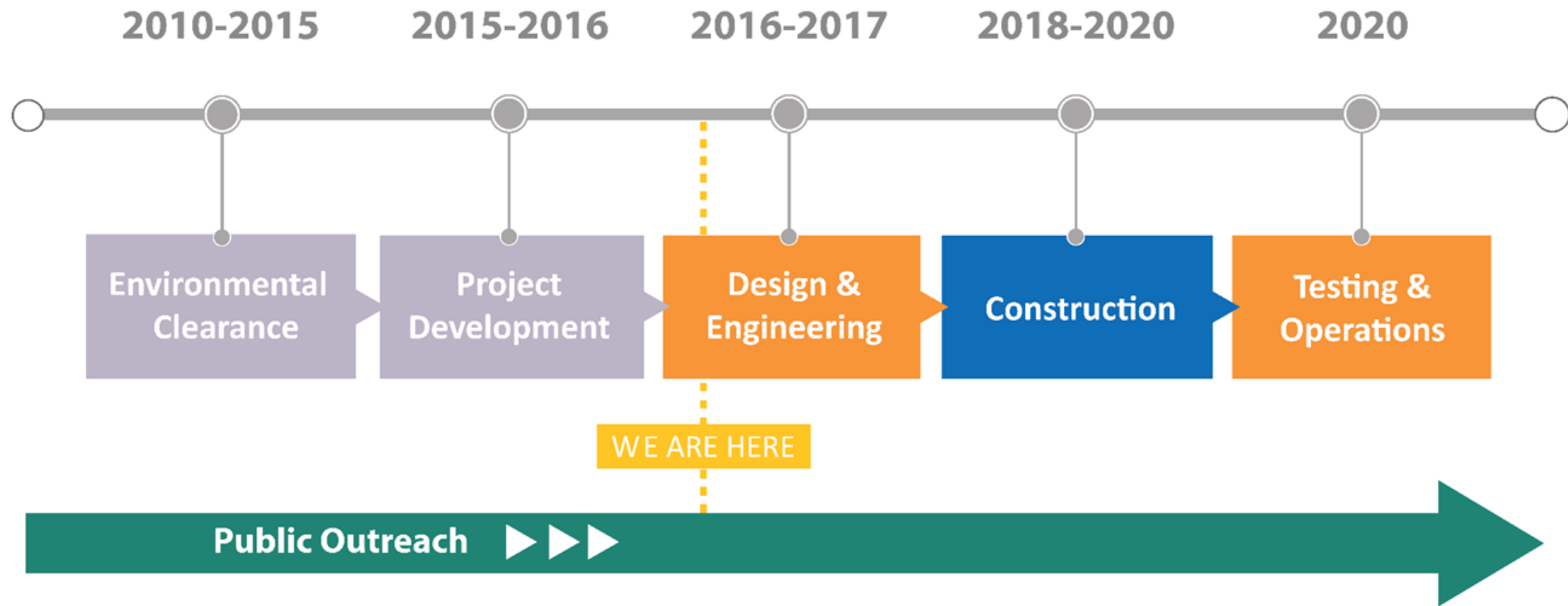


# OC Streetcar Project Update and Revised Capital Funding Plan

# Schedule



# Recent Activities

- Finalization of appraisals for property acquisition for maintenance and storage facility
- Utility conflict identification and coordination with utilities
- Initiation of effort to develop aesthetic concepts for streetcar stops
- 30 percent design submittal
- Environmental analysis to ensure no new impacts
- Updated cost estimate based on 30 percent design and risk assessment
- Initiation of fiscal year 2018 Federal Transit Administration (FTA) New Starts submittal
- Site visits to explore vehicle contract assignment opportunities

# Vehicle Acquisition

- Site visits to Cincinnati and Portland to explore potential assignments on vehicle contracts
- Request for quotes to obtain pricing/schedule/contract provisions – July 2016 release



Cincinnati CAF vehicle



Portland Siemens vehicle

# 30 Percent Design Milestone

- More defined project
  - Track alignment
  - Street improvement plans
  - Stop locations/footprint
  - Traction power substation locations
  - Utility conflicts
  - Drainage
  - Bridge selection
- Close coordination with cities of Santa Ana and Garden Grove



# Stops



\*Pacific Electric (PE) Right-of-Way (ROW)

# East Terminus at SARTC



Standard Stall: 8.5' x 18'

PARKING SUMMARY:

|    |                         |
|----|-------------------------|
| 71 | Parking Stalls          |
| 6  | Compact Stalls          |
| 2  | Electric Vehicle Stalls |
| 2  | ADA Stalls              |
| 81 | Total Stalls            |

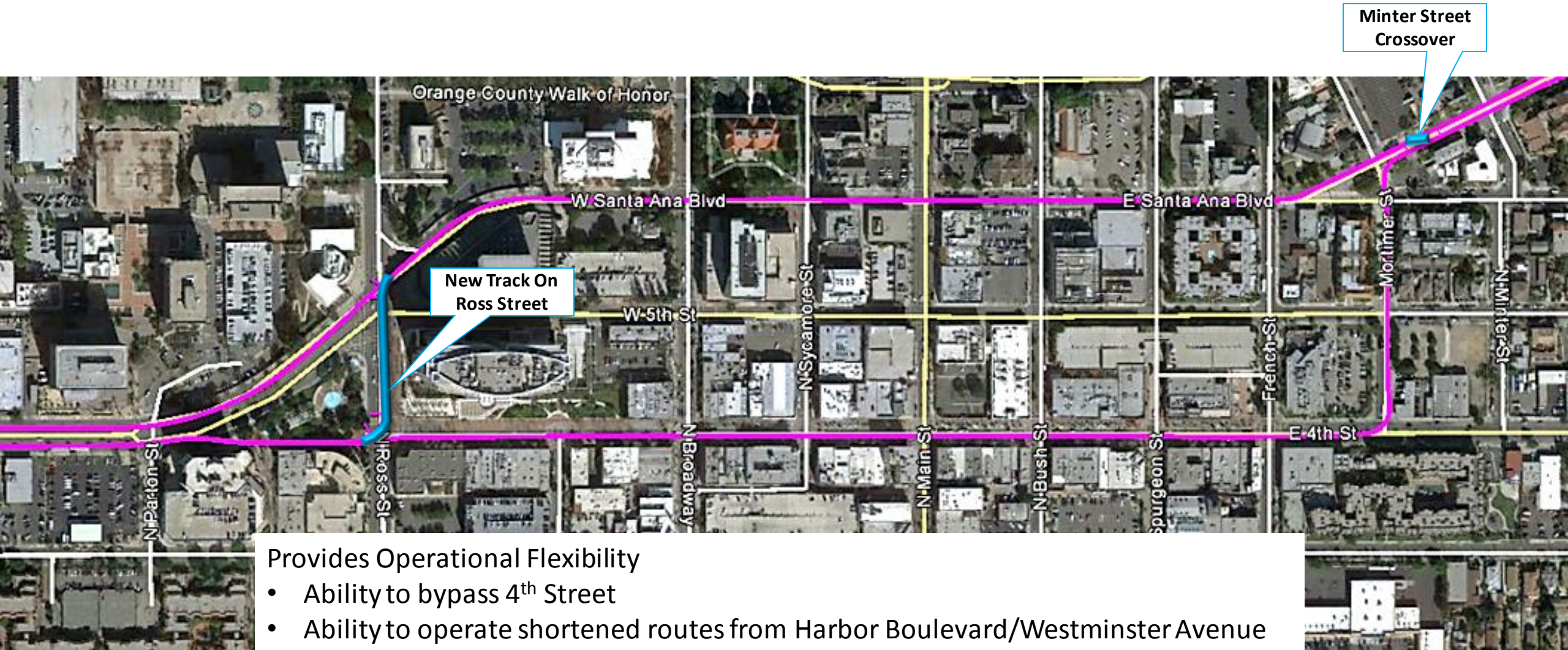
OC STREETCAR

SARTC PARKING ALTERNATIVE 3

\*Santa Ana Regional Transportation Center (SARTC)



# Ross Street – Added Track Connection



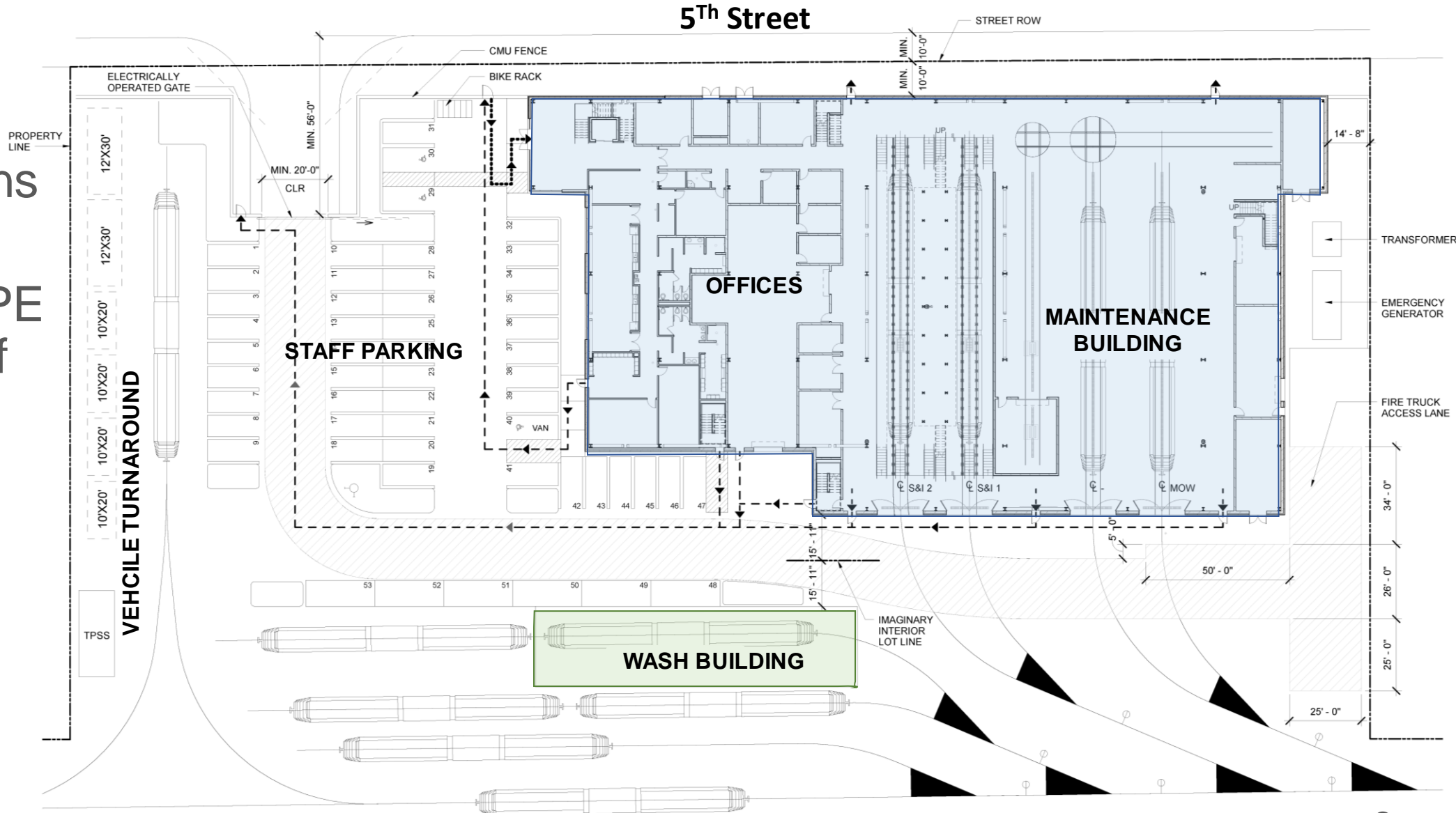
Provides Operational Flexibility

- Ability to bypass 4<sup>th</sup> Street
- Ability to operate shortened routes from Harbor Boulevard/Westminster Avenue or SARTC

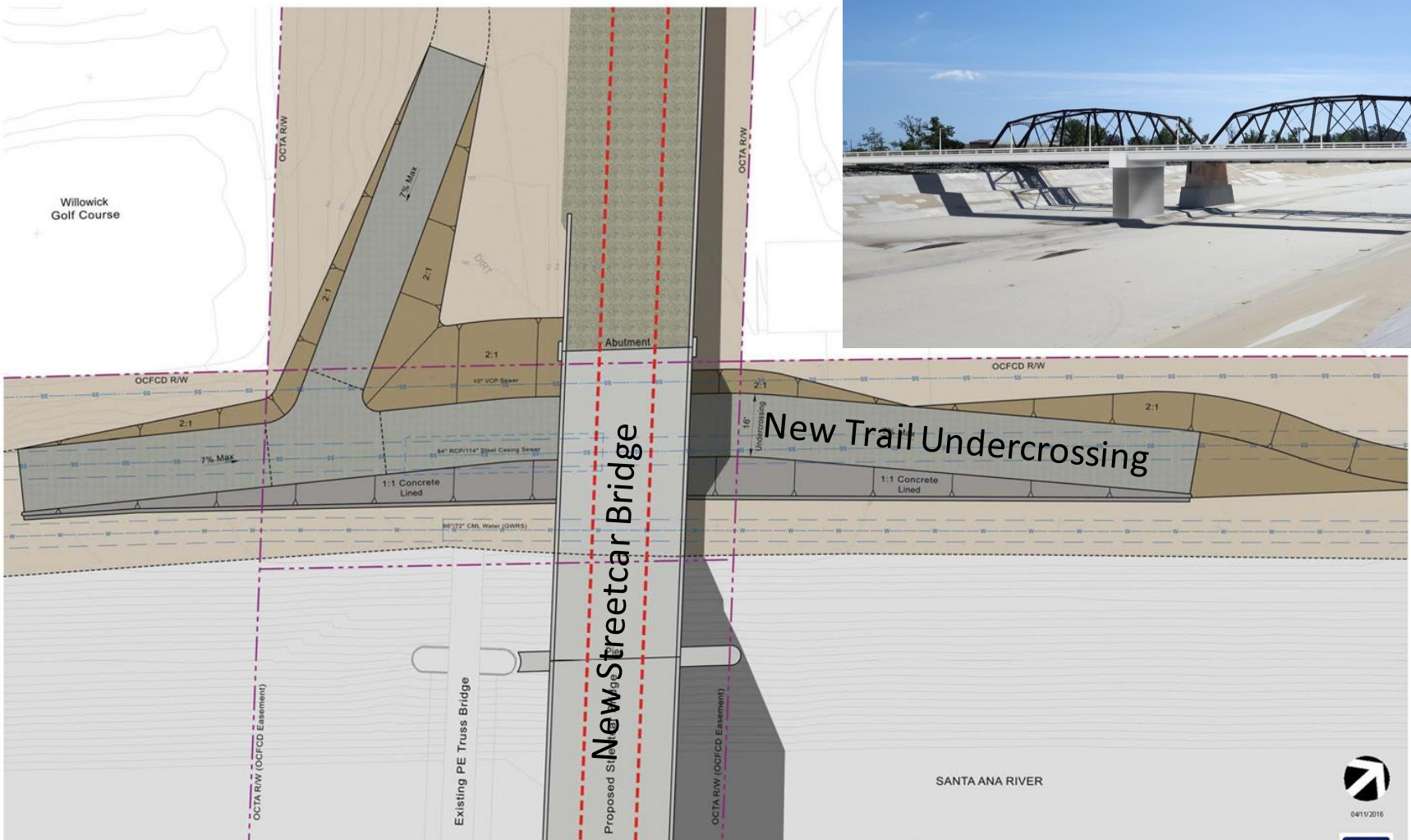


# Maintenance and Storage Facility

- Maintenance of vehicles and operations center
- Adjacent to PE ROW west of Raitt Street



# New Trail Undercrossing West Side Santa Ana River



New Trail Undercrossing

# West Terminus at Harbor Boulevard/ Westminster Avenue



# Westminster Bridge



Wave

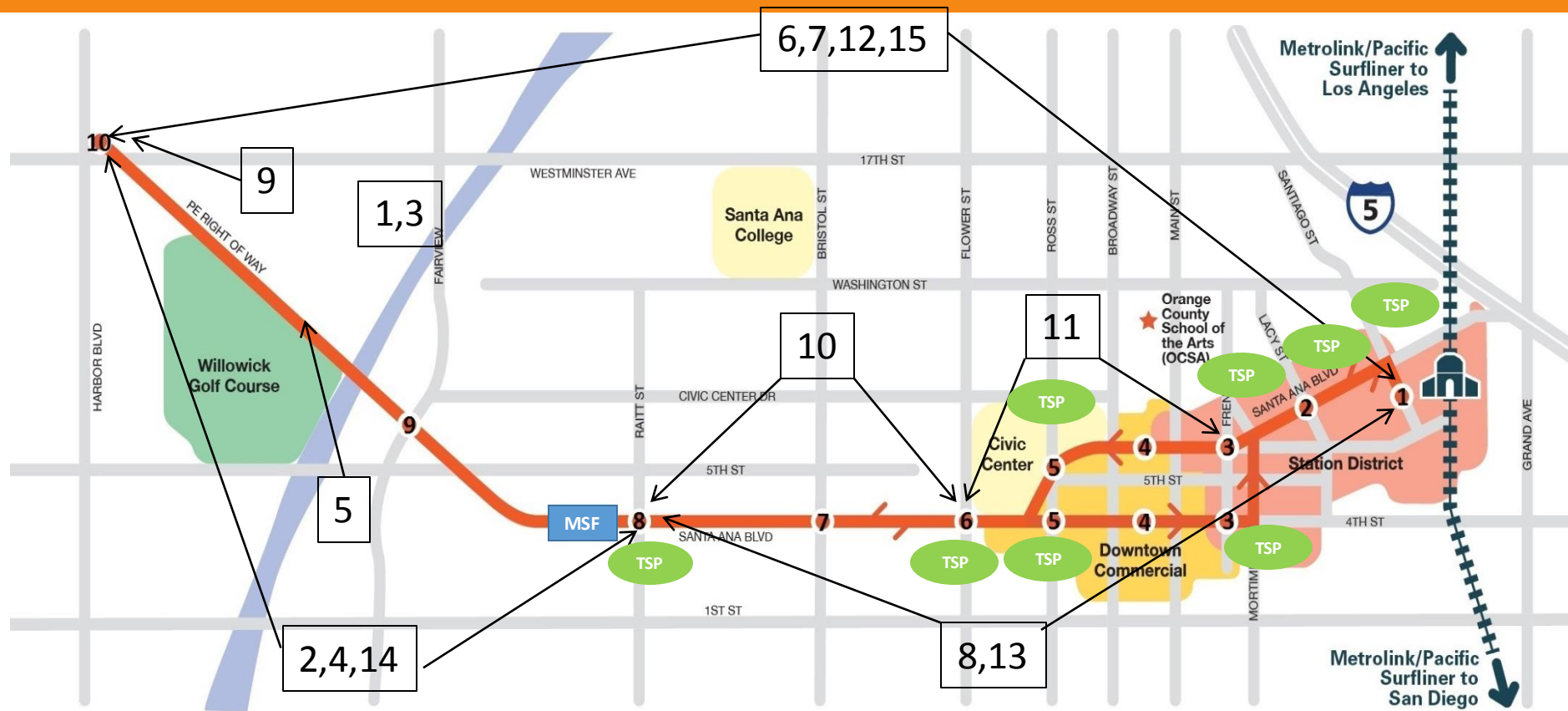


Arch



Art Deco

# Minor Design Modifications



- 1-Santa Ana River Bridge
- 2-Alignment within PE ROW Bridge Type
- 3-Trail Crossing West Bank Santa Ana River
- 4-45 miles per hour speed in the PE ROW

- 5-Delete Willowick Station
- 6-Station Locations
- 7-Crossover Locations
- 8-Traffic Signal Priority (TSP)

- 9-Westminster Avenue Bridge Type
- 10-West Santa Ana Boulevard
- 11-Santa Ana Boulevard Downtown
- 12-Traction Power Substation Locations

- 13-Street Drainage
- 14- Two Wire Overhead Contact System in PE ROW
- 15-Communications Fiber Run

# Environmental Update – 30 percent Design

- Technical Analyses to address minor design modifications
  - Noise and vibration
  - Cultural and historic
  - Parks, recreation areas, wildlife refuges, and historic sites [4(f)]
  - Visual
  - Traffic
- California Environmental Quality Act Addendum
  - No increase to previously identified impacts
  - No new significant impacts

# Updated Cost Estimate – 30 percent Design

| Cost (millions)               | August 2015     | 30 percent Design<br>July 2016 | Change in Cost |
|-------------------------------|-----------------|--------------------------------|----------------|
| Construction/ROW/Utilities(1) | \$129.28        | \$123.76                       | -\$5.52        |
| Vehicles(1)                   | \$33.00         | \$38.01                        | \$5.01         |
| Professional Services(1)      | \$48.55         | \$59.86                        | \$11.31        |
| Contingency(1)                | \$53.07         | \$54.49                        | \$1.42         |
| Escalation(2)                 | \$24.84         | \$21.79                        | -\$3.05        |
| <b>Total Cost(2)</b>          | <b>\$288.74</b> | <b>\$297.91</b>                | <b>\$9.17</b>  |

(1) Base Year Cost

(2) Year of Expenditure Cost

-All numbers have been rounded

# Updated Cost Estimate – 30 percent Design

- Decreases from August 2015 estimate
  - More traditional bridge design at Westminster Avenue
  - Cost of materials based on “bottoms up” estimate
  - Escalation
- Increases from August 2015 estimate
  - Professional services
  - Vehicle costs (sales tax and non-revenue vehicles)
  - Maintenance facility construction/equipment
  - Additional traffic signal replacements
  - Wheel truing machine for long-term maintenance cost savings
  - New track on Ross Street for operational flexibility



# Recommended Capital Funding Plan

| Funding Source (millions)                                 | August 2015 Funding Plan | July 2016 Funding Plan | Change in Funding | Status of Funding Source   |
|---|--------------------------|------------------------|-------------------|--|
| Federal New Starts*                                       | \$144.37                 | \$148.96               | \$4.59            | Pending award by FTA   |
| Federal Congestion Mitigation and Air Quality Improvement | \$48.45                  | \$53.03                | \$4.58            | Committed, with the additional \$4.58 million pending Board of Directors' (Board) approval |
| Federal FTA 5307  |                          | \$4.09                 | \$4.09            | Pending Board approval   |
| State Cap-and-Trade*                                      | \$40.00                  | \$40.00                | \$0               | Pending award by the California State Transportation Agency                                |
| Measure M2 – Project S                                    | \$55.92                  | \$51.83                | -\$4.09           | Committed  |
| <b>TOTAL</b>  | <b>\$288.74</b>          | <b>\$297.91</b>        | <b>\$9.17</b>     |  |

\* Contingent on state and federal approvals.

-All numbers have been rounded

# Next Steps

- Provide Board design criteria for station stops – August 2016
- Submittal of annual New Starts Update – September 2016
- FTA Administrative Action on National Environmental Policy Act documentation (target) – September 2016
- Initiate evaluation of operations and maintenance options – October 2016
- FTA Approval of entry into Engineering (target) – November 2016
- Board consideration of vehicle contract award (piggyback option) or approval of vehicle manufacturing/delivery request for proposals – December 2016
- 60 percent design completion – December 2016

# Questions ?

