



February 28, 2023
Caltrain AMP Committee

Diridon Station Business Case Update



METROPOLITAN
TRANSPORTATION
COMMISSION



Today's Focus



1

Goals Review

2

Alternatives Development Process

3

Operational Context

4

Station Design

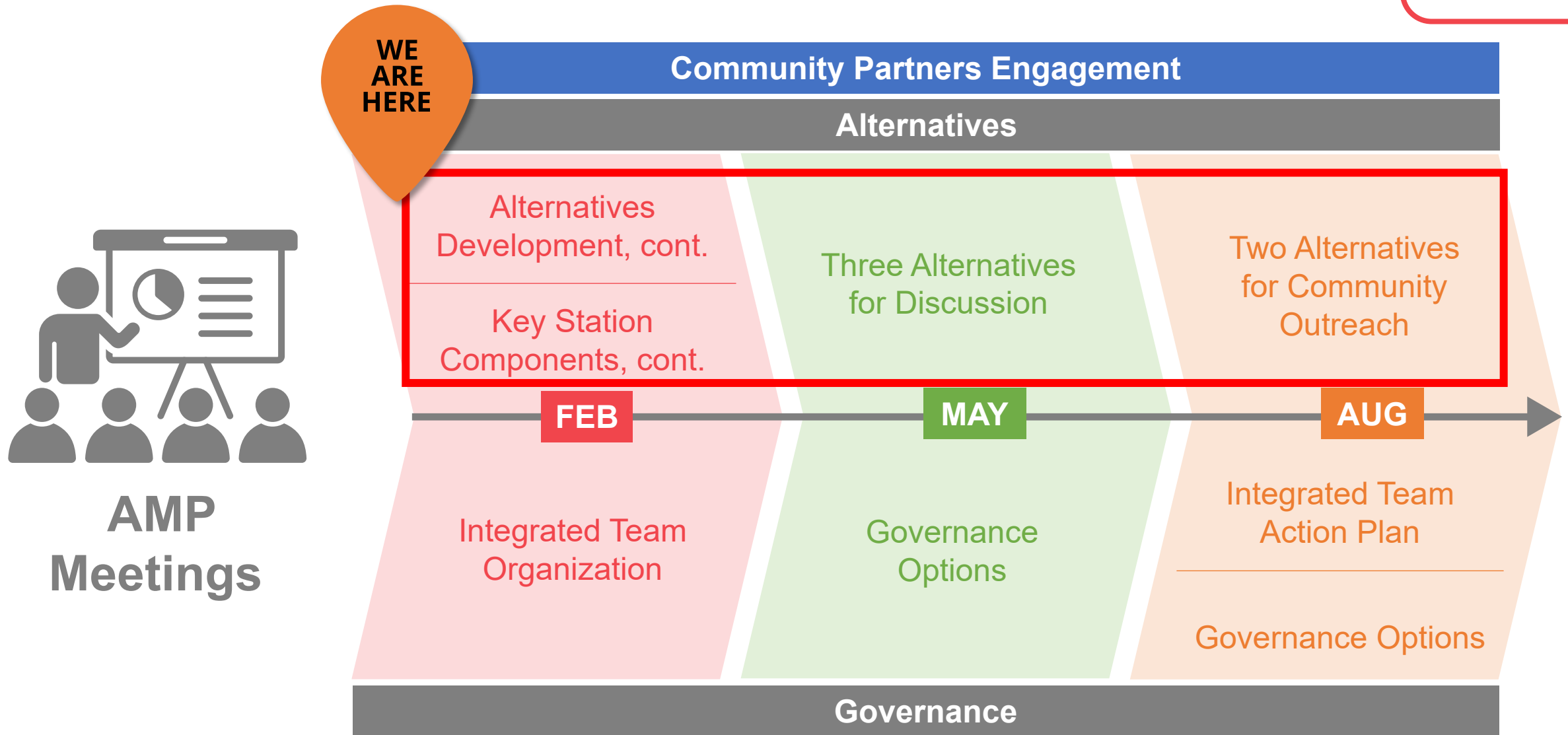
5

Station Components

6

Governance Update

Where We're Headed



Goals Review



Goals

The Surrounding Community:

An anchor for economic & community development

Partners & Key Stakeholders:

Achieving strategic aims and optimizing benefits for Partners and key stakeholders



The Passenger Experience:

A connected, multi-modal and passenger-friendly station

Transit Operators & Operations:

Facilitating safe, integrated and reliable transit operations

The Station Building:

A sustainable, future-proof and resilient station

- How we will execute our goals:
 - Design ensures the **function of the transit station** – designing from the tracks out
 - Consider the relationship of the tracks to the concourse to the ground plane and how those **connect modes**
 - Plan for **activation of space** with retail, food, gathering spaces, etc.
 - **Connect communities** around the station with pathways, view corridors, etc.

Alternatives Development



Key Station Components



**PG&E
Substation**



**Connecting
to BSV**



**Historic
Station**



**Light Rail Station
Location/Alignment**



**Caltrain
Maintenance
Facility**



Bus Service



**Airport
Connector
Landing**

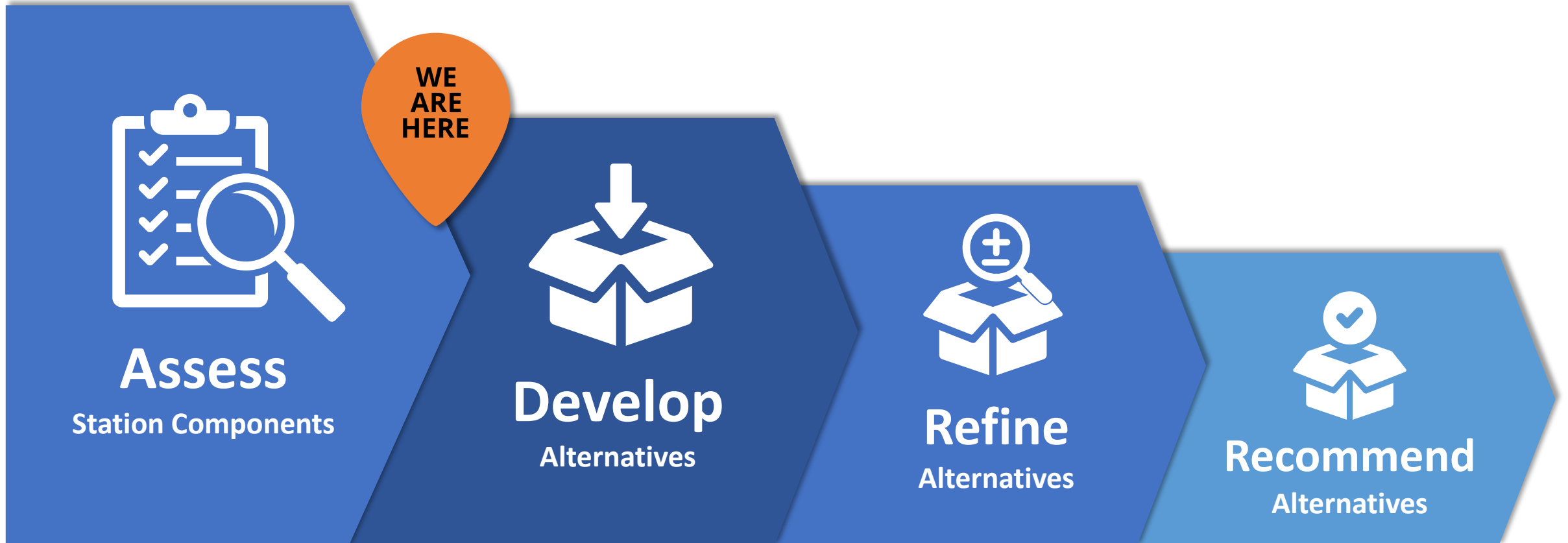


**Pick-up/
Drop-off**



**Retail/
Commercial**

Alternatives Development Process

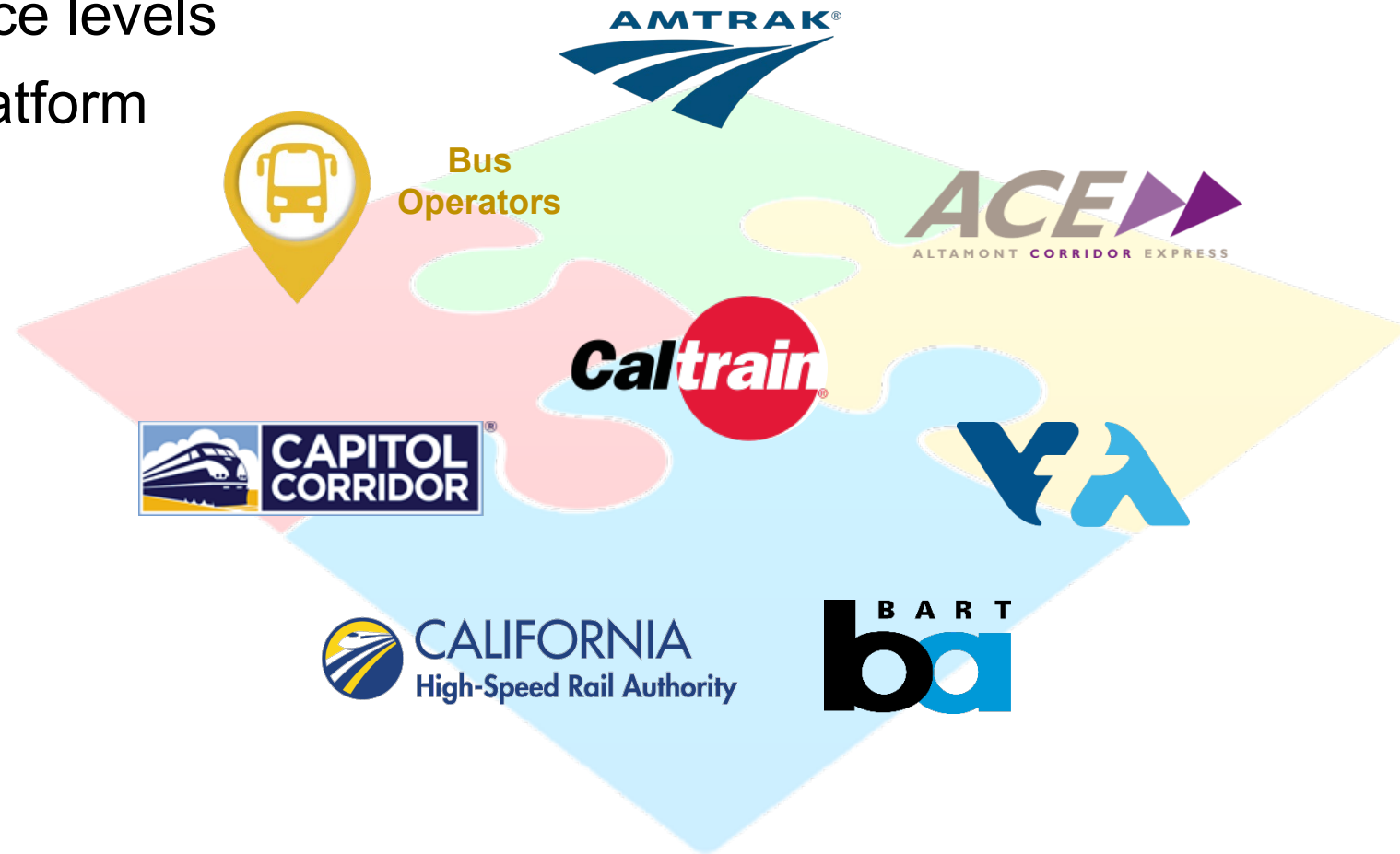


Operational Context



Intermodal Operations Analysis

- Anchor to needed transit service levels
- Operations Analysis – track/platform configuration underway
- Analysis on-going:
 - Platform widths
 - Concourse locations
 - Passenger flow
 - Connectivity between modes



Growing Transit in San Jose



Growth in Service
for Caltrain, VTA,
CCJPA and ACE



NEW Services
with BART and HSR



**Expanded
Bus Services**

**GROWTH = 100K+ Passengers with
Supported Redevelopment**

High-Capacity Transit Service Infrastructure Needs



Technical Analysis In-Progress

Updated operator service requirements drive need for:



Caltrain

ACE, Capitol Corridor,
and Amtrak

Union Pacific

CA HSR

VTA

BART



Platform
Faces



Platform
Faces



Platform
Faces



LRT Connection,
Platforms and
Track



BART
Connection



Tracks



Tracks



Track Ownership



Tracks
with Ability
for Trains to
Turn Back



Bus Connection

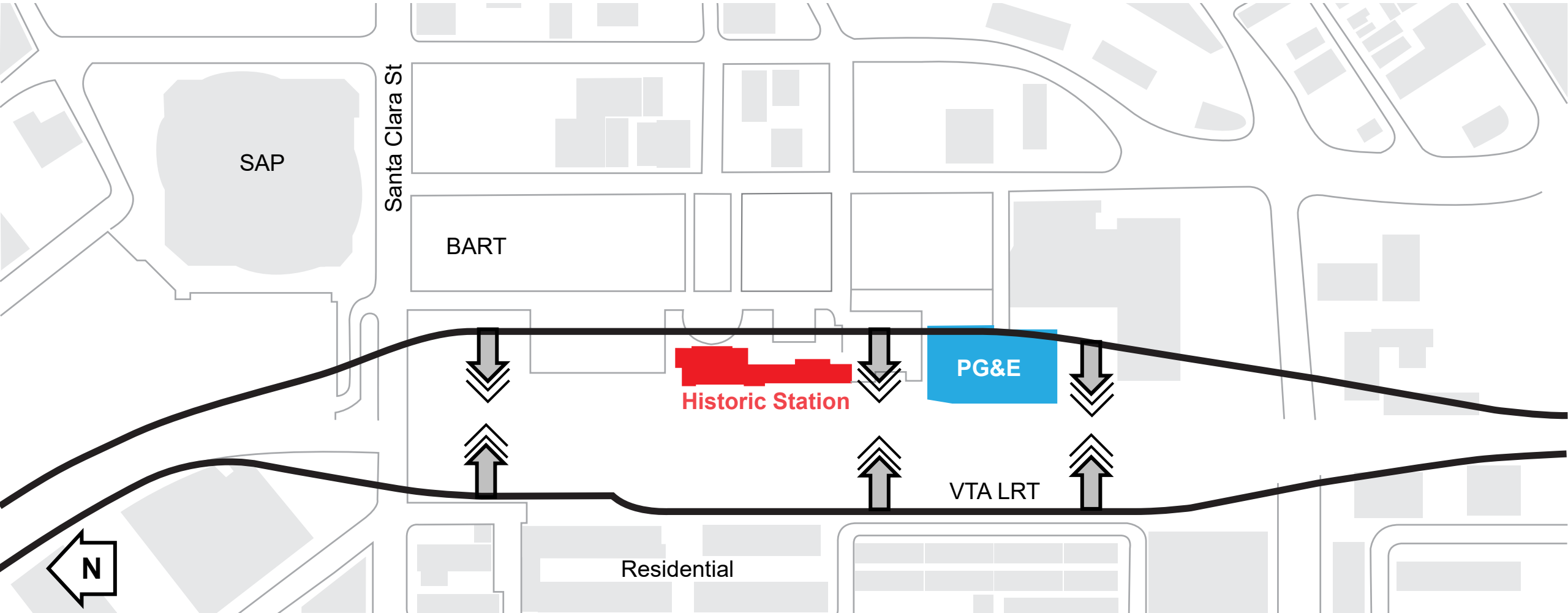
meets future service levels

Station Design

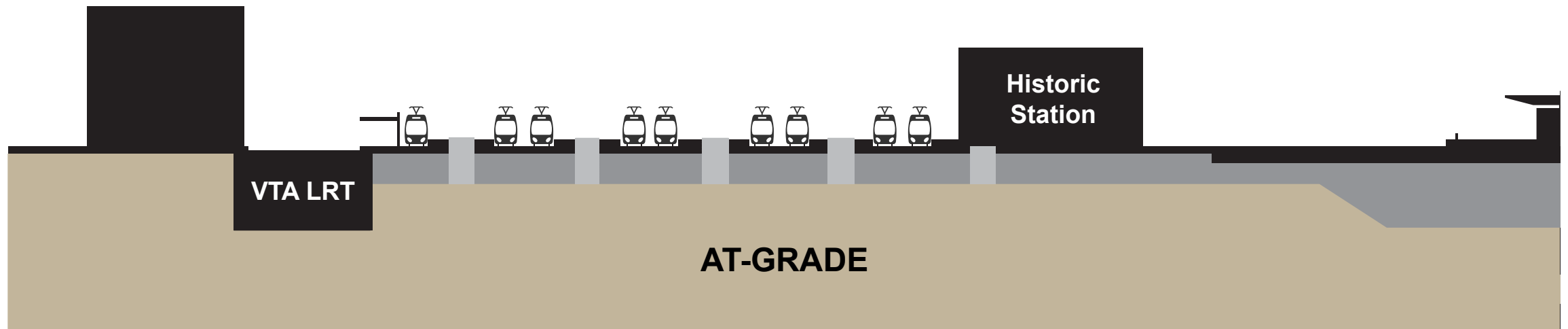
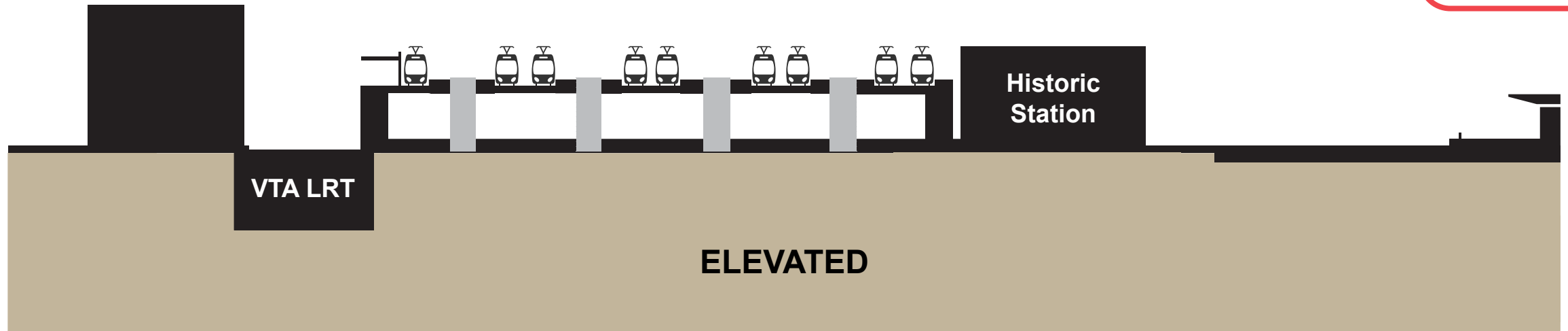
Footprint and Reducing Impact



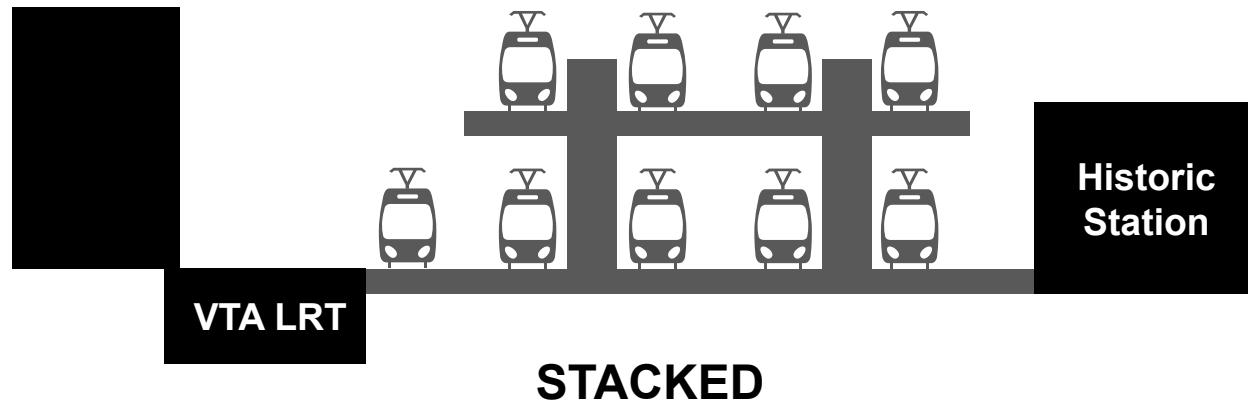
Assessing design options to reduce impacts identified by Concept Layout



Station Alternatives Under Consideration



Station Alternatives Under Consideration



- Previously considered by HSR but didn't advance
- Considering an improved version, which limits height and length
- Potentially reduces land use impacts
- Assessment of viability is in progress

Station Components





The Passenger Experience:
A connected, multi-modal and
passenger-friendly station

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**Airport
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**Pick-up/
Drop-off**



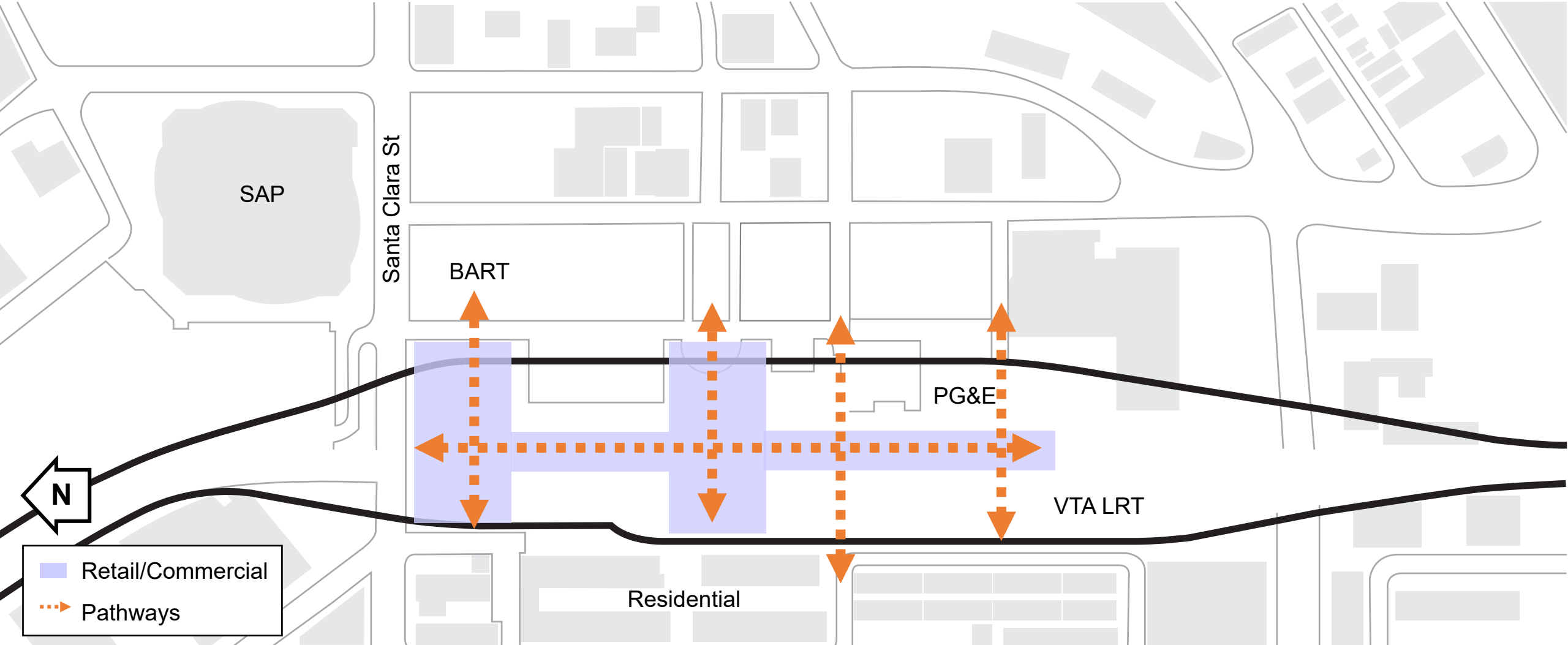
**Retail/
Commercial**



Retail/ Commercial

- All station alternatives will create a destination
- Priority considerations:
 - *Retail and commercial corridors*
 - *Restaurants*
 - *Programmed space*
- Locating commercial corridors to enhance transit connections

Creating Connections

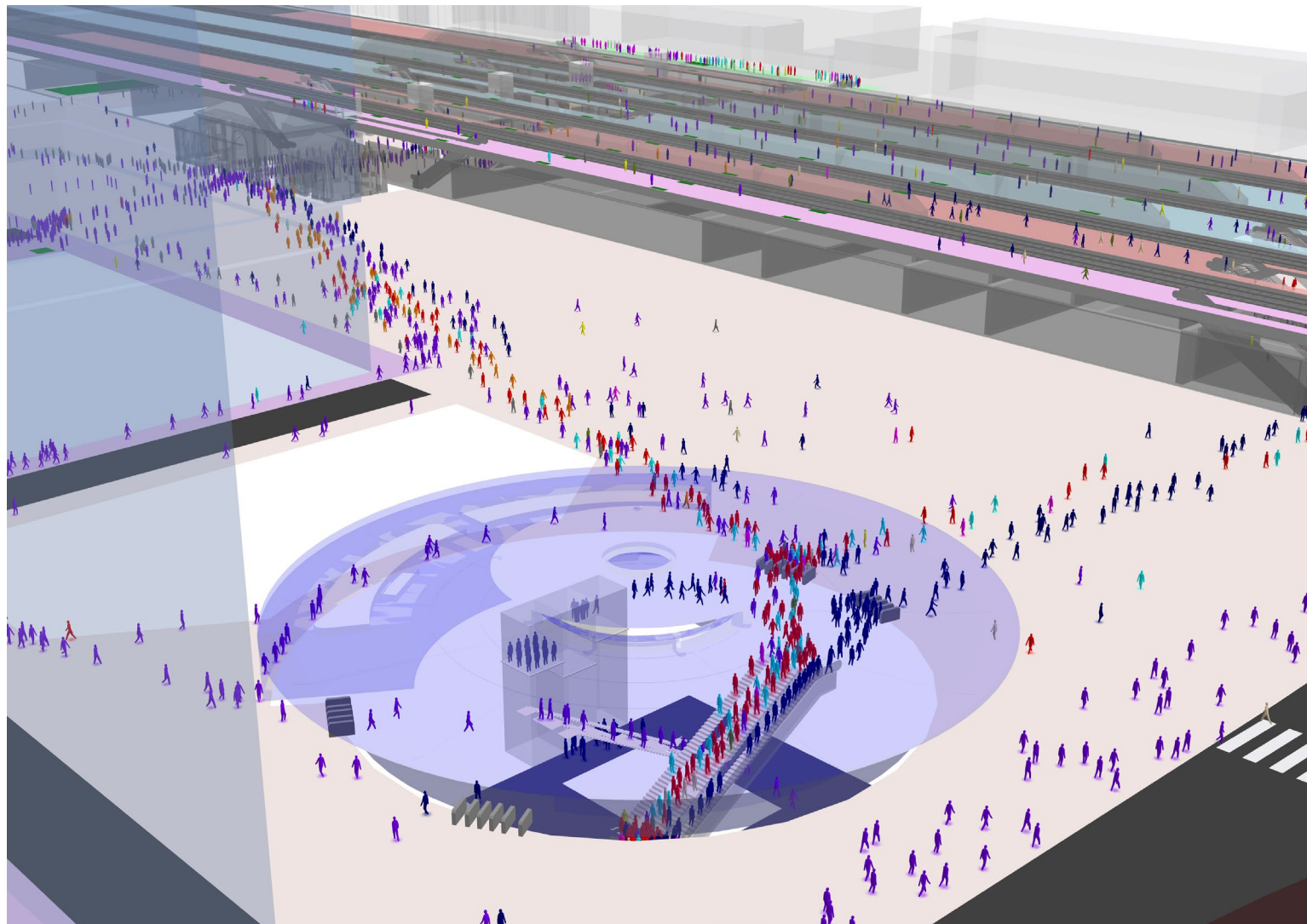




Connecting to BSV

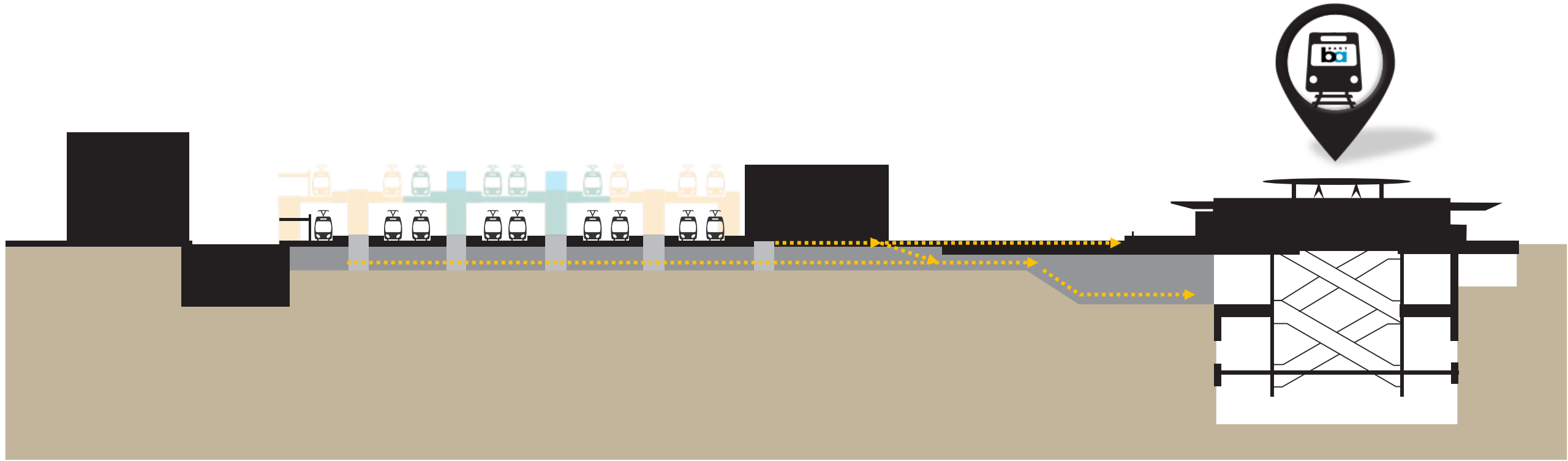
- All station alternatives can provide a direct connection to BSV
- Ongoing coordination with BSV
- Pedestrian modeling will help inform transfer times and cost-benefit

Connecting to BSV – Passenger Flows



Illustrative sample of passenger flow simulation in evening peak

Connecting to BSV

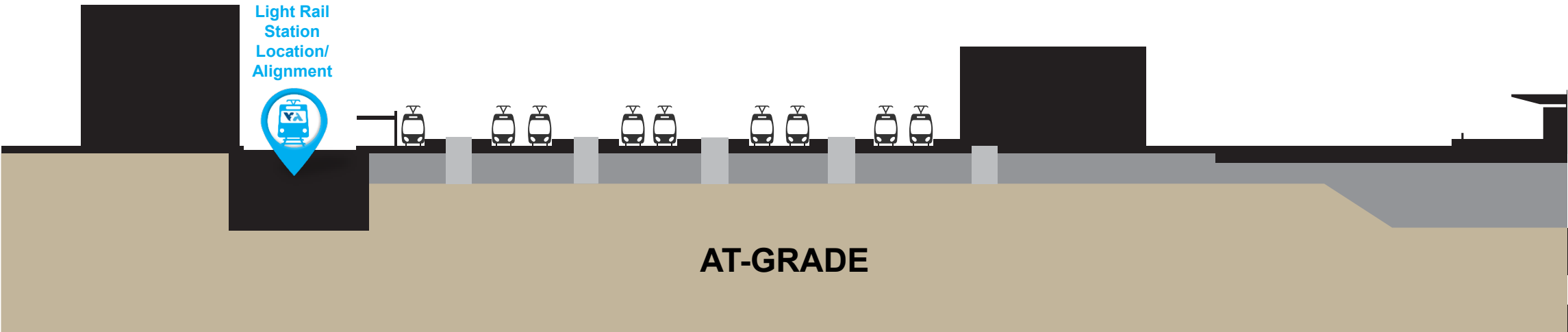




Light Rail Station Location/ Alignment

- All station alternatives require some modification to LRT:
 - LRT tunnel, alignment and grade potentially need redesign to accommodate heavy rail corridor
 - Changes to station may be needed for easy transfers
- Further design of the LRT is a major next step in process

LRT Station Location and Alignment

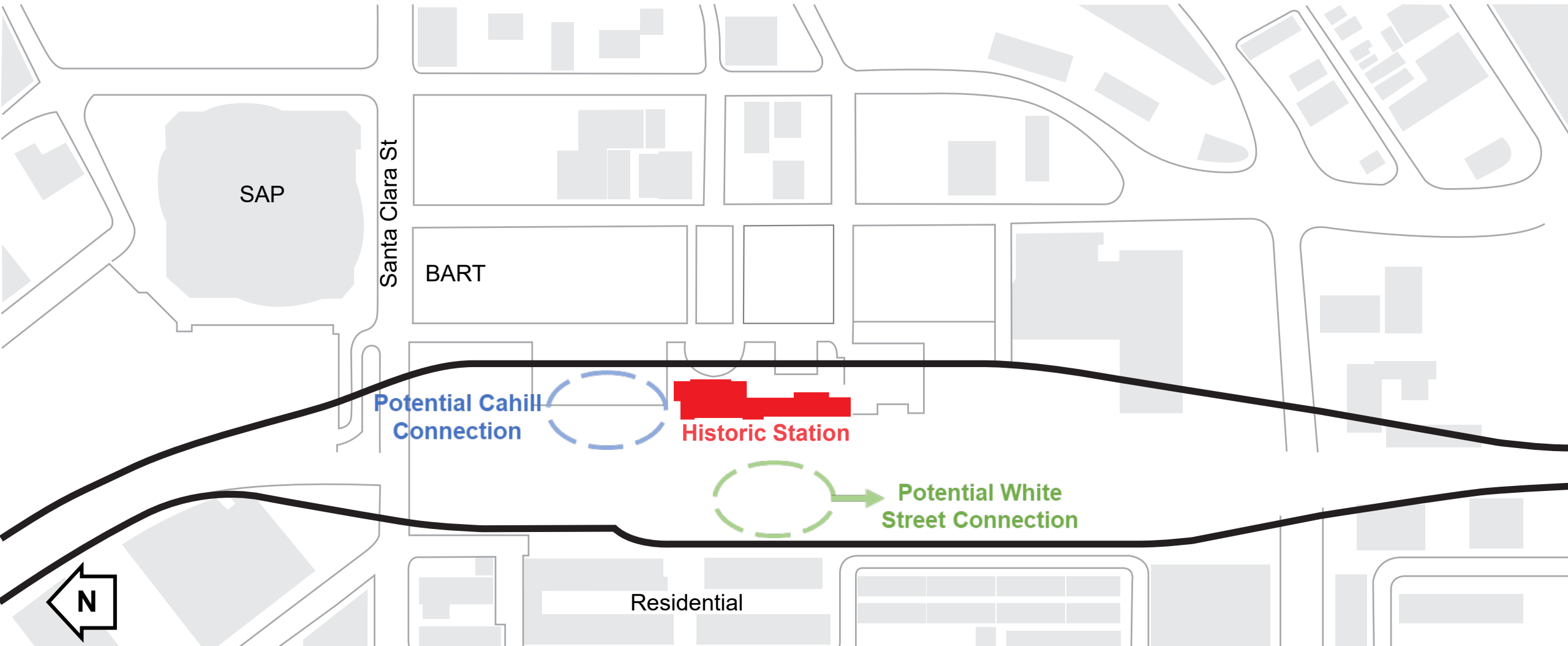




Airport Connector Landing

- City of San Jose conducting feasibility analysis
 - Ongoing coordination
- Station alternatives considering two alignments:
 - Cahill Street alignment assumed to be stub-end (under consideration by City of San Jose)
 - White Street alignment allows for extension

Airport Connector





Bus Service



**Pick-up/
Drop-off**

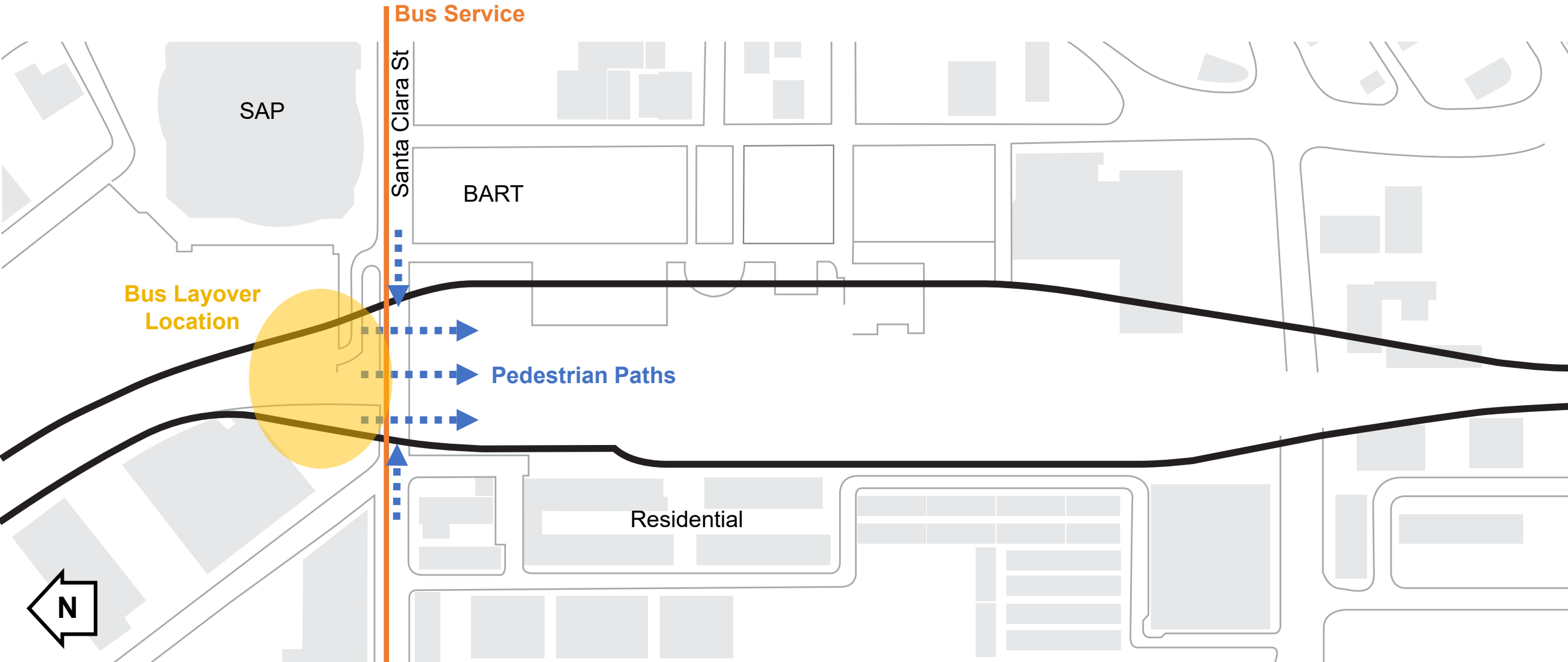
Bus Service/Layover

- All station alternatives prioritize:
 - Keeping bus stops on Santa Clara
 - Providing a layover facility
 - Easy pedestrian access to station

Pick-up/drop-off

- All station alternatives provide:
 - Pick-up/drop-off separate from bus layover facility
 - Dedicated curb space
 - Shared pedestrian access with bus facility

Bus Service/Layover and Pick-up/Drop-off





PG&E Substation

- Confirming the extent that at-grade and elevated station alternatives encroach into the PG&E substation site
- For the stacked alternative, assessing design options to avoid encroachment
- Substation contains outdated technology
- Coordination with City of San Jose, Downtown West, and PG&E needed
- Option to rebuild as a more compact substation in same location OR relocate nearby

PG&E Substation

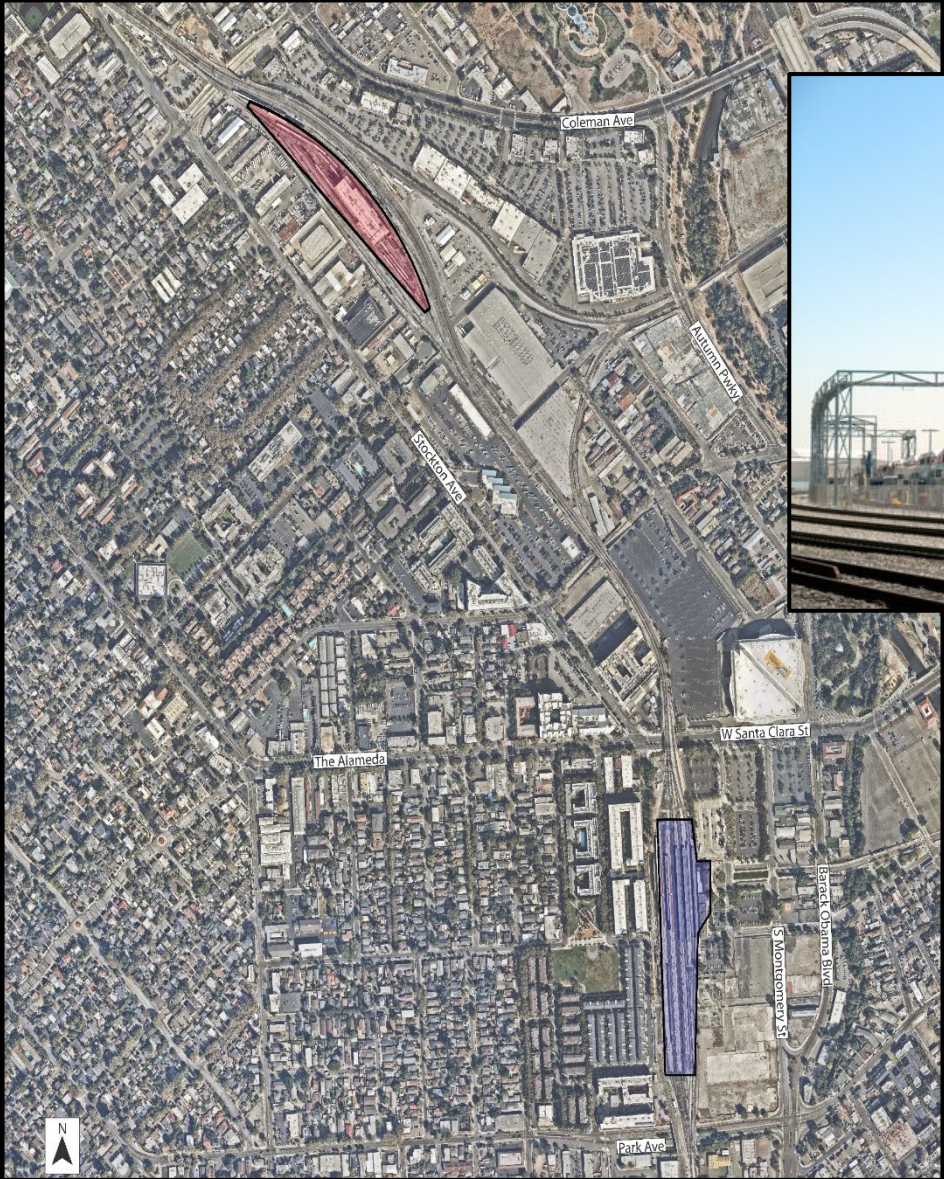




Caltrain Maintenance Facility

- Original Concept Layout proposed to relocate CEMOF because the elevated track could not connect with a grade less than 1% without UPRR approval
- Reconsidering CEMOF relocation as part of project to reduce project cost
- Investigating design solutions avoid relocation and a UPRR design variance
- If UPRR design approval is required, it is a significant project risk in terms of negotiating time frames and project costs
- Caltrain will separately consider CEMOF expansion/upgrades to satisfy systemwide needs

Caltrain Maintenance Facility



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Complete
Technical Due
Diligence



Present
3 station
Alternatives

- 1) Improved Concept Layout (Elevated)
- 2) At-grade
- 3) Stacked



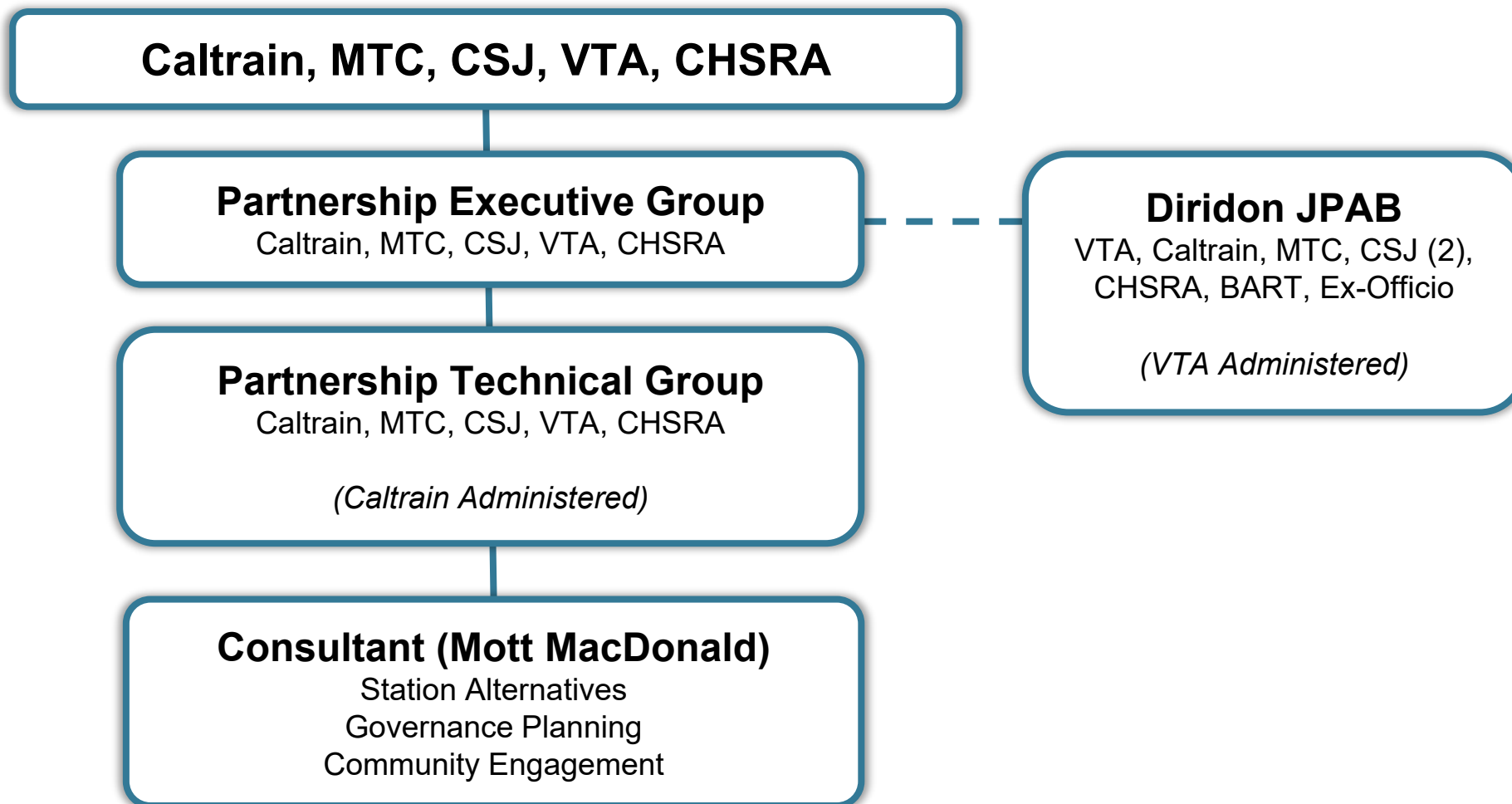
Define
Assumptions
& Tradeoff
Considerations



Governance Update

- Goals
 - Redevelop Diridon Station
 - Advance project from Concept to Delivery
- MOU Partnership (San Jose, Caltrain, VTA, MTC, CHSRA)
- Set up governance structure for success
- Concurrent efforts
 - ➔ **Set up Interim Integrated Organization (to advance planning and environmental review)**
 - Determine Long-term organization (to ensure funding and delivery)

Current Organization



- Strengthen partnership relationships
- Clear goals and objectives
- Clear decision-making
- Clear roles, responsibilities, accountability
- Move faster

Restructured Organization



Diridon Project Steering Board

(Diridon JPAB membership: Caltrain, San Jose, VTA, MTC, CHSRA, BART, Ex-Officio)

Diridon Project Integrated Program Team

Caltrain

Station Planning
Environmental Planning
Design and Engineering

San Jose

Station Area Plan
Development
Stakeholder /
Community Outreach

VTA

Governance Planning /
Funding Strategy
Legislative Advocacy
Plan
Projects Coordination

MTC

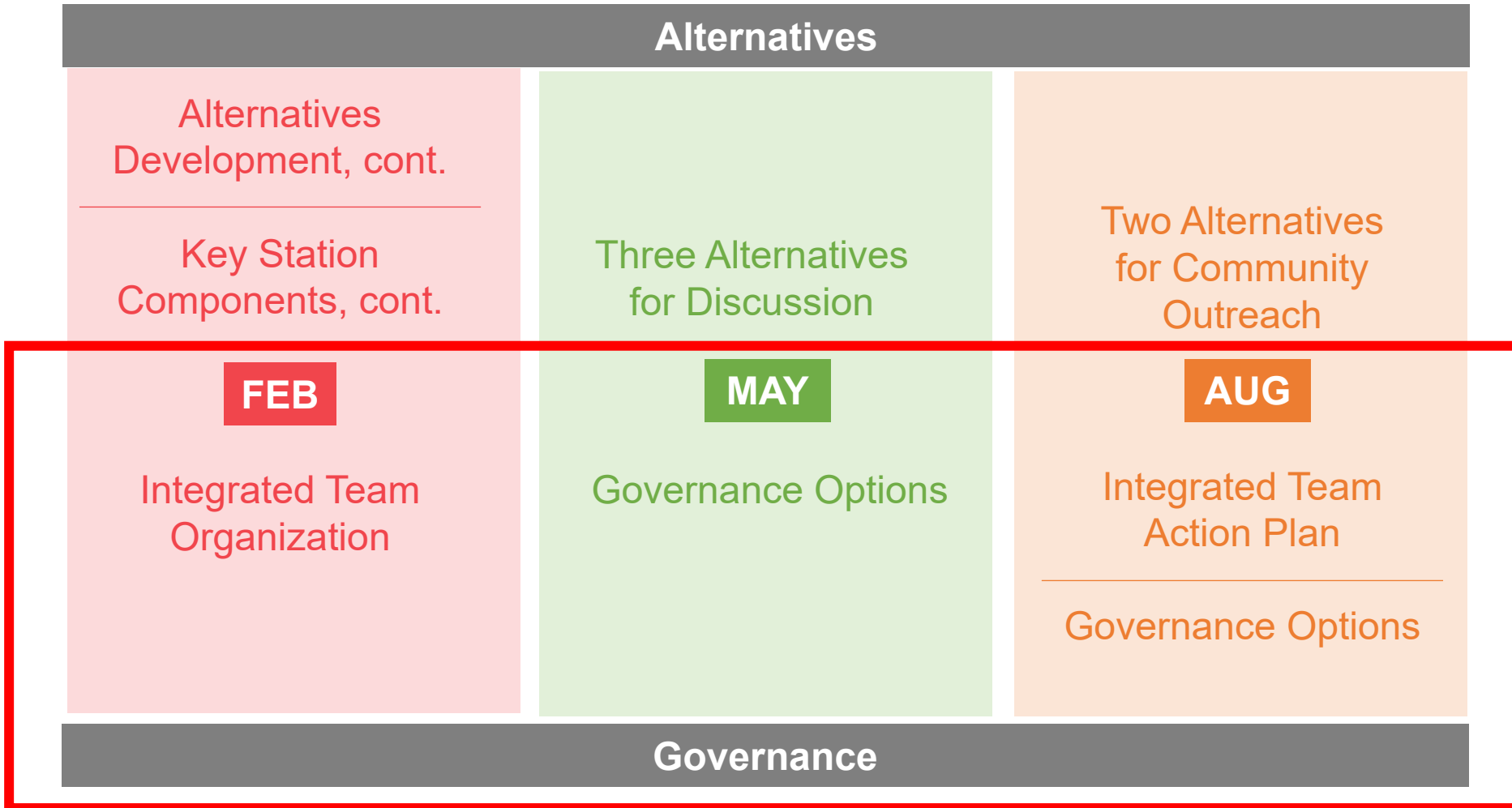
Regional Legislative
Advocacy
Regional Funding
Strategy
Regional Network

CHSRA

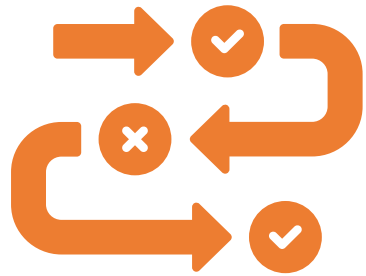
HSR Project Interface
FRA Partnership
Support

- **Develop Partner Agency MOU**
 - Integrated Program Team Organization
 - Project design review protocols
- **Set up next phase of work 2024 - 2028**
 - Scope and timeline (Community Engagement and Environmental)
 - Budget / Funding
 - Staff / Consultant
 - San Jose office

Upcoming AMP Meetings



Look Ahead



Alternatives

- Alternatives for discussion



Governance

- Long term options



Thank You