SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

East-West Freight Corridor Concept

Presentation to Goods Movement Steering Committee

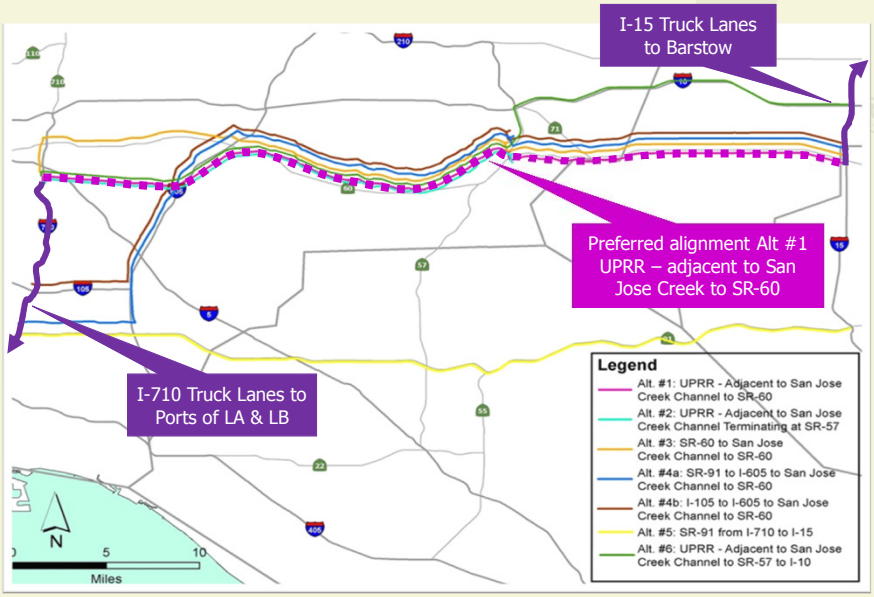
September 8, 2011

Purpose of Today's Discussion

- Make staff recommendation on a general East–West corridor alignment and strategy for incorporating zero-emission technology
- Describe rationale for recommendation
- Hear comments from Steering Committee

2

Goods Movement System
Potential East-West Freight Corridor



Assessment Summary: Staff Recommendation

Alignment (Alt. #1):

- Avoids significant residential property impacts.
- Offers good connectivity to warehouse & manufacturing facilities.
- Results in greatest traffic reduction on parallel routes and high reductions in total & heavy truck delay.
- Provides opportunity to improve the flood control channel.
- Provides opportunity to redevelop UP-adjacent industrial property between I-710 and I-605 and to mitigate rail impacts in area.

Assessment Summary (Cont).

Connecting the SJC to SR-60:

- Full- length corridor (to I-15) is important to realize maximum benefits
- SR-60 has fewer ROW constraints east of SR-57 compared to I-10
- Near SR-57, connection to SR-60 is challenging
- Initial engineering work underway to address potential residential impacts in vicinity of SR-57/SR-60

UP- Adjacent as a Connector to I-710:

- Less residential property impacts than 91 / 105 / 605
- More engineering work would be required to lessen impacts to industrial facilities

Connection Issues

- SJC to SR-57/SR-60:
  - "S" curves: slower speed
  - Alternate direct connection: ROW impact severe
- UP-adj to SJC:
  - Potential impact on proposed park and bike path
  - Alternate has other ROW impacts
- Develop alternative design concepts
  - Evaluation of alternatives beyond 2012 RTP

6

Next Steps

Develop Financial Plan

Beyond 2012 RTP

- Recommendation on a refined concept for RTP
  - Initiates process of more detailed environmental and engineering study
- EIR/EIS and PSR
  - Analysis of alternatives

7

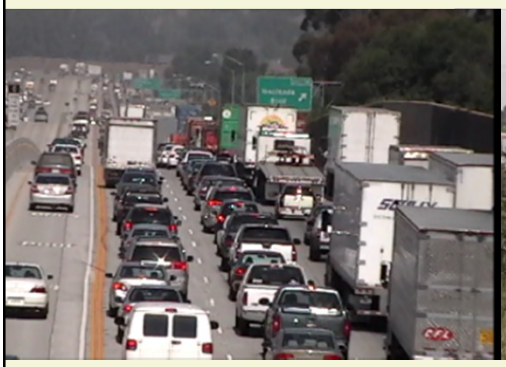
Benefits of a Freight Corridor to Communities/Region

- Reduce congestion for trucks and autos in corridors served
- Reduce truck traffic on general purpose lanes
- Serve corridor and regional economy
- Reduce truck/auto interactions to improve safety
- Reduce emissions and adverse health impacts
- Serve as catalyst for advanced technologies

8

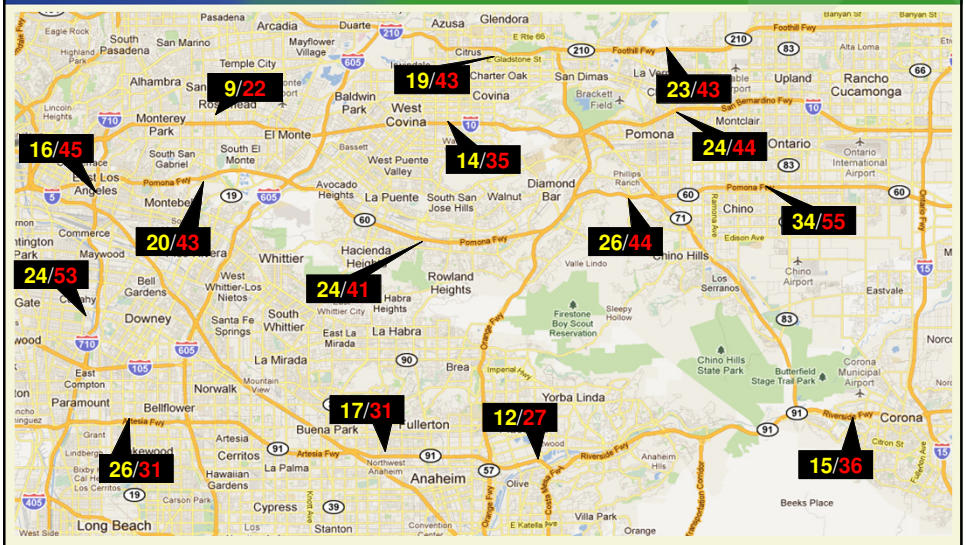
Improving Mobility for Trucks and Autos

Truck Traffic Today (SR-60)



9

Doing Nothing: Rising Truck Volumes

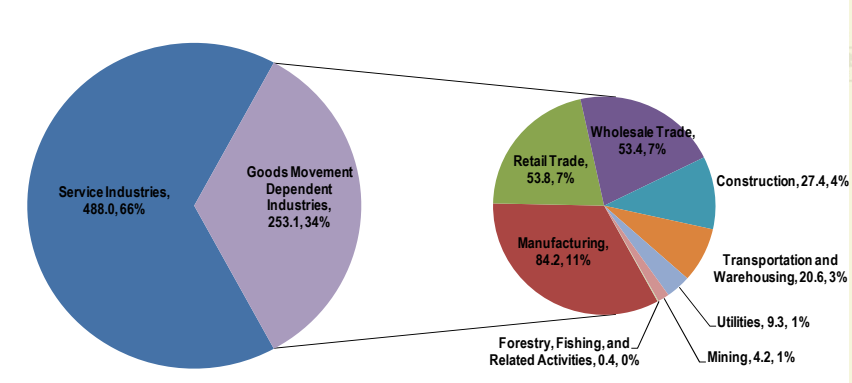


2008 Daily Trucks (bi-directional)/2035 Daily Trucks (bi-directional)

* numbers in thousands (rounded)

Serving Corridor and Regional Economy

Goods Movement Sector Contribution To SCAG GDP



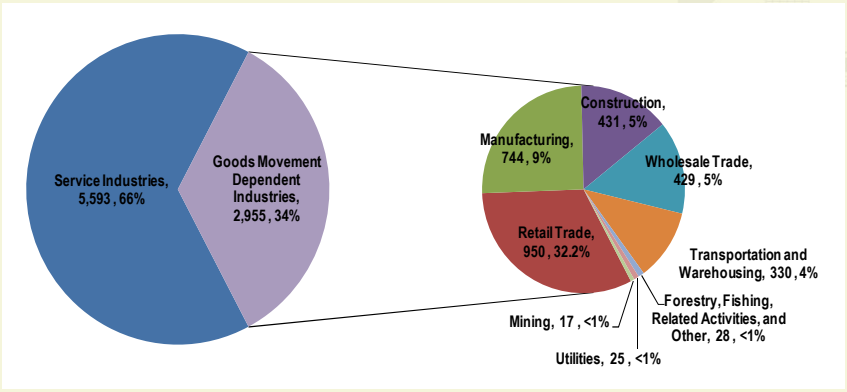
Goods movement –dependent industries contribute 34% of the SCAG regional GDP – over $253 billion dollars.

11

Source: REMI PI+ v1.2.4 Model Data

Serving Corridor and Regional Economy

Goods Movement Sector Contribution To SCAG Employment



Goods movement –dependent industries contribute 34% of the SCAG regional employment – almost 3 million jobs.

12

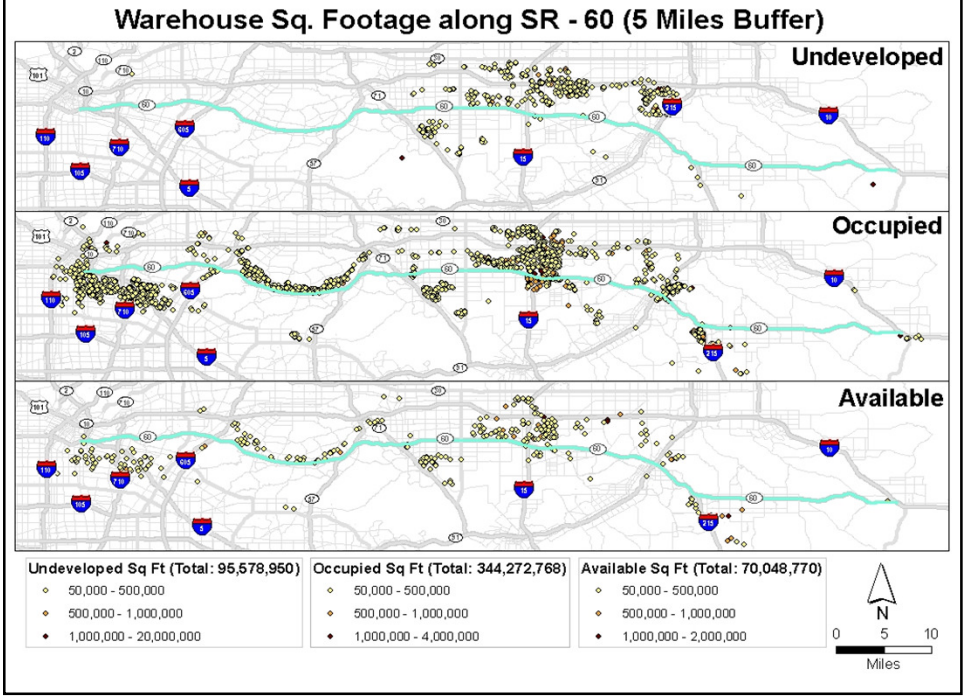
Serving Corridor and Regional Economy

Provide Connectivity to Regional Warehousing

	Total Square Feet (mil)	Percent of Regional Total
SR-60	**509.9**	**50%**
UP Line	**533.4**	**52%**
SCE Line	291.5	29%
I-10	442.9	**43%**
SR-91	188.9	18%
I-605	106.2	10%
I-15	203.8	20%
I-105	78.4	8%

Warehouse Square Footage within 5.0 miles of different potential Freight Corridor alignments

13



Serving Corridor and Regional Economy

Provide Connectivity to Regional Manufacturing

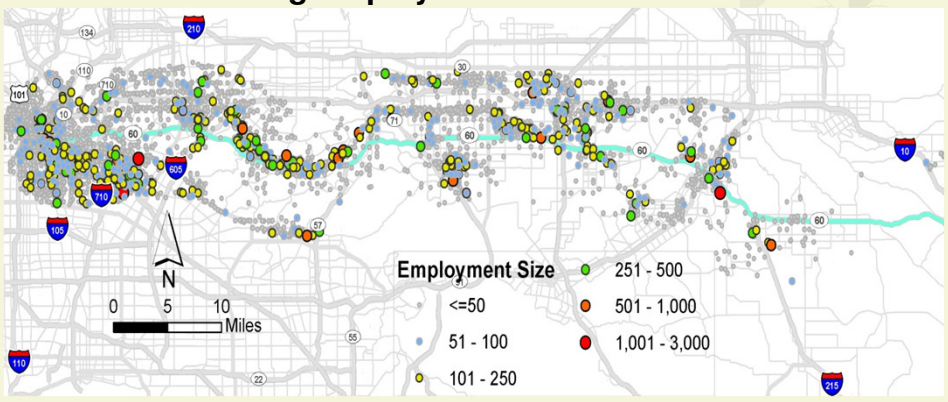
	Total Manufacturing Employment	Percent of Regional Total
SR-60	**226,886**	**27%**
UP Line	**237,756**	**28%**
I-10	156,046	18%
SR-91	165,976	20%

Manufacturing employment within 5.0 miles of different potential Freight Corridor alignments

15

Serving Corridor and Regional Economy

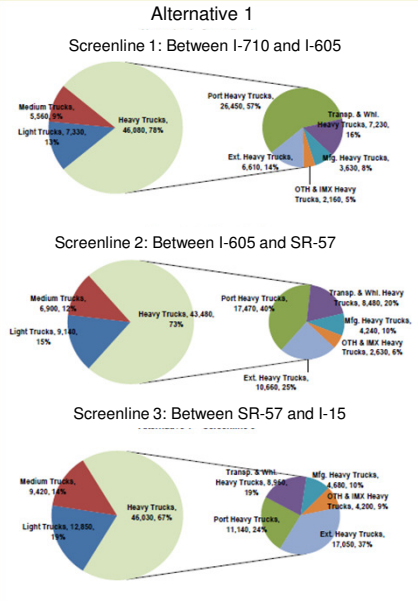
Manufacturing Employment within 5.0 Miles: SR-60



•27%of SCAG regional manufacturing employment is within 5 miles of SR-60.

16

Users of East West Freight Corridor



- Predominantly domestic trade and local business serving trucks
  - Warehouses & Manufacturing facilities
  - Local businesses and stores
  - Strong implications for congestion impacts on business operations
- Changes in Truck Compositions from I-710 to I-15
  - 67-78% Heavy-Duty Trucks
  - 24-57% Port Trucks (decreases further east)

17

Improving Safety

Doing Nothing: Truck Involved Crashes

Impacts of Accidents:

- Congestion on highways
- Increased travel time and lost productivity
- Spillover effect on parallel roads

18

4-Step Evaluation Process

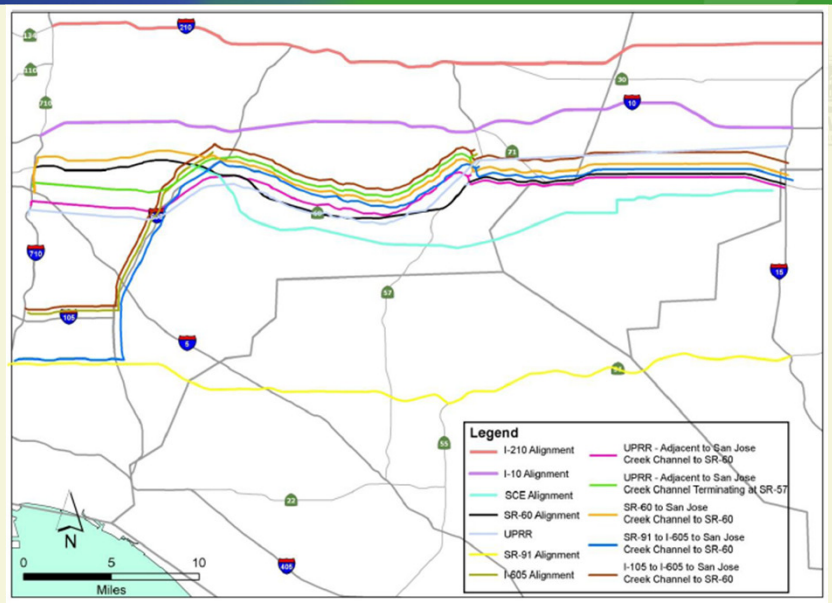
Step 1: **Define Initial Potential E-W Freight Corridor Alignments**

Step 2: **Screen Preliminary Alignments Against Three Initial Criteria**

Step 3: **Develop Hybrid Alignments:**
- Avoid constraints / deficiencies Identified in Step 2

Step 4: **Traffic Modeling of Leading Alternatives Against MOEs**

Step 1: Initial Potential EWFC Alignments



20

Step 2: Initial Evaluation Criteria

1. Proximity to markets: warehouses and manufacturing facilities
2. Right-of-way constraints: impacts on the adjacent properties (residential, commercial, industrial, etc.) and the level of impacts
3. Traffic impacts:
   - Regional highways with high truck volumes
   - High incident rates for truck involved crashes

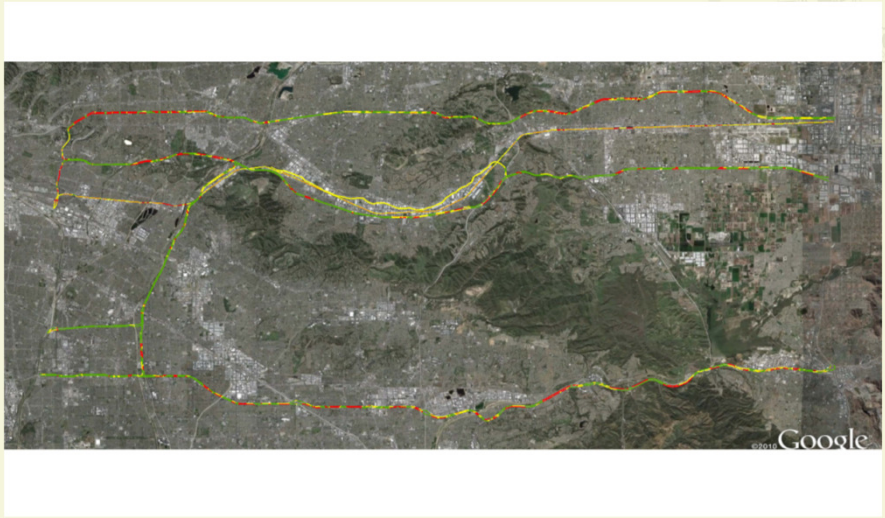
21

Step 2: Initial Screening Outcomes

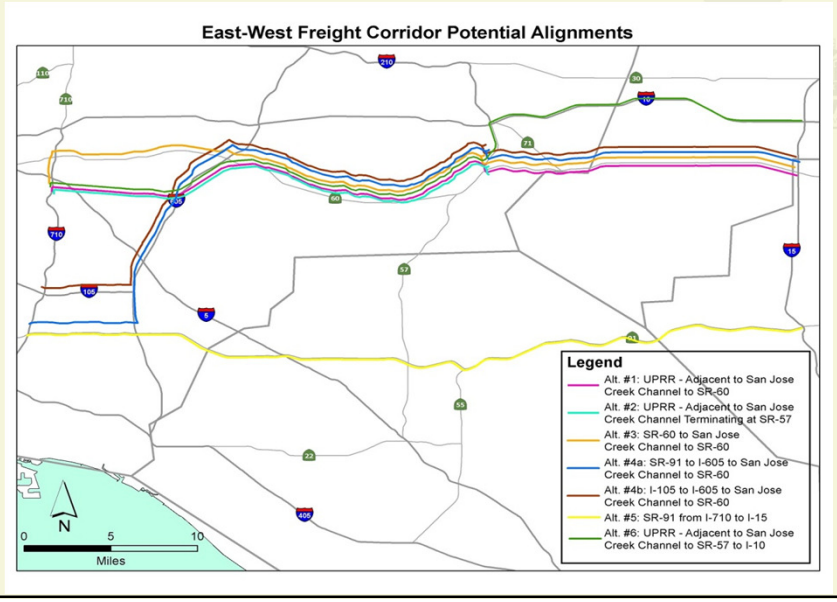
Proximity to Goods Movement Markets	•Resulted in elimination of I-210 •Resulted in elimination of SR-91 (Later re-added and assessed for traffic impacts)
ROW Constraints / Limitations (Grades, etc.)	•Another factor suggesting I-210 and SR-91may not be feasible. •Resulted in elimination of SCE
Traffic Impacts	•Confirmed need for E-W Corridor •Showed importance of SR-60 •Confirmed need to connect to I-710

22

Right-of-Way Assessment



Step 3: Potential Alignments – Aug. 2011



24

Step 4: Measures of Effectiveness (MOEs)

Truck Volumes	The volumes of trucks that would be carried by each of the potential alignments in 2035
Delay (All Traffic)	Impact on delay of all traffic within the influence area
Delay (Truck Traffic)	Impact on delay of all heavy-duty truck traffic within the influence area
Impact on Parallel Routes	Effectiveness of each alignment to reduce the truck volumes and congestion on parallel routes

25

2035 Freight Corridor Truck Volumes

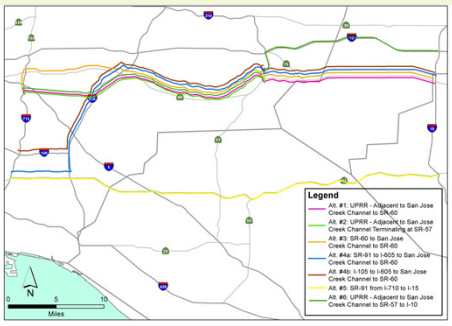
Screenline	2035 Truck Lane Usage (Trucks / Day)						
	Alt. #1 UP/SJC/60	Alt. #2 UP/SJC	Alt. #3 60/SJC/60	Alt. #4a 105/605/ SJC/60	Alt. #4b 91/605/ SJC/60	Alt. #5 SR-91	Alt. #6 UP/SJC/10
SL1	58,700	58,600	60,700	57,100	60,700	78,600	59,900
SL2	58,200	55,400	57,800	54,700	55,300	62,300	57,700
SL3	70,300	N/A	71,000	70,100	69,300	55,200	56,500

- **All truck lane alignments all show heavy use by trucks. Truck volumes are between 54,000 – 79,000 at all locations, all alignments.**

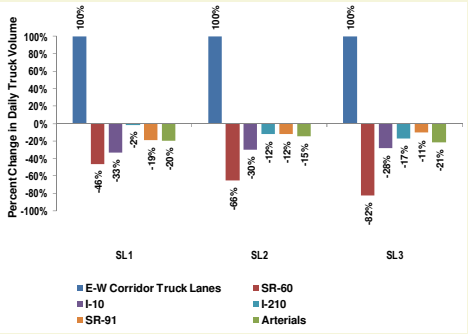
26

Reducing Truck Volumes from Regional Highways

2035 Impacts on Parallel Routes



Alt #1: UP / SJC / SR-60



East West Freight Corridor in SGV demonstrates significant reduction in the number of trucks using parallel regional highways.

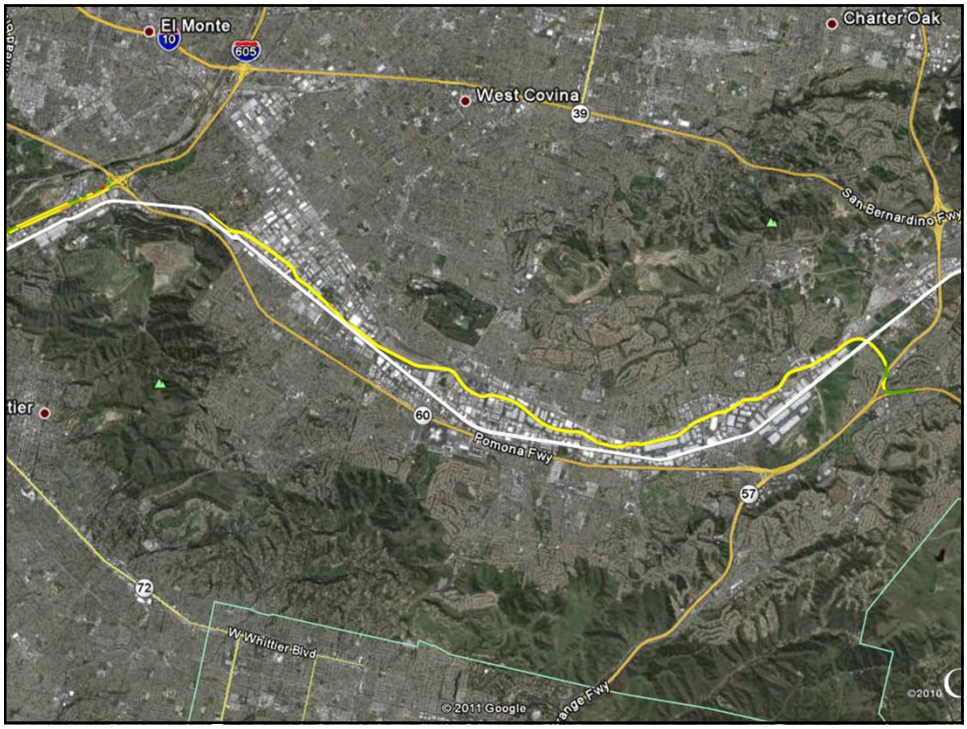
27

2035 Impacts on Parallel Routes

HW	SL #	Alternative Description							
		No-Build	Alt. #1 UP/SJC/60	Alt. #2 UP/SJC	Alt. #3 60/SJC/60	Alt. #4a 105/605/SJC/60	Alt. #4b 91/605/SJC/60	Alt. #5 SR-91	Alt. #6 UP/SJC/10
I-210	SL1	44,700	44,000	43,500	43,800	43,700	43,900	43,400	44,600
	SL2	40,900	36,000	37,500	37,000	35,300	35,900	38,600	34,200
	SL3	27,300	22,600	25,900	23,400	21,700	22,200	24,900	18,900
I-10	SL1	21,500	14,300	15,000	12,900	15,900	15,800	18,600	14,593
	SL2	36,400	25,600	28,000	26,700	26,500	26,700	32,800	25,657
	SL3	39,100	28,100	34,700	28,800	28,700	28,700	34,800	10,367
SR-60	SL1	42,500	22,900	21,800	11,400	29,000	29,300	33,200	22,300
	SL2	41,000	14,100	11,300	12,000	17,000	18,000	31,400	16,500
	SL3	51,000	9,000	60,300	7,000	9,200	10,700	39,000	45,100
SR-91	SL1	51,200	41,500	42,700	43,700	38,500	34,500	14,600	41,000
	SL2	36,100	31,700	32,700	32,600	32,600	31,300	7,200	32,300
	SL3	29,600	26,400	28,800	26,700	26,700	25,900	6,500	26,900

- SR-91 has least impact on parallel routes – less regional impact
- Largest impact is on SR-60 under Alt.#1 and Alt. #3

28


El Monte
10
605
West Covina
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Charter Oak
San Bernardino Fwy
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Pomona Fwy
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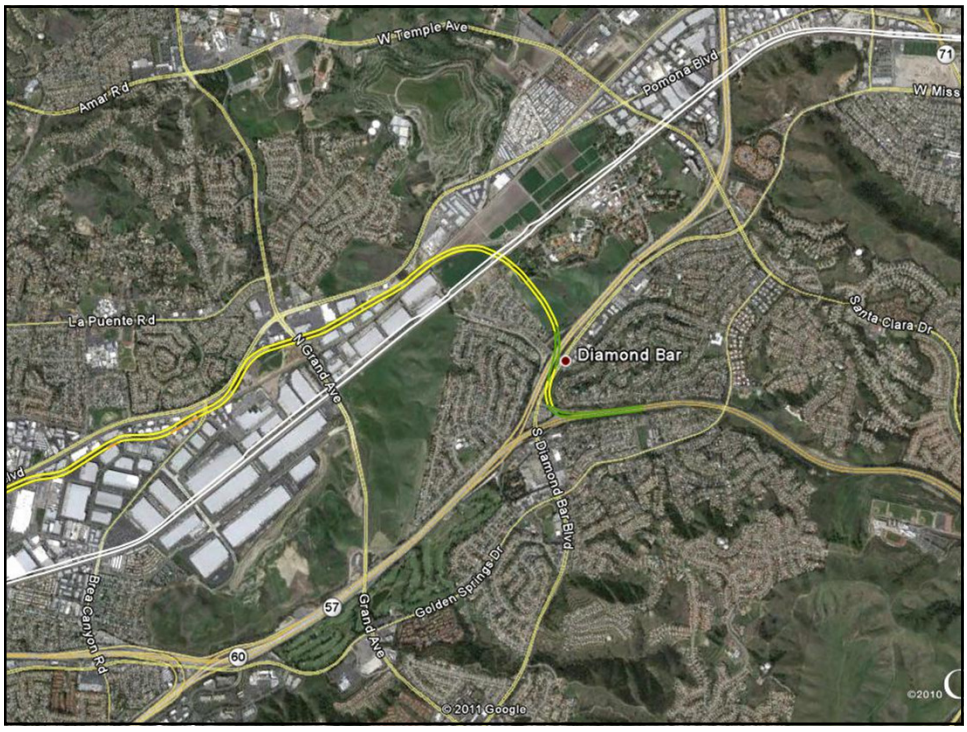
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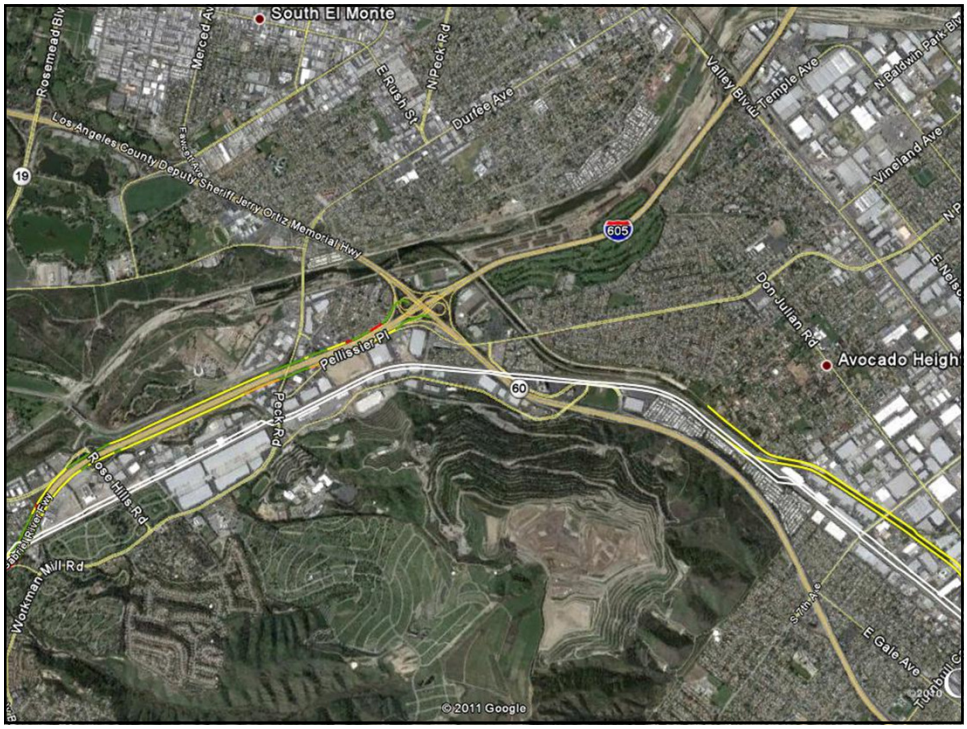
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Vincland Ave
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