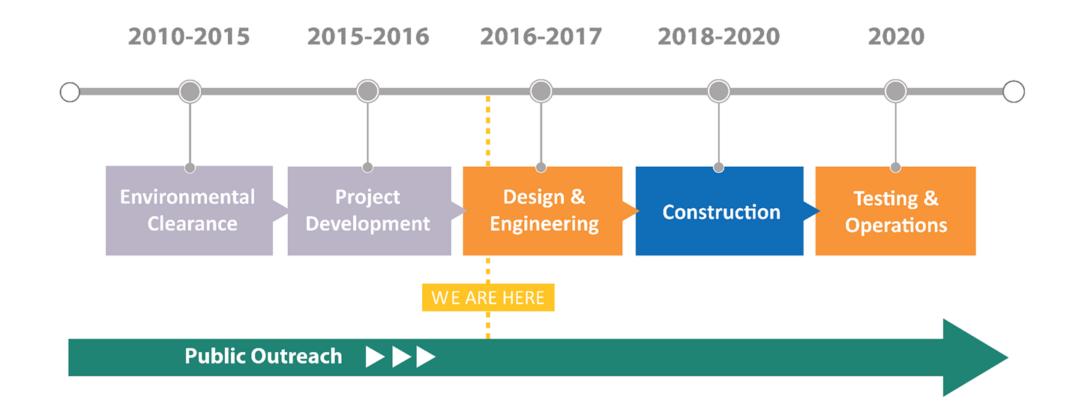
OC Streetcar Project Update and Stop Design Criteria Stakeholder Working Group August 2016





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

30 Percent Design Milestone

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



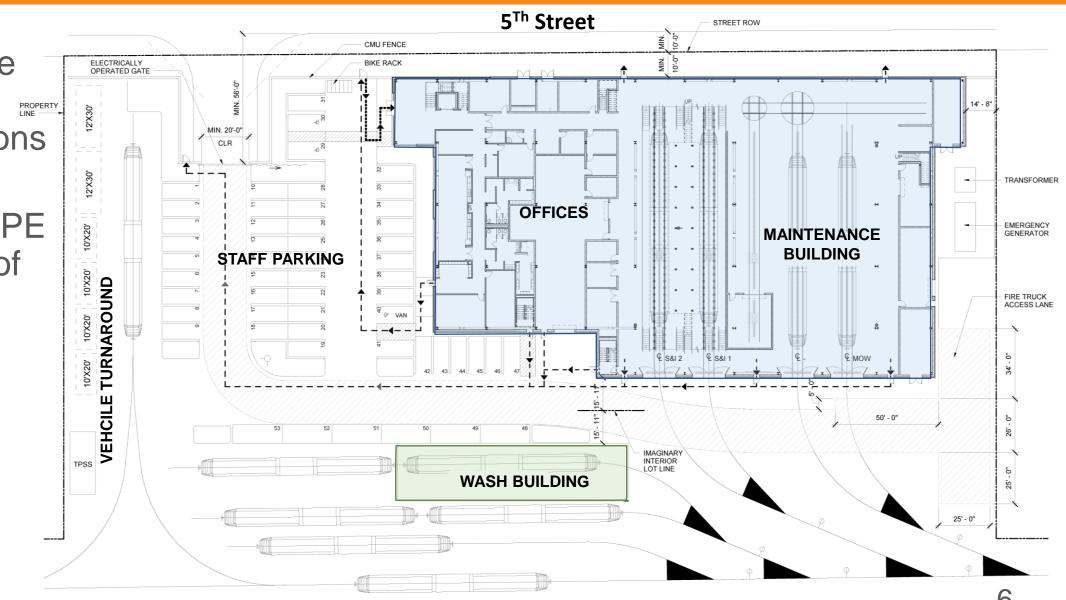




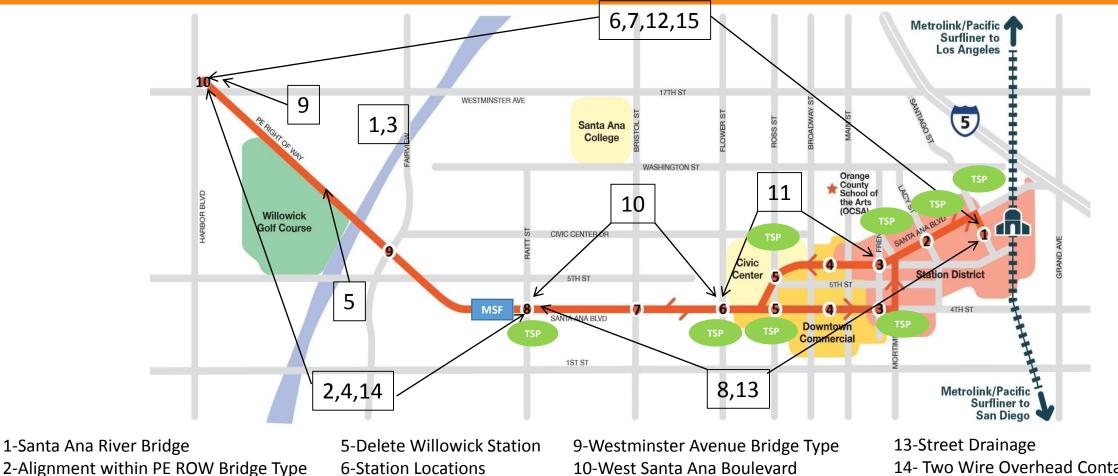
*Pacific Electric (PE) Right-of-Way (ROW)

Maintenance and Storage Facility

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



Minor Design Modifications



3-Trail Crossing West Bank Santa Ana River 4-45 miles per hour speed in the PE ROW 5-Delete Willowick Station6-Station Locations7-Crossover Locations8-Traffic Signal Priority (TSP)

9-Westminster Avenue Bridge Type10-West Santa Ana Boulevard11-Santa Ana Boulevard Downtown12-Traction Power Substation Locations

13-Street Drainage14- Two Wire Overhead Contact Systemin PE ROW15-Communications Fiber Run

Streetcar – Traction Power Substations



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 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
Total Cost(2)	\$288.74	\$297.91	\$9.17

(1) Base Year Cost

(2) Year of Expenditure Cost

-All numbers have been rounded

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
TOTAL	\$288.74	\$297.91	\$9.17	

* Contingent on state and federal approvals. -All numbers have been rounded

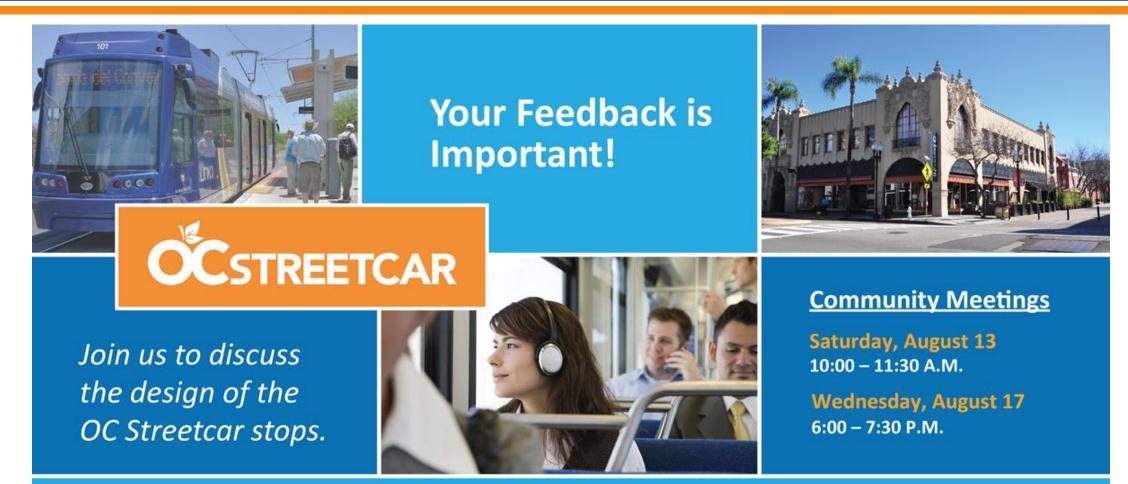
Next Steps

- 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 ?



Community Meetings







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)

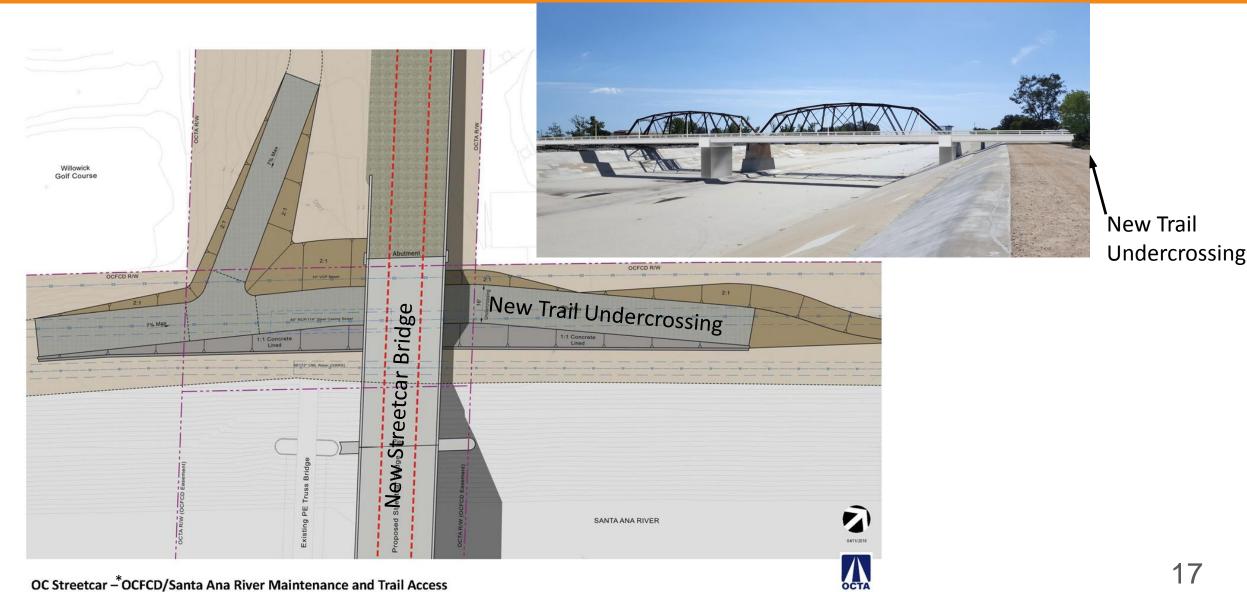
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HNTB

Ross Street – Added Track Connection



New Trail Undercrossing West Side Santa Ana River



Proposed West Levee Undercrossing

* Orange County Flood Control District (OCFCD)

HNTB