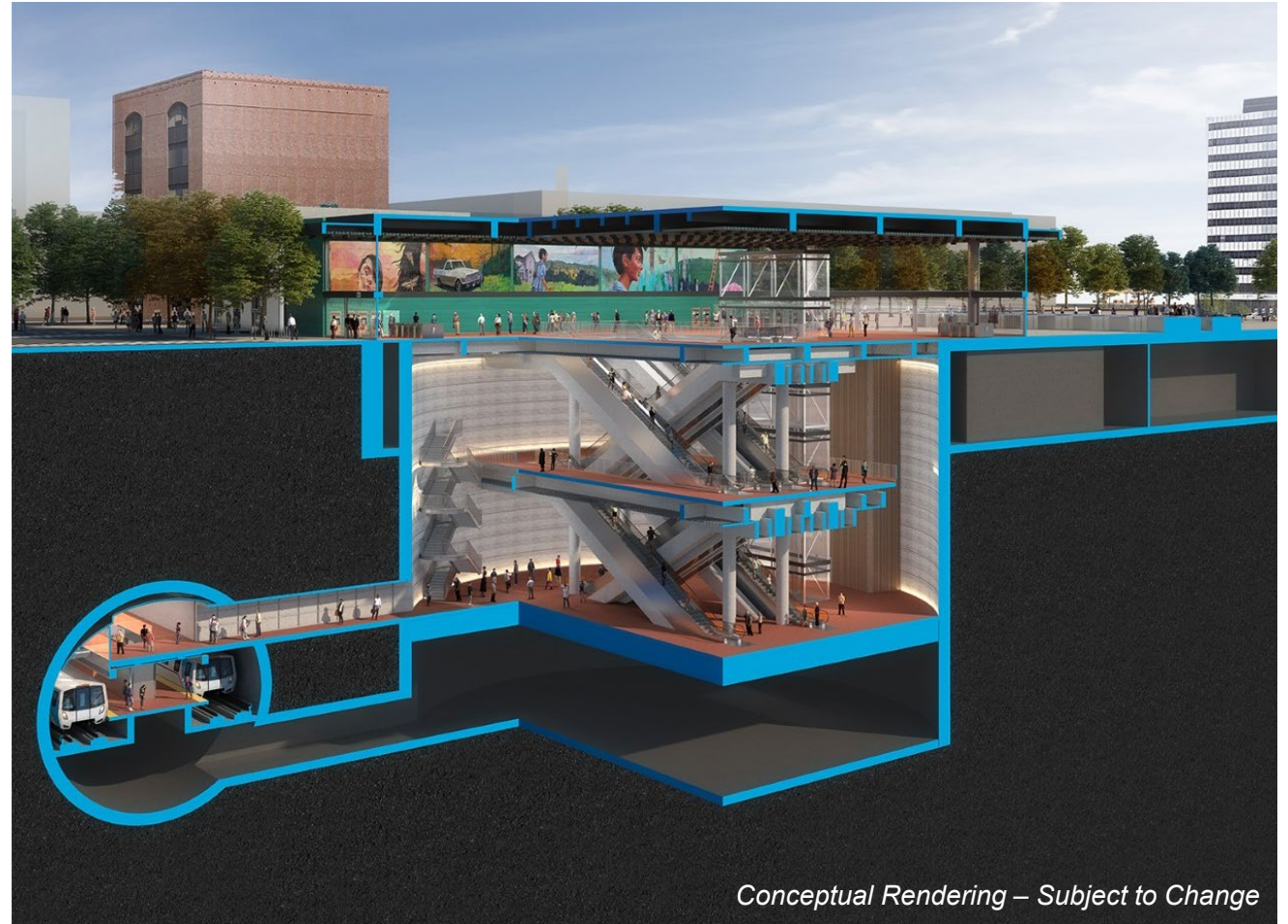
*Conceptual Rendering – Subject to Change*



# Single Bore Station Configuration



*Conceptual Rendering – Subject to Change*



*Conceptual Rendering – Subject to Change*



# Station Visioning



- A placemaking approach to station entrances, modeling what has been done by others
- Places for gathering in the public plaza
- Enhancements of the urban landscape through architectural beauty and artwork
- Clearly indicated wayfinding for the transit patrons
- Creating the most visible and defining aspects of the system
- Avoids additional structural cost



*San Francisco Salesforce Transit Center*



*SF Central Subway Chinatown-Rose Pak Station*

# 28th Street/Little Portugal Station



6,700 Riders by 2040	1,200 Onsite Parking	Bicycle Parking	Close to Future Bus Rapid Transit	Potential Transit-Oriented Development	Connected to Future Five Wounds Trail	Station Plaza for Community Events



# Downtown San José Station



27,900 Riders by 2040



Two Entrances on Santa Clara Street



Bicycle Parking



Ticketing Gates at Street Level



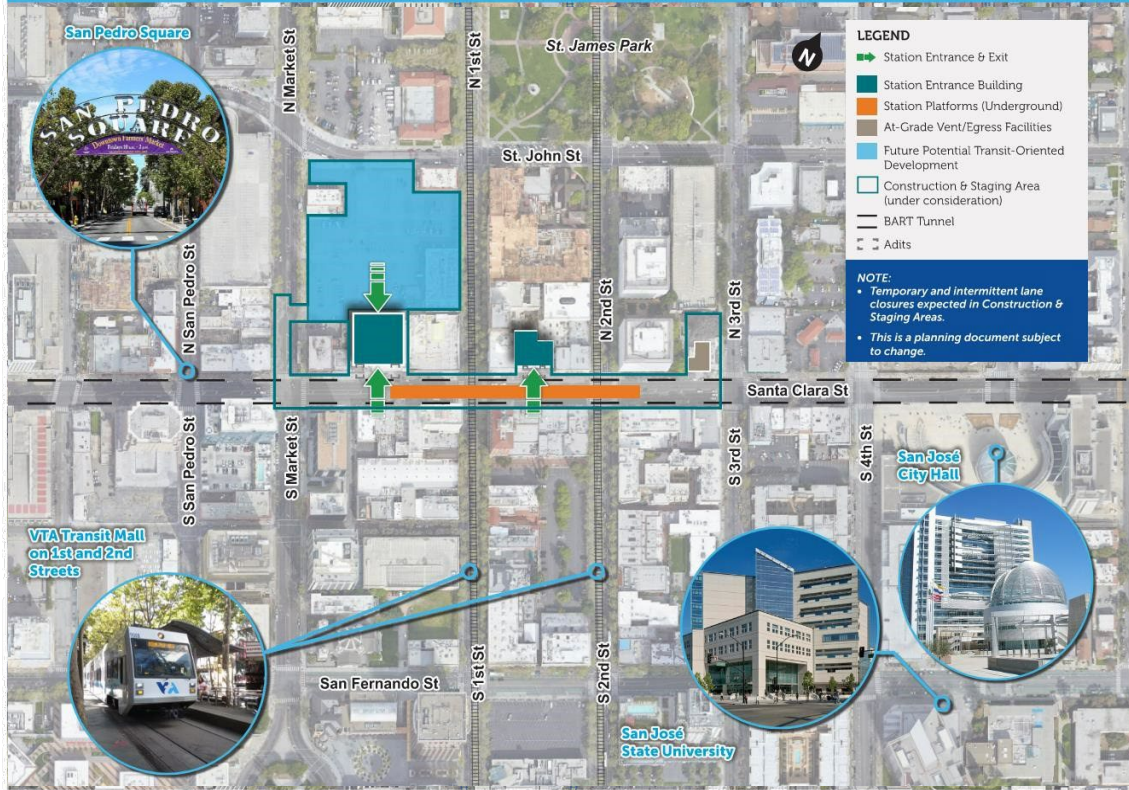
Potential to Integrate with TOD



Connects to VTA Bus/ Light Rail



Walking Distance to Numerous Landmarks & Amenities



# Diridon Station



9,900 Riders  
by 2040



Bicycle  
Parking



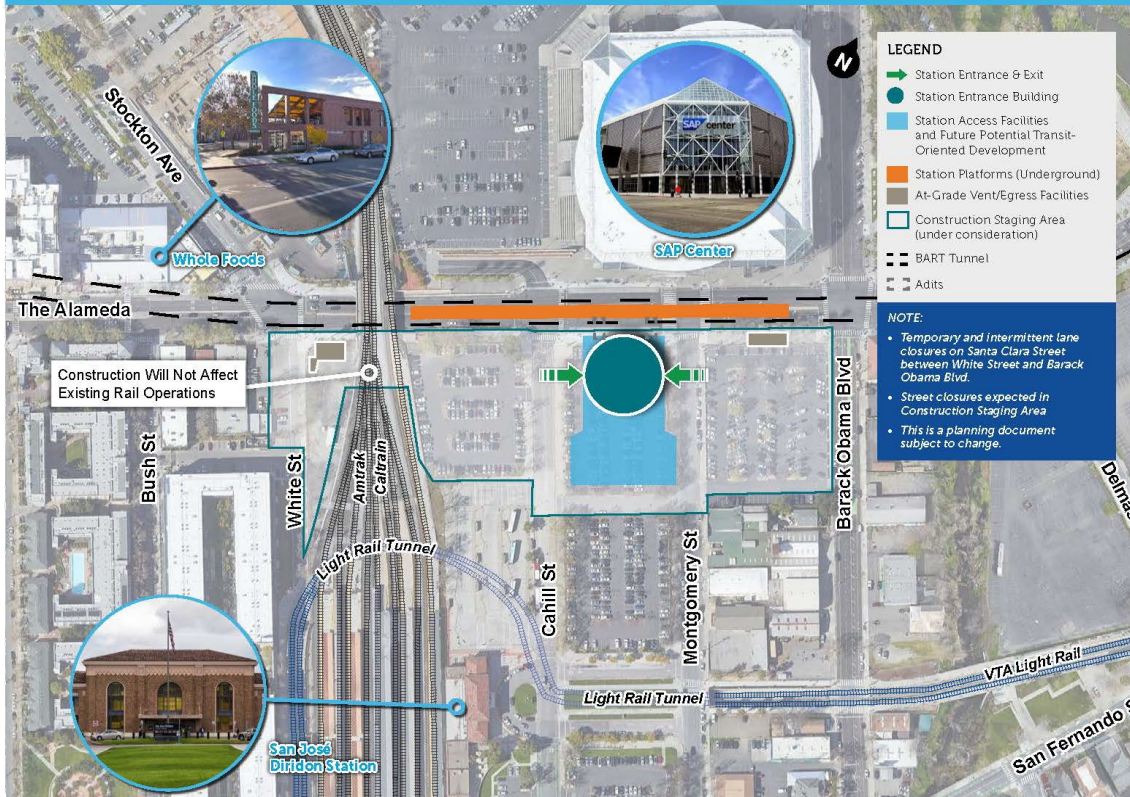
Entrances on  
Cahill and  
Montgomery  
Streets



Ground Level  
Connection to  
Diridon Caltrain  
Station and  
Transit Center



Across from SAP Center,  
Downtown West,  
and Future Diridon  
Intermodal Station



# Santa Clara Station



10,100 Riders  
by 2040



500 Parking  
Space Garage  
above Yard  
Storage &  
Transfer Tracks



Bicycle  
Parking



Elevated  
two-track  
concourse



Connection  
to Gateway  
Crossings, Santa  
Clara Caltrain  
Station, VTA  
buses, and rail



Walking  
distance to  
Santa Clara  
University &  
PayPal Park



# Newhall Yard & Maintenance Facility



# Project Benefits



**Annual reduction of carbon footprint** the equivalent of a forest the size of Oakland, CA



**Elimination of 3.9 million** auto trips every year in support of CA 2030 climate goals



**Connecting 1.7 M** transit-dependent riders to resources every year



VTA buses will continue to serve **44,000 weekday riders** during construction



**Providing equitable transit** for low-income communities



Activation of station sites and streets that **foster walkability, vibrancy, activity, and cultivate a sense of community**



**Intermodal connection** to commuter, intercity, light rail, and regional bus service



**Limited disruption and impact** to local businesses as a result of single-bore construction methodology



**2 M people** in Santa Clara County will gain access to → **3.5 M Bay Area Jobs**



An average travel **time savings of 30 minutes** for a 50-mile commute



**60 M sq ft** of new development and housing



**5,600 student riders (San Jose State University/Santa Clara University)** are projected to use the system daily

# Proposed Funding Plan



## Federal

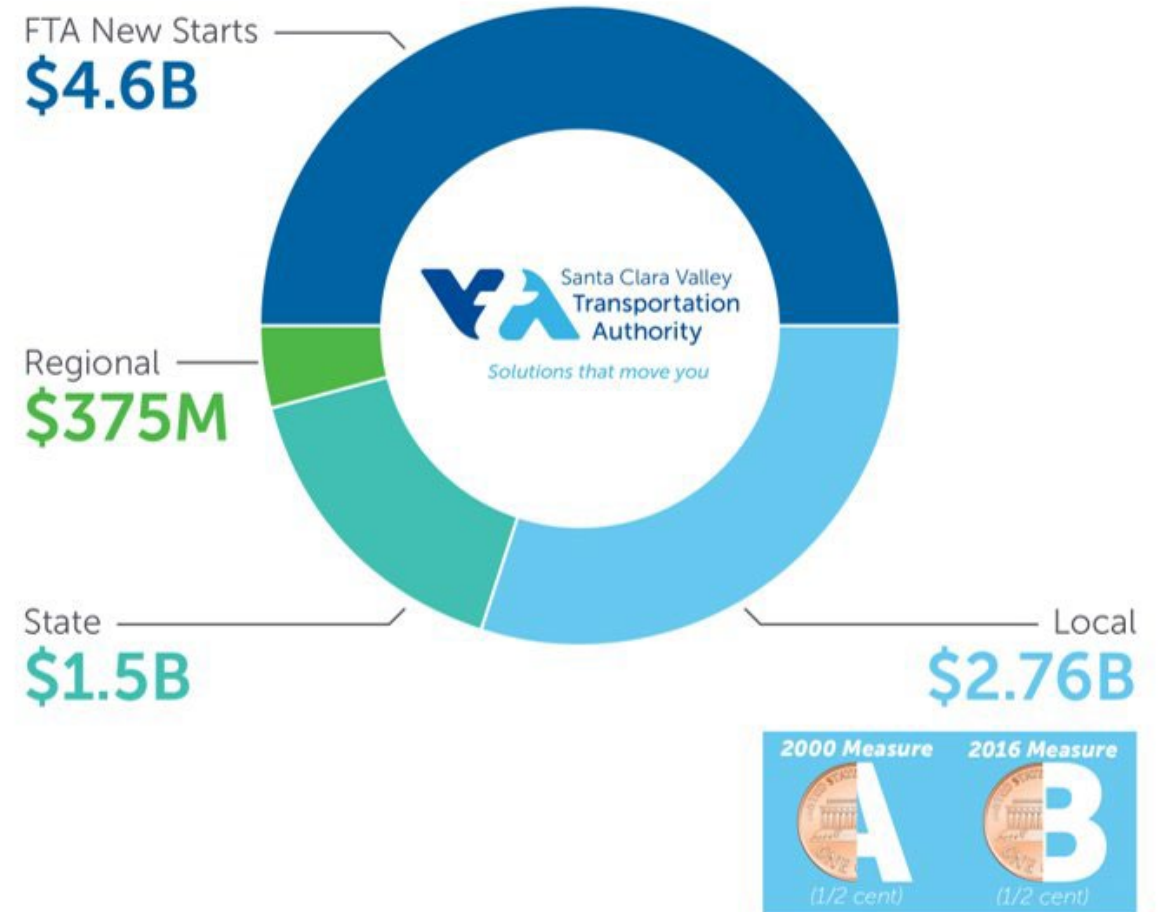
- Federal Transit Administration (FTA) New Starts Program
- Letter of No Prejudice (LONP) up to \$9.318 billion

## Local

- 2000 Measure A
- 2016 Measure B

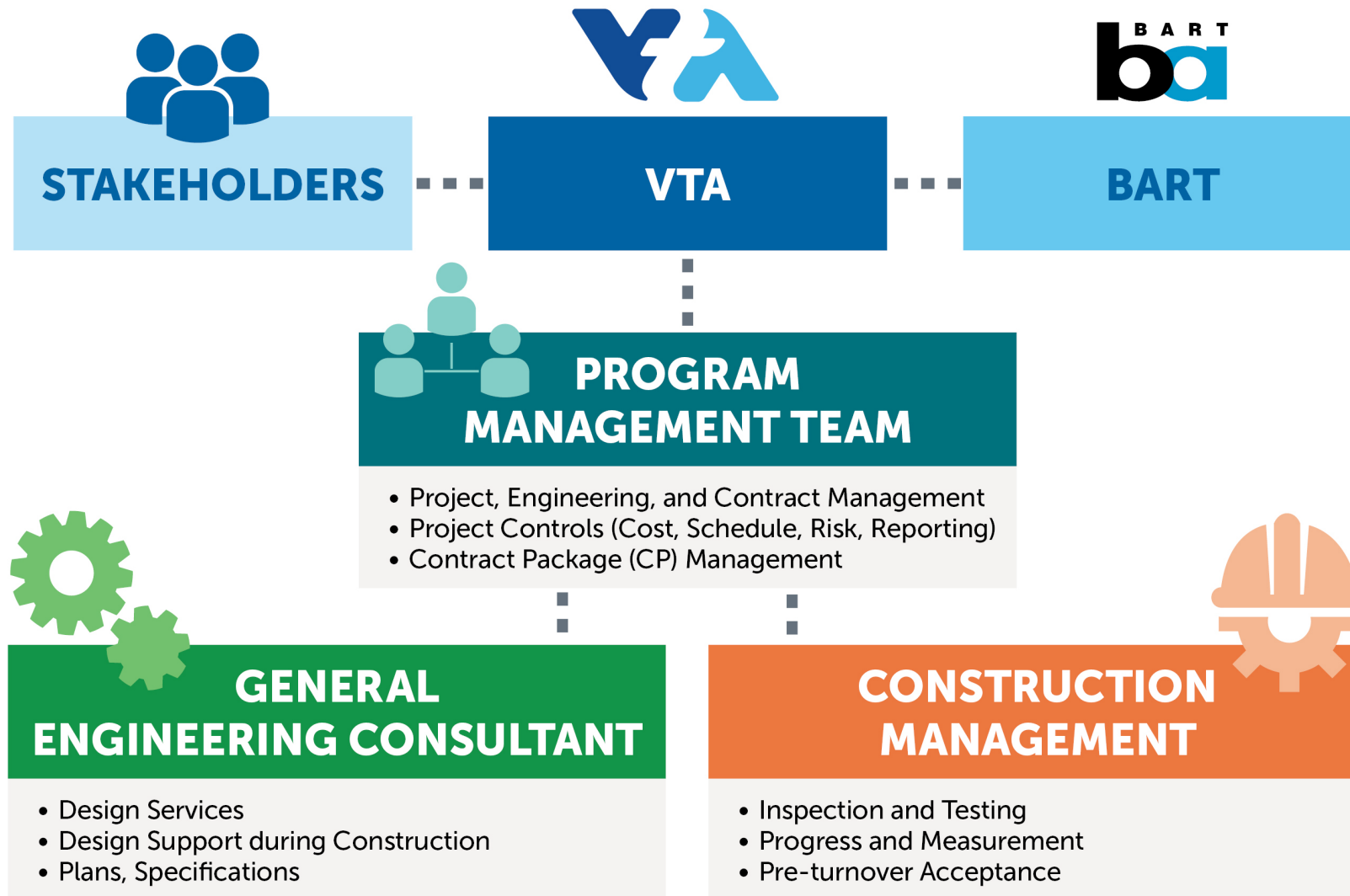
## State/Region

- Transit and Intercity Rail Capital Program (TIRCP)
- Regional Measure 3

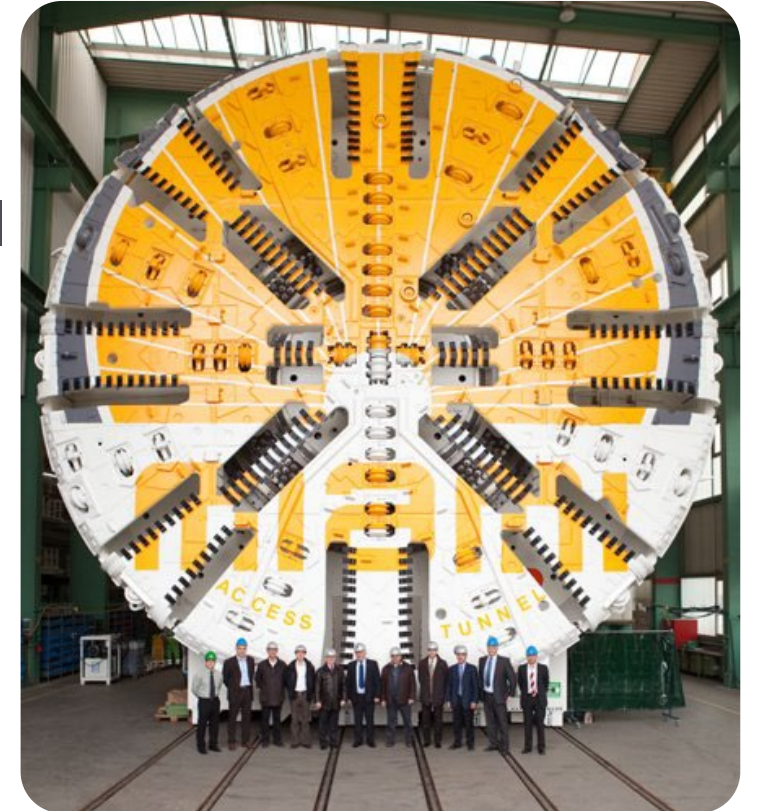




# BSV Phase II Program Delivery Organization



- Contract Package 2, Tunnel and Trackwork design and construction, Kiewit Shea Traylor JV on board
- VTA advancing other design, especially related to Tunnel and Trackwork interfaces
- Reviewing contract packaging and delivery methods for the systems, yard, and stations
- Preparing construction management services RFP



# Contracting Process



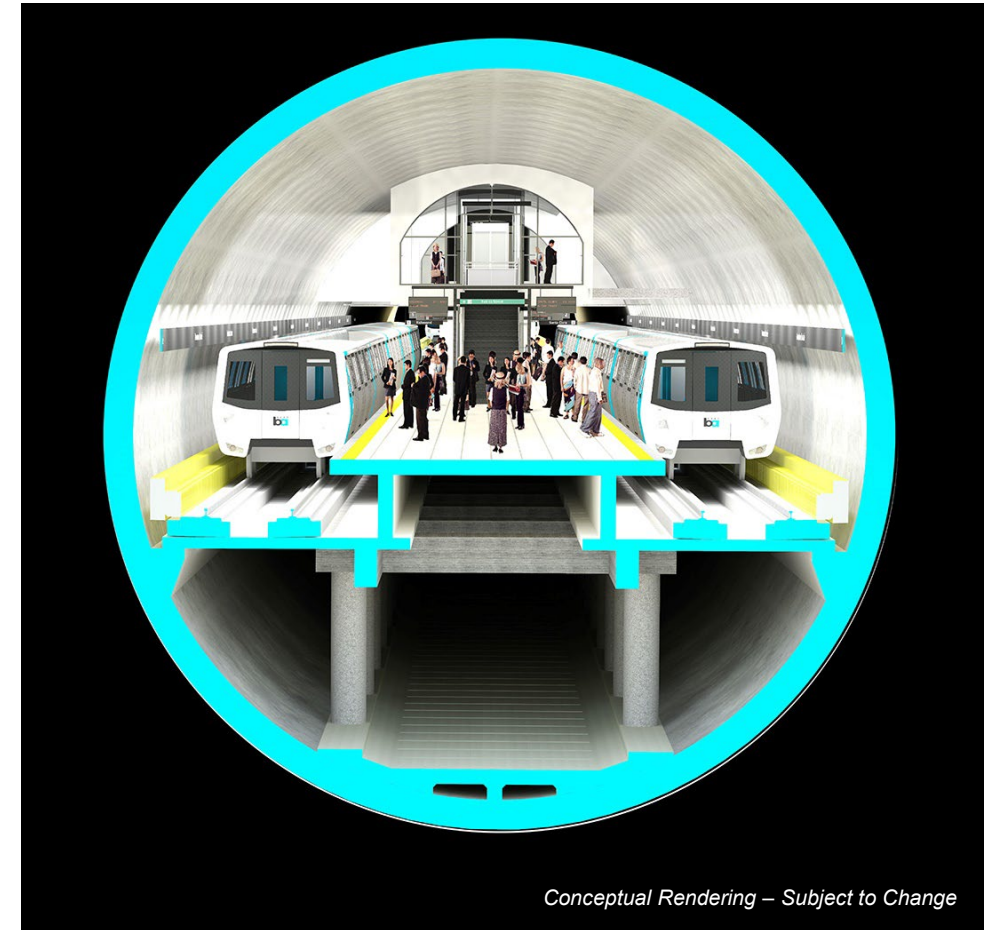
- Tunnel/Heavy Civil Construction Industry Forum in February 2020
- Three step process for procurements:
  - Request for Industry Feedback (RFIF)
  - Request for Qualifications (RFQ)
  - Request for Proposals (RFP)
- Multiple one-on-one sessions
- Pre-proposal conferences



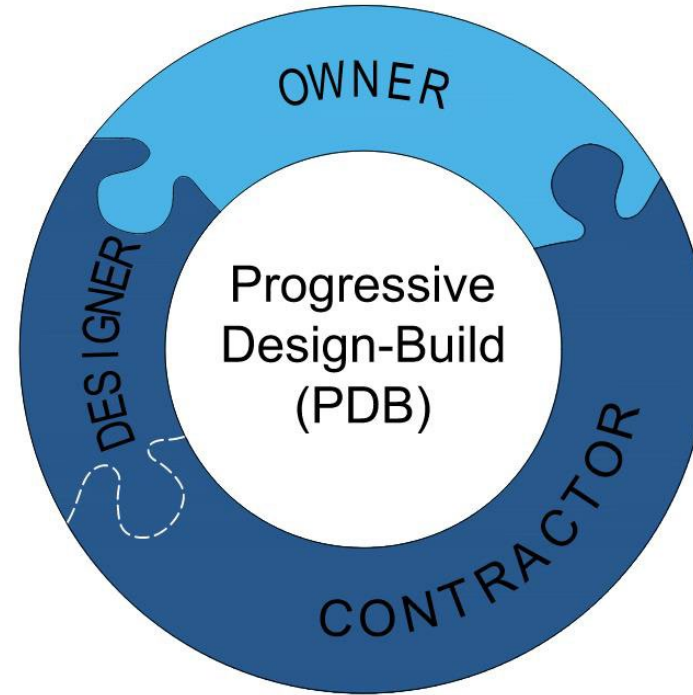
# Contract Package 2 Overview



- Progressive Design Build delivery method
- Overall contract description (anticipated through multiple Board actions):
  - Procurement of Tunnel Boring Machine (TBM)
  - Tunnel construction
  - Internal tunnel concrete structures
  - Portals
  - Mid-tunnel facilities
  - Support of excavation for underground stations
  - Adits (connections between tunnel and off-street structures)
  - Trackwork
  - Demolition, utility relocations, enabling works, etc.



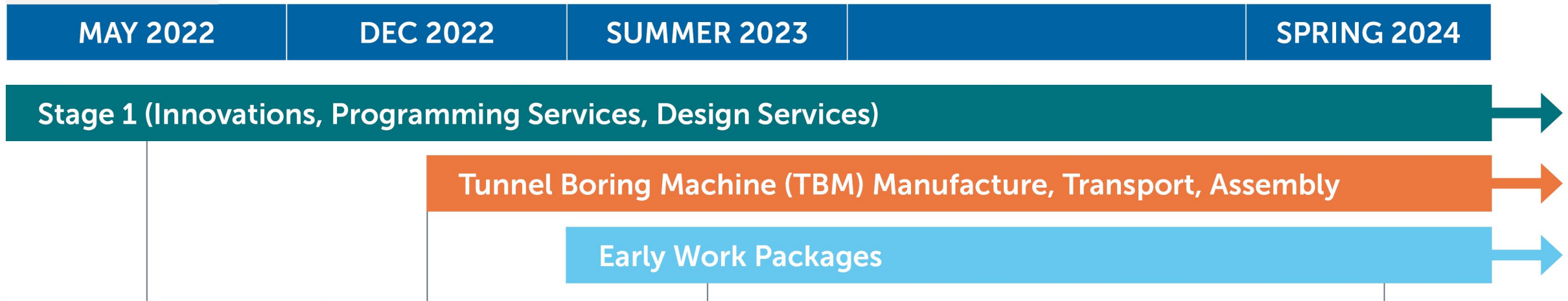
# Progressive Design Build



# CP2 Schedule

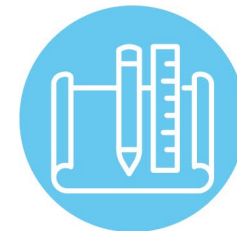
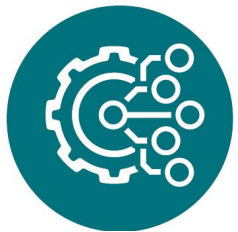


## Schedule



## Board Actions

- STAGE 1 SERVICES**
  - Innovations
  - Programming & Design Services
- EARLY WORK PACKAGES**
  - TBM
  - West Portal
- EARLY WORK PACKAGES**
  - Enabling Works
- STAGE 2**
  - Final Design
  - Heavy Construction



# Community and Stakeholder Input



**VTA NEEDS YOUR FEEDBACK**

**Small Business Operations Survey**

*This survey will help us understand how we can help your business, organization, or institution during construction. Log in today and make sure your voice is heard.*

[vta.org/bartsurvey](https://vta.org/bartsurvey)

**Tell us here!** conte-nos aqui! ¡cuéntenos aquí!

여기서 알려주세요 sabihin mo sa amin dito nói với chúng tôi ở đây 在这里告诉我们

SCAN ME

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

# Business Diversity Program



- Existing Professional Service Contracts:
  - ~15% DBE Goal
- Contract Package 2:
  - 15% DBE Goal
  - 20% SBE Goal (inclusive of DBE)
- More information at:

[www.vta.org/business-center/business-diversity-programs](http://www.vta.org/business-center/business-diversity-programs)





# Future Opportunities



*Construction Management Services*



*Systems (Construction Procurement)*



*Stations (Construction Procurement)*



*Yard & Facilities (Construction Procurement)*

# Get Involved with the Phase II Project!



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