

ALTERNATIVES ANALYSIS

Downtown San José

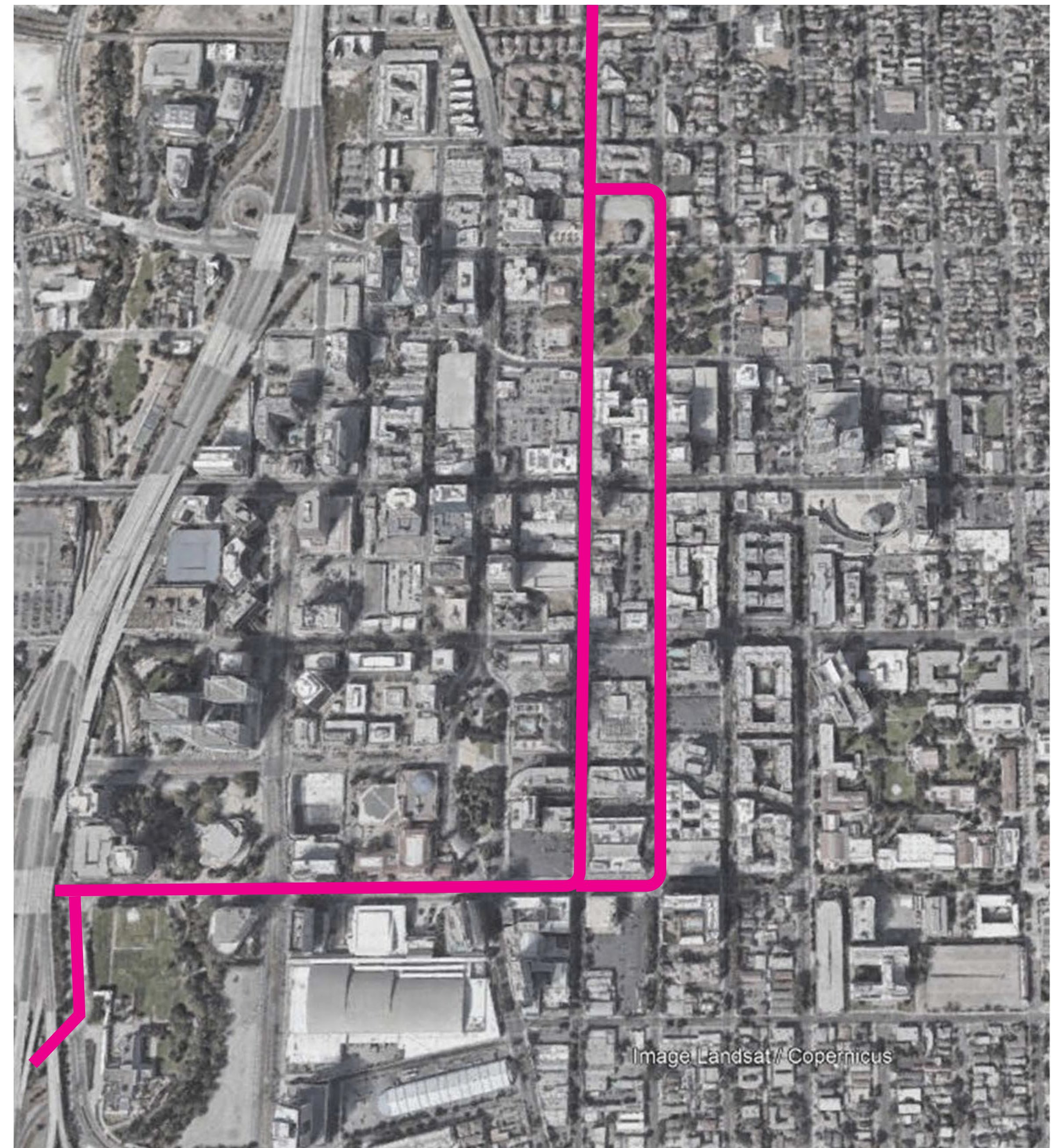
Light Rail

Realignment Project



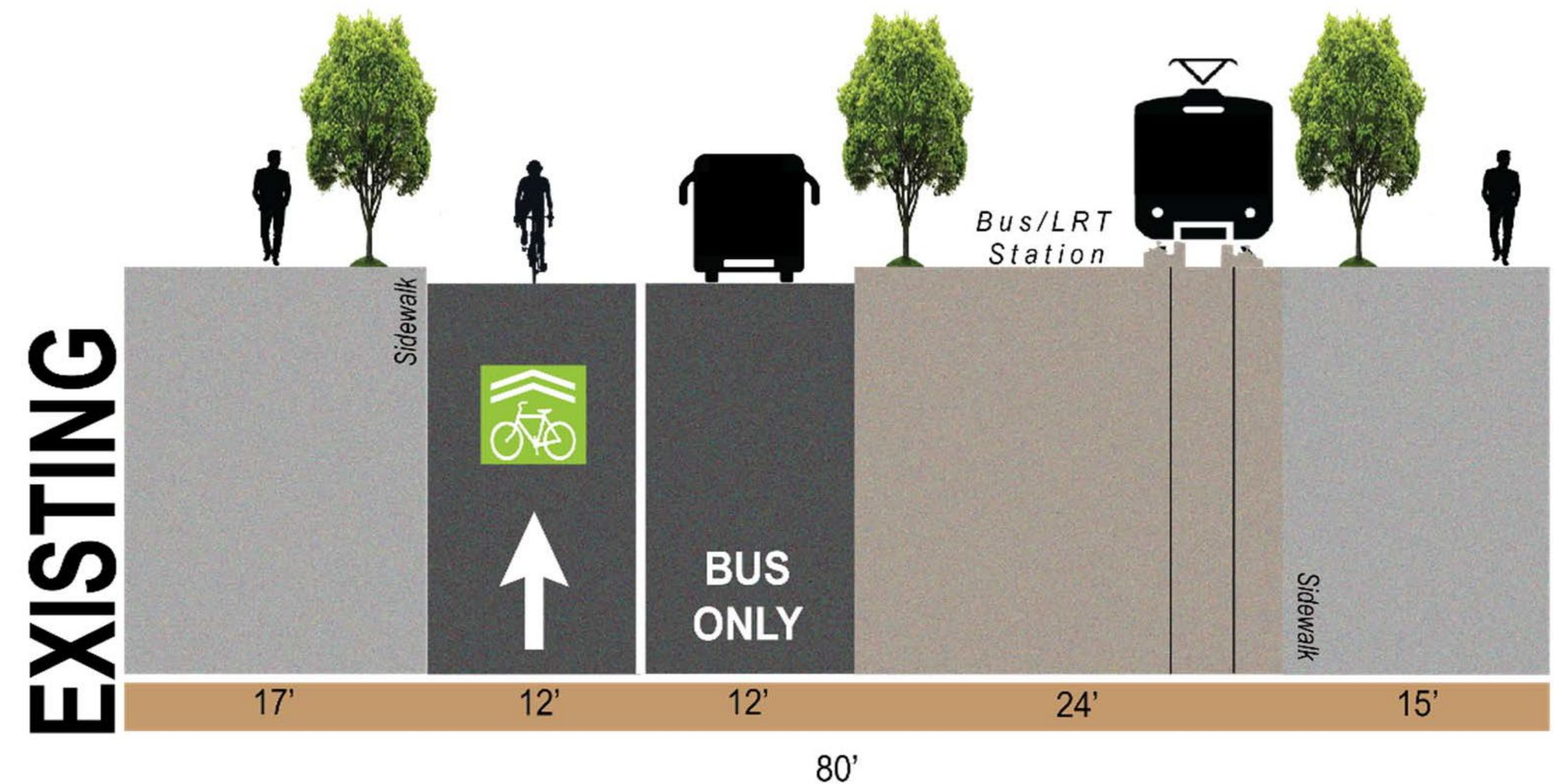
Downtown Light Rail Analysis

- Slowest Segment in VTA light rail system
- Approximately 1 mile long
- Speeds governed by California Public Utilities Commission (CPUC)
- Existing speed limit - 10 mph
- New configuration would allow higher maximum speed
- 20 mph (at-grade)
- 45 mph (Grade separated)



Downtown Light Rail Analysis

- Tracks currently configured at sidewalk level
- Higher speeds would require significant reconfiguration
- New configuration would reduce potential conflicts between trains and other modes
- Travel times would improve between 2-6 minutes



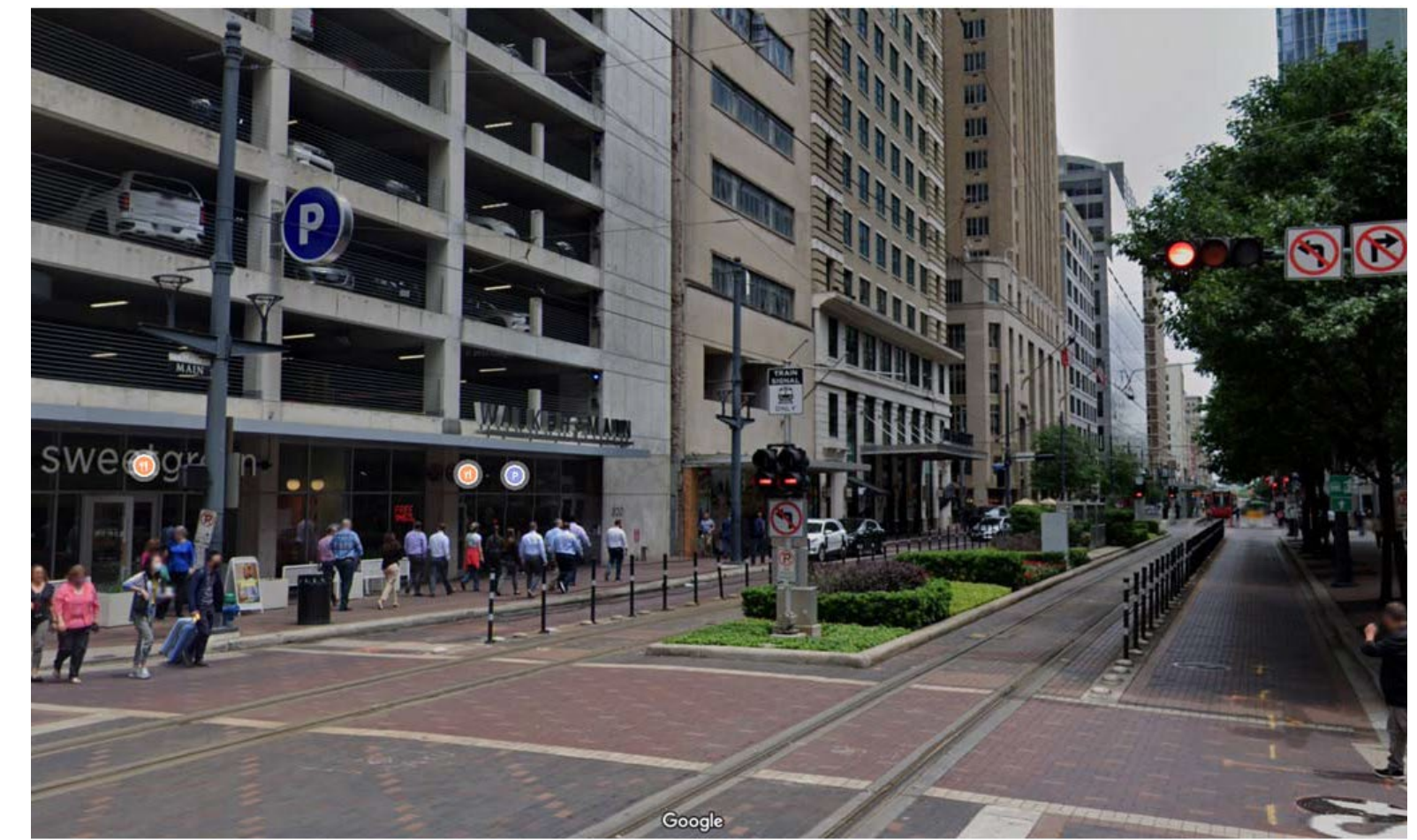
Examples



Netherlands



San Francisco, CA



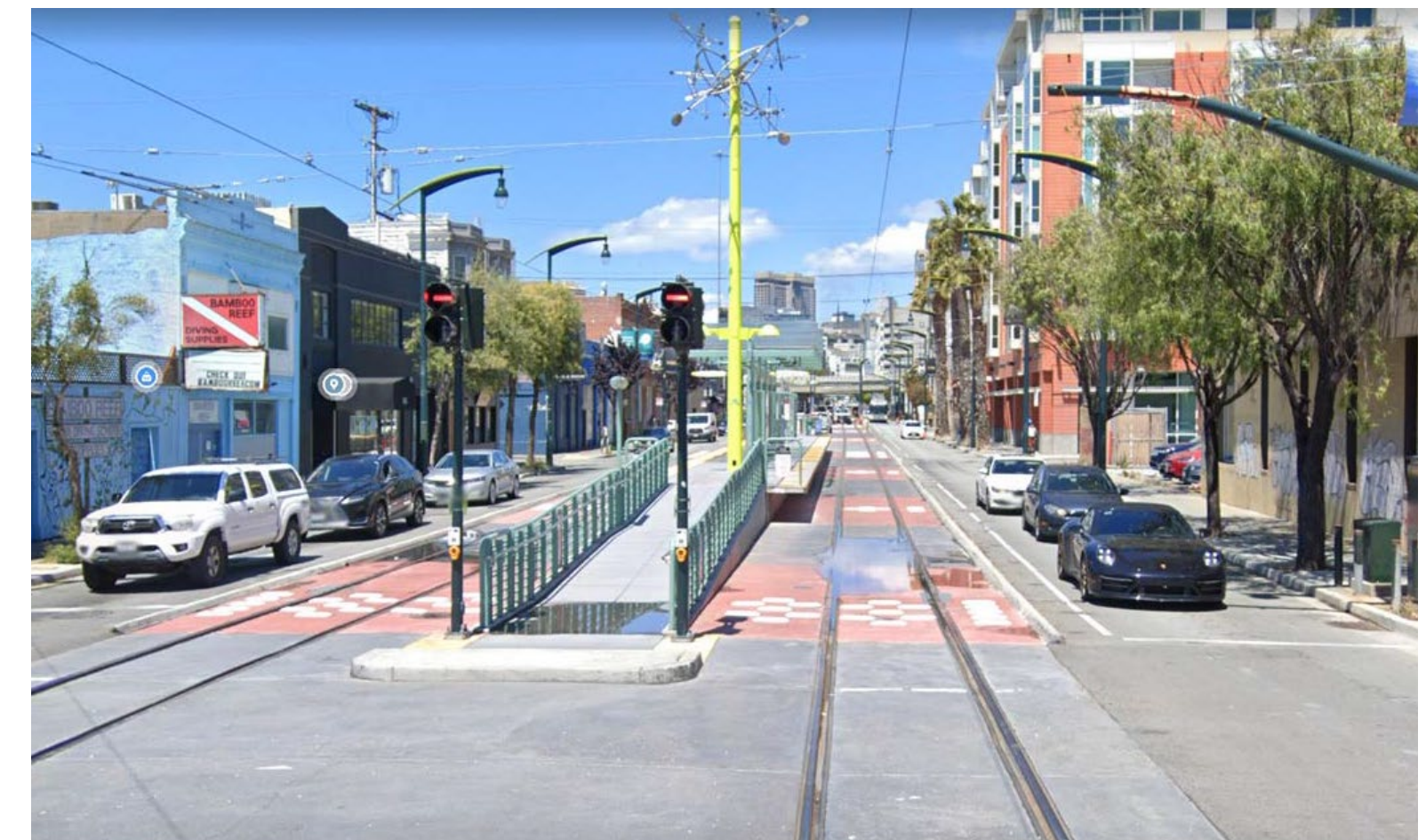
Houston, TX



San Diego, CA



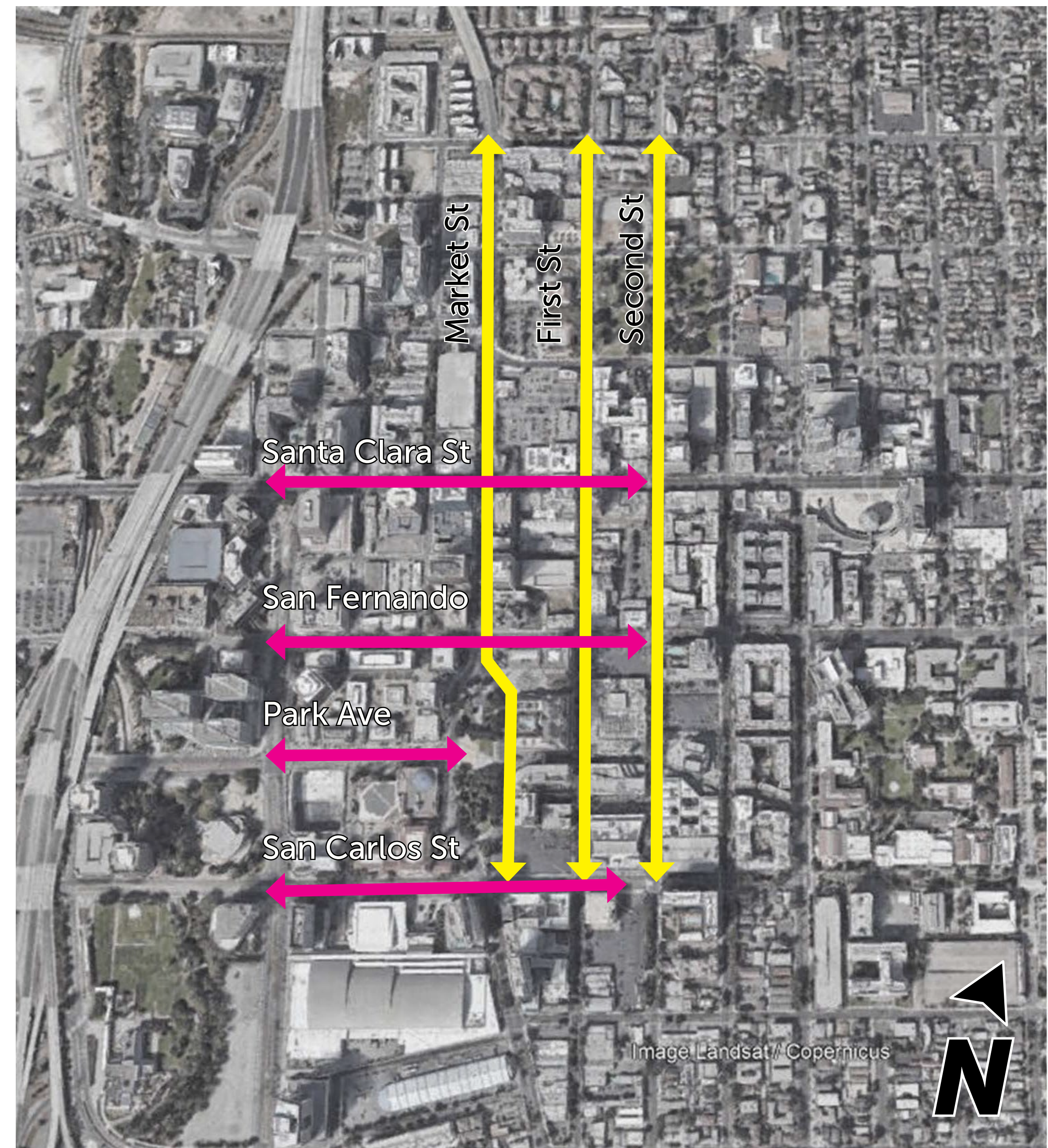
Seattle, WA



San Francisco, CA

Workshop Summary

- 25 total options
- Analysis included:
 - Below grade, at-grade, above grade options
 - First Street, Second Street, and Market Street
 - Santa Clara Street, San Fernando Street, Park Avenue, and San Carlos Street

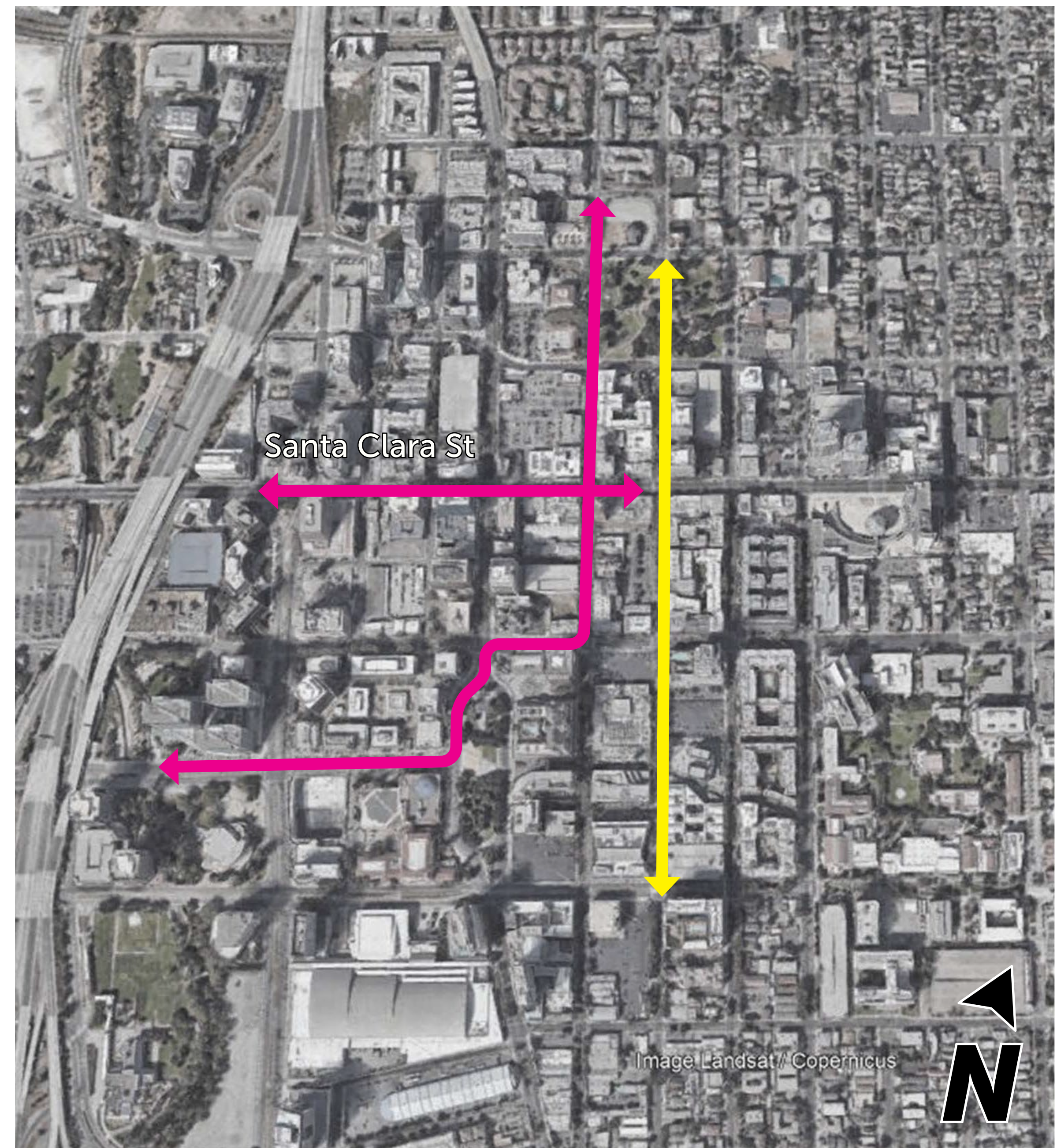


ALTERNATIVES

	Vertical Configuration	North-South Configuration	East-West Configuration
1	Below Grade	1st	San Carlos
2	Below Grade	1st	Park
3	Below Grade	1st	San Fernando
4	Below Grade	1st	Santa Clara
5	Below Grade	Market	San Carlos
6	Below Grade	Market	Park
7	Below Grade	Market	San Fernando
8	Below Grade	Market	Santa Clara
9	At-Grade	1st	San Carlos
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12	At-Grade	1st	Santa Clara
13	At-Grade	Market	San Carlos
14	At-Grade	Market	Park
15	At-Grade	Market	San Fernando
16	At-Grade	Market	Santa Clara
17	Above Grade	1st	San Carlos
18	Above Grade	1st	Park
19	Above Grade	1st	San Fernando
20	Above Grade	1st	Santa Clara
21	Above Grade	Market	San Carlos
22	Above Grade	Market	Park
23	Above Grade	Market	San Fernando
24	Above Grade	Market	Santa Clara
25	Bypass	Bypass	Bypass

Alternatives Eliminated

- Santa Clara Alignments - potential impacts to the utilities future BART structures
- Winding alignments – slow speeds due to additional turns
- Grade-separated alignments on narrower streets – community, major construction, and utility impacts
- 15 of 25 alternatives eliminated



Alternatives Considered

- 4 alternatives recommended for additional analysis
- Highest benefits to passengers
- Least expected construction and community impacts
- Variety of different configurations



Photo Courtesy Shane Rankissoon

Portland, OR

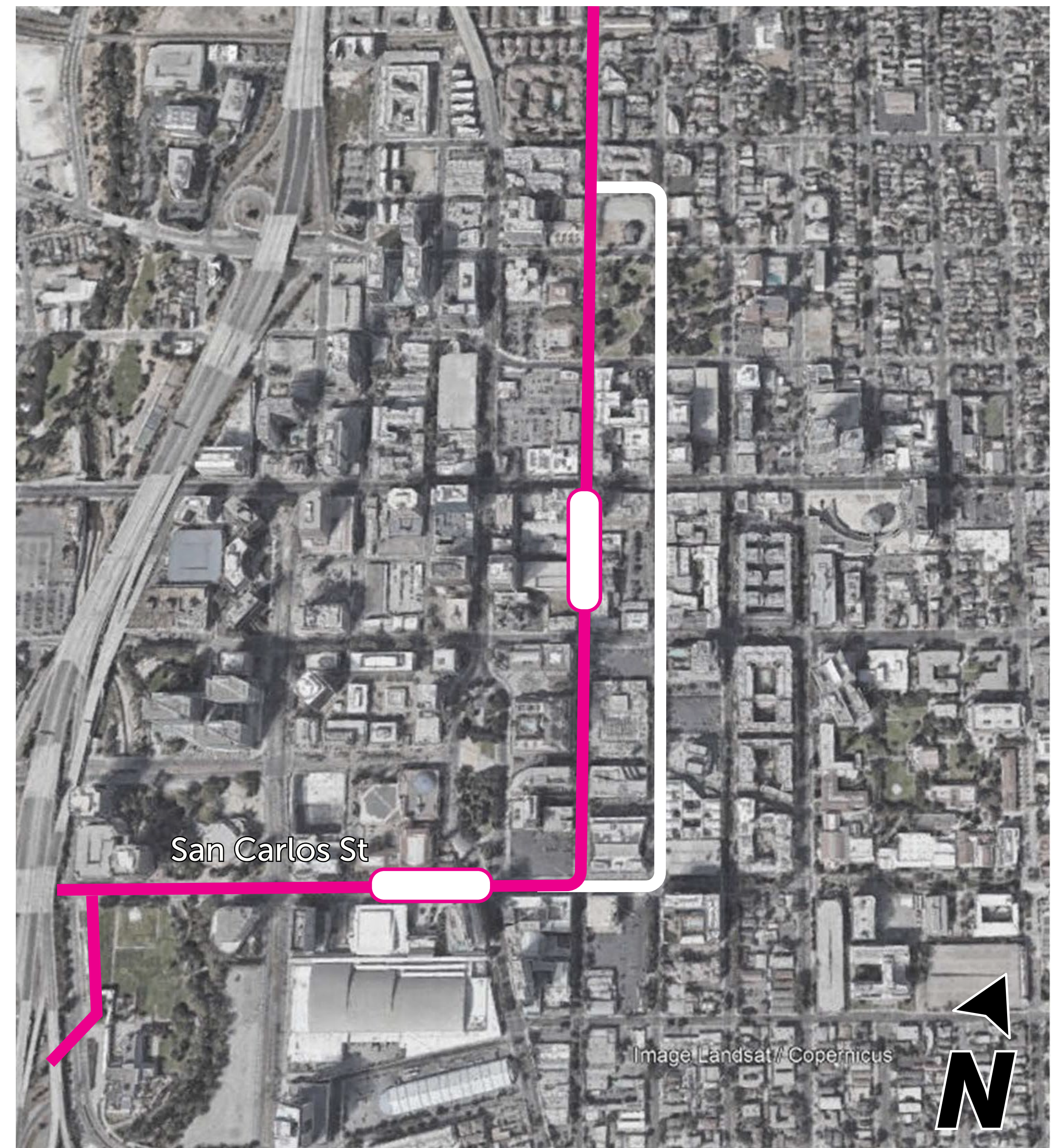


Photo Courtesy Robert Schwardt

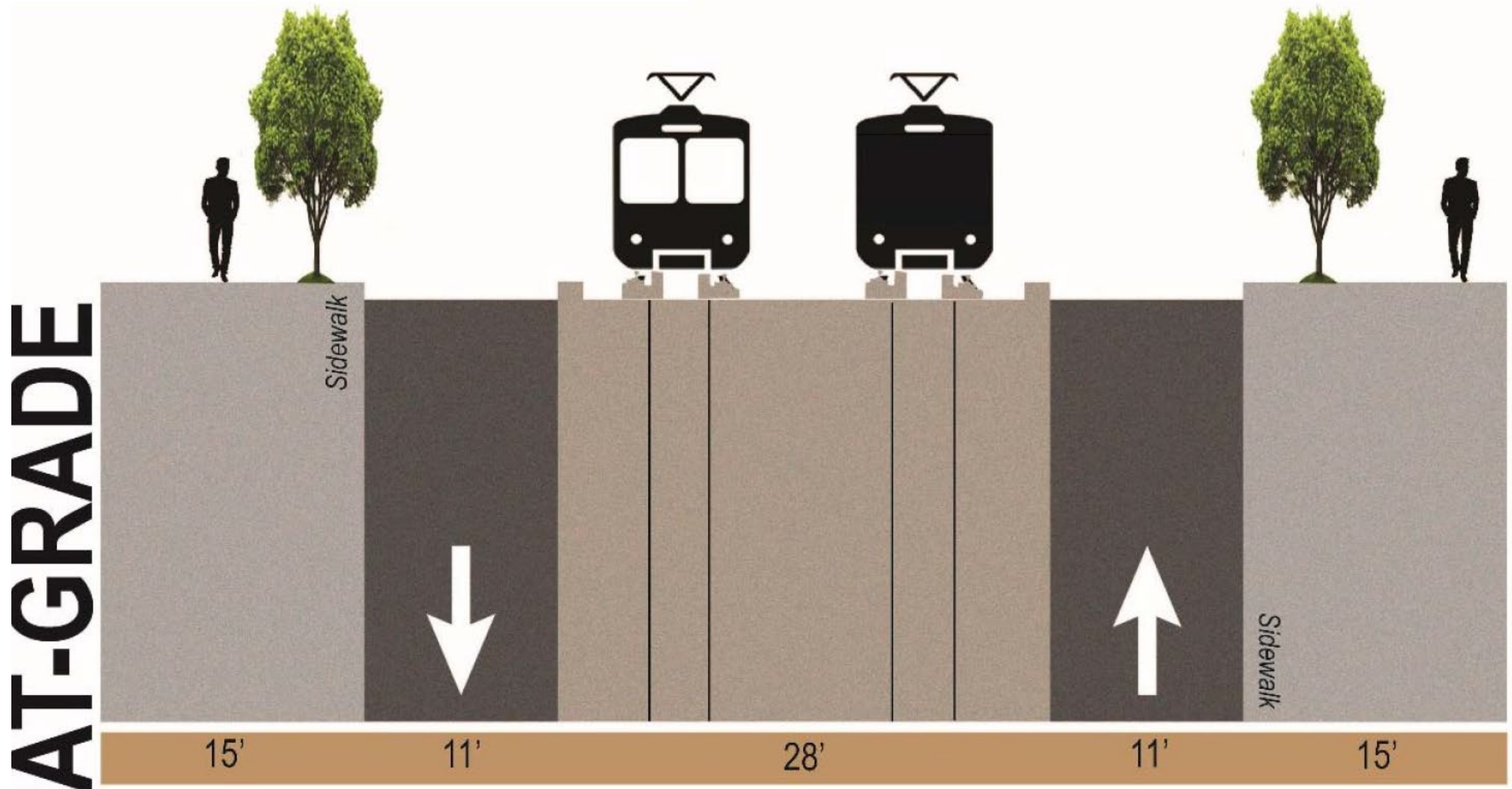
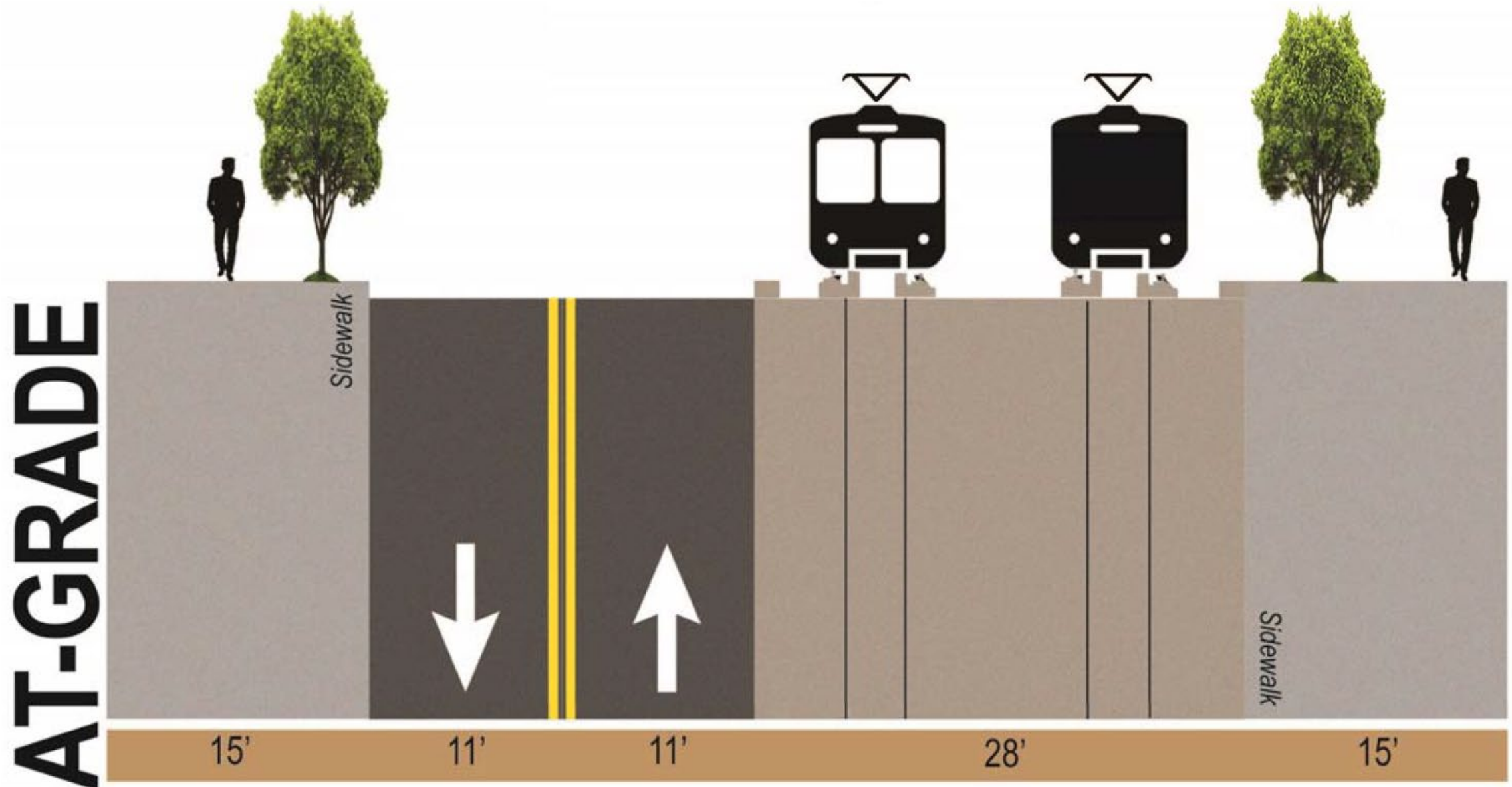
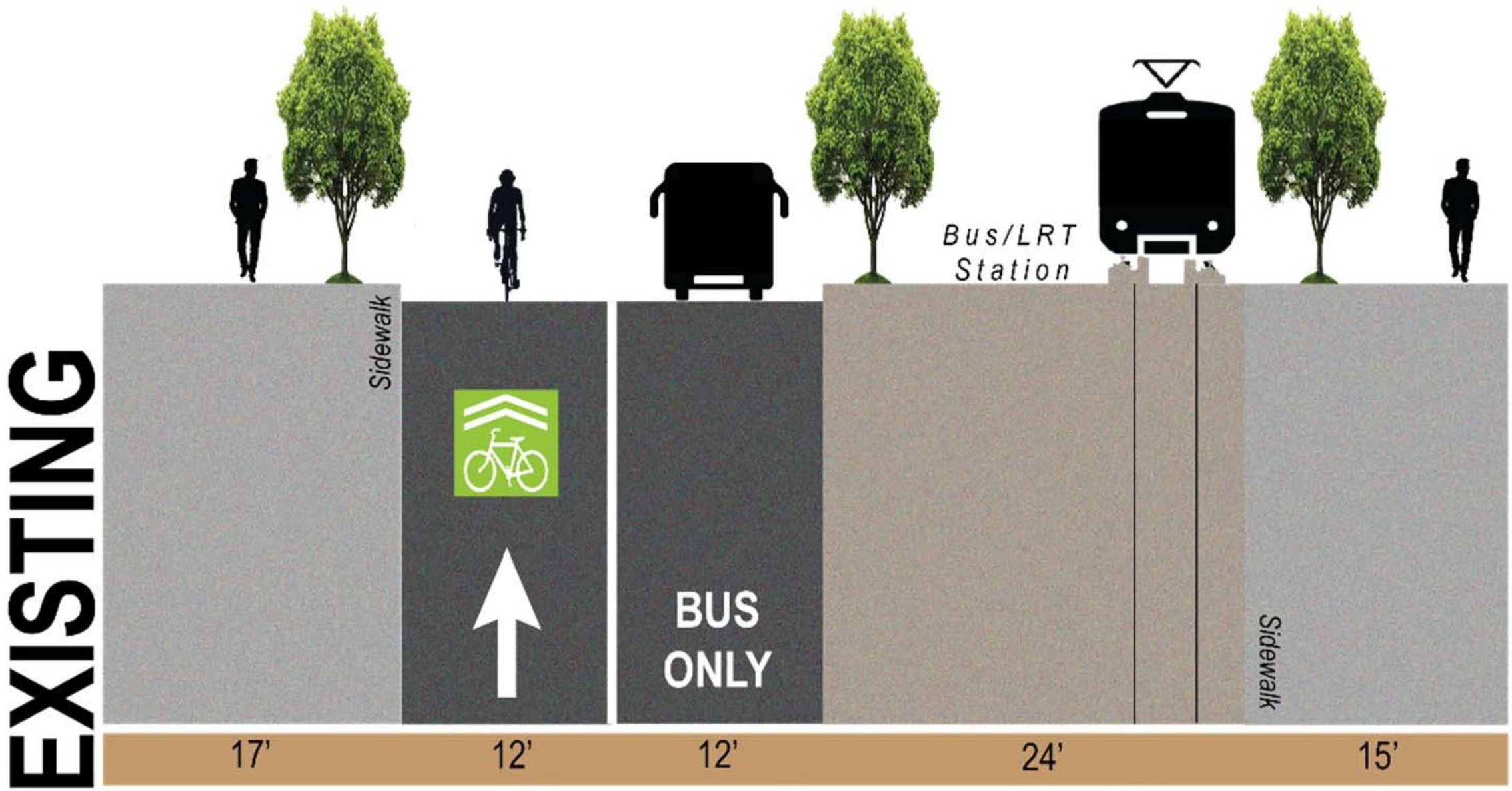
St. Louis, MO

At-Grade Options

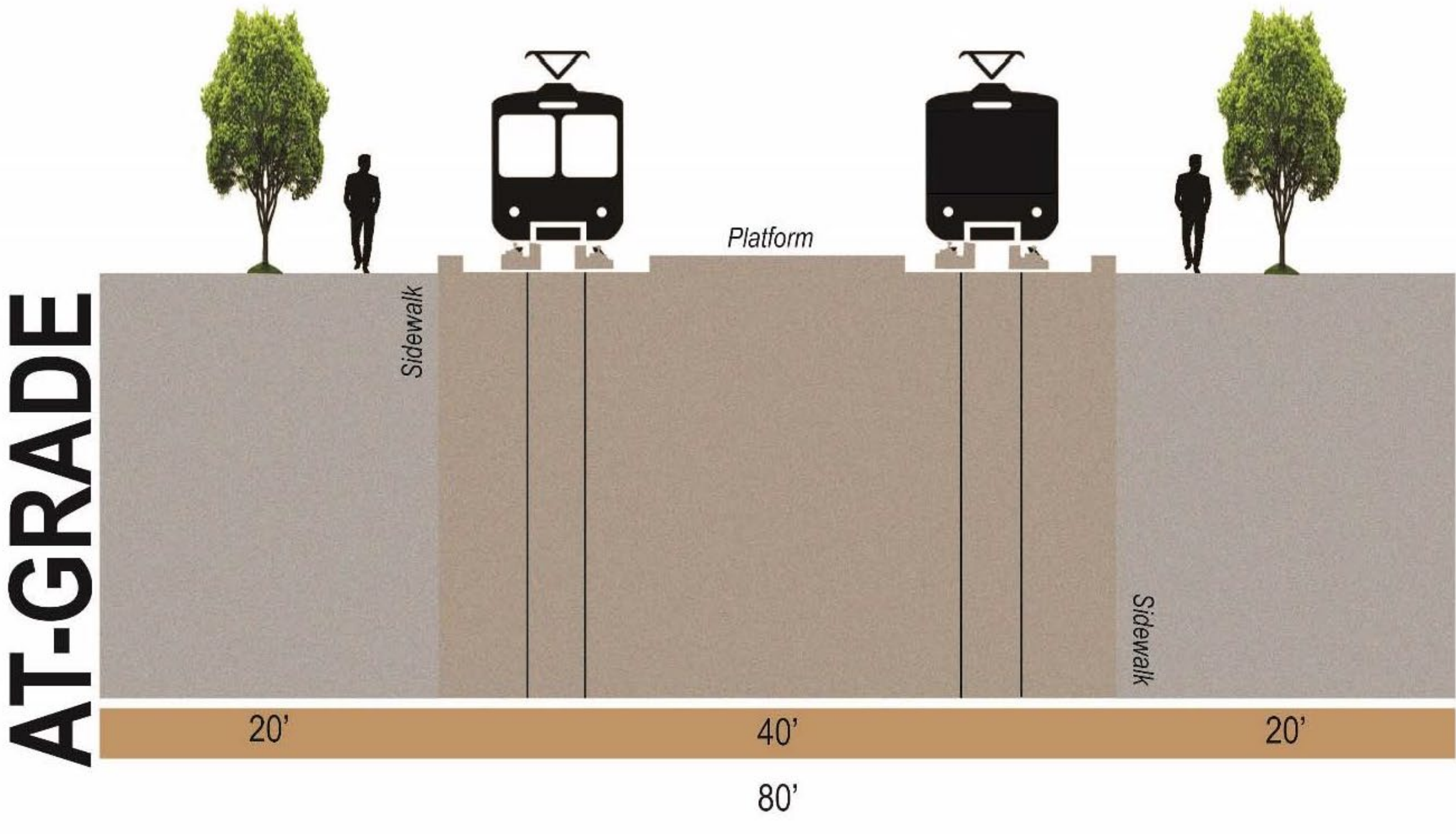
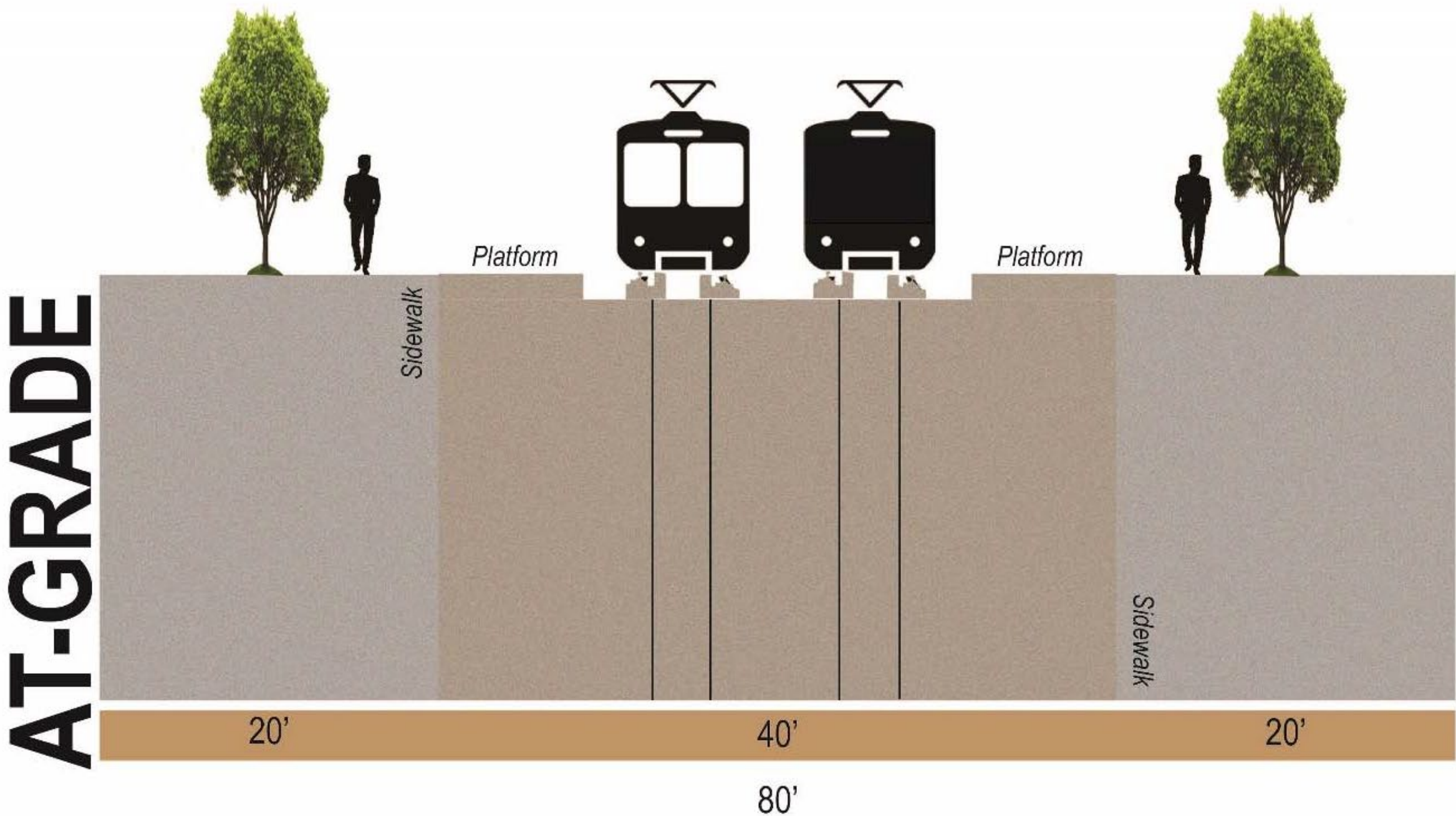
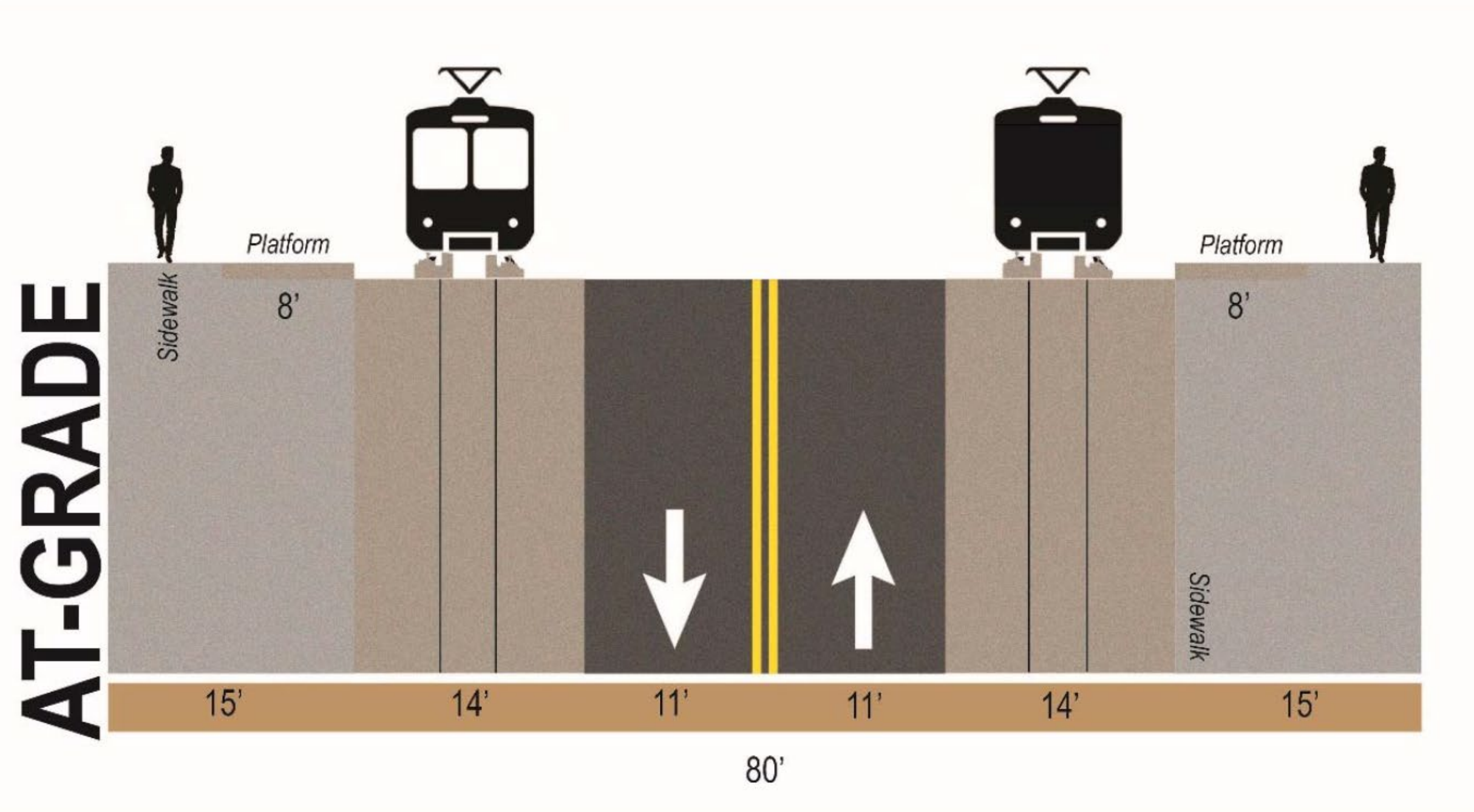
- First and San Carlos
- Existing Alignment –reconstruct both tracks onto first in new configuration
- Space available on First street but would need to make some trade offs
- Keep two Downtown Stations



First St between Santa Clara St & San Fernando St (80')

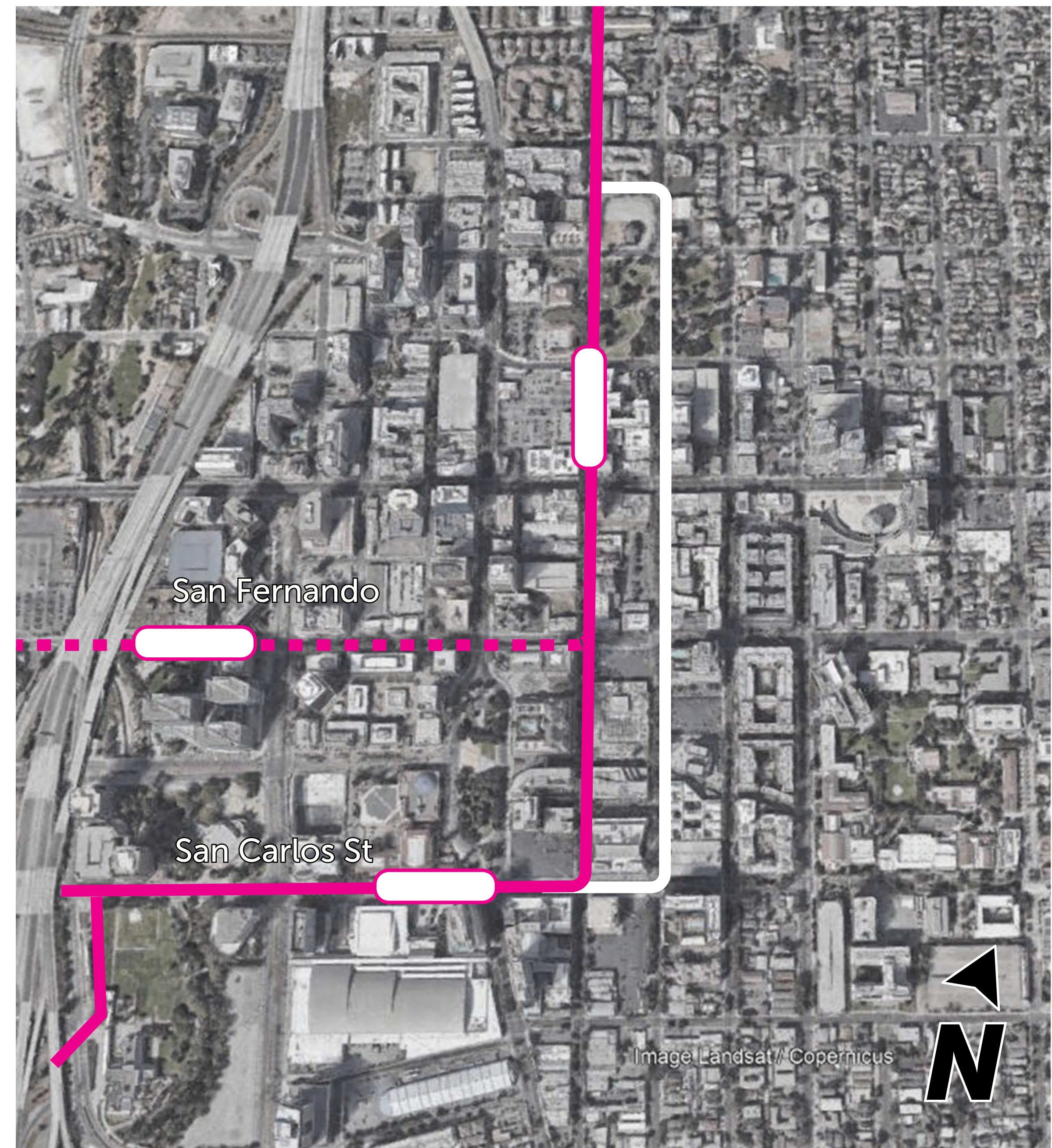


Platform Configurations



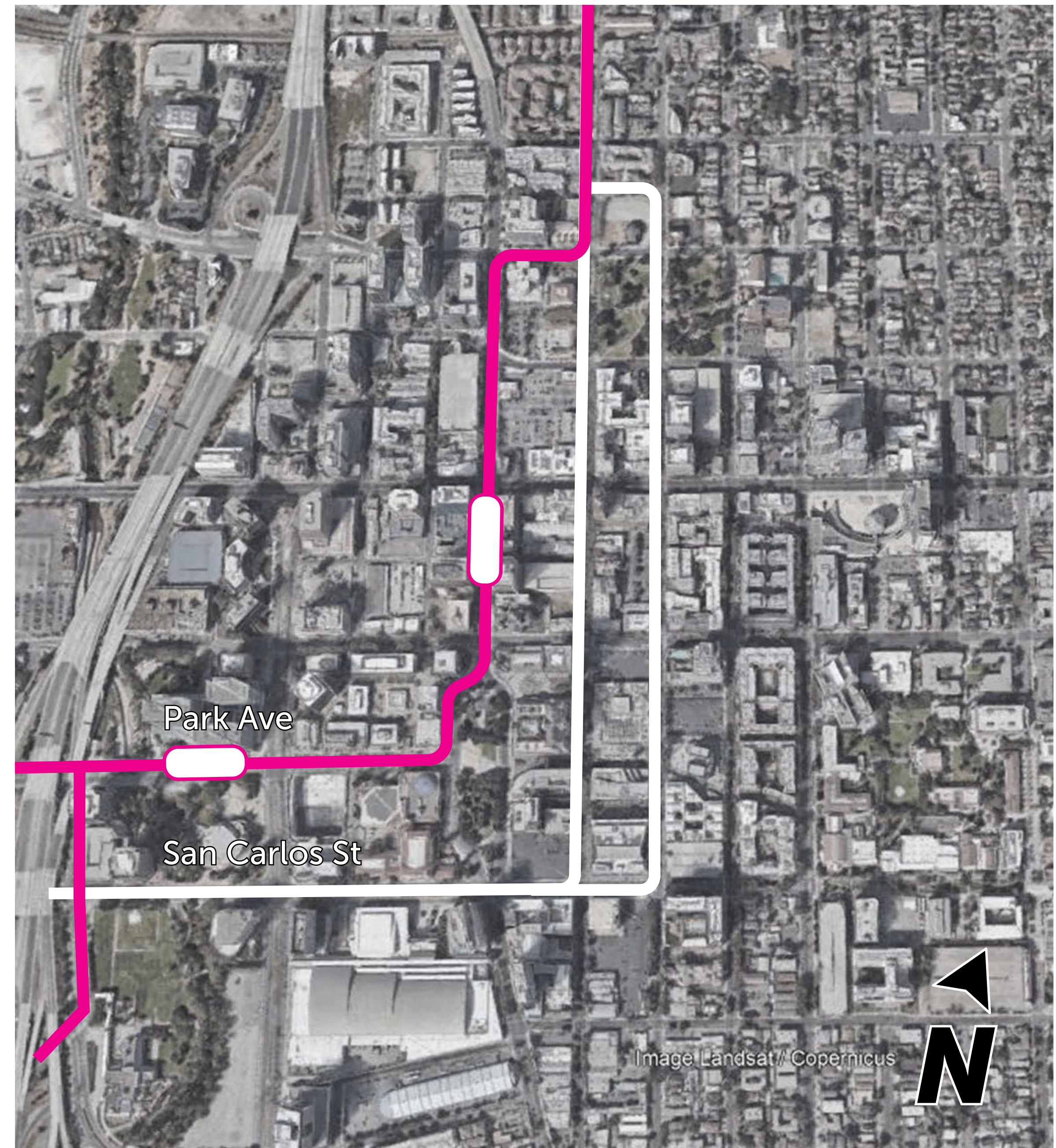
At-Grade Options

- First and San Carlos/ San Fernando
- San Fernando option would speed up connection to downtown for Green line/ Diridon

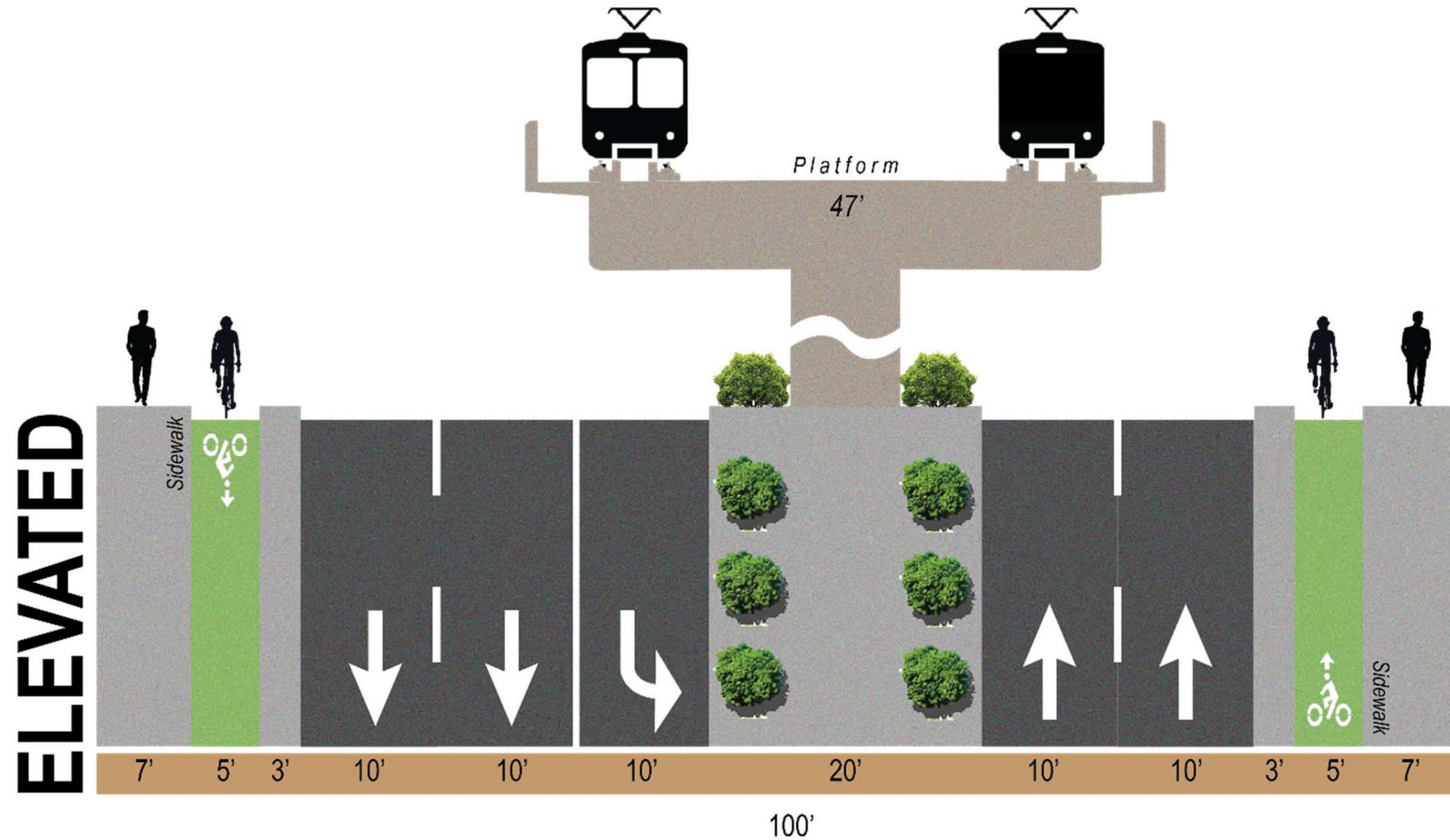


Above Grade Options

- Market Street and Park Avenue
- Only streets with adequate space for an elevated structure
- Major utilities impacts, but adequate space for utility relocation

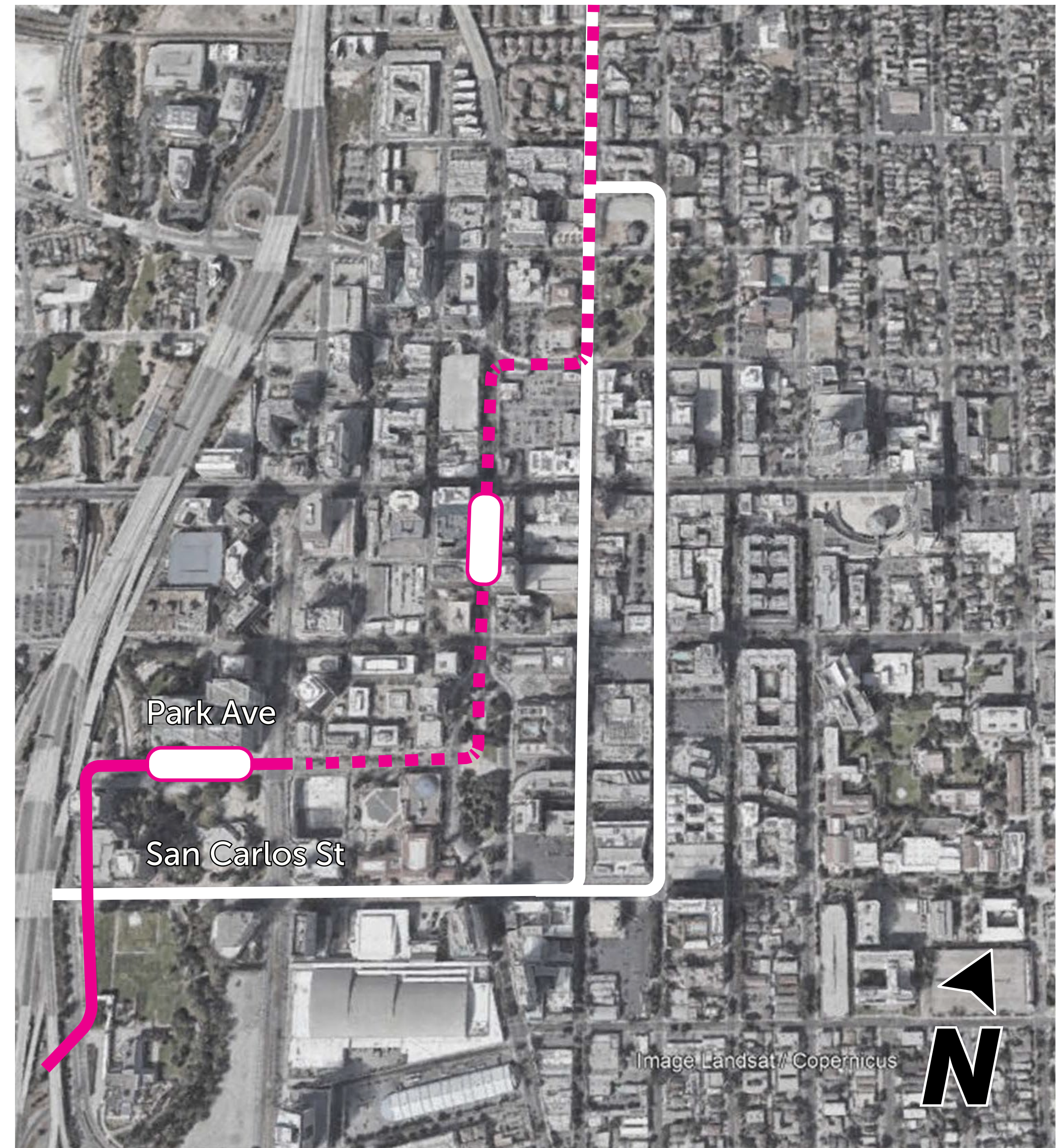


Market St between Santa Clara St & Park (100')

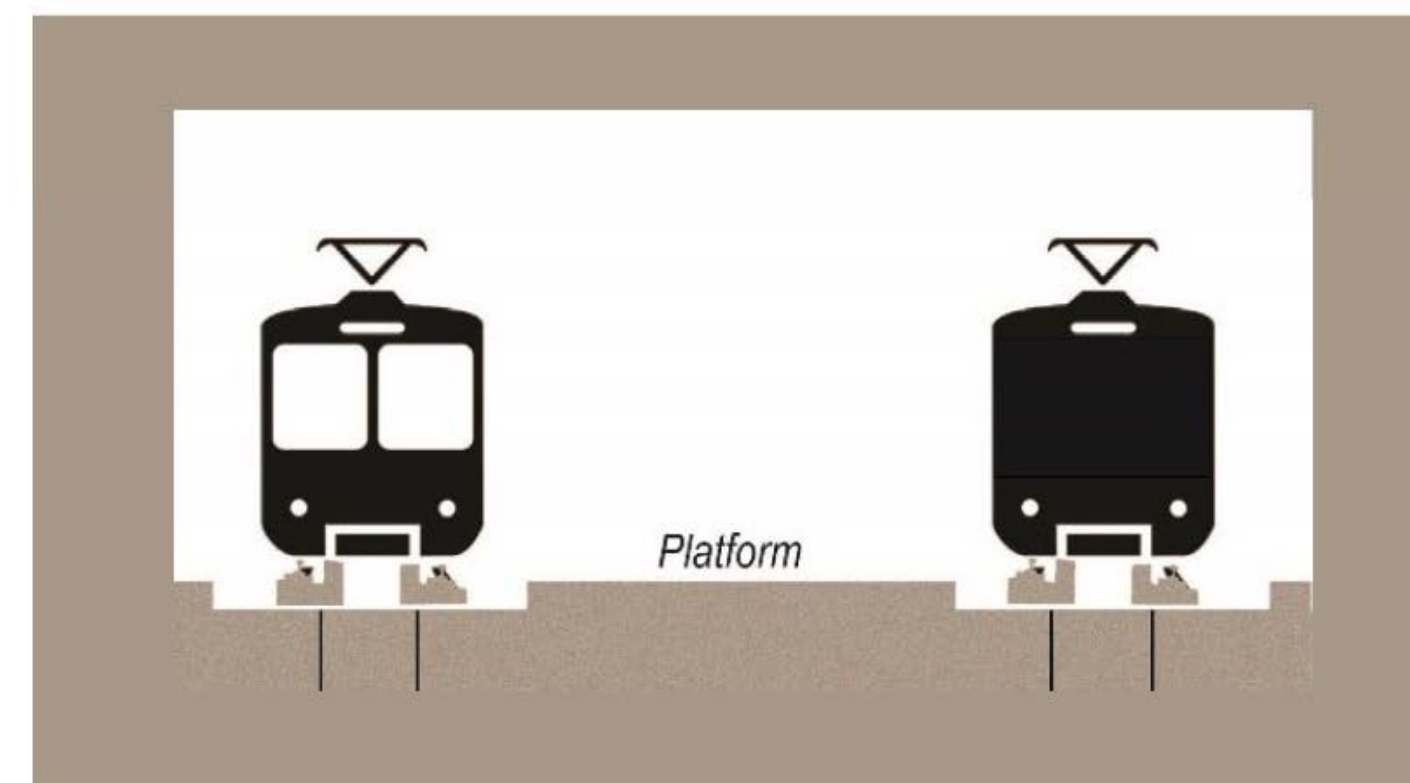
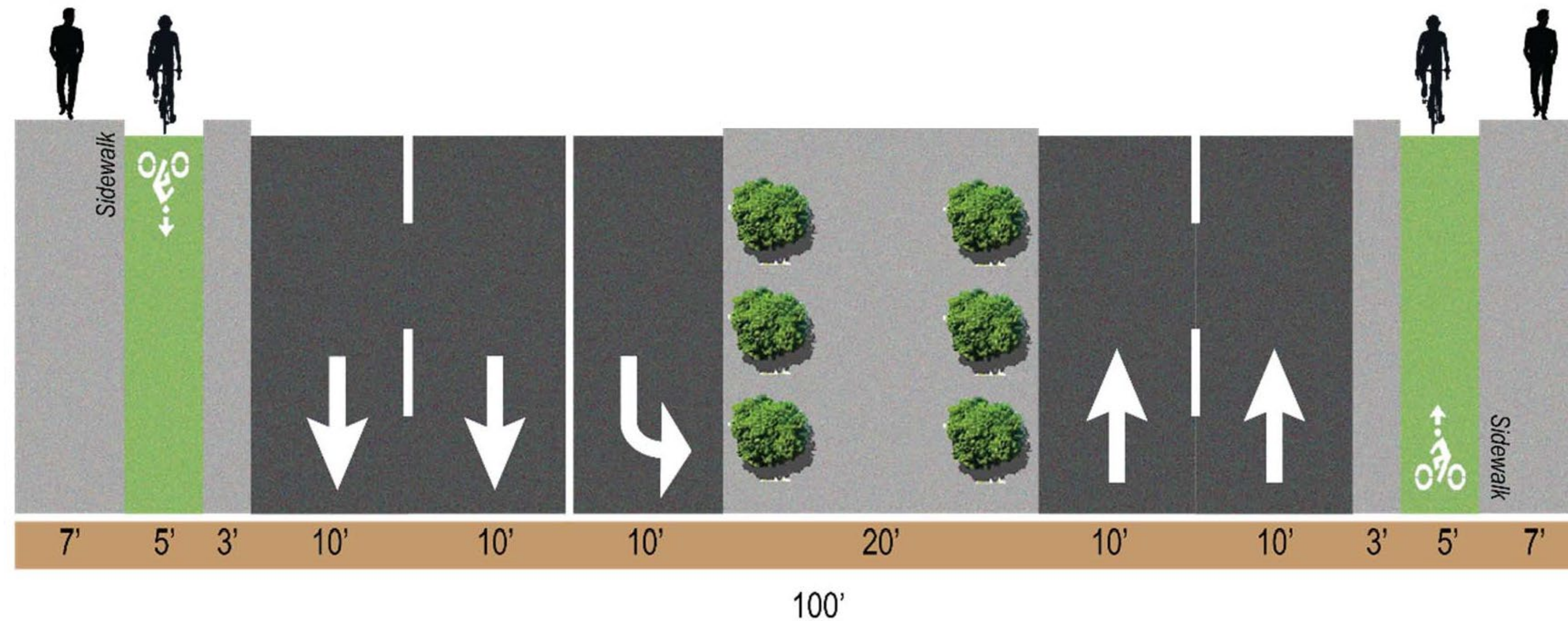


Below Grade Options

- Market Street and Park Avenue
- Wider ROW, more space to mitigate construction and utility impacts
- Major utilities impacts, but adequate space for utility relocation



Market St between Santa Clara St & Park (100')



48'

Next Steps

Move forward with conceptual engineering on 4 alternatives

- At-grade, First and San Carlos
- At-grade, First and San Carlos/San Fernando
- Above-grade, Park and Market
- Below-grade, Park and Market

Conceptual Engineering – 6-12 months

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