


Rail Programs and Facilities Engineering Quarterly Report

Station Improvements



Project	Cost (millions)	2013	2014	2015	2016	2017	2018	2019	2020
Laguna Niguel/Mission Viejo Metrolink Station/Americans with Disabilities Act Ramp Improvements	\$8.52								
Orange Metrolink Station Parking Structure	\$34.80								
Placentia Metrolink Station	\$31.20								
Anaheim Canyon Metrolink Station Improvements	\$20.05								
Fullerton Transportation Center Elevator Upgrades	\$4.00								
Total	\$98.57	Note: All Costs do not include right-of-way (ROW) expenses.							

 Project Definition Report

 Project Approval/Environmental Document (PA/ED)

 Final Design

 Construction

 Funding Approval

 Project On Hold or Delayed

Rail Corridor Improvements



Schedule / Cost

Project	Cost (millions)	2013	2014	2015	2016	2017	2018	2019
17th Street Grade Separation	\$ 158.32							
Laguna Niguel-San Juan Capistrano Passing Siding	\$ 30.83							
San Juan Creek Bridge Replacement	\$ 38.33							
Control Point Fourth	\$ 8.51							
Positive Train Control Program (Orange County Transportation Authority (OCTA) Share)	\$ 39.92							
Rail ROW Slope Stabilization	\$ 2.00							
Total	\$ 277.91							

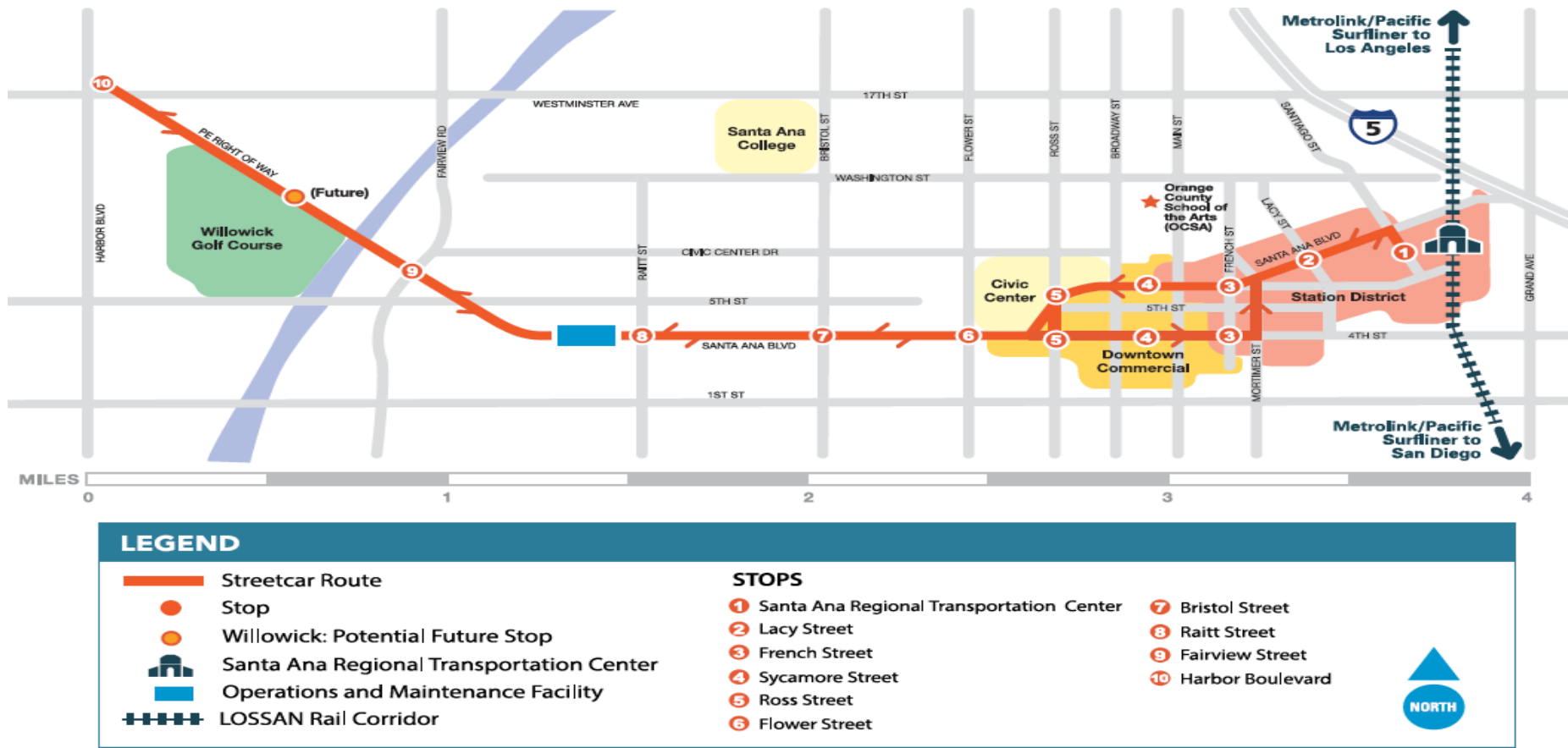
PA/ED

Final Design

Construction

Planning

Transit Extensions to Metrolink: Santa Ana/Garden Grove Fixed-Guideway



Schedule	2013	2014	2015	2016	2017	2018	2019	2020
Alternatives Analysis, state/federal environmental clearance, and conceptual engineering								
Project Development/Preliminary Engineering/Engineering								
Full Funding Grant Agreement/Construction*								
Start up, Testing, and Certification								

* Pursuing federal New Starts

Rail Operations

Angels Express

- Special Metrolink service to 54 home games from March 30 to September 29, 2017.
- OCTA received a Mobile Source Air Pollution Reduction Review Committee (MSRC) grant for operation of Metrolink trains with Tier 2 clean emissions locomotives.
- Adult tickets are \$7 round trip.
- Total ridership for the season was more than 39,000; eight percent below 2016.



Tier 4 Locomotives

- Delivery and testing continues for the 40 Metrolink Tier 4 clean emissions locomotives.
- Following a press event the week before, the first Tier 4 locomotive ran in revenue service on October 12, 2017.
- Metrolink expects at least four locomotives to operate throughout the system by the end of October 2017.

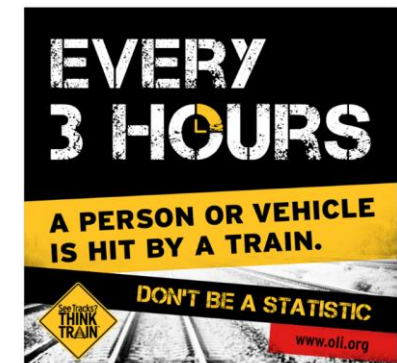


Rail Safety Month

- In coordination with Operation Lifesaver, OCTA and Metrolink promoted September as rail safety month via social media and an e-news blast.

Football Trains

- On September 10, 2017, Metrolink began special train service to seven Los Angeles Rams home games at the Coliseum.
- For \$7 round trip, Orange County football fans can ride the Orange County and 91/Perris Valley lines to Union Station and transfer to LA Metro rail for free.
- Metrolink received a MSRC grant for the service.



Facilities Engineering

Project	Cost (millions)	2016	2017	2018
Ana, GG Bases - LNG Underground Storage Tanks Removal	\$ 1.50			
Ana Base - Fence Repair and Bus Parking Stall Wheel Stops	\$ 0.07			
Facilities Condition Assessment - All Transit Facilities	\$ 0.20			
FPNR - Bus Dock Platform Minor Rehabilitation	\$ 0.50			
GG Base - Maintenance Building HV Unit Replacement	\$ 0.29			
GG Base - Vehicle Inspection Station Equipment Canopy	\$ 0.26			
All Bases - Bus Wash Run-Off Mitigation	\$ 0.65			
SA Base - Liquid Hydrogen Fueling Station	\$ 4.77			
SA Base - Facility Modifications for Hydrogen Buses	\$ 1.13			
GG Base - Bus Yard Pavement Striping	\$ 0.07			
SA, GG Bases - Video Surveillance System	\$ 1.20			
TSOC - Preliminary Engineering and Environmental Clearance	\$ 0.92			
TOTAL	\$ 11.56			

Final Design
 Bid
 Construction

OCTA Facility Legend:

Ana	Anaheim Bus Base
FPNR	Fullerton Park-and-Ride
GG	Garden Grove Bus Base
Irv CC	Irvine Construction Circle Bus Base
Irv SC	Irvine Sand Canyon Bus Base
BPNR	Brea Park-and-Ride
GWTC	Golden West Transportation Center
NPTC	Newport Transportation Center
LBTC	Laguna Beach Transportation Center
SA	Santa Ana Bus Base
TSOC	Transit Security Operations Center



SA Hydrogen Gas Detection
Control Panel Wiring



Facility Condition Assessment
Federal Transit Administration Guidance