

# South Linden Avenue and Scott Street Grade Separation (LSGS)

Project Status Update by Caltrain

January 22, 2025

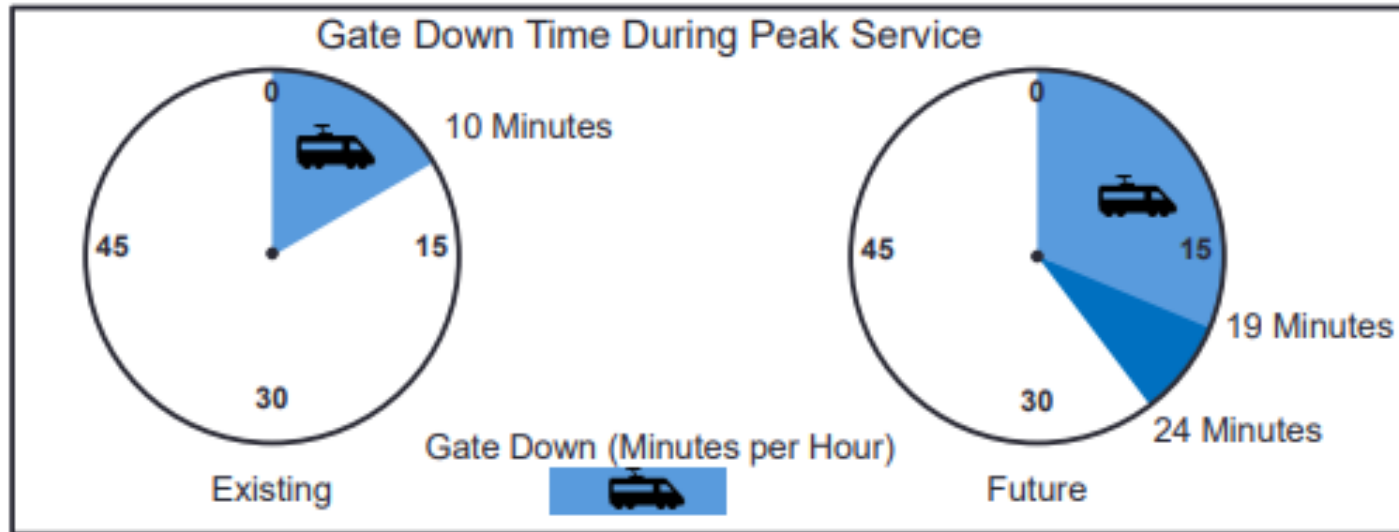


# Project Partners and Roles



# Forecast Gate Down Times at Peak Hours

(Long Range Service Vision – Adopted Moderate Growth Scenario)

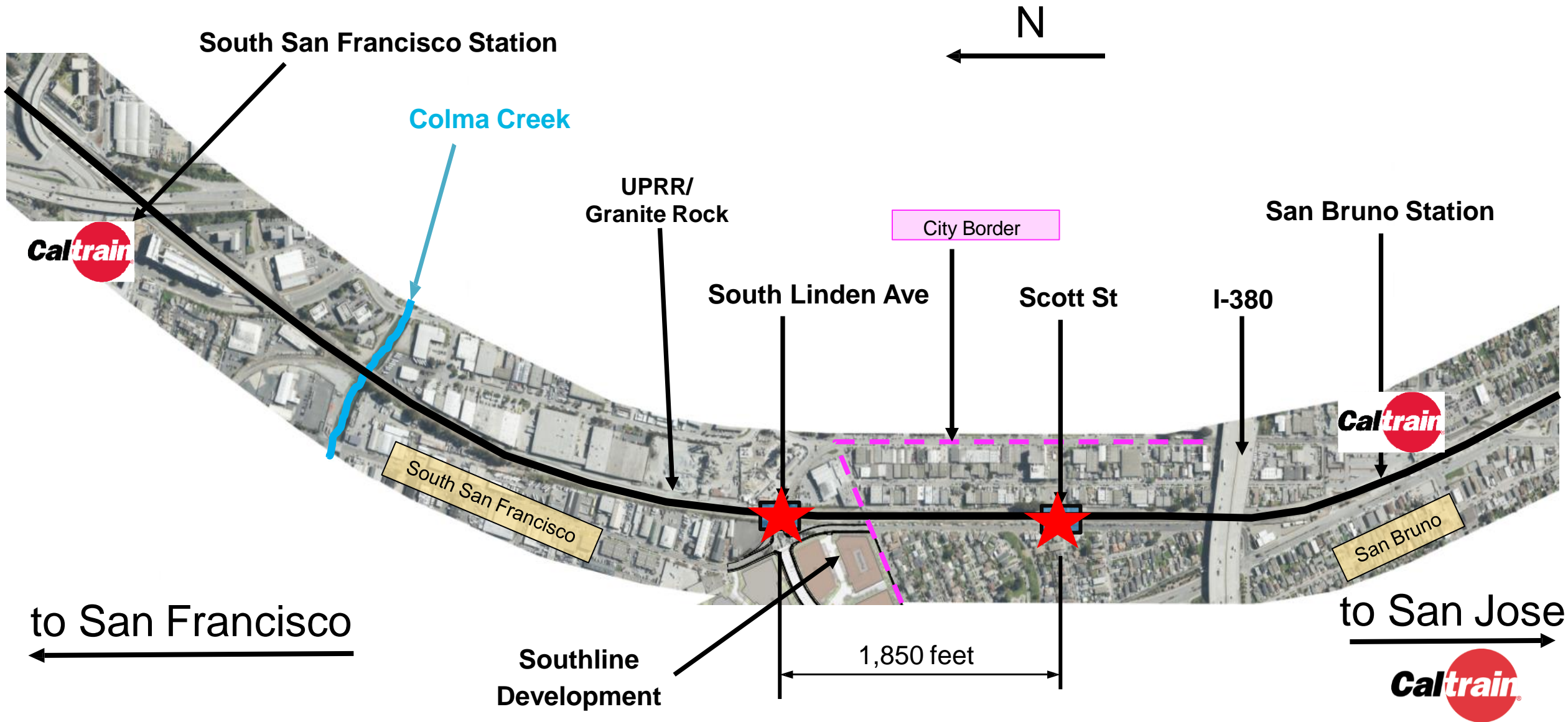


## Gate Down Times During Peak Service Hours:

Existing	10 minutes each hour
Moderate Growth*	19 minutes each hour
High Growth*	24 minutes each hour

***Trains will be passing through the grade crossing every few minutes.***

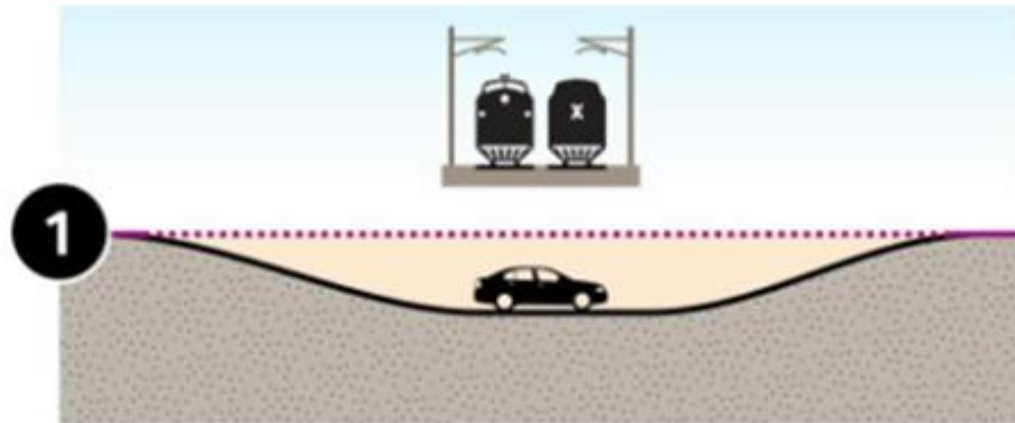
# Background: Project Location/Key Features



# PSR Alternative 1 – Requirements

## Alternative 1: Hybrid

Rail Partially Elevated and Roadway Partially Lowered

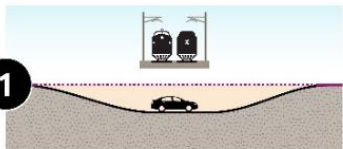
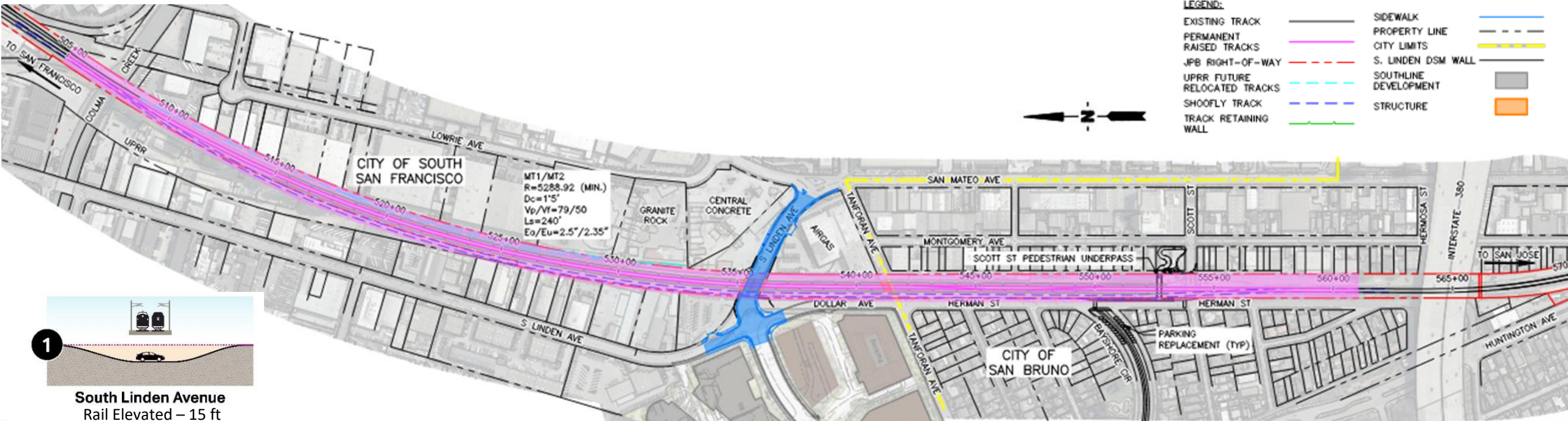


### South Linden Avenue

Rail Elevated 15 ft  
Roadway Lowered 7 ft

- ❑ Lowering roadway 7 ft, elevate railroad 15 ft. and build railroad bridge
- ❑ Elevate Caltrain tracks for one mile with **retaining walls**
- ❑ Electrified **shoofly** (detour) tracks
- ❑ Significant property and partial building **acquisition/modifications**
- ❑ Relocation of **UPRR/Granite Rock tracks** plus fiber optic and utilities
- ❑ Shoofly and railroad construction within **safety envelope** of operating, electrified trains

# PSR Alternative 1 – Design Footprint



**1**  
 South Linden Avenue  
 Rail Elevated – 15 ft  
 Road Lowered – 7 ft

5600 ft

# Optimized Alternative (OA)



The evaluation revealed a **refinement of the PSR alternative**. A “jacked box” or Optimized Alternative that has the following characteristics and advantages:

- Retains key features of S. Linden **Grade Separation**
- Lower risk** (due to less ROW, no track impacts to UPRR/Granite Rock, fewer environmental impacts, faster construction)
- Fewer railroad operational impacts**
- Lower cost**

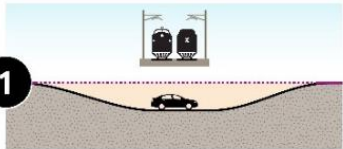
# Box Jacking

- ❑ Push or "jack" a precast concrete box beneath existing tracks
- ❑ Keeps existing railroad tracks
- ❑ Eliminates shoofly and elevated tracks





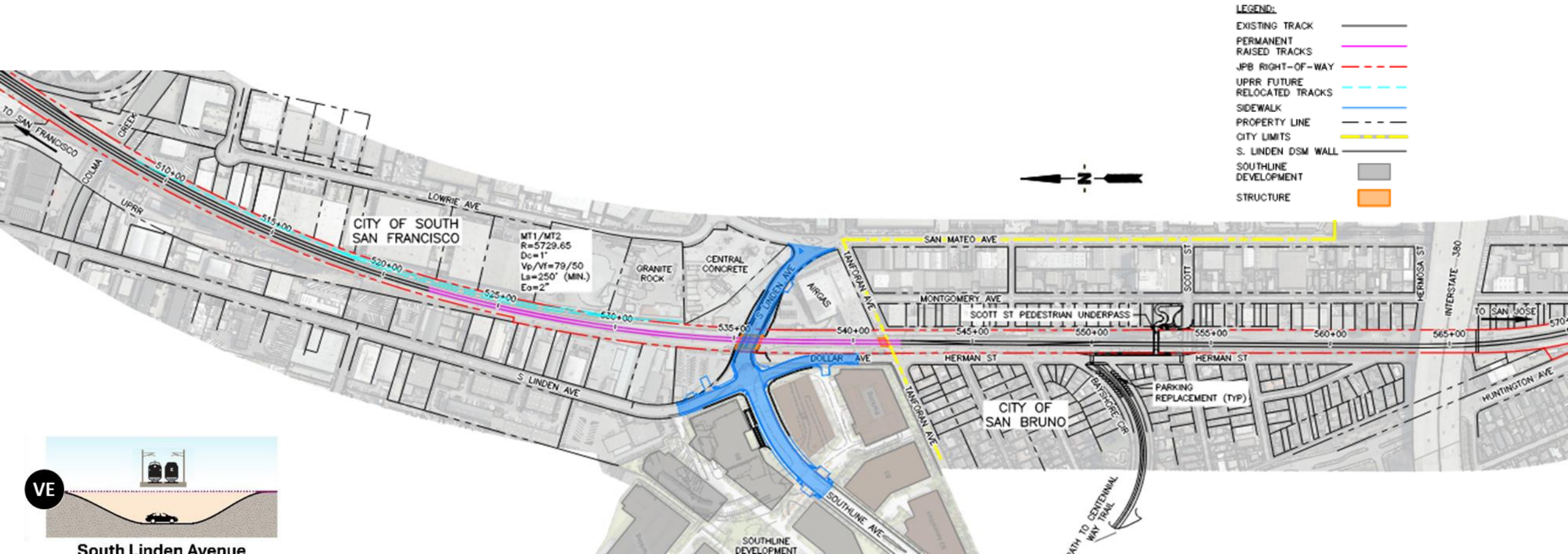
# PSR Alternative 1 – Design Footprint



**1**  
**South Linden Avenue**  
 Rail Elevated – 15 ft  
 Road Lowered – 7 ft

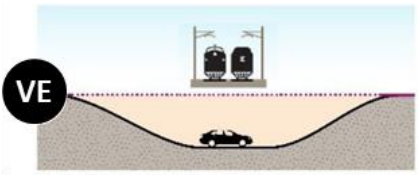
5600 ft

# Optimized Alternative – Design Footprint



**LEGEND:**

- EXISTING TRACK —
- PERMANENT RAISED TRACKS —
- JPB RIGHT-OF-WAY - - -
- UPRR FUTURE RELOCATED TRACKS - - -
- SIDEWALK —
- PROPERTY LINE - - -
- CITY LIMITS - - -
- S. LINDEN DSM WALL —
- SOUTHLINE DEVELOPMENT
- STRUCTURE



**South Linden Avenue**  
 Rail Elevated – 2 ft  
 Road Lowered – 20 ft

# Design Alternative Comparison

Project Element	PSR Alternative 1	Optimized Alternative
Construction Schedule	84 months	36 months
Construction Cost <sup>1,2,3,4</sup>	\$450	\$320
Property Owners Impact	Extensive	Moderate

<sup>1</sup> Dollars shown are in millions.

<sup>2</sup> Based upon escalation of 5% to midpoint of construction

<sup>3</sup> Assumes all funding available when required

<sup>4</sup> Estimate not adjusted for risk

*Slide does not show total project cost*

# Similar Project – Jefferson Avenue in Redwood City



- Road lowered approx. 24 ft
- Track kept at existing elevation
- Fully accessible for peds/bikes/autos
- Retaining walls allow for building construction and landscaping

# Video Rendering of South Linden Ave - OA



- Road would be lowered by 22 ft
- Track would be raised less than 2 ft
- Fully accessible for peds/bikes/autos
- Retaining walls allow for building construction and landscaping

# Summary

With new analysis of the design, constructability, and risks, Caltrain endorses **the Optimized Alternative** as a **more effective** and **realistic** option to advance forward with design.

By contrast, the PSR Alternative is least practical alternative due to:

- 7-year construction **duration**
- the large **impacts** (ROW, the environment, the footprint, traffic)
- the higher **cost**, higher risk, and fundability
- the impacts of **safety** clearances
- the construction **inefficiencies** (constrained site access, electrified operating railroad environment)

# Next Steps

- On-going engagement with property/business owners
  - Winter through Spring 2025
- San Bruno City Council – Action on staff recommendation
  - January 28<sup>th</sup>, 2025
- South San Francisco City Council
  - February 12<sup>th</sup>, 2025
  - Environmental Phase
  - Preliminary engineering (15%-35%)
- Project team planning for next phase of the design work

