



RIVERSIDE
COUNTY
TRANSPORTATION
COMMISSION

LOGISTICS MITIGATION FEE NEXUS STUDY

May 8, 2019

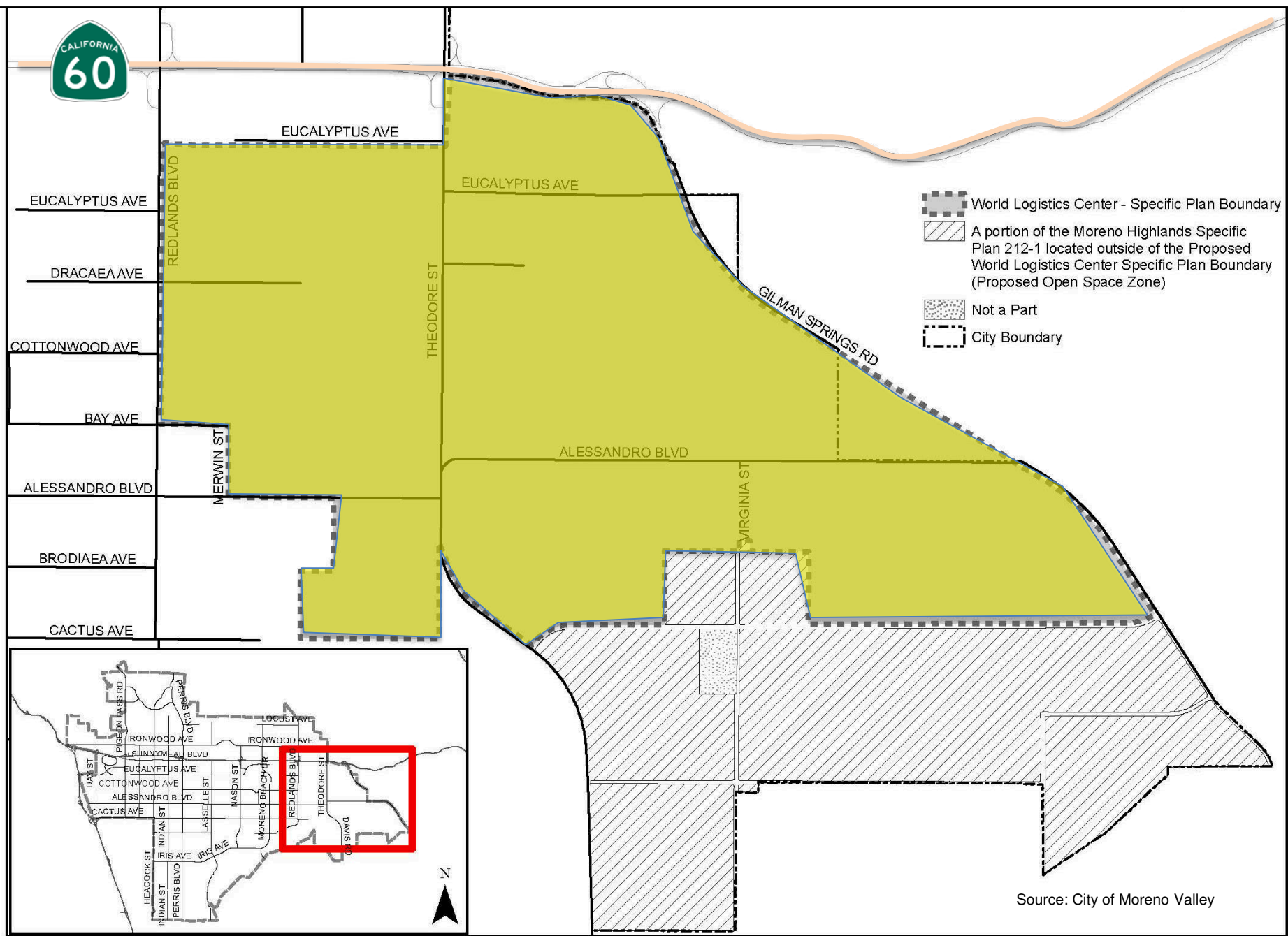
Lorelle Moe-Luna, Multimodal Services Director

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Outline of Topics

- **Background**
- **Fee Program Basics**
- **Major Tasks**
- **Nexus Findings**
- **Locational Impacts Assessment**
- **Next Steps**

Ba c k g r o u n d



Proposed World Logistics Center

- A master-planned development planned for 40.6 million SF
- Large-scale logistics operations
- Covers 2,610 acres
- Expected to draw as many as 14,000 truck trips per day at build-out
- In comparison, Skechers is 1.8 million SF

Challenging the EIR

- RCTC filed suit in Sept. 2015
- Additional suits filed by the County and SCAQMD
- Additional CEQA lawsuits filed by environmental organizations
- Highland Fairview (HF) launched initiatives to supplant city approval of the project
- RCTC filed suit challenging the initiatives in Feb. 2016



Settlement Agreement - Terms and Conditions

- Settlement reached July 2016
- HF and Moreno Valley must contribute \$100,000 each for air quality studies
- HF to receive TUMF credit for widening Gilman Springs
- HF to contribute:
 - \$3 million for Gilman Springs safety improvements
 - \$2 million for widening SR-60
 - \$1 million for improving the Theodore Interchange

Settlement Agreement

- World Logistics Center Settlement
- Each party to contribute \$250,000

 **HIGHLANDFAIRVIEW**



SETTLEMENT AGREEMENT

This settlement agreement ("Agreement") is made at Riverside, California, as of July 28, 2016, between THE COUNTY OF RIVERSIDE (the "County") and the RIVERSIDE COUNTY TRANSPORTATION COMMISSION (the "RCTC"), on the one hand, and the CITY OF MORENO VALLEY and the MORENO VALLEY COMMUNITY SERVICES DISTRICT (collectively the "City"), HF PROPERTIES,

2. Highland Fairview, the City, the County and the RCTC will each contribute, directly or indirectly, \$250,000, for a total of \$1,000,000, to be used for an RCTC-conducted regional transportation study to evaluate a logistics-related regional fee. The contributions shall be submitted to the RCTC and shall be managed according to its regular accounting practices. The contributions will be made no later than 60 calendar days after a final

...regional transportation study to
evaluate a logistics-related regional fee...

these funds at any time.

Potential Regional Fee

- HF will pay \$0.65/SF in-lieu fee if there is an established regional logistics fee program
- A regional fee would need approval of the county or 75 percent of the cities
- Approval must take place within 24 months of the HF and Moreno Valley \$250,000 contribution for the study
- Should no regional fee be approved, the fee is reduced to \$0.50/SF



Study Participants



Scope of Work/ Timeline

Task/Scope	Status
1) Existing and Future Conditions Analysis	October 2017
2) Funding and Cost Analysis	March 2018
3) Nexus Study	April 2019
4) Locational Impacts Assessment	April 2019

Fee Program Basics

Fee Program Requirements

- California Mitigation Fee Act:
 - Must establish a rational nexus/reasonable relationship between the infrastructure need and development impact
 - Fees must be roughly proportional with the impacts of development and the cost of the infrastructure
 - A development does not have to exclusively benefit from the infrastructure but can substantially benefit from the overall improvement in regional mobility
- A *Nexus Study* is prepared to fulfill these requirements

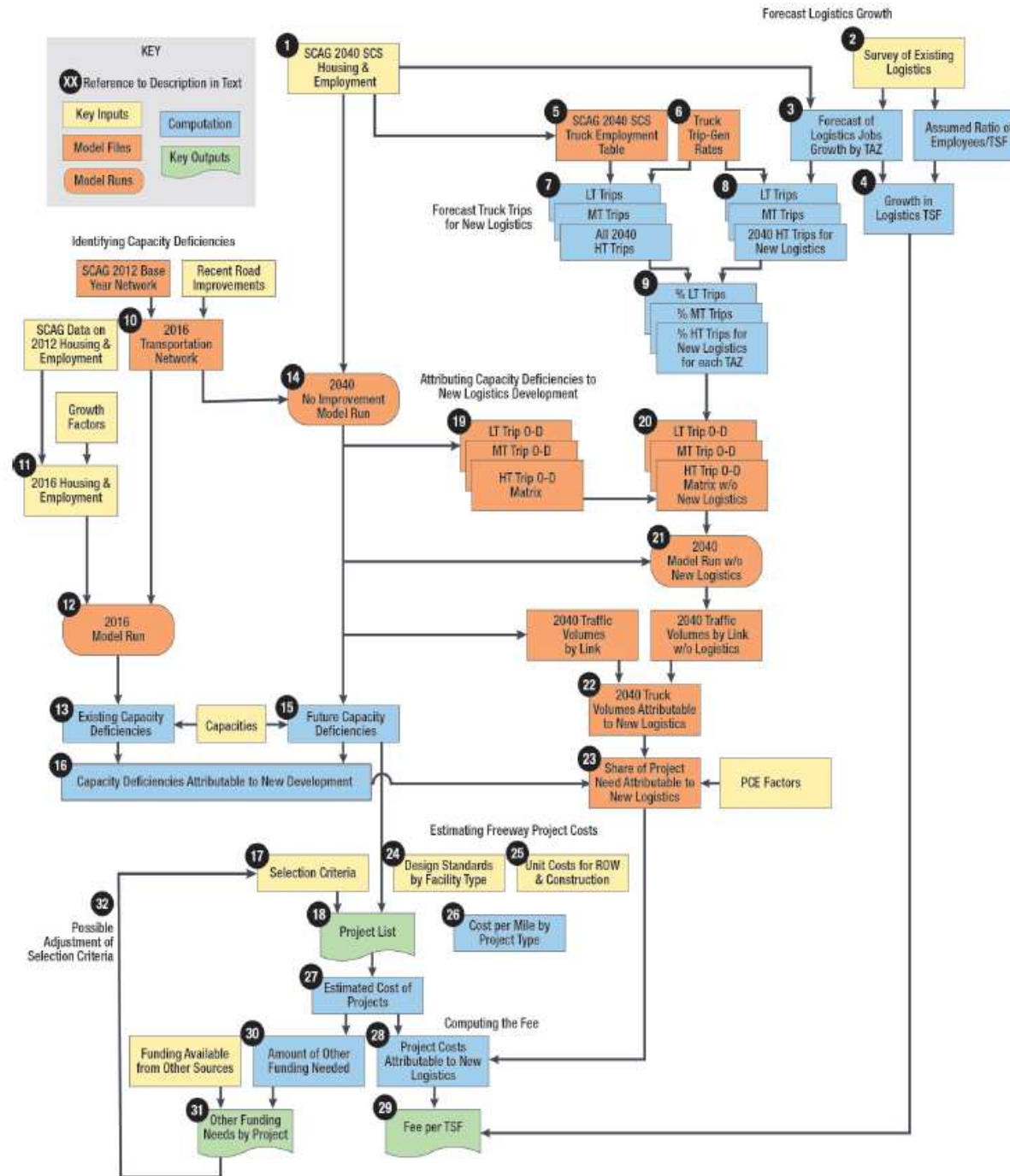
Fee Program Requirements

- An impact fee cannot mitigate for existing deficiencies.
- Existing needs and similar impacts from outside Riverside County (pass-through trips) must be excluded from a fee.
- No overlap with the WRCOG and CVAG TUMF programs, this study focuses only on mainline freeway truck impacts and mitigation (which are not a part of either TUMF).

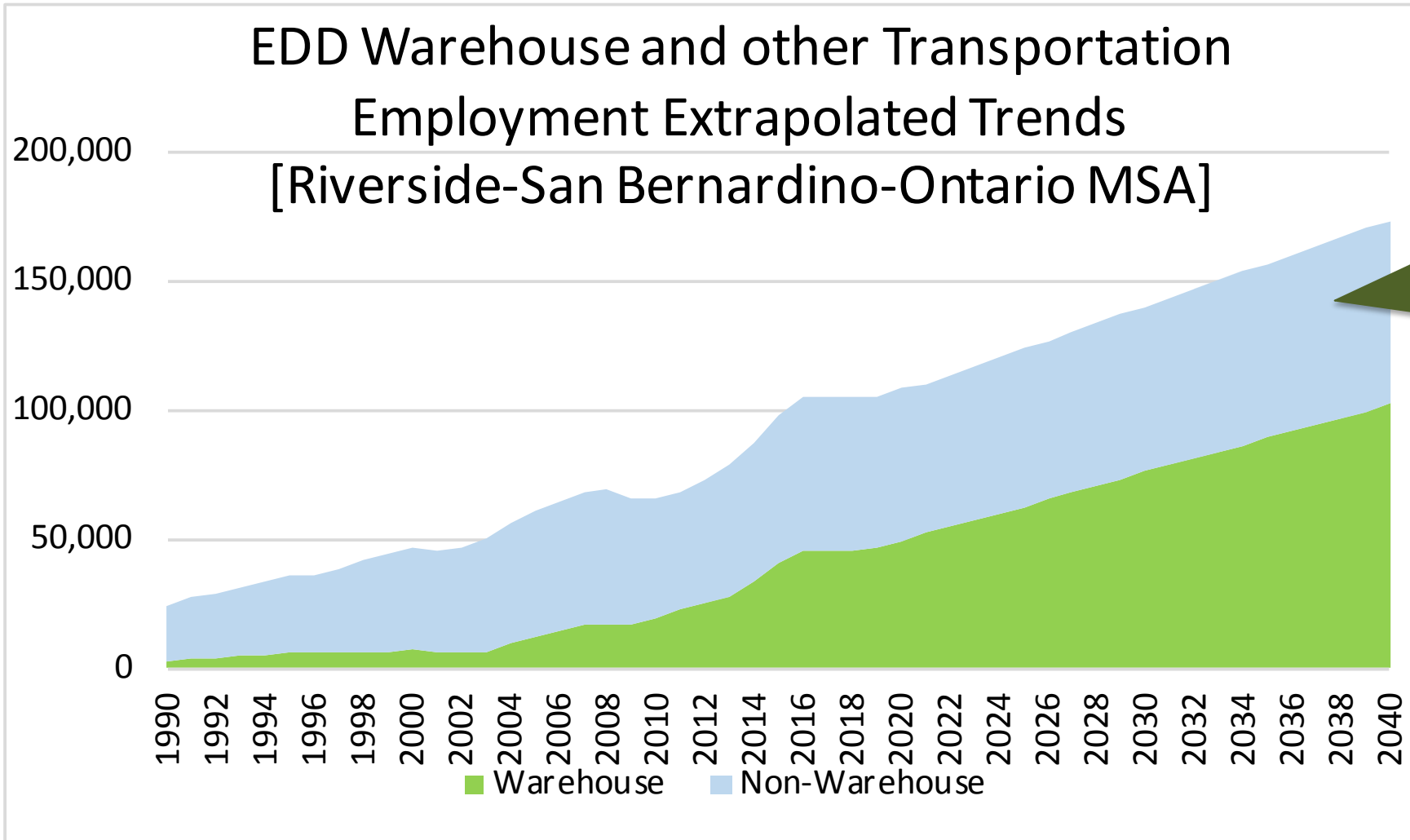
Major Tasks

Major Tasks

- ✓ Model validation
- ✓ Forecast logistics growth
- ✓ Forecast truck trips
- ✓ Identify capacity deficiencies
- ✓ Attribute deficiencies to new logistics development
- ✓ Estimate project costs
- ✓ Compute fee amount
- ✓ Locational impacts



Forecast Logistics Growth



EDD data was extrapolated as input to modeling freeway traffic impacts

Source: California Employment Development Department (EDD) Industry Employment Data for Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA)

Forecast Logistics Growth

Warehouse Employment Growth for Riverside County			
	2016 Employees	2040 Employees	Growth Employees
SCAG 2016 RTP/SCS Employment Forecast	5,343	13,612	8,269
EDD Employment Trend Forecast	13,080	27,662	14,582

**Basis to
model
impacts**

- EDD warehouse employment trend forecast was used for modeling purposes





















































Warehouse Building Area Growth for Riverside County			
	2016 SF GFA	2040 SF GFA	Growth SF GFA
SCAG 2016 RTP/SCS HDT Model GFA Forecast	63,309,990	100,642,169	37,332,179
EDD Employment Trend Forecast	29,312,280	61,990,542	32,678,262

**Basis to
calculate
fee**

- EDD employment trend forecast was multiplied by 2,241 square feet per employee ratio from NAIOP *Logistics Trends and Specific Industries that Will Drive Warehouse and Distribution Growth and Demand for Space*, March 2010

Forecast Truck Trips

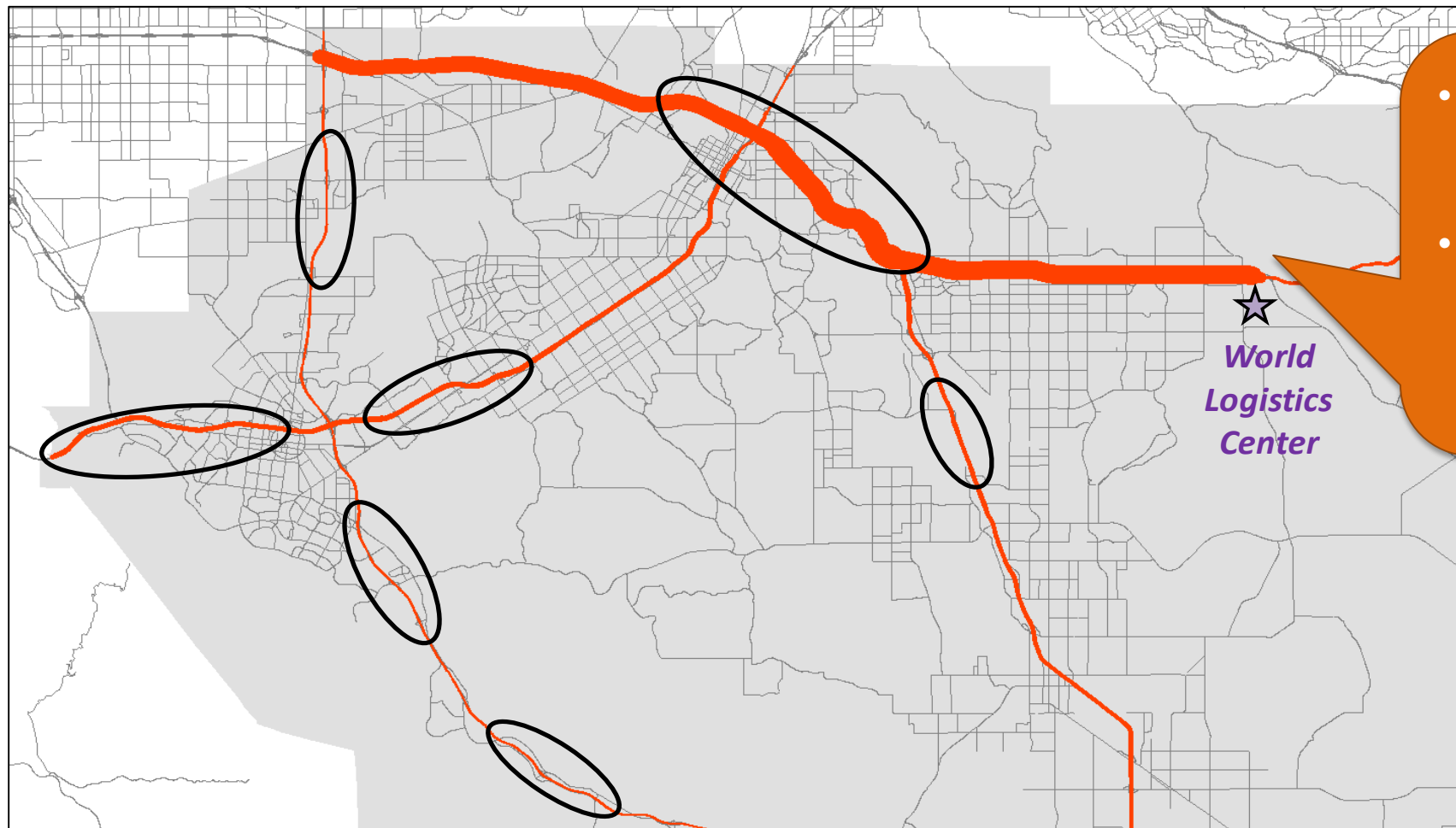
Truck Traffic O-D Distribution by Route

State Route No.	Link	Heavy-Duty Trucks		Medium-Duty Trucks	
		Riverside	SCAG	Riverside	SCAG
74	1		21%		93%
91	2		26%		40%
71	3		21%		28%
60	4		22%		26%
15	5		18%		25%
215	6		34%		83%
10	7		33%		74%
62	8		28%		93%
15	9		1%		1%
79	10		2%		6%
86	11		27%		7%
111	12		32%		32%
78	13		21%		31%
10	14		0%		85%
95	15		13%		23%
177	16		26%		40%
60	17		55%		41%
60	18		55%		61%
215	19		52%		88%
60	20		45%		91%
91	21		44%		60%
91	22		43%		92%
215	23		48%		83%
215	24		26%		60%
15	25		26%		52%
215	26		18%		96%
10	27		43%		62%
10	28		41%		63%
10	29		32%		80%

- Model results were analyzed to identify those truck trips generated by developments within Riverside County, and those that were generated by developments elsewhere in the SCAG region (and beyond)
- The O-D distribution helped to account for pass-through trips

Forecast Truck Trips

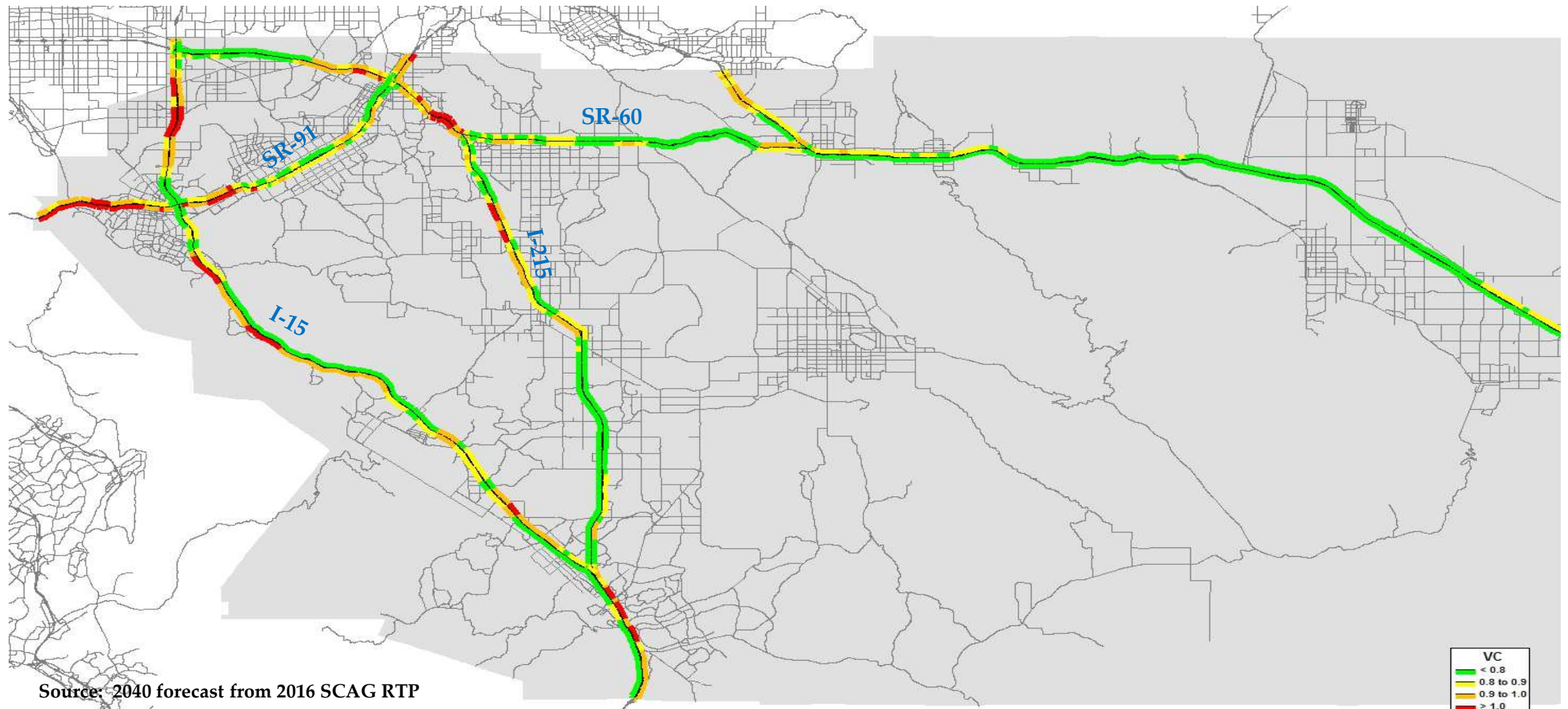
New Logistics Trucks on Freeways in Western Riverside County



- Bandwidth reflects proportional increased volume
- Largest increases in truck flows would occur on SR-60 and I-215

Source: 2040 forecast from 2016 SCAG RTP

Identified Deficiencies Based on New Warehousing Development



Source: 2040 forecast from 2016 SCAG RTP

Attributing the Share of Impacts

- **Adjust for the following factors:**
 - Existing capacity deficiency
 - Share of future traffic growth that is attributable to other development activity
 - Pass through trips that have a trip end outside Riverside County
- **Accomplished by comparing base model run to model run that separates warehouse and logistics uses**

Attributing the Share of Impacts

ID	Route Name	Dir	Beginning	End	Segment Length (mi)	2040 Max V/C	Recommended Improvement	% Deficiency Attributable to New Logistics Trucking
1	I-15	NB	SR-79 S	Rancho California Rd	1.0	1.01	Add aux lane between the on- and off-ramps	1%
			Rancho California Rd	Winchester Rd	1.1	1.01		1%
2			Winchester Rd	Lane Add south of I-15/I-215 Split	0.7	1.08	Add aux lane between the on-ramp and the lane add	1%
3			Clinton Keith Rd	Baxter Rd	0.8	1.03	Add aux lane between the on- and off-ramps	0.3%
4			El Cerrito Rd	Ontario Ave	0.2	1.03	Add aux lane between the on- and off-ramps	1%
5			Norco Dr/6th Street	Limonite Ave	2.0	1.14	Add aux lane between the on- and off-ramps	1%
6		SB	Cantu Galeano Ranch Rd	Limonite Ave	1.3	1.02	Add aux lane between the on- and off-ramps	4%
			Limonite Ave	Norco Dr/6th Street	2.0	1.04		5%
7			El Cerrito Rd	Dos Lagos Dr	2.1	1.09	Widen mainline to 4 lanes	2%
8			Temescal Canyon Rd	Indian Truck Trail	2.2	1.01	Add aux lane between the on- and off-ramps	1%
9	SR-60	EB	Rubidoux Blvd	Market St	0.8	1.03	Add aux lane between the on- and off-ramps	31%
			Market St	Main St	0.1	1.06		39%
10	I-215	NB	Box Springs Rd	Central Ave	0.4	1.07	Add aux lane between the on- and off-ramps	14%
			Watkins Dr	Martin Luther King Jr	0.8	1.23		38%
10c			University Ave Off-Ramp	Upstream of Univ Ave On-ramp	0.4	1.04	Add aux lane upstream of the on-ramp to the off-ramp	13%
11			Center St Off-Ramp	Riverside County Line/Iowa Ave	0.5	1.03	Add aux lane between the off-ramp and the county line	12%
12		SB	Martin Luther King Jr	Sycamore Canyon Rd	1.6	1.25	Add aux lane between the on- and off-ramps	57%
13			Van Buren Blvd	Harley Knox Blvd	1.2	1.06	Add aux lane between the on- and off-ramps	4%
14	SR-91	NB	Riverside County Line	Green River Rd Off-Ramp	0.8	1.23	Add aux lane from the county line to Green River Rd. off-ramp	1%
			Green River Rd Off-Ramp	SR-71	1.3	1.02	Widen mainline to 6 lanes	10%
			SR-71	Serfas Club Dr Off-Ramp	1.4	1.27	Widen mainline to 6 lanes	1%
15			Serfas Club Dr Off-Ramp	Grand Blvd Off-Ramp	2.3	1.23	Widen mainline to 5 lanes	9%
16			On-Ramp from SB I-15	On-Ramp from NB I-15	0.3	1.07	Add aux lane	8%
17			McKinley St Off-Ramp	Pierce St	1.6	1.14	Widen mainline to 4 lanes	10%
18			Magnolia Ave	La Sierra Ave	0.3	1.00	Add aux lane between the ramps	8%
19		SB	Serfas Club Dr Off-Ramp	Lane Add at SR-71	2.3	1.12	Widen mainline to 5 lanes	3%
			Lane Add at SR-71	Riverside County Line	1.7	1.07	Widen mainline to 6 lanes	2%

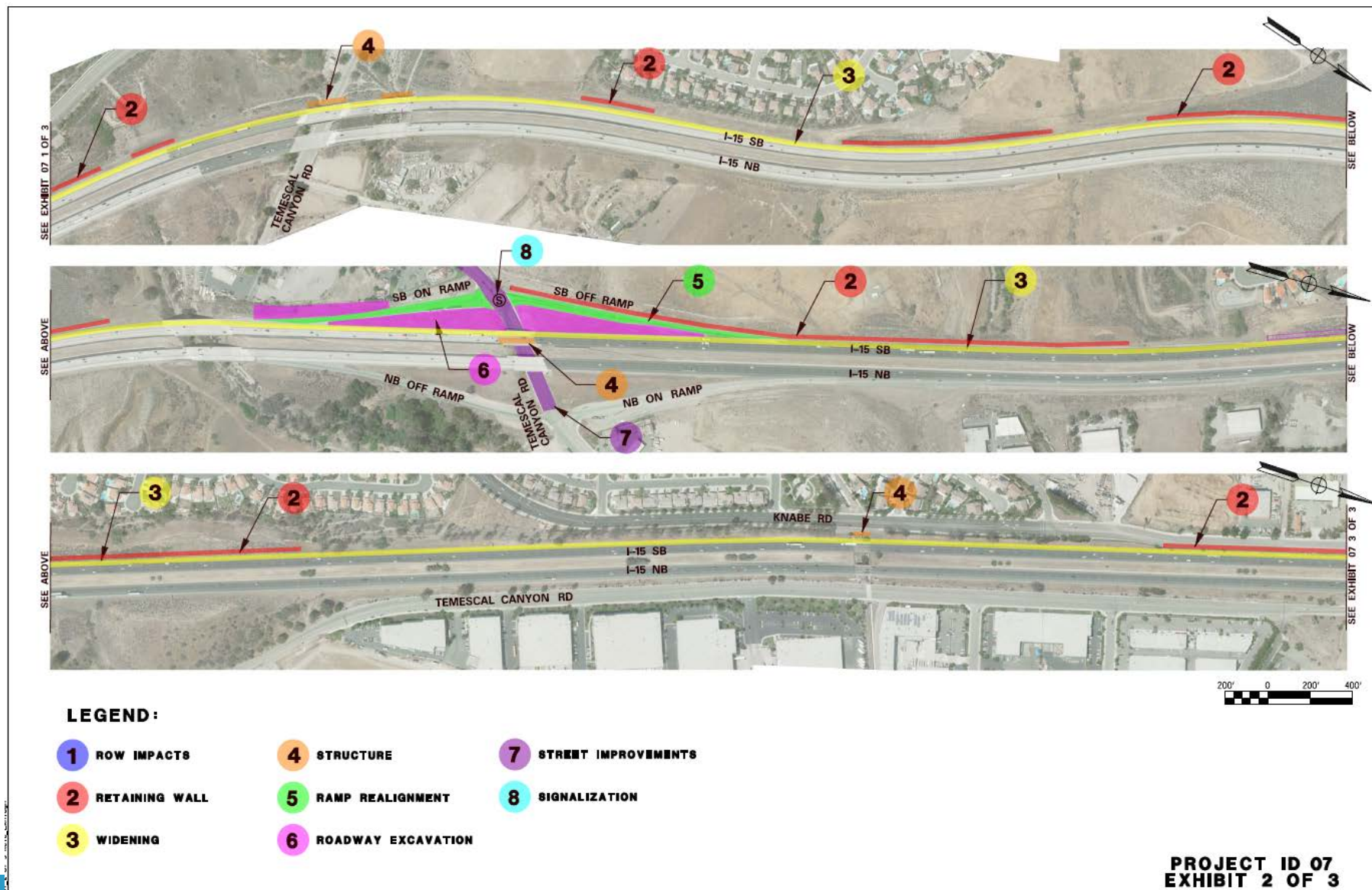
Cost Estimation Methodology

- Deficient segments were reviewed to determine project limits/logical termini for mitigation project concepts
- Mitigation project concepts were compared to completed and ongoing RCTC program to determine where deficiencies have been/are being mitigated
- Conceptual designs were developed using Google desktop research.
 - All costs and impacts based on visual analysis
 - No detailed engineering completed for verification

Cost Estimation Methodology

- **Conceptual costs were developed based on the quantification of construction elements in the conceptual designs**
- **Unit cost values based on Caltrans 2016/2017 Construction Cost Database**
- **Various ancillary and support cost factors, and contingency factor applied**

Conceptual Design Example – I-15 SB Cajalco to Indian Truck



Total Conceptual Cost Estimate

RCTC Truck Study and Regional Logistics Mitigation Fee Capacity Improvement Project Conceptual Cost Estimate Summary						
ID	Route Name	Dir	Beginning	End	Total Conceptual Project Cost	Findings
1	I-15	NB	SR-79 S	Rancho California Rd	\$36,237,000	Cost reduced by TUMF inclusion of I-15 at Rancho California
			Rancho California Rd	Winchester Rd		
2			Winchester Rd	Lane Add south of I-15/I-215 Split	-	Mitigated by French Valley Parkway Project
3			Clinton Keith Rd	Baxter Rd	\$7,406,000	Cost reduced by TUMF inclusion of I-15 at Baxter
4			El Cerrito Rd	Ontario Ave	-	Mitigated by I-15 Tolled Express Lanes (TEL)
5			Norco Dr/6th St	Limonite Ave	-	Mitigated by I-15 Tolled Express Lanes (TEL)
6		SB	Cantu Galeano Ranch Rd	Limonite Ave	-	Mitigated by I-15 Tolled Express Lanes (TEL)
			Limonite Ave	Norco Dr/6th		
7			Cajalco Rd	Indian Truck Trail	\$37,825,000	Cost reduced by TUMF inclusion of I-15 at Temescal Canyon
8			El Cerrito Rd	Cajalco Rd	\$10,408,000	Cost reduced by TUMF inclusion of I-15 at Cajalco
9	SR-60	EB	Rubidoux Blvd	Market St	\$40,234,000	
			Market St	Main St		
10	I-215	NB	Box Springs Rd	Central Ave/Watkins Dr	\$26,513,000	
			Central Ave/Watkins	Martin Luther King		
10c			Martin Luther King Blvd	SR-91	\$55,081,000	
11		SB	Center St Off-Ramp	Riverside County Line/Iowa	\$42,212,000	Cost reduced by TUMF inclusion of I-215 at Highgrove/Center
12			Martin Luther King Jr	Sycamore Canyon Rd	\$13,403,000	
13			Van Buren Blvd	Case Rd	\$95,365,000	
14	SR-91	NB	Riverside County Line	Green River Rd Off-Ramp	-	Mitigated by SR-91 Express Lane Extension Project
			Green River Rd Off-Ramp	SR-71		
			SR-71	Serfas Club Dr Off-Ramp	-	Mitigated by SR-91 Express Lane Extension Project
15			Serfas Club Dr Off-Ramp	Grand Blvd Rd Off-Ramp		
16			On-Ramp from SB-I-15	On Ramp from NB- I-15	\$7,611,000	
17		SB	McKinley St Off Ramp	Pierce St	-	Mitigated by SR-91 Express Lane Extension Project
18			Pierce St	Magnolia St	\$13,040,000	
19			Serfas Club Dr Off-Ramp	Lane Add at SR-71	-	
			Lane Add at SR-71	Riverside County Line/Iowa	-	Mitigated by SR-91 Express Lane Extension Project
Sum Total:					\$385,335,000	

Total Conceptual Cost Estimate: \$385,335,000

Total Logistics Cost Share

RCTC Truck Study and Regional Logistics Mitigation Fee Capacity Improvement Project Adjusted Conceptual Cost Share Summary							
ID	Route Name	Dir	Beginning	End	Total Conceptual Project Cost	Logistics Attributable Share	Logistics Cost Share
1	I-15	NB	SR-79 S	Rancho California Rd	\$36,237,000	0.7%	\$258,000
3			Rancho California Rd	Winchester Rd			
7		SB	Clinton Keith Rd	Baxter Rd	\$7,406,000	0.3%	\$19,000
8			Cajalco Rd	Indian Truck Trail	\$37,825,000	2.2%	\$820,000
		El Cerrito Rd	Cajalco Rd	\$10,408,000	1.4%	\$142,000	
9	SR-60	EB	Rubidoux Blvd	Market St	\$40,234,000	31.8%	\$12,802,000
			Market St	Main St			
10	I-215	NB	Box Springs Rd	Central Ave/Watkins Dr	\$26,513,000	30.0%	\$7,963,000
			Central Ave/Watkins	Martin Luther King			
10c			Martin Luther King Blvd	SR-91	\$55,081,000	13.3%	\$7,317,000
11		SB	Center St Off-Ramp	Riverside County Line/Iowa	\$42,212,000	11.8%	\$4,978,000
12			Martin Luther King Jr	Sycamore Canyon Rd	\$13,403,000	57.1%	\$7,658,000
13			Van Buren Blvd	Case Rd	\$95,365,000	4.4%	\$4,235,000
16	SR-91	NB	On-Ramp from SB-I-15	On Ramp from NB- I-15	\$7,611,000	7.5%	\$571,000
18			Pierce St	Magnolia St	\$13,040,000	8.3%	\$1,078,000
Sum Total:					\$385,335,000	12.4%	\$47,841,000

*Includes auxiliary lane improvements

Total Logistics Cost Share: \$47,841,000

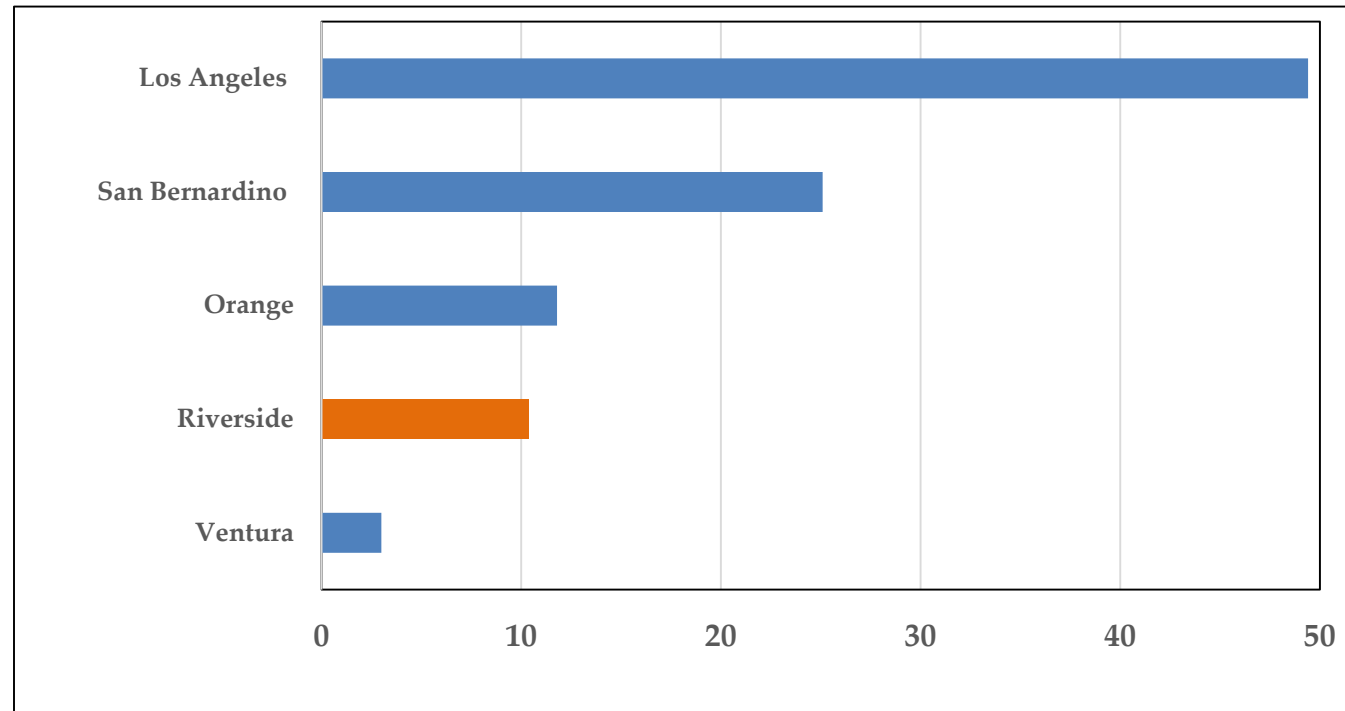
Potential Logistics Impact Fee

Logistics and Warehouse Impact Fee for Riverside County	
Logistics Cost Share of Freeway Mitigation	\$47,841,000
Growth in Warehouse Gross Floor Area in Square Feet	37,332,179
Fee per Square Foot of Gross Floor Area	up to \$1.28

Locational Impacts Assessment

Southern California Warehouse Distribution

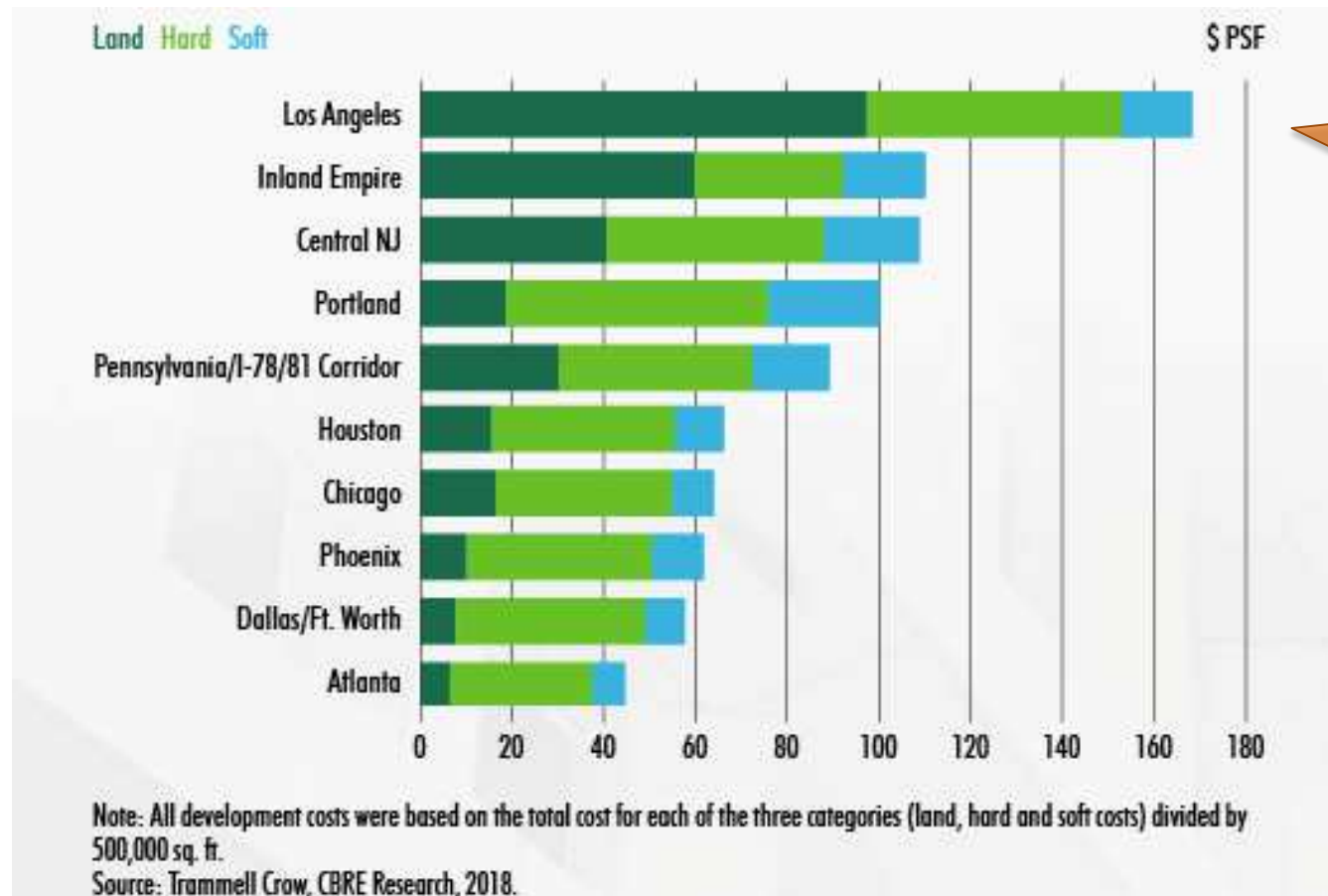
Percentage Share of Total Industrial Warehouse Building Area by County in 2014



Source: Southern California Association of Governments, *Industrial Warehousing in the SCAG Region*, April 2018

Potential Effects of Fee on Locational Decisions

Average New Construction Cost Breakdown for a 500,000-square-foot Warehouse



Development costs in Los Angeles County are 55% higher than the Inland Empire

Potential Effects of Fee on Locational Decisions

Total Development Costs in Western Riverside County

Development Costs, Land Values, and Return	Industrial Per Bldg Sq.Ft.
<u>DIRECT</u>	
Basic Site Work/ Lot Improvements	\$12.13
Direct Construction Cost	\$37.98
Hard Cost Total	\$50.12
<u>INDIRECT</u>	
TUMF	\$1.45
Other Development Impact Fees	\$3.74
Other Soft Costs	\$20.05
Soft Cost Total	\$25.24
Total Direct and Indirect Costs	\$75.35
Developer Return Requirement	\$13.68
Land Value	\$45.75
TOTAL COST/RETURN	\$136.19

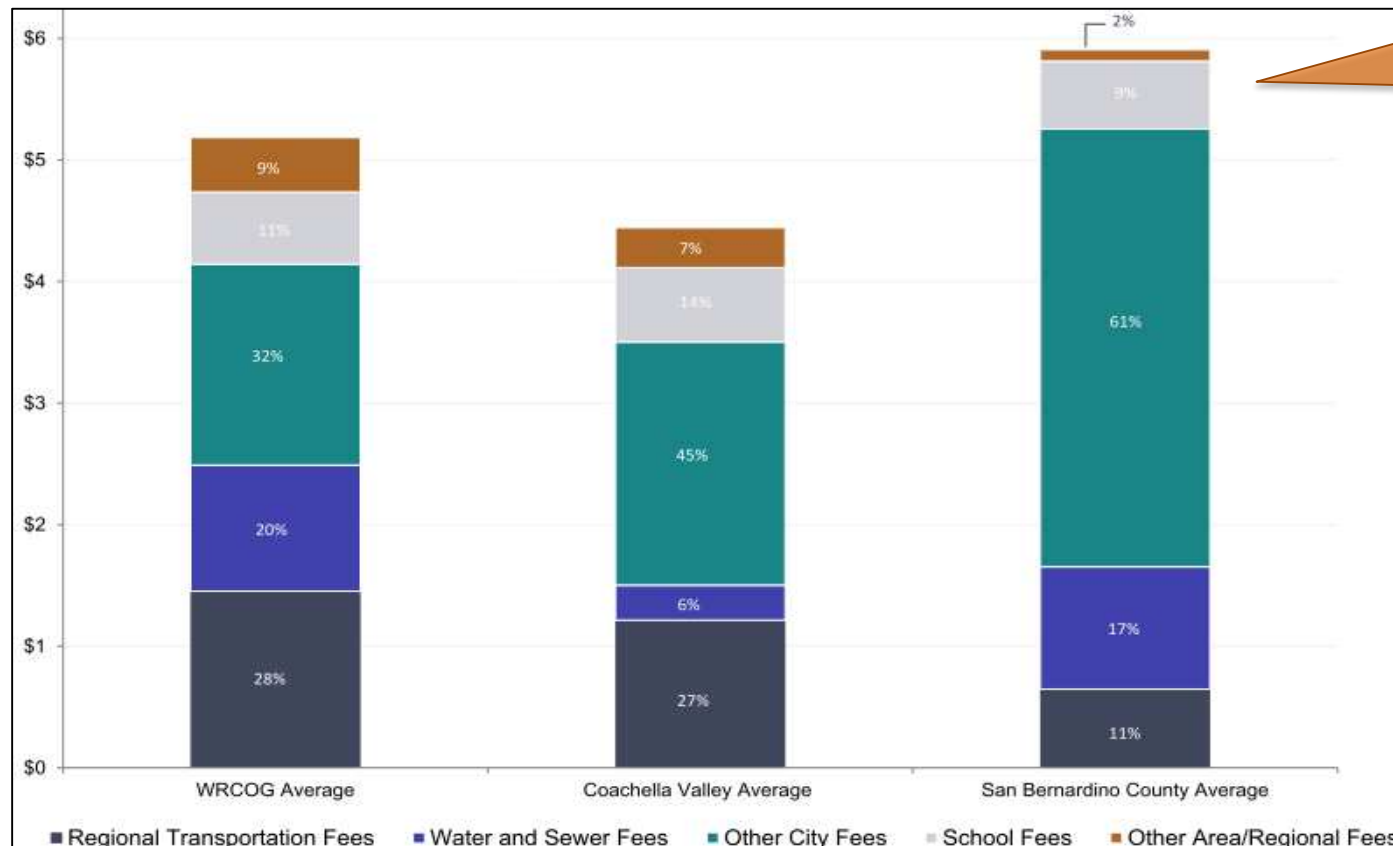
Total Development costs
in Western Riverside
County = \$121.10

The proposed fee of \$1.28
would increase the total
development costs by 1.1%

Source: Western Riverside Council of Governments, *Updated Analysis of Development Impact Fees in Western Riverside County*, 2019

Comparative Fee Costs

Current Average Development Impact Fee Costs Per Square Foot and Proportions in Inland Empire Jurisdictions



Current average impact fee costs are about \$0.80 higher in San Bernardino County, although fees vary greatly by city

Implementation of \$1.28 fee would make Western Riverside average about \$0.50 higher than San Bernardino

Source: Western Riverside Council of Governments, *Updated Analysis of Development Impact Fees in Western Riverside County, 2019*

Potential Locational Impacts

- A potential logistics mitigation fee would likely have limited impacts on demand for warehouse development in Riverside County
- It will represent a 1.1% increase in total development costs
- Total development costs for Los Angeles County will continue to be much higher than for the Inland Empire.
- Impact fees are generally higher in San Bernardino County compared to Riverside County, although fees vary widely
 - The logistics fee would make the average for Western Riverside higher than San Bernardino.
- Any impacts could be affected by offsetting changes in development costs in San Bernardino County and in other regions in the Southern California.

Next Steps

Next Steps

- Approve the Logistics Mitigation Fee Nexus Study
- The Commission's current governing authority does not allow for fees to be collected directly by the Commission.
- Should the Commission decide to pursue a fee program, staff will return with an implementation plan.