

# SR-91 INTEGRATED CORRIDOR MANAGEMENT SYSTEM



# INTRODUCTION

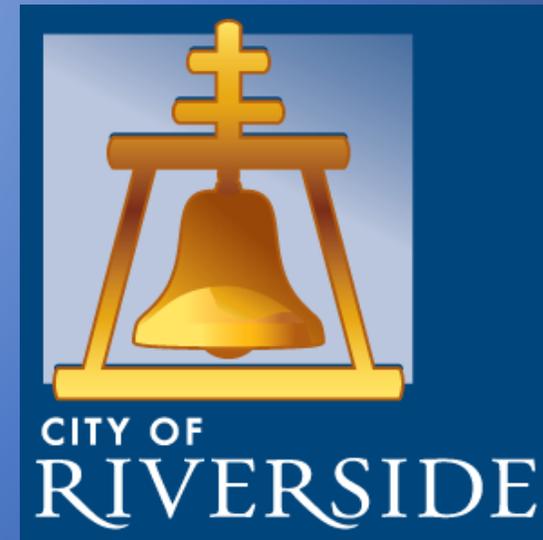
- CORRIDOR SELECTION
- PARTNERSHIP
- CONGESTIONS ISSUES
- EXISTING FEATURES
- PROPOSED INTEGRATED CORRIDOR
- SCHEDULE

# STATEWIDE SELECTION

List Compiled with Priorities from each District Traffic Operations Deputy											
Caltrans Strategic Management Plan (SMP) - System Performance - Objective 4	District	District Rank	Route	County	Vehicle Hours of Delay (at 35 mph) 2013*	Post Mile Limits	Number of Incidents 2013*	VMT 2013	Incidents/Day*	Incidents/million VMT*	District Traffic Operations and Transportation Planning Contact:
CT SMP System Performance Goal, TMS BCP Corridor & Connected Corridor Priority 1	7	1	I-210	Los Angeles	2,789,943	24.7-33.5 (Connected Corridors Segmt 1); 7-LA-210 PM R22.283 – R36.411	10,032	3,113,364,581	27.48	3.22	Sam Esquenazi, Sheik Moinuddin
CT SMP System Performance Goal, TMS BCP Corridor Priority 2	4	1	I-80	Alameda	2,065,218	4-ALA/CC-80 CC 14.139 – Ala 1.939 (WB -AM)	3,546	499,810,971	9.72	7.09	Julianna Gum, Cesar Pujol
CT SMP System Performance Goal & Connected Corridor Priority 3	12	1	SR-57	Orange	869,170	12-Ora-57 PM 10.734R – R22.551 (NB - PM)	2,508	945,456,088	6.87	2.65	Bassem Barsoum, Fedrico Hormozi
CT SMP System Performance Goal & Connected Corridor Priority 4	7	2	I-110	Los Angeles	2,987,933	7-LA-110-PM 0.7 – PM 25.57 (NB - AM)	11,429	1,939,421,592	31.31	5.89	Sam Esquenazi, Sheik Moinuddin
CT SMP System Performance Goal (ICM only) & Connected Corridor Priority 5	12	2	SR-91	Orange	1,518,164		6,934	1,608,166,242	19.00	4.31	Bassem Barsoum, Fedrico Hormozi
Priority 2 Group (Yellow) 6	8	1	SR-91	Riverside	1,550,721	0.0-21.7	7,769	1,469,417,281	21.28	5.29	Thomas Ainsworth
7	12	3	I-5	Orange	2,895,529		12,805	3,827,923,497	35.08	3.35	Bassem Barsoum, Fedrico Hormozi
8	12	4	I-405	Orange	2,575,837		7,097	2,056,568,888	19.44	3.45	Fedrico Hormozi
9	4	2	I-580	Alameda	1,472,155	30.81-46.46	9,620	2,179,049,718	26.36	4.41	Julianna Gum
10	11	1	5	San Diego	2,190,818		9,863	3,991,828,286	27.02	2.47	Gary Vettese
11	4	1	101	San Mateo	1,086,010	0.0-26.2	4,828	1,497,390,946	13.23	3.22	Julianna Gum
12	7	3	405	Los Angeles	7,810,420		20,371	4,317,842,401	55.81	4.72	Abdolhossein Saghafi
13	4	3	880	Alameda	1,871,778		8,954	2,089,172,019	24.53	4.29	Julianna Gum
14	8	2	15	Riverside	766,358		5,940	2,669,820,020	16.27	2.22	Thomas Ainsworth

\* Delay and incidents are from PeMS for the entire corridor in the county (not the post mile limits of the Connected Corridors Candidate)

# THE PARTNERS



# THE PROBLEM

Average Daily Traffic – 270,000

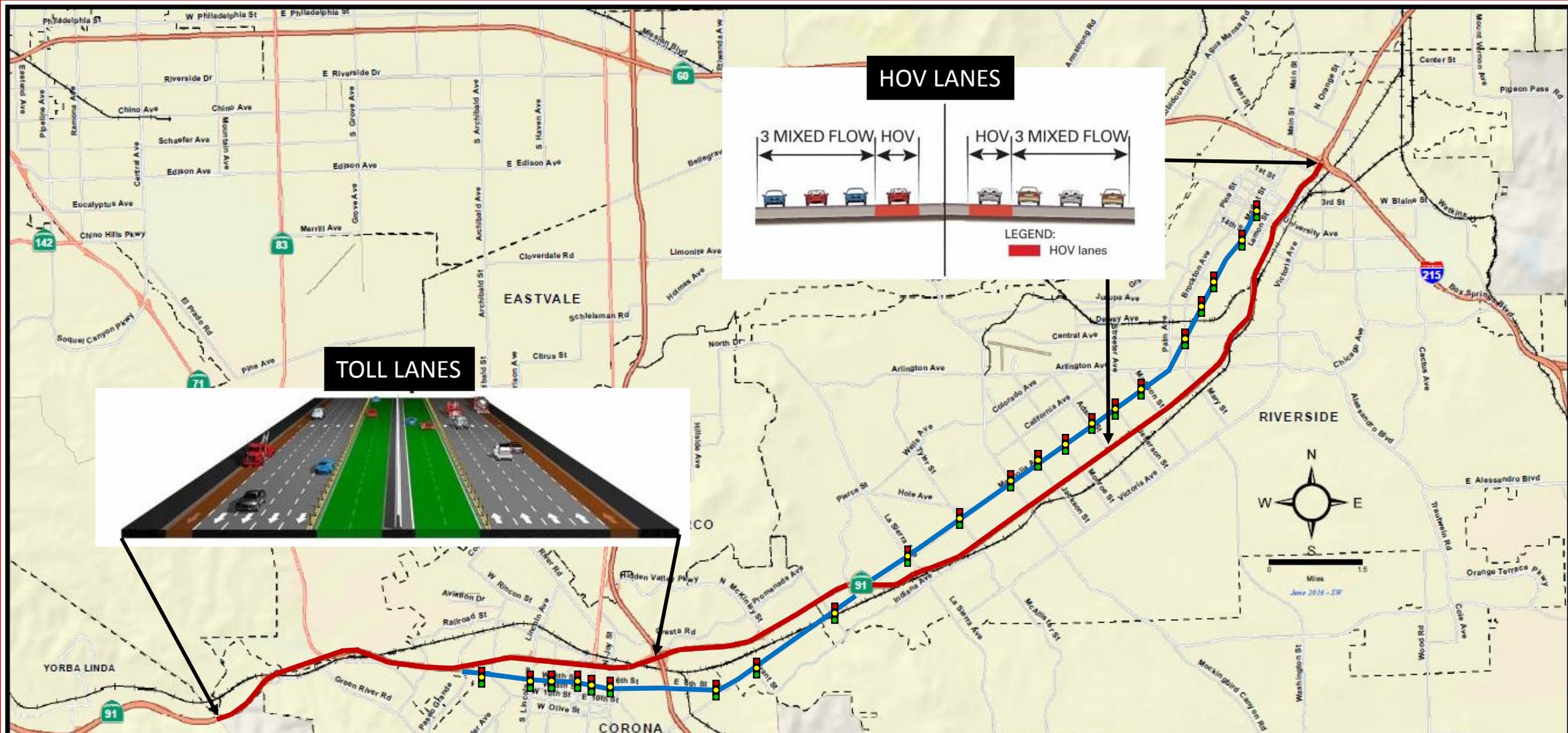
Average Daily Delay (35 mph) – 6400 Hrs

Annual Incidents - 8770

## SR-91 & I-15 Interchange



# SR-91 CORRIDOR



# ITS ELEMENTS

- Traffic Signals - 110
- CCTV - 66
- Vehicle Detection Stations - 21
- Ramp Meters - 39
- Changeable Message Signs – 6
- Fiber Optic Cable – 22 Miles

# PROBE DATA

Smart Phones



Fleet Tracking



Roadway Detection



Data Provider



TMC Servers



Travel Times

# EXPERIENCE WITH ITS

## RCTC IE511 System



## District 08 TMC



## Riverside TMC



## Corona TMC



# SR-91 CORRIDOR - TRANSIT

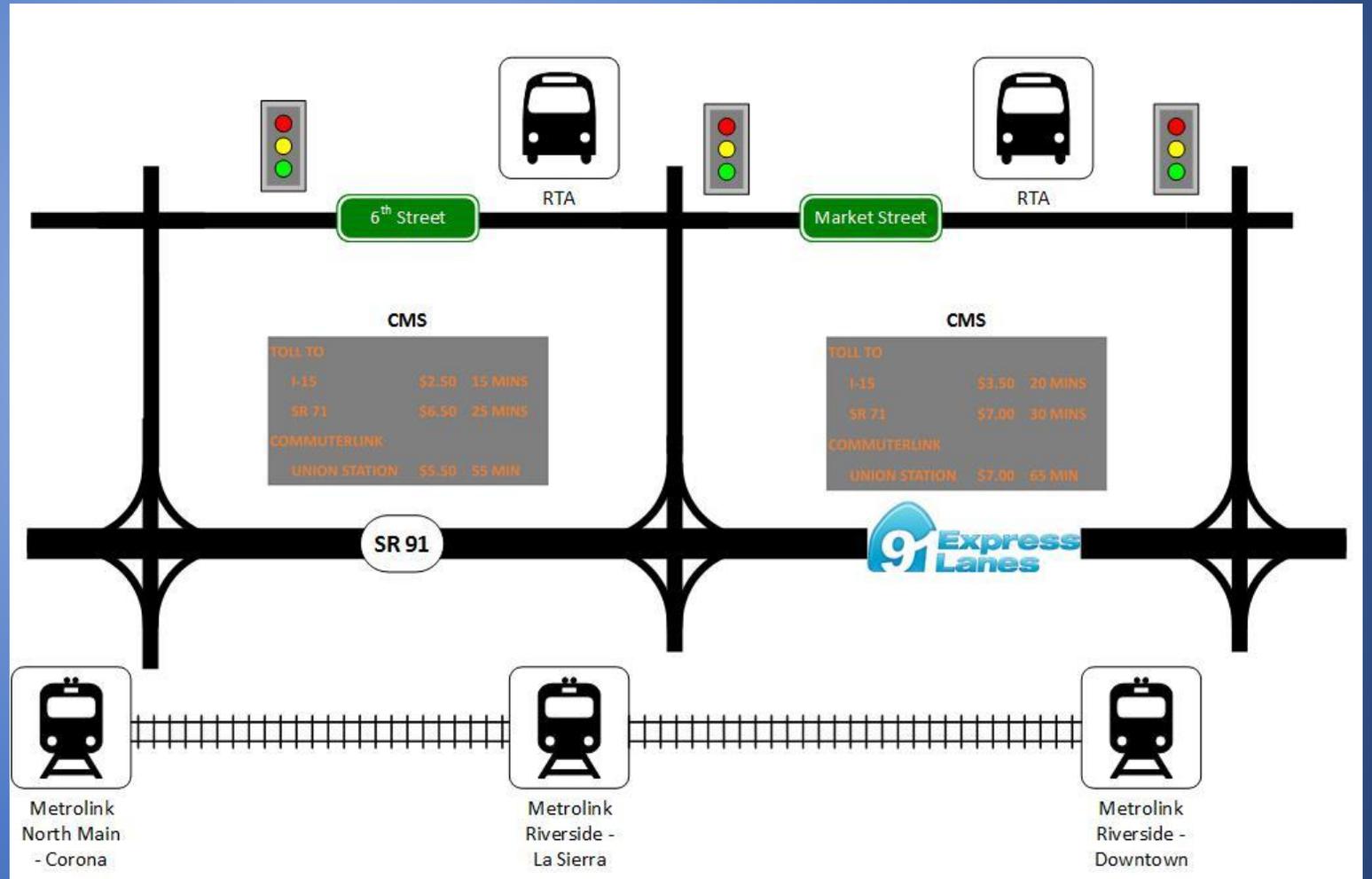


# SR-91 ICM FOCUS AREAS

- DEMAND MANAGEMENT
- LOAD BALANCING
- EVENT RESPONSE

# ICM FEATURES

- Integrated Traffic Signal Control
- Changeable Message Signs
- Enhanced IE511 Capabilities

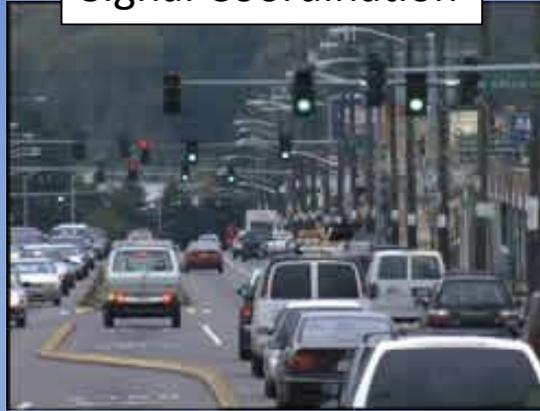


# EXAMPLE

OH NO!



Signal Coordination



Real Time CMS Messages



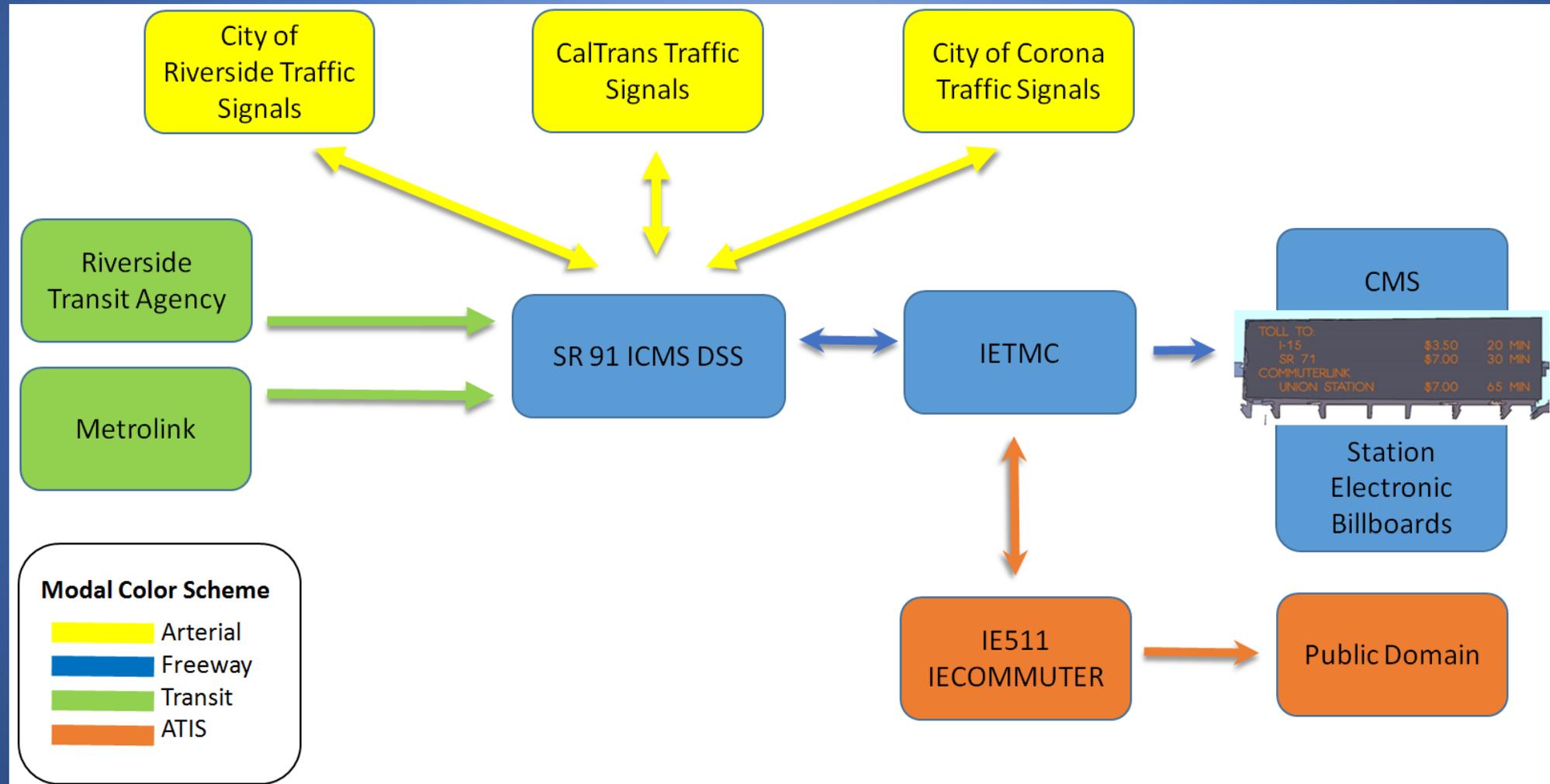
Real Time Ridesharing



Alerts Via 511



# Integrated Corridor Management SYSTEM



# BENEFITS

- Daily Operation
- Freeway Incidents
- Arterial Incidents
- Transit Incidents
- Special Events
- Disaster Response

# WHERE WE ARE



## SCHEDULE

- Contract 9/16
- Concept of Operations 12/16
- Requirements 6/17
- Design & Architecture 10/17
- CMS Installation 2/18
- System Integration 7/18
- System Testing 8/18



QUESTIONS ?