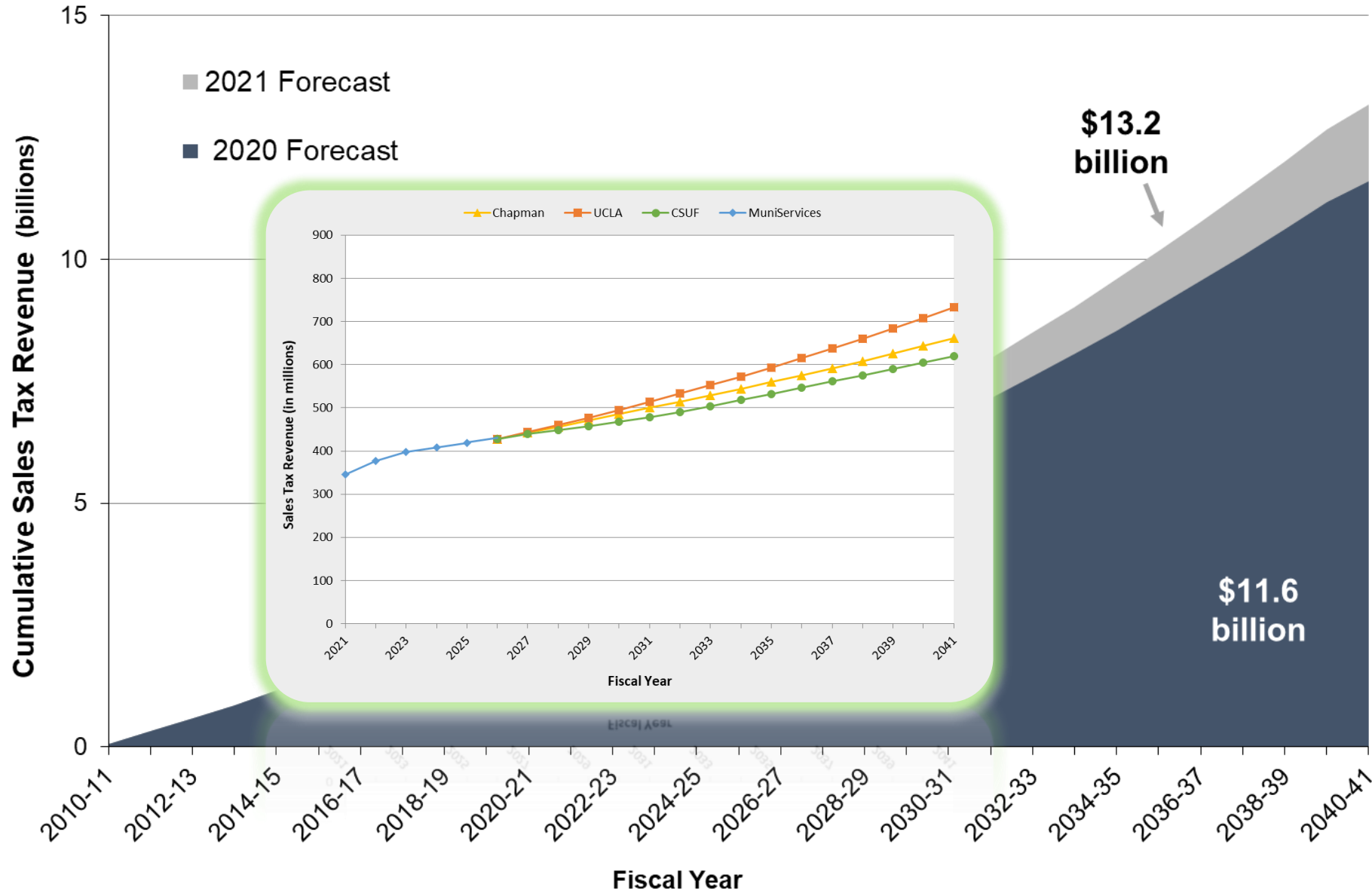


# Orange County Transportation Authority - Capital Programs Update



**Jim Beil, Executive Director, Capital Programs &  
Rose Casey, Director, Highway Programs**

Construction Network – February 15, 2022

# Revenue - Measure M2 Sales Tax Forecast




# Next 10 Delivery Plan 2021 Update

- Next 10 Plan adopted in 2016 (ten-year plan)
  - Matches delivery plan schedule and cost with forecast revenue
  - Updated last in 2020 (updated annually)
- Revenue - 2021 M2 revenue forecast is \$13.2 B (vs. \$11.6 in 2020)
  - Most areas of M2 Plan scale to available revenue
  - Freeway Program generally not scalable due to general scopes in ordinance
- Cost estimate and schedule updates on freeway and transit projects
  - Escalation rates
- M2 revenue forecast up  \$1.6 billion
- Cost escalation up  6% to 11% near term
- Reservation for economic uncertainty
- Draft Next 10 Plan approved by OCTA Board December 2021



## ENVIRONMENTAL

 A total of 5% of OC Go Freeway Program funds is allocated to the Freeway Environmental Mitigation Program

 A total of 2% of the overall OC Go Program funds is allocated to the Environmental Cleanup Program



# OC Streetcar Overview



## OC STREETCAR BY THE NUMBERS

### PROJECT FEATURES

OCTA BUS CONNECTIONS: 14

FLEET SIZE: 8

FREQUENCY: 10-15 MINUTES

STOPS: 10 (IN EACH DIRECTION)



STREETCAR CAPACITY:  
UP TO 210 PEOPLE

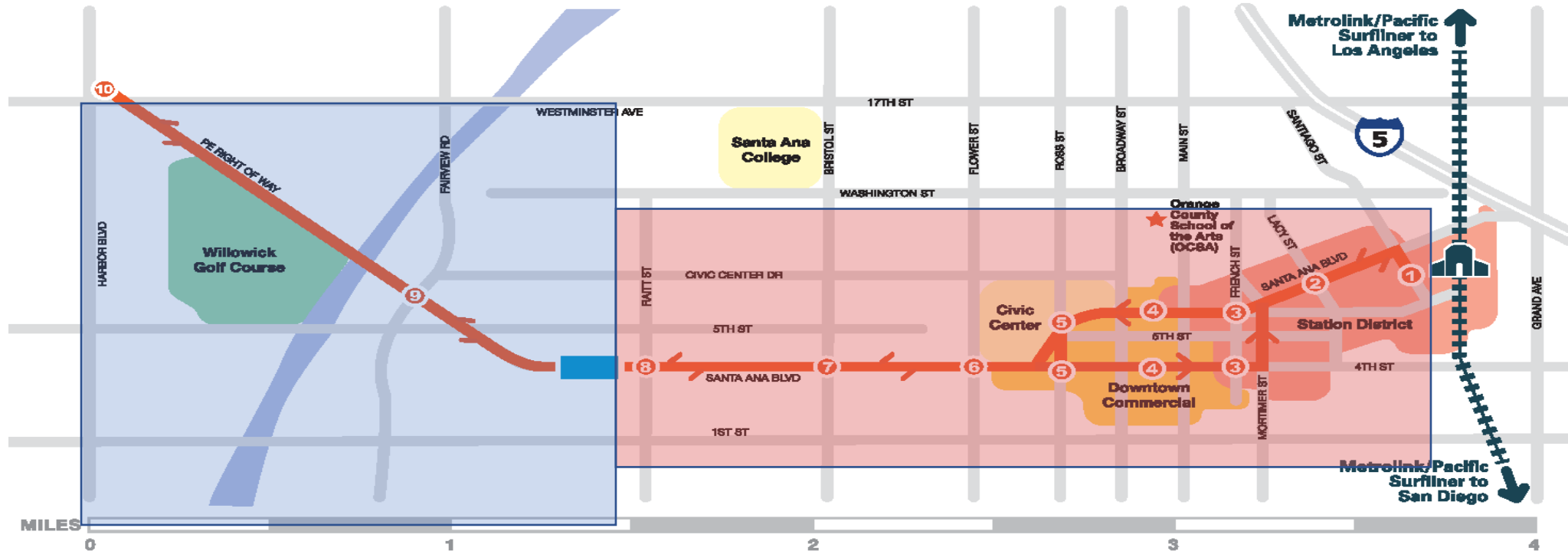
DAILY TRAIN CONNECTIONS  
AT SARTC: 65+

ROUTE: 4.15 MILES (in each direction)



- 4.1 miles connecting Santa Ana transit station to Harbor Boulevard in Garden Grove

# Map and 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 5<sup>th</sup> Street
- Maintenance facility for eight cars west of Raitt Street
- Center Platforms
- Two-Wire Overhead Catenary System (OCS)

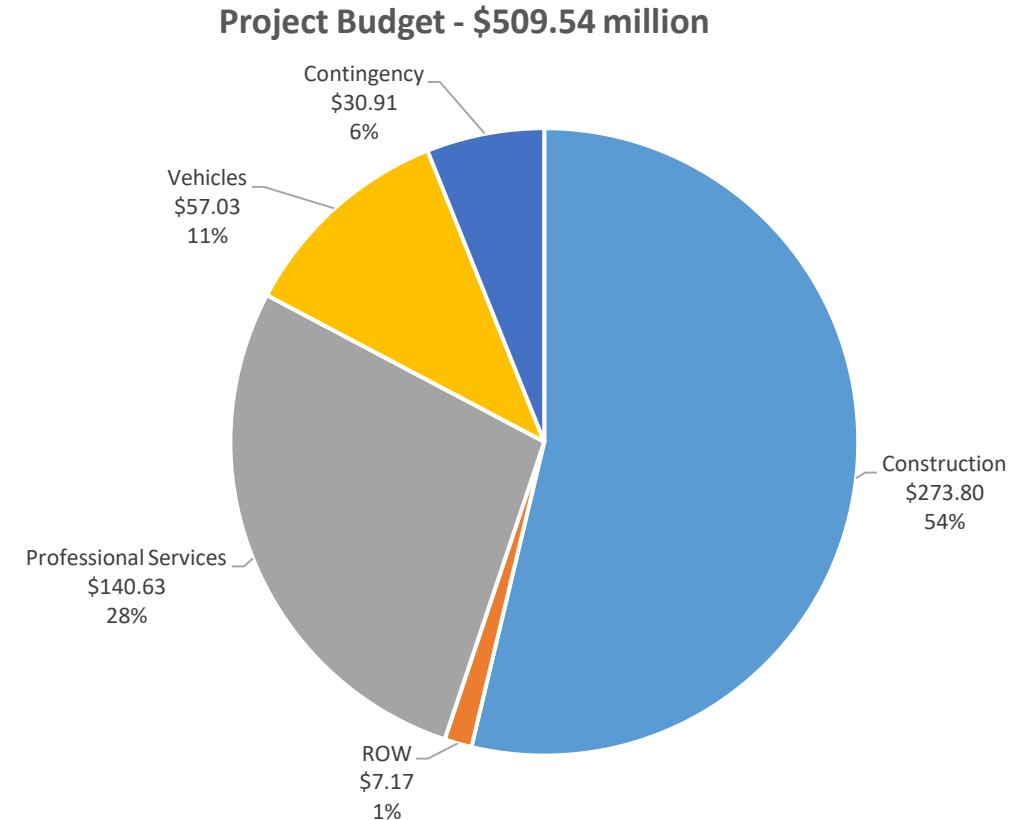
## STREET RUNNING

- 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

# Budget and Schedule

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

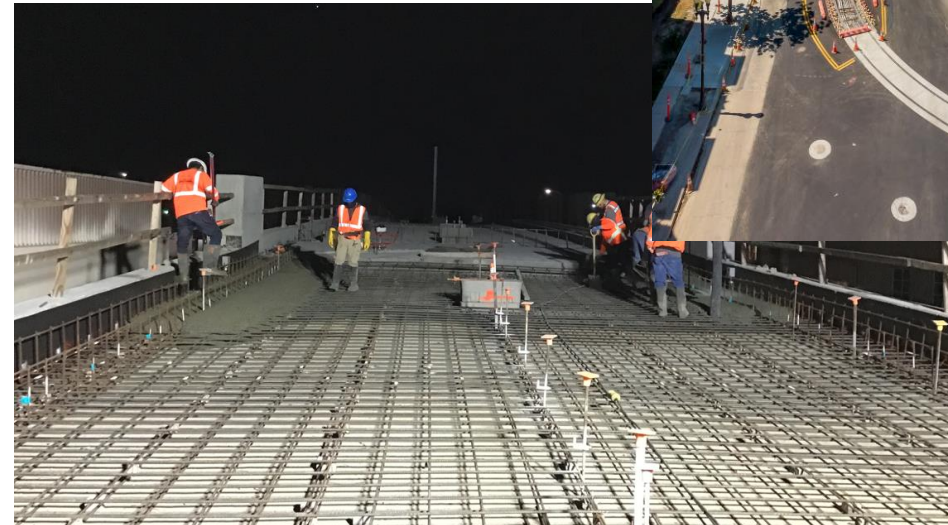
- Anticipated revenue service date is March 2024
- Estimated cost to complete is \$509.54 million
  - Includes \$30.91 million in contingency. This estimate is consistent with FTA's standard percent contingency at current stage of construction.





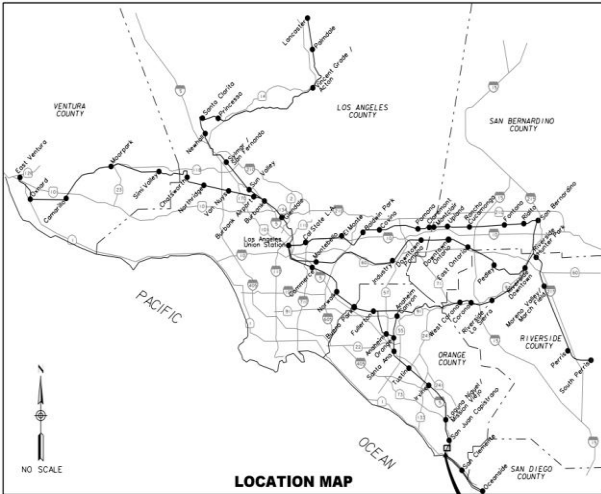
# OC Streetcar Construction Status

- Construction 62.7% complete
- Embedded track installation in streets
  - WB track complete on Santa Ana Boulevard Raitt to French Street
  - EB track from Bristol to Ross underway
  - 4<sup>th</sup> Street installation has begun
- Installation of OCS & traffic signal foundations and poles
  - 75% of OCS foundations complete
  - 34% of OCS poles installed
  - 27% traffic signal foundations installed (utility conflicts)
- MSF
  - Structural steel expected to go up late February
- Santa Ana River & Westminster Bridges
  - Direct fixation track installation is beginning

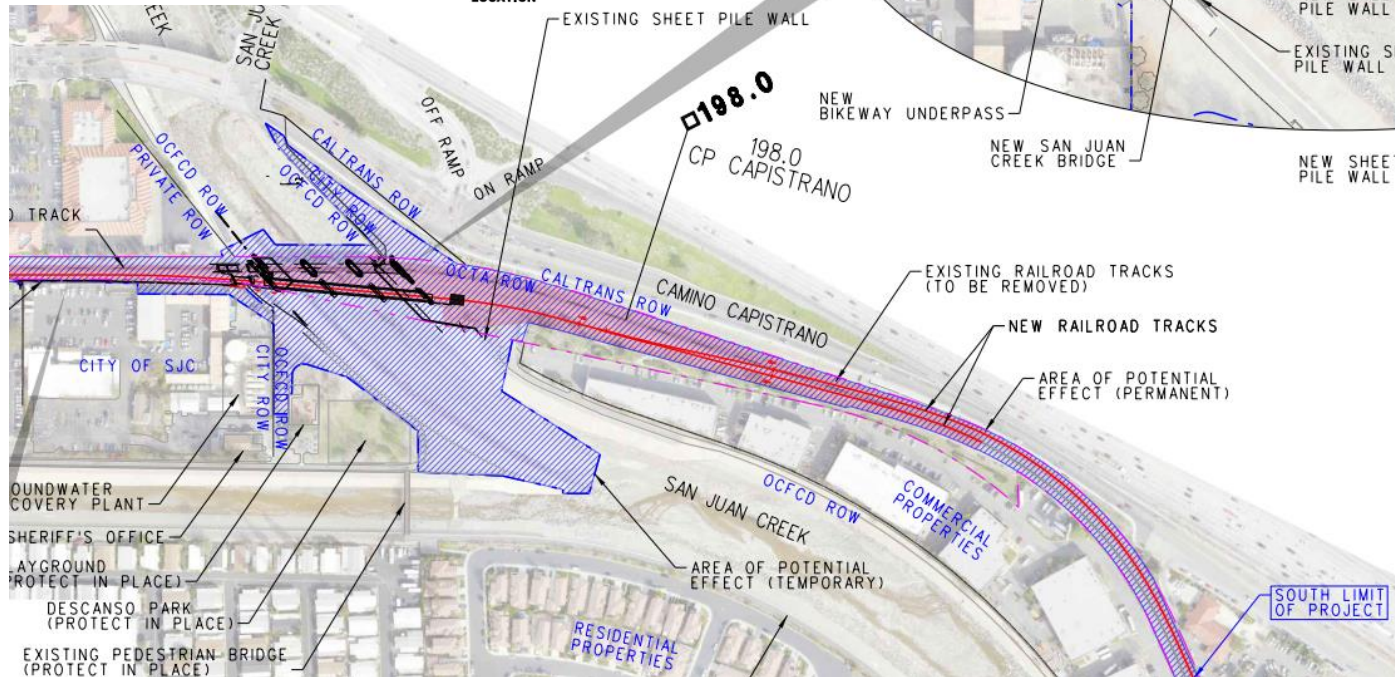
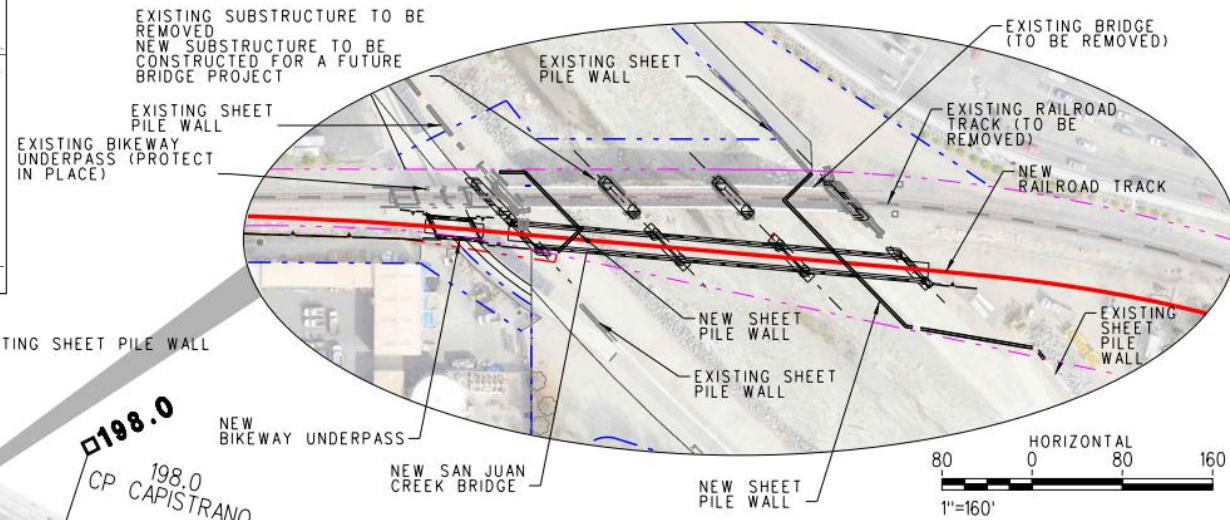




# San Juan Creek Bridge Replacement



- Replaces 100+ year old bridge
- Construction ready mid-2022
- Metrolink construction contract



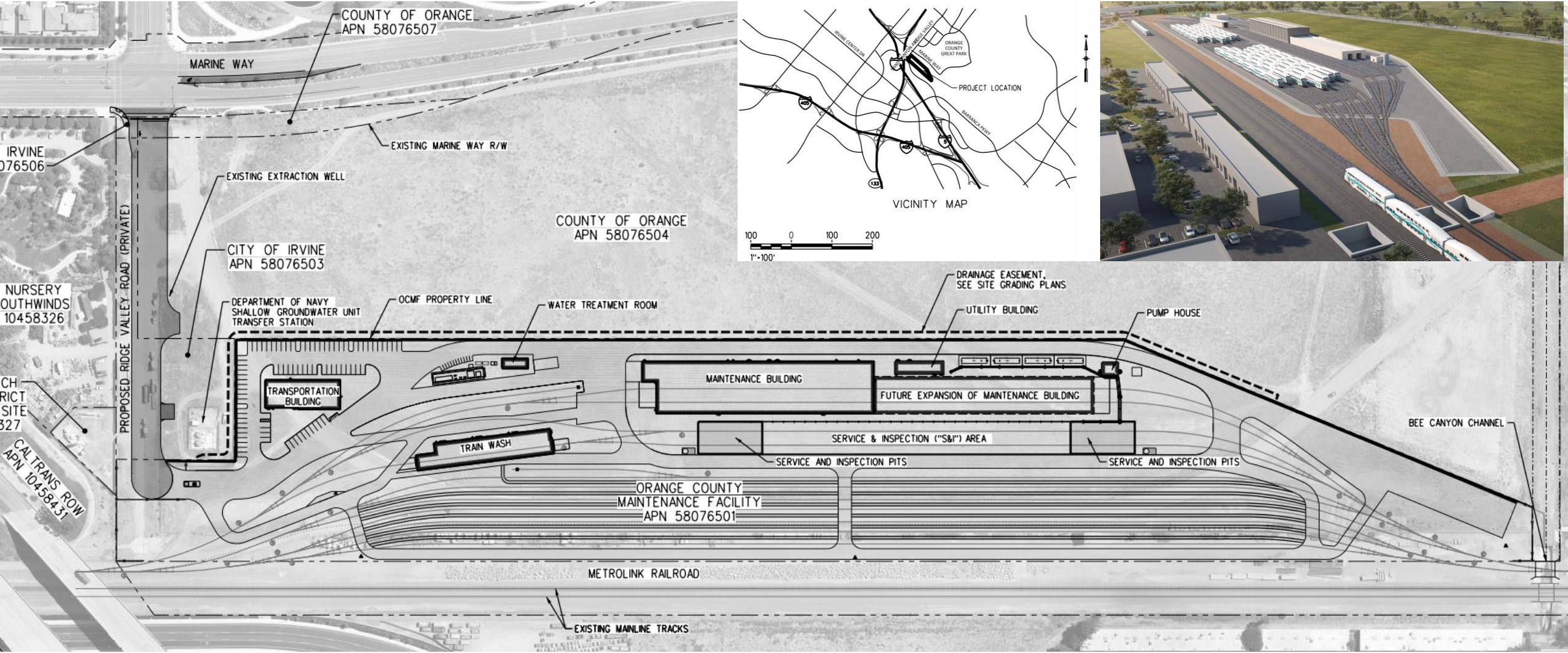
**ABBREVIATIONS:**

CP	CONTROL POINT
FWY	FREEWAY
I	INTERSTATE
OCFCD	ORANGE COUNTY FLOOD CONTROL DISTRICT
OCTA	ORANGE COUNTY TRANSPORTATION AUTHORITY
RD	ROAD
ROW	RIGHT-OF-WAY
SJC	SAN JUAN CAPISTRANO
ST	STREET

- Replaces 100+ year old bridge
- Construction ready mid-2022
- Metrolink construction contract



# OC Metrolink Maintenance Facility (OCMF)



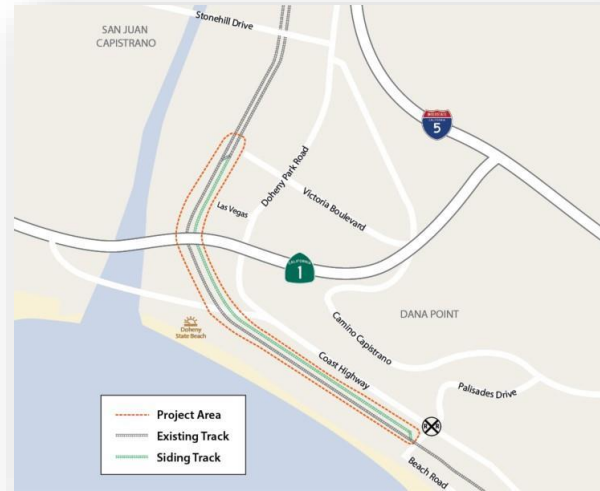
- OCTA environmental lead
- Environmental Clearance mid-2022
- Metrolink design lead





# Serra Siding Extension

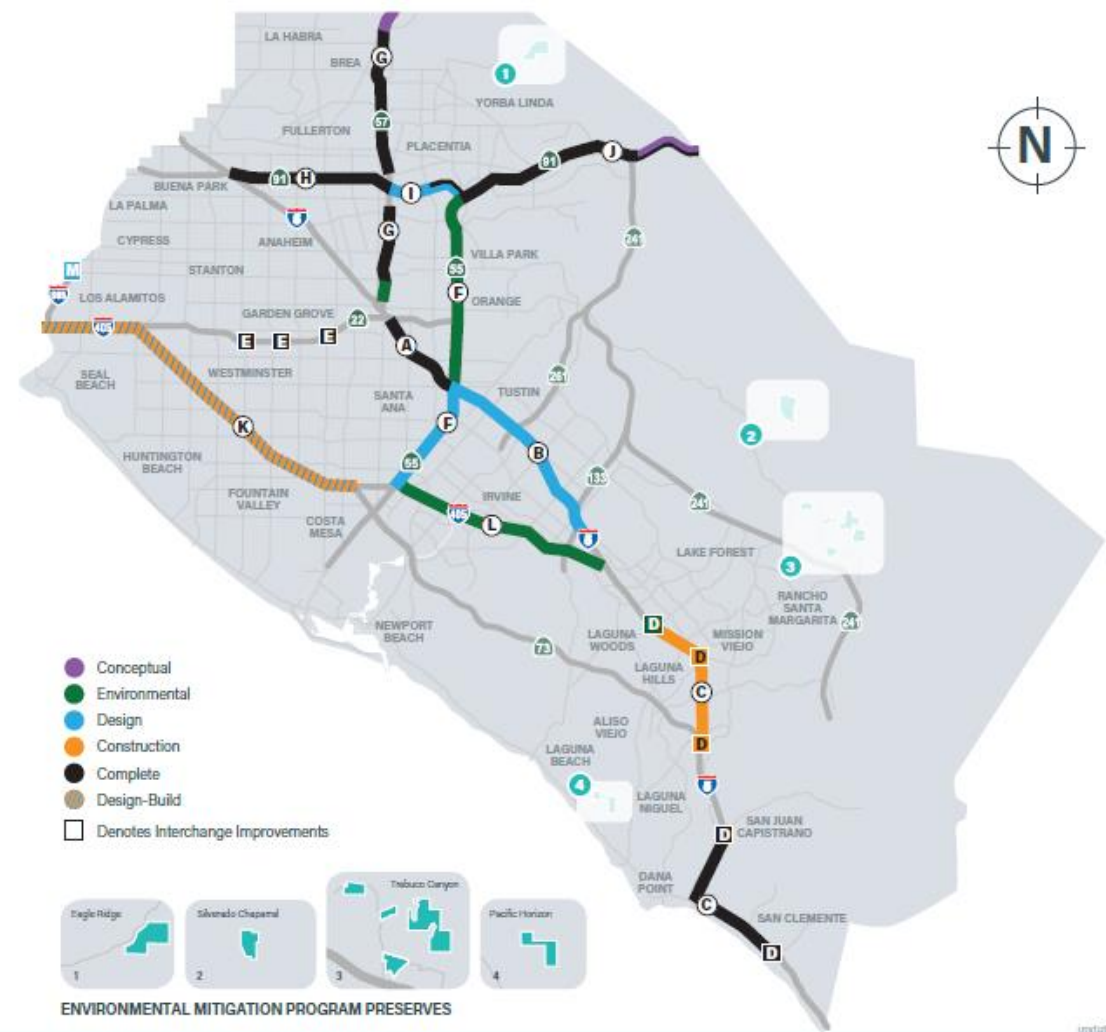
- Estimated project cost \$50 million  
*Based on preliminary design*
- Extends 1.2 miles of siding track
- Replaces wooden ties with concrete ties
- Replaces a 93-year-old railroad bridge over Coast Highway with two single-track bridges
- Adds fencing along Coast Highway
- Construct retaining walls
- **CEQA clearance late 2022**





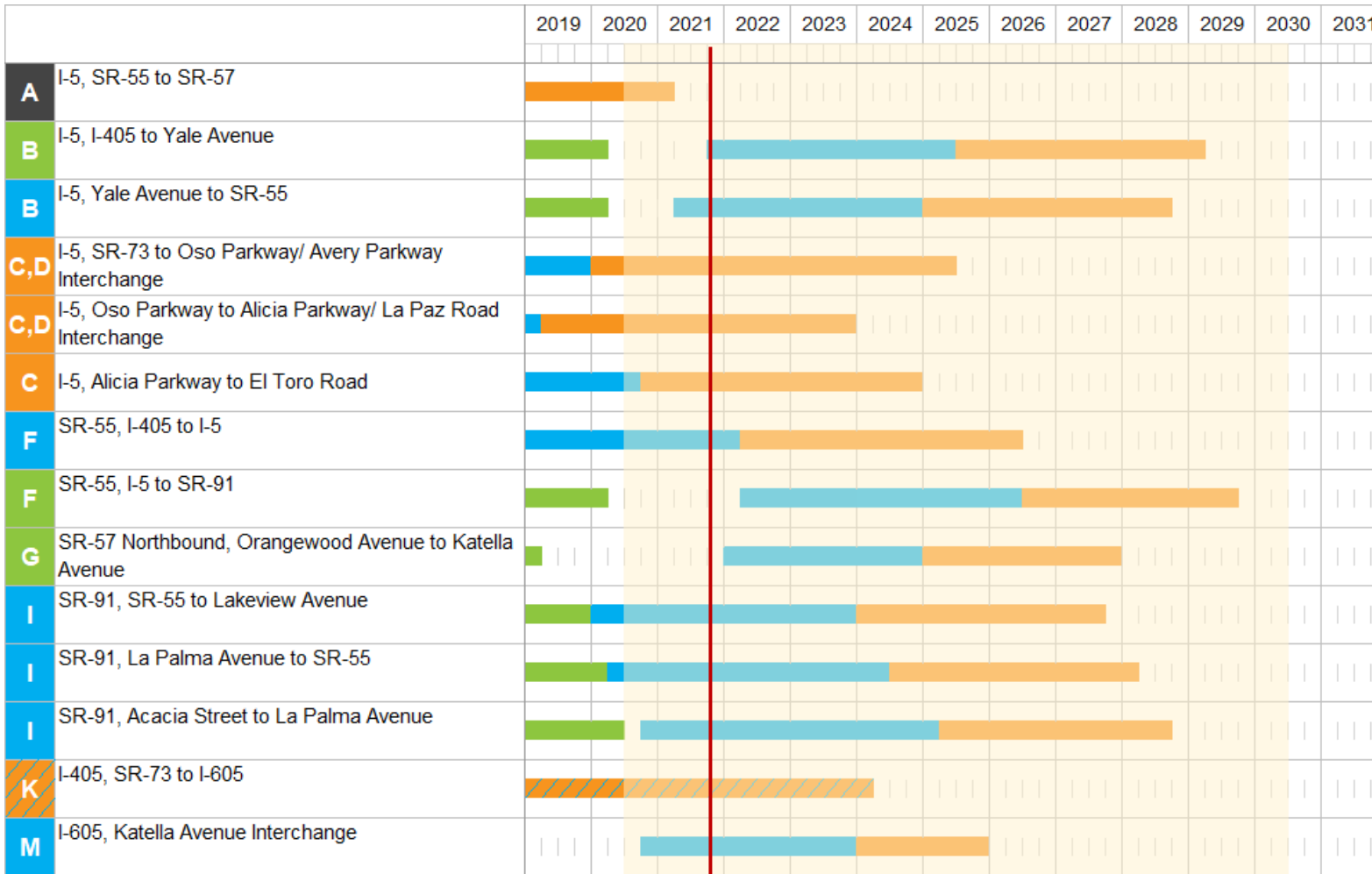


# Measure M2 Freeway Projects Map



- A I-5 (SR-55 to SR-57)
  - E I-5 (I-405 to SR-55)
  - C D I-5 (Avenida Pico to San Juan Creek Road)
  - C D I-5 (SR-73 to El Toro Road)
  - D I-5/Ortega Highway Interchange Improvements
  - D I-5/El Toro Road Interchange Improvements
  - E SR-22 Access Improvements
  - F SR-55 (I-405 to I-5)
  - F SR-55 (I-5 to SR-91)
  - C SR-57 NB (Orangewood Avenue to Katella Avenue)
  - C SR-57 NB (Katella Avenue to Lincoln Avenue)
  - C SR-57 NB (Orangethorpe Avenue to Lambert Road)
  - C SR-57 NB (Lambert Road to County Line)
  - U SR-91 WB (I-5 to SR-57)
  - I SR-91 (SR-57 to SR-55)
  - I SR-91 WB (Tustin Avenue to SR-55)
  - I SR-91 (SR-55 to SR-71)
  - I SR-91 (SR-241 to I-15)\*
  - C I-405 (SR-73 to I-605)
  - I I-405 (I-5 to SR-55)
  - I-605/Katella Avenue Interchange Improvements
  - U Freeway Service Patrol (not mapped)
  - A-M Environmental Mitigation Program
    - 1,300 acres of permanent open space
    - 12 restoration projects totaling nearly 350 acres (not mapped)
- \*Project environmentally reviewed as part of the Riverside County Transportation Commission's Corridor Improvement Project. Additional studies needed prior to construction.

# M2 Freeway Program – 2021 Next 10



- 14 freeway projects to be delivered in Next 10 Plan timeframe
- Nine freeway projects under construction in 2025

**I-5 – Interstate 5**  
**I-405 – Interstate 405**  
**I-605 – Interstate 605**  
**SR-55 – State Route 55**  
**SR-57 – State Route 57**  
**SR-73 – State Route 73**  
**SR-91 – State Route 91**



Environmental



Design, Advertise,  
and Award



Design-Build



Construction



Completed

- I-405 Design-Build Project from SR-73 to I-605
- I-5 from SR-73 to El Toro Road
  
- Bidding phase:
  - SR-55 from I-405 to I-5



# 405 Design-Build Project Update

## General

- Over 70 percent complete with Interstate 405 Improvement Project

## Design and Right-of-Way Possession

- Substantially complete with both design and right-of-way possession

## Construction

- Eight of 18 bridge replacements complete
- All remaining bridges under construction
- Over half of ramps to be reconstructed complete
- Approximately half of paving complete

# 405 Construction Update



**Talbert Avenue**



**Slater Avenue**



**Bushard Street**



**Magnolia Street**



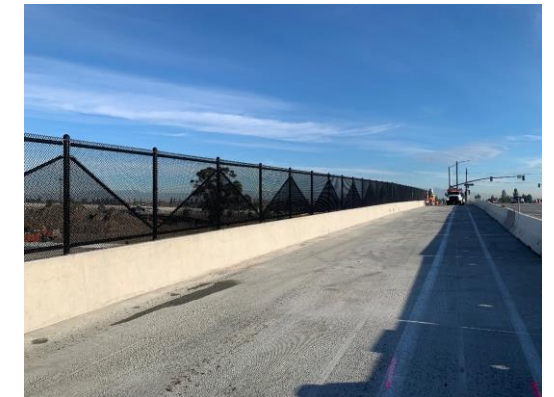
**McFadden Avenue**



**Edwards Street**



**Edinger Avenue**



**Bolsa Chica Road**

**Eight bridge replacements complete and open to traffic**



# 405 Bridge Construction Map



**LEGEND**

- Project Limits
- Closed to Traffic During Construction
- Open to Traffic During Construction
- New Bridge Open to Traffic

Bridge Map as of 02/04/2022



# 405: Status of 18 Bridge Replacements

Overcrossing Bridge	Number of Stages	Anticipated Opening Date		
		Open	2022	2023
Bolsa Chica Road	Two	X		
Springdale Street	One			X
Westminster Boulevard	Two		X	
Edwards Street	One	X		
Goldenwest Street	Two		X	
Bolsa Avenue	Two		X	
McFadden Avenue	One	X		
Edinger Avenue	One	X		
Newland Street	One			X
Heil Avenue (Pedestrian)	One		X	
Magnolia Street	Two	X		
Warner Avenue	One			X
Bushard Street	One	X		
Slater Avenue	One	X		
Brookhurst Street	Two			X
Talbert Avenue	One	X		
Ward Street	One		X	
Fairview Road	Two		X	

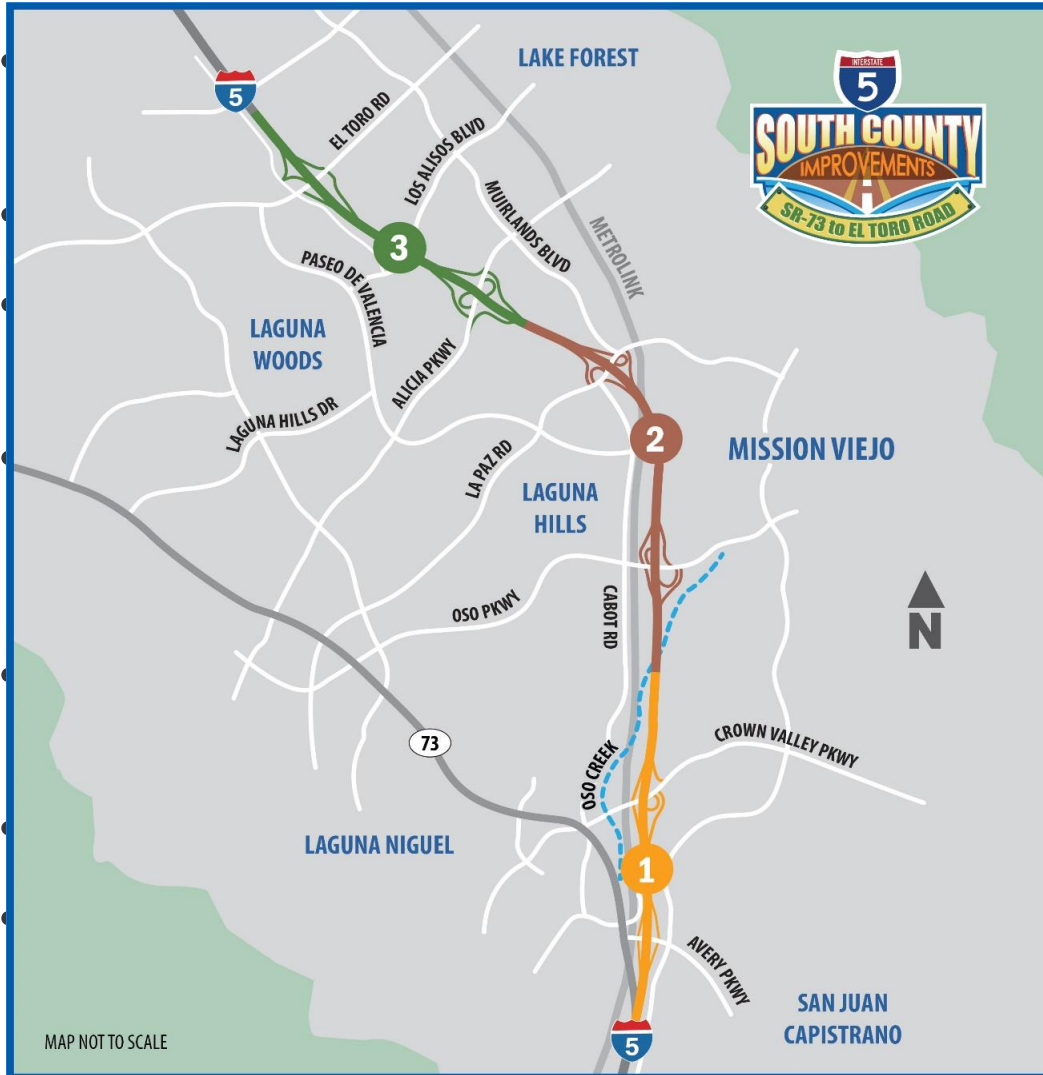
# 405 Construction Update



**Mainline and ramp paving**



# I-5 from SR-73 to El Toro Road



**Segment 1**  
State Route 73 to Oso Parkway

**Segment 2**  
Oso Parkway to Alicia Parkway

**Segment 3**  
Alicia Parkway to El Toro Road

**Total length: 6.5 miles**

**Total estimated cost: \$580m**

**Scope:** Add one GP lane from Avery to Alicia, extend second HOV lane from Alicia to El Toro, reconstruct Avery, La Paz and Los Alisos, auxiliary lane and ramp improvements





# I-5 South County Construction



Avery Parkway stage 2A pile driving  
Segment 1



La Paz Road NB on-ramp JPCP  
Segment 2

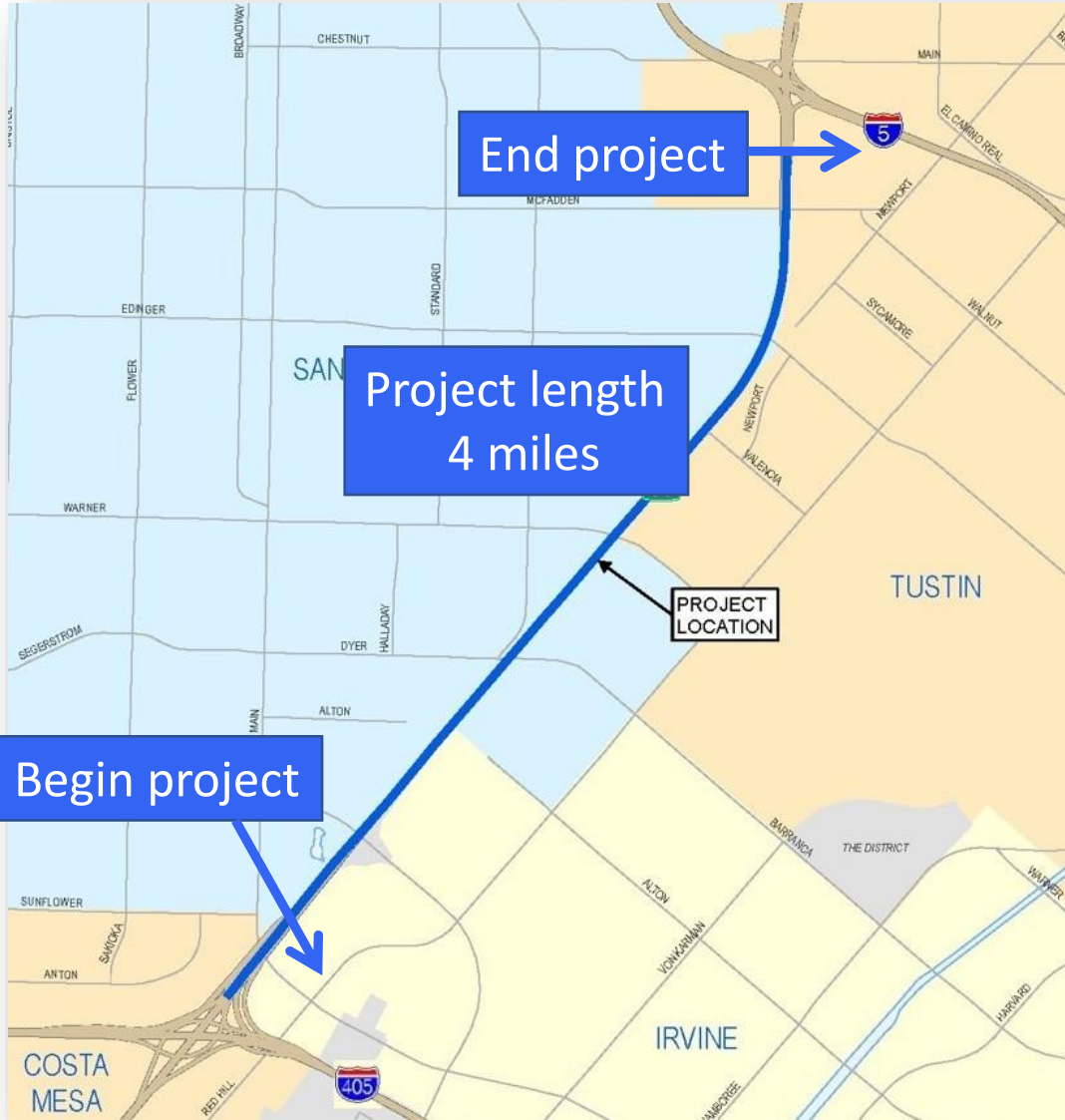


Aliso Creek bridge widening  
Segment 3

# I-5 Construction Schedule

Segment	Estimated Schedule
<b>Segment 2</b> Oso Parkway to Alicia Parkway	<b>May 2019 – Mid 2024</b> <i>Construction 65% complete, La Paz in stage 1B</i>
<b>Segment 1</b> State Route 73 to Oso Parkway	<b>February 2020 – Late 2024</b> <i>Construction 53% complete, Avery in stage 2A</i>
<b>Segment 3</b> Alicia Parkway to El Toro Road	<b>January 2021 – Mid-2024</b> <i>Construction 31% complete, Los Alisos in stage 1</i>

# SR-55 from I-405 to I-5



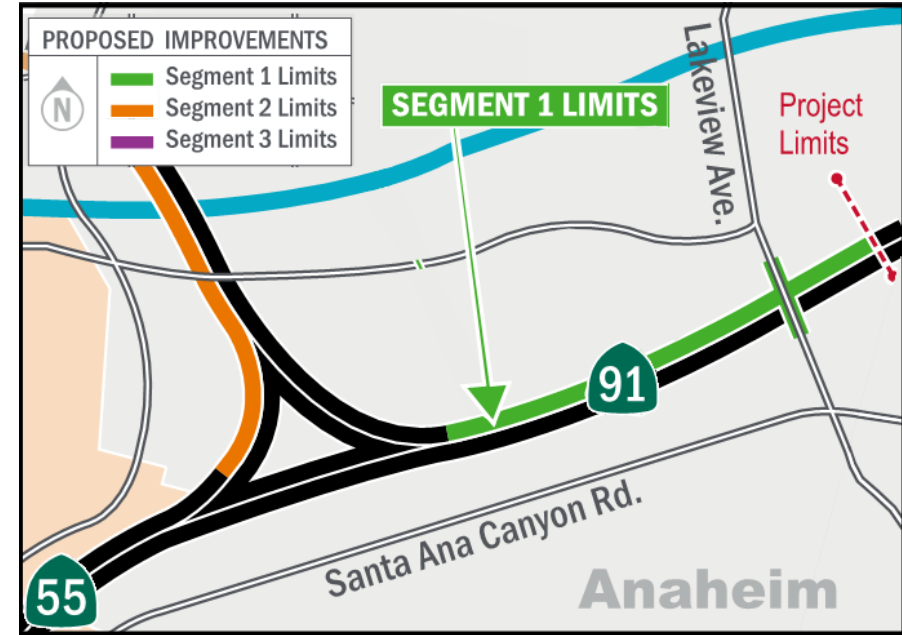
- Will add one HOV and one GP lane in each direction along with auxiliary lanes
- Borders cities of Irvine, Santa Ana, and Tustin
- Capital construction cost: \$215 million (Total cost \$505 million)
- Advertised for construction bids on December 6, 2021
- Bid opening scheduled for March 3, 2022
- Construction start: June 2022
- Construction duration: 3.5 years (excluding PE)



- SR-91 from Lakeview Avenue to SR-57
  - Segment 1: Lakeview Avenue to SR-55
  - Segment 2: SR-55 to La Palma Avenue
  - Segment 3: La Palma Avenue to Acacia Street
- I-605/Katella Avenue Interchange
- I-5 from I-405 to SR-55
  - Segment 1: I-405 to Yale Avenue
  - Segment 2: Yale Avenue to SR-55
- SR-57 from Orangewood Avenue to Katella Avenue
- SR-55 from I-5 to SR-91

# SR-91 (Lakeview Avenue to SR-55)

- Realigns westbound on-ramp to direct traffic to westbound SR-91
- Adds new ramp from Lakeview Bridge connecting directly to southbound SR-55
- Separates westbound SR-91 from southbound SR-55
- Construction capital cost: \$63 million, ad date Oct. 2023



## Anticipated Schedule

Design	June 2020 to mid-2023
Construction	Early 2024 to late 2027

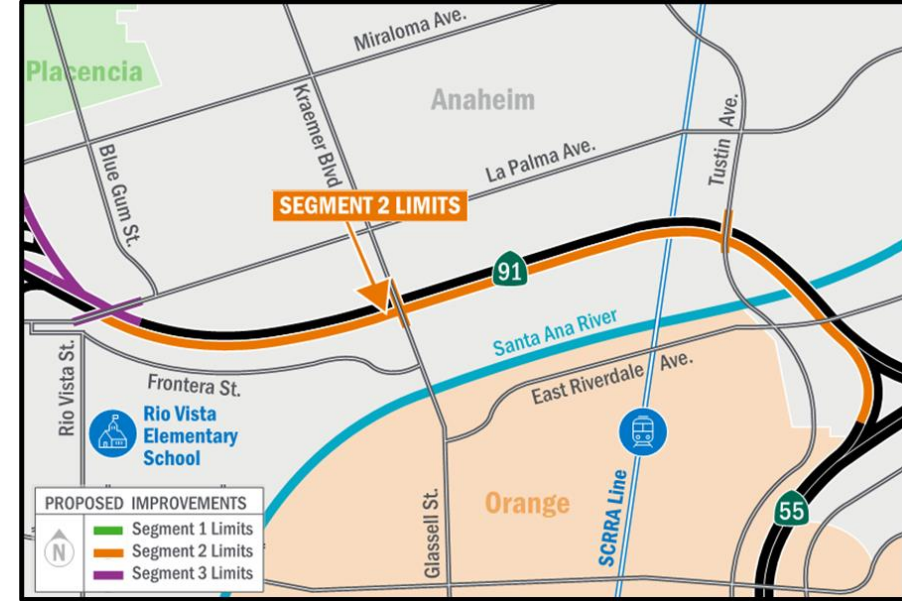


# SR-91 (La Palma Avenue to SR-55)

- Adds eastbound general purpose lane between SR-57 and SR-55
- Replaces the Kraemer Boulevard/Glassell Street and Tustin Avenue overcrossings
- Widens the Santa Ana River bridge
- Construction capital cost: \$117 million, ad date: March 2024



<b>Anticipated Schedule</b>	Design	June 2020 to early 2024
	Construction	Mid-2024 to mid-2028



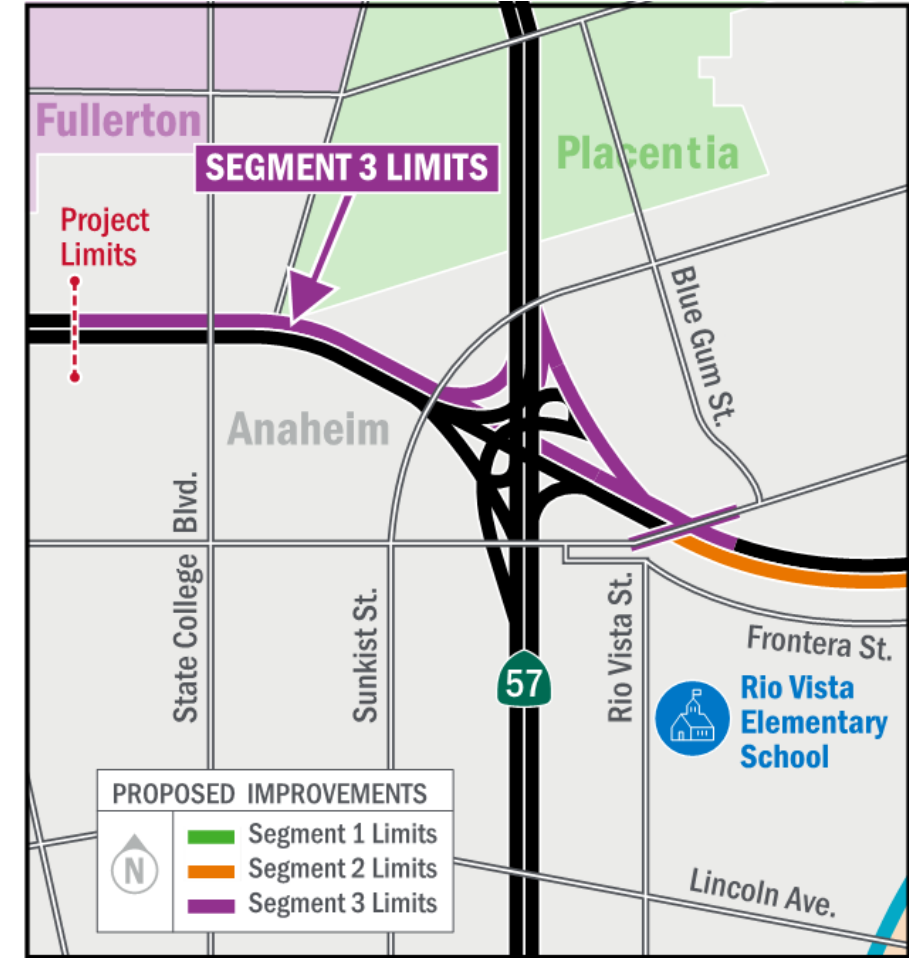


# SR-91 (Acacia Street to La Palma Avenue)

- Improves weaving from westbound SR-91 to SR-57
- Adds auxiliary lane from SR-57 to Raymond Avenue/East Street
- Replaces La Palma Avenue bridge
- Construction capital cost: \$73 million, ad date: Jan 2025

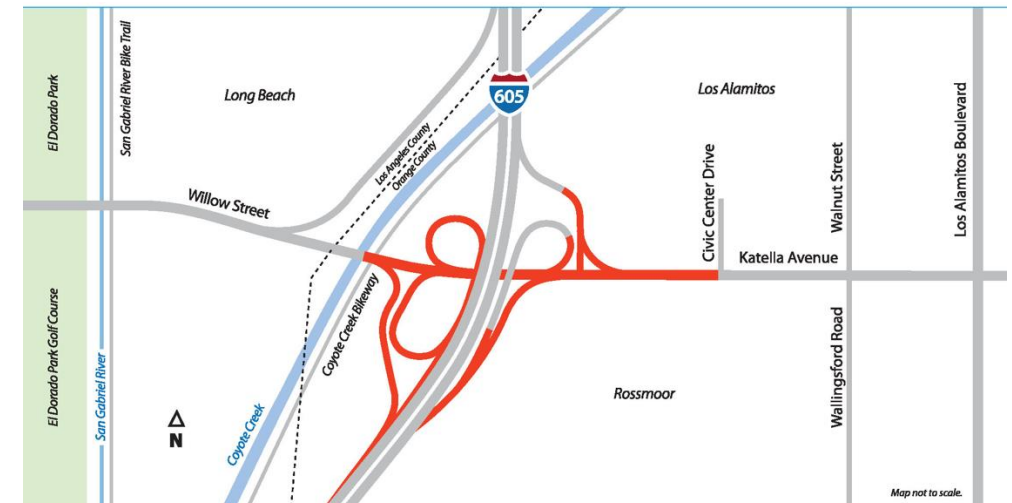


<b>Anticipated Schedule</b>	Design	November 2020 to late 2024
	Construction	Mid-2025 to late 2028



# I-605/Katella Avenue Interchange

- Scope
  - Operational improvements to ramps and Katella Avenue
  - Provides pedestrian and bike connectivity
- Construction Cost: \$17 million
- Final design: Dec 2020 – March 2023
- Advertisement date: Dec 2023
- Construction anticipated to begin mid-2024

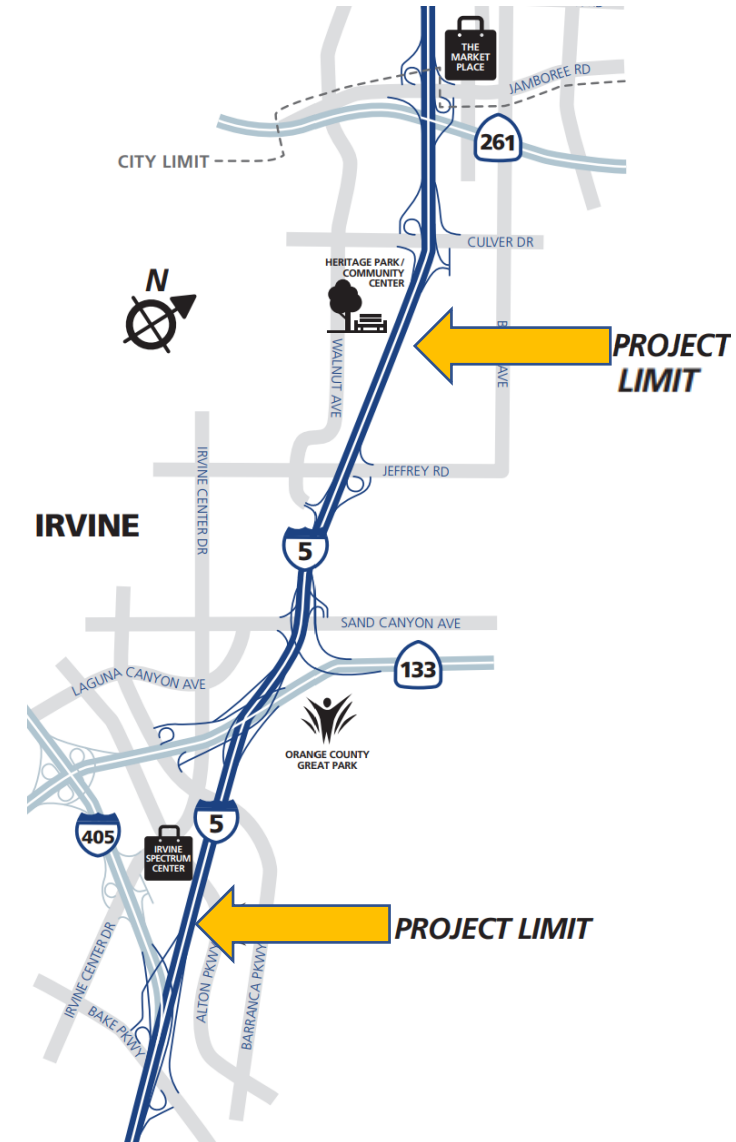


Project Limits



# I-5 (I-405 to Yale Avenue)

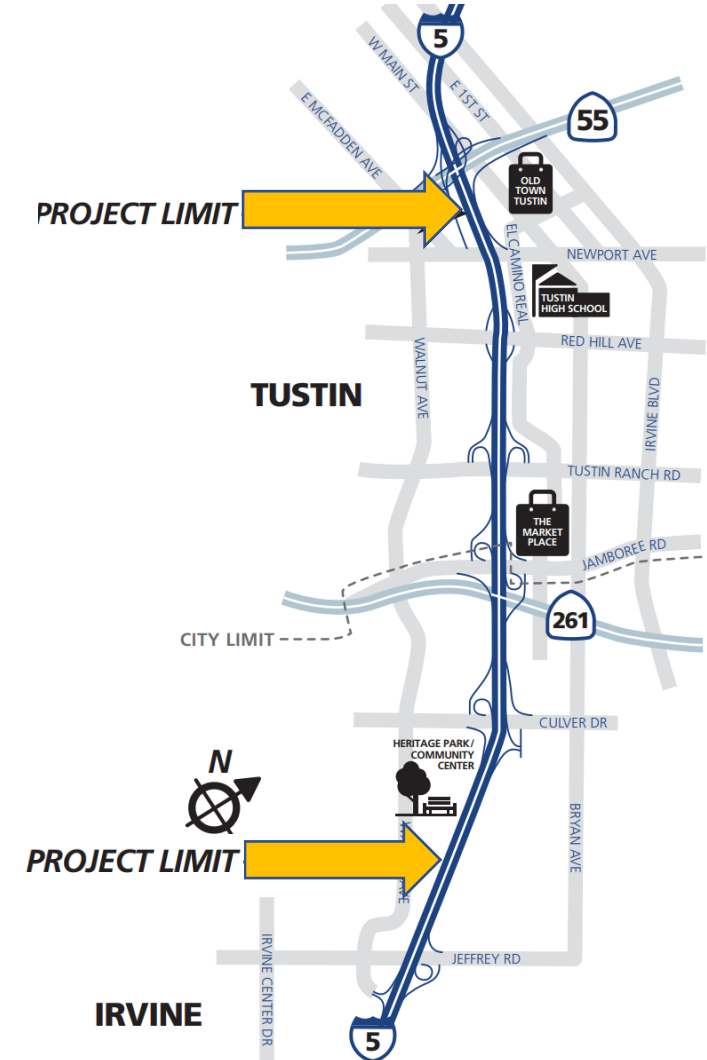
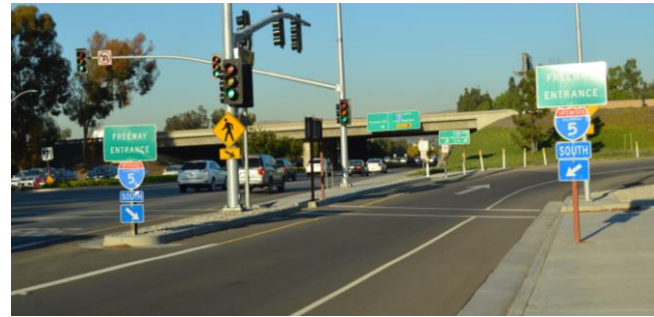
- Scope
  - Adds general purpose lane in each direction
  - Interchange improvements
  - Continuous HOV access
- Length: 4.5 miles
- Construction capital cost: \$131 million
- Final design: Oct 2021- July 2024
- Advertisement: May 2025
- Construction anticipated to begin mid-2025





# I-5 (Yale Avenue to SR-55)

- Scope
  - Adds general purpose lane in each direction
  - Interchange improvements
  - Continuous HOV access
- Length: 4.5 miles
- Construction Cost: \$118 million
- Final design: May 2021- Jan 2024
- Advertisement: Nov 2024
- Construction anticipated to begin early 2025



# Northbound SR-57 (Orangewood to Katella)

- Scope
  - Extends fifth general purpose lane
  - Retains auxiliary lane between Orangewood and Katella
  - Improves on- and off-ramps
  - Improves merge movements
  - Length: 1 mile
- Construction Cost: \$46 million
- Design: Feb 2022-April 2024
- Advertisement: Dec 2024
- Construction to begin in mid-2025



# SR-55 (I-5 to SR-91)

- Scope
  - Adds one lane in each direction between I-5 and SR-22
  - Improves off-ramps at Fourth Street and southbound Katella Avenue off-ramp
  - Relocates Lincoln Avenue/Tustin Street off-ramp
  - Construction capital cost: \$80 million
- Anticipated schedule
  - Design: Aug 2022 to July 2025; Advertisement: April 2026



New Bridge over Lincoln Avenue



**Legend**

- Proposed General Purpose (GP) Lanes
- Proposed Ramp Improvements



# Upcoming Contract Opportunities

Visit [cammnet.octa.net](http://cammnet.octa.net) for all upcoming opportunities

Project	Service	Approx. Value	Anticipated RFP Release Date/ Construction Advertisement Date	Contact
Drainage Pipe Repair at Anaheim Bus Base Chassis Wash Bay	Construction	\$106,000	February 14, 2022	George Olivo
Fire Alarm Control Panels Replacement at Santa Ana Bus Base	Construction	\$620,000	February 16, 2022	George Olivo
Restroom Improvements at Fullerton Park-and-Ride	Construction	\$480,000	March 2022	George Olivo
HVAC Multi-zone Unit Replacement at Anaheim Bus Base Operations Building	Construction	\$ 570,000	March 2022	George Olivo
Building Repairs at Irvine Construction Circle Bus Base	Construction	\$ 400,000	March 2022	George Olivo
Installation of 12KV Switchgear Equipment at Santa Ana Bus Base	Construction	\$ 475,000	March 2022	George Olivo

Notes:

1. Project to be advertised by Caltrans.
2. Pending Board direction or budget approval.
3. Pending external agency approval

# Upcoming Contract Opportunities

Visit [cammnet.octa.net](http://cammnet.octa.net) for all upcoming opportunities

Project	Service	Approx. Value	Anticipated RFP Release / Construction Advertisement Date	Contact
SR-57 from Lambert to Tonner Canyon	PSR	\$750,000	March 2022	Dan Phu
Garden Grove – Santa Ana Rails-to-Trails Gap Closure Study	PA/ED	\$3 million	April 2022	Peter Sotherland
91 Express Lanes Roadside Services	Professional	\$6 million	April 2022	Kirk Avila
Harbor Boulevard Corridor Study	PE/ED	\$7 million	June 2022	Kim Tucker/ Dan Phu
91 Express Lanes Pavement Management Plan	Professional	\$400,000	June 2022	Josue Vaglienty
Transit Security and Operations Center	CM	\$5 million	June 2022	George Olivo
405 Express Lanes Roadside Services	Professional	\$6 million	July 2022	Kirk Avila
91 Express Lanes Toll Operation Systems and Oversight	Professional	\$1 million	July 2022	Kirk Avila
Transit Security and Operations Center	Construction	\$38 million	August 2022	George Olivo

Notes:

1. Project to be advertised by Caltrans.
2. Pending Board direction or budget approval.
3. Pending external agency approval

# Upcoming Contract Opportunities

Visit [cammnet.octa.net](http://cammnet.octa.net) for all upcoming opportunities

Project	Service	Approx. Value	Anticipated RFP Release/ Construction Advertisement Date	Contact
Traffic and Revenue Updates for the 91 and 405 Express Lanes	Professional	\$800,000	August 2022	Kirk Avila
SR-91 Implementation Plan Updates	Planning	\$200,000	September 2022 <sup>2</sup>	Dan Phu
SR-91 from SR-55 to Lakeview Avenue (Segment 1)	CM	\$ 4.5 million	April 2023	Jeannie Lee
I-605/Katella Interchange	CM	\$1 million	May 2023	Josue Vaglienty
I-605/Katella Interchange <sup>1</sup>	Construction	\$15 million	July 2023	Caltrans
SR-91 from SR-55 to Lakeview Avenue (Segment 1) <sup>1</sup>	Construction	\$55 million	August 2023	Caltrans
SR-91 from La Palma Avenue to SR-55 (Segment 2)	CM	\$8 million	November 2023	Jeannie Lee
SR-91 from La Palma Avenue to SR-55 (Segment 2) <sup>1</sup>	Construction	\$100 million	January 2024	Caltrans

Notes:

1. Project to be advertised by Caltrans.      2. Pending Board direction or budget approval.      3. Pending external agency approval



# Upcoming Contract Opportunities

Visit [cammnet.octa.net](http://cammnet.octa.net) for all upcoming opportunities

Project	Service	Approx. Value	Anticipated RFP Release/ Construction Advertisement Date	Contact
SR-91 from Acacia Street to La Palma Avenue (Segment 3)	CM	\$5 million	January 2024	Jeannie Lee
I-5 from Yale Avenue to SR-55 (Segment 2)	CM	\$7.5 million	February 2024	Niall Barrett
SR-91 from Acacia Street to La Palma Avenue (Segment 3) <sup>1</sup>	Construction	\$60 million	April 2024	Caltrans
I-5 from Yale Avenue to SR-55 (Segment 2) <sup>1</sup>	Construction	\$95 million	June 2024	Caltrans
I-5 from I-405 to Yale Avenue (Segment 1)	CM	\$8.5 million	November 2024	Josue Vaglienty
I-5 from I-405 to Yale Avenue (Segment 1) <sup>1</sup>	Construction	\$110 million	April 2025	Caltrans
NB SR-57 from Orangewood to Katella	CM	\$3 million	June 2024	Niall Barrett
NB SR-57 from Orangewood to Katella <sup>1</sup>	Construction	\$40 million	October 2024	Caltrans
SR-55 from I-5 to SR-91	CM	\$5 million	September 2025	Jeannie Lee
SR-55 from I-5 to SR-91 <sup>1</sup>	Construction	\$60 million	February 2026	Caltrans

Notes:

1. Project to be advertised by Caltrans.
2. Pending Board direction or budget approval.
3. Pending external agency approval

# Upcoming Contract Opportunities

Visit [cammnet.octa.net](http://cammnet.octa.net) for all upcoming opportunities

Project	Service	Approx. Value	Anticipated RFP Release/ Construction Advertisement Date	Contact
OC Transportation Demand Management Strategy	Planning	\$ 200,000	TBD <sup>3</sup>	Greg Nord
Express Lanes Project Initiation Document	Planning	\$ 700,000	TBD <sup>2</sup>	Greg Nord
Alternative Traffic Signal Communications Demonstration Project	Planning	\$250,000	TBD	Alicia Yang

Notes:

1. Project to be advertised by Caltrans.
2. Pending Board direction or budget approval.
3. Pending external agency approval

# Questions?



Equity,  
Transparency,  
Fiscal and  
Environmental  
Responsibility