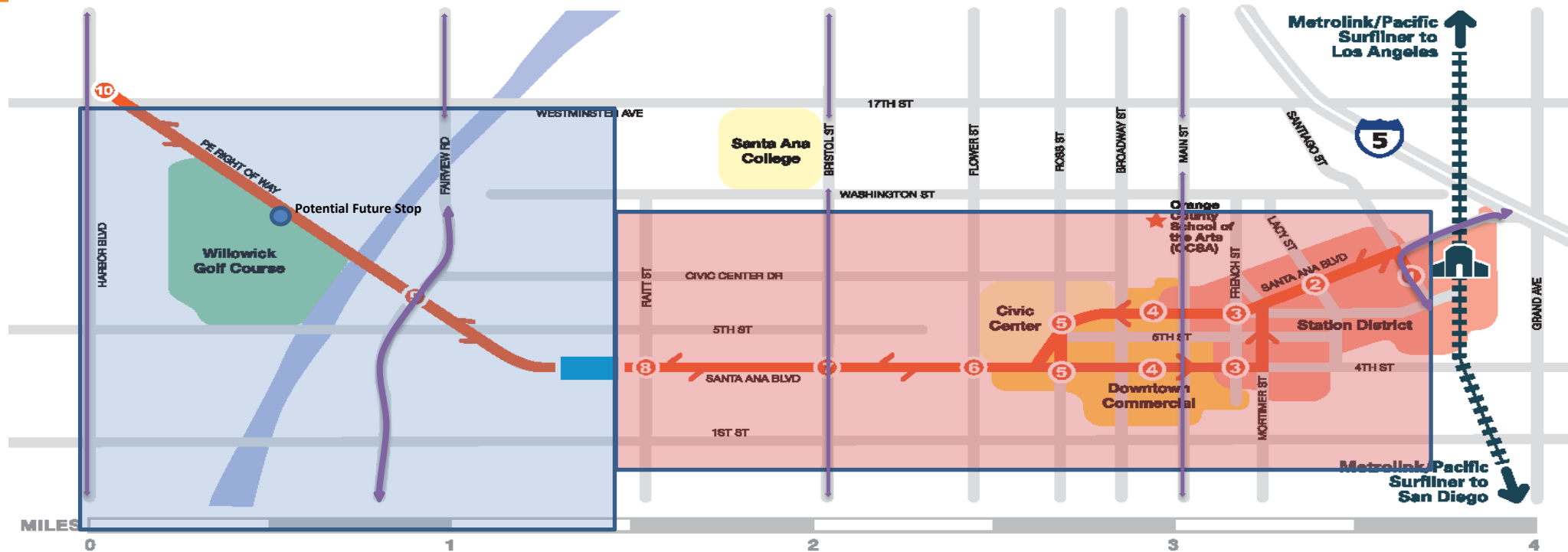


OC Streetcar Cost and Schedule Update

Community Advisory Committee

January 18, 2022

Features



Pacific Electric Right-of-Way (PEROW)

- Dedicated right-of-way owned by the Orange County Transportation Authority (OCTA)
- Double-Track, Ties, and Ballast
- Two Bridges-Westminster Avenue and Santa Ana River
- Two-Gated Crossings-Fairview Street and 5th Street
- Maintenance facility for eight cars west of Raitt Street
- Center Platforms
- Two-Wire Overhead Catenary System (OCS)

STREET RUNNING

- Traffic Signal Priority
- One-Way Couplet Downtown
 - 4th Street Eastbound, Santa Ana Boulevard Westbound
- Embedded Track (Block Rail)
- Side Platforms (except Santa Ana Regional Transportation Center)
- Protected bike lane on Santa Ana Boulevard
- One-Wire OCS with underground feeder

Construction Status

Construction

- 62.7% complete
- Embedded track installation in city streets
 - WB track complete in Segments 2 & 3 (Ross intersection 40% complete)
 - Segment 4 to begin after Ross intersection
 - Working on WB station platforms before shifting traffic to install EB track
- Installation of OCS & traffic signal pole foundations
 - 75 % of all OCS Foundations complete
 - 34% of OCS poles installed
 - 27% traffic signal foundations complete due to utility conflicts
- MSF
 - Structural steel expected to go up late February

- Santa Ana River & Westminster Bridges
 - Direct fixation track installation is beginning



Vehicle Status

Vehicles

- Eight Siemens S700 modern streetcar vehicles are in production in Sacramento, CA
- Production is 52.4% complete
 - Cars 1-7 are undergoing final equipping of remaining vehicle component and detail cleaning.
 - Car 8 is in final assembly and then will proceed to static and dynamic testing
 - Negotiations underway with Siemens for storage of vehicles until infrastructure is complete to accept and test the vehicles



Background of Project Challenges

- Unknown utility conflicts and unsuitable subgrade conditions within city streets
- Extensive amount of contaminated and hazardous soil in the Pacific Electric Right-of-Way, city streets, and at the MSF site
- Unforeseen conditions at the MSF
- Unanticipated design revisions
- Contractor non-compliance with construction quality requirements and quality control plans
- Extensive number of change requests and requests for information and submittals

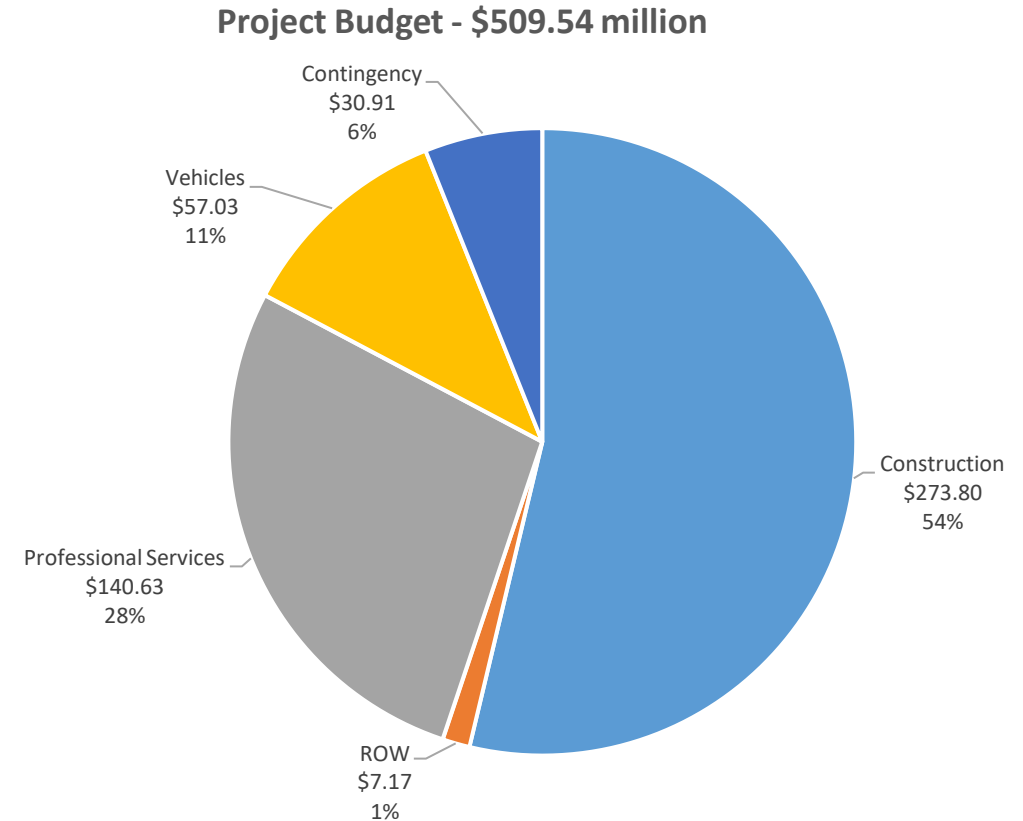
Impacts of Challenges to Cost and Schedule

- Schedule Impacts
 - Extended construction duration
- Costs of Schedule Delay
 - Storage costs for vehicles and equipment
 - Extended performance period for professional services
 - Increased costs to update equipment technology
- Additional Cost Impacts
 - Increased change orders
 - Increased level of oversight for technical and contractual reviews

Proposed Project Budget and Schedule

Based on challenges, contractor progress, and current risks assessed in coordination with the Federal Transit Administration (FTA):

- Anticipated revenue service date is March 2024
- Estimated cost to complete is \$509.54 million
 - Includes \$30.91 million in contingency. This estimate is consistent with FTA's standard percent contingency at current stage of construction.



Project Budget Comparison

| Cost Categories | Budget Approved by Board in March 2021 | Revised Budget Approved by Board in December 2021 | Change Between Revised Budget and March 2021 Budget | % Change | Key Changes |
|-----------------------|--|---|---|--------------|--|
| Construction | \$234.28 | \$273.80 | \$39.52 | 16.9% | <ul style="list-style-type: none"> • Pending/executed contract change orders through October 2021 • Added/increased costs for MSF/operational equipment, ticket vending machines, spare parts |
| Right-of-Way | \$8.22 | \$7.17 | (\$1.05) | -12.8% | <ul style="list-style-type: none"> • Cost savings from SA Recycling Acquisition |
| Professional services | \$74.94 | \$140.63 | \$65.69 | 87.7% | <ul style="list-style-type: none"> • Increased costs for professional services including the extended performance period required with the extended revenue service date of March 2024 plus project close-out (professional services, OCTA staff) |
| Vehicles | \$52.35 | \$57.03 | \$4.68 | 8.9% | <ul style="list-style-type: none"> • Vehicle and spare parts/special tools storage. Addition of computer-aided dispatch/automatic vehicle locator technology |
| Contingency | \$53.64 | \$30.91 | (\$22.73) | -42.4% | <ul style="list-style-type: none"> • Current budget contingency has been distributed between all cost categories in cost to complete amount • OCTA estimate is 6.5% of base cost |
| Total | \$423.43 | \$509.54 | \$86.11 | 20.3% | |

**Numbers may be slightly off due to rounding

Proposed Funding Sources

| Funding Programs (in 1,000's) | Funding Approved March 2021 | Funding Need | Recommended Funding |
|--|-----------------------------|-----------------|---------------------|
| FTA New Starts | \$148,955 | | \$148,955 |
| FTA Section 5307 | \$13,599 | | \$13,599 |
| Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) | \$62,412 | \$45,720 | \$108,132 |
| Federal American Rescue Plan Act (ARP)* | | \$9,407 | \$9,407 |
| State Transit and Intercity Rail Capital Program | \$25,586 | | \$25,586 |
| Subtotal State and Federal | \$250,552 | \$55,127 | \$305,679 |
| Measure M2 (M2) Project S | \$172,886 | \$30,975 | \$203,861 |
| Total Funding | \$423,438 | \$86,102 | \$509,540 |

*Federal ARP funding is an offset to the M2 amount requested

Next Steps

- Work with Southern California Association of Governments to amend the Federal Transportation Improvement Program
- Work with the FTA to update and/or amend the Full Funding Grant Agreement and execute grants for CMAQ and ARP CIG funds
- Continue to track Project cost and schedule adherence and continue to report to the Board of Directors quarterly

Outreach

- Bilingual Door Hanger Notices
- Field Meetings
- Downtown Business Associations
- Eat Shop Play Program



A collage of three images. On the left is a bottle of "daily kombucha Ocean Breeze" with a label that says "PERISHABLE: KEEP REFRIGERATED" and "INGREDIENTS: Filtered water, live kombucha culture, organic lemon juice, organic apple cider vinegar, organic cane sugar". In the center is a burrito from "The Deli Station" filled with chicken, cheese, and vegetables. On the right is a bowl of soup from "La Vegana Mexicana". At the bottom, there is a blue banner with the OC Streetcar logo and the text "EAT SHOP PLAY". To the right of the banner is an orange box with the text "Your food-venture starts @4thStreetMarket" and the website "octa.net/eatshopplay".

A promotional graphic for "Plaza Navideña". At the top, it says "EAT SHOP PLAY COMMUNITY CORNER" with a sun icon. Below that is a green bar with "WEEKEND FUN". The main text reads "Click on the image below to learn more about the free Plaza Navideña at Plaza Calle Cuatro!". The central graphic features a Christmas tree, string lights, and gift boxes. It says "Plaza Navideña" in a large, cursive font, followed by "SATURDAY, NOVEMBER 20, 2021" and "5:00 PM - 8:00 PM PLAZA CALLE CUATRO". The Santa Ana logo is in the top right, and "PARKS, RECREATION AND COMMUNITY SERVICES AGENCY" is at the bottom.