# OC Streetcar Project Quarterly Update

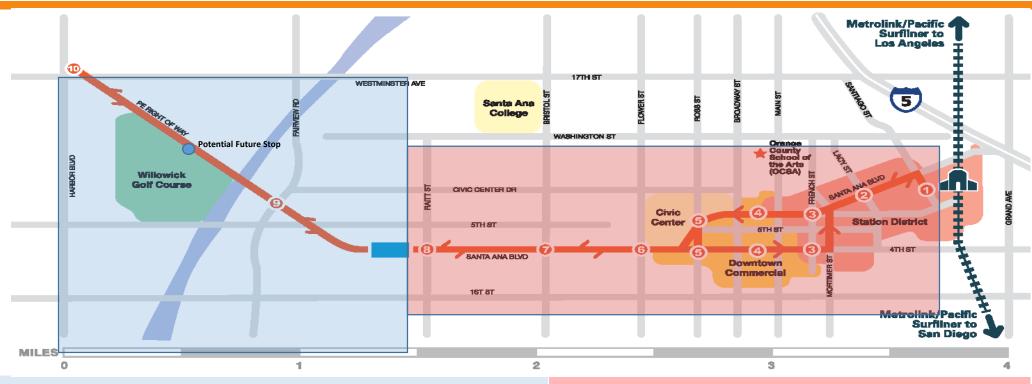


# Background

- Measure M2 Project S Transit Extensions to Metrolink approved by Orange County voters in November 2006
- Key OC Streetcar project (Project) implementation dates:

Key Milestone	Date	Contract Execution Amount ( in Millions)
Vehicle Contract Award	March 2018	\$51.52
Construction Contract Award	September 2018	\$220.53
Full Funding Grant Agreement Executed	November 2018	\$148.96

#### OC Streetcar Features



#### Pacific Electric Right-of-Way (PEROW)

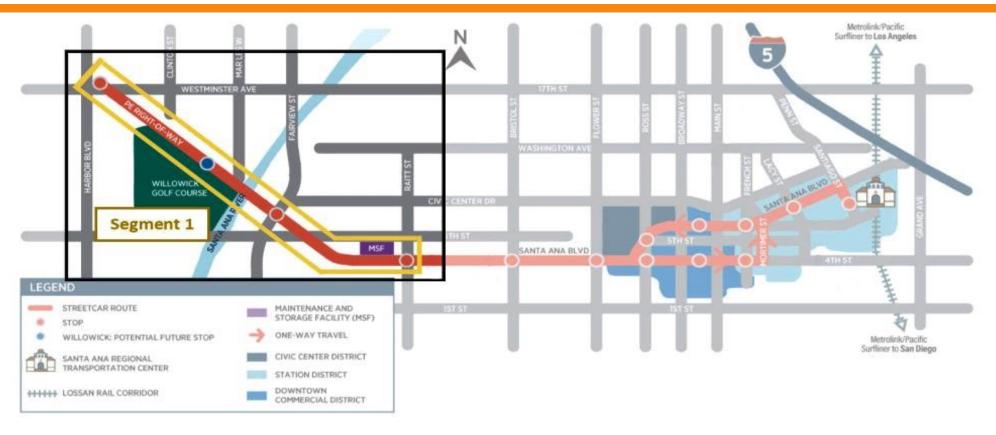
- Dedicated right-of-way owned by the Orange County Transportation Authority (OCTA)
- Double-Track, Ties, and Ballast
- Two Bridges-Westminster and Santa Ana River
- Two Gated Crossings-Fairview and 5<sup>th</sup> Street
- Maintenance facility for eight cars west of Raitt Street
- Center Platforms
-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

#### STREET RUNNING

- Traffic Signal Priority
- One-Way Couplet Downtown
  - 4<sup>th</sup> 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—Segment 1



- Bridge foundations, bents, abutments and piers completed. Temporary falsework supports to build Westminster bridge installed. Retaining walls for bridge approaches beginning construction.
- Testing, manifesting, and hauling of contaminated materials from PEROW to approved disposal facilities is progressing.
- Establish rail laydown and welding area in PEROW.

# Santa Ana River Bridge



# Westminster Avenue Bridge

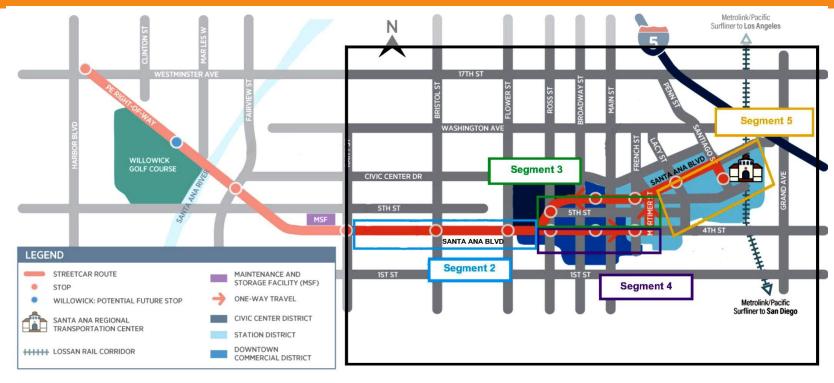




# Maintenance and Storage Facility (MSF)



### Construction—Segments 2 Through 5



- Wet utilities relocated by OCTA's contractor: water, sewer, and storm drain
  - Raitt Street to Bristol Street utilities complete, in-street embedded trackwork will begin once the rail strings delivered and welded
  - Sewer relocations in Segment's 4 and 5 approximately 80 percent complete
  - Water line relocations are approximately 56 percent complete
  - Storm drain relocations in street-running segments are approximately 17 percent complete

# Third-Party Utility Relocations

- Most third-party dry utility relocations are complete
- Remaining work includes:
  - Southern California Gas working downtown and east of downtown on Santa Ana Boulevard
  - Southern California Edison removal of underground vaults on Santa Ana Boulevard
  - AT&T with one final relocation being scheduled now that a conflicting sewer line has been relocated





#### Vehicles

- First article inspections have been conducted for the brake system, first welded carshell, auxiliary power supply, and the painted carshell
- Finalizing outstanding items from final design review
- California Public Utilities Commission approved a variance request for the use of rearview cameras in lieu of rearview mirrors
- Ongoing coordination with Conduent and Siemens on Computer Aided Dispatch and Automated Vehicle Location design specifications
- Ongoing coordination between OCTA, Siemens, and Walsh Construction Company II, LLC, in the integration of the streetcar vehicle with the infrastructure, including the tracks, platforms, MSF, and wayside equipment and systems







# Vehicle Interior











# Other Key Project Updates

- Best and final offers were received in response to the operations and maintenance request for proposals
  - Contract award anticipated in April 2020
- Ongoing coordination with the Federal Transit Administration, City of Santa Ana, City of Garden Grove, Orange County Fire Authority, Orange County Flood Control District, and OC Parks











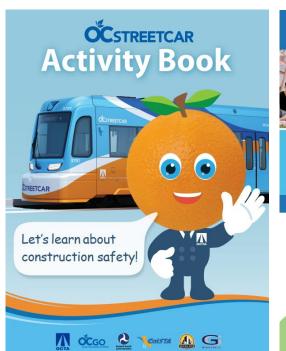


# OC Streetcar Outreach – Support

- Eat, Shop, Play
- Lobby Displays

Dining Guide

- Safety Campaign
- OCTA Employee
   Program
- Parking Signage















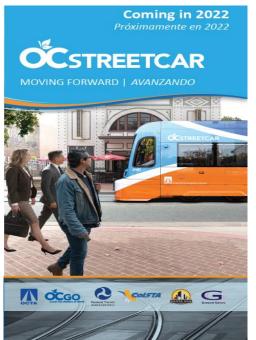
#### OC Streetcar Outreach - Construction

- E-Blasts
- Social Media
- Flyers and Doorhangers
- Mobile App

- Construction
   Brochure
- Closed Circuit
   Television Slides
- Posters with tear-sheets









# OC Streetcar Awareness Campaign

- Promote brand awareness
- Integrated website design and development
- Brand video
- Benefit-driven brochure





