

RCTC TRUCK STUDY AND REGIONAL LOGISTICS MITIGATION FEE

Draft Technical Memorandum:
Task 3 – Fee Allocation Structure
and Implementing Mechanisms

Potential Locational Effects of a Riverside County Logistics Mitigation Fee

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1. Introduction

A logistics mitigation fee of \$1.28 per square foot of gross floor area of new warehouse construction in Riverside County is proposed to provide funding for highway projects that are needed to mitigate the impacts of increased truck traffic resulting from that new construction. The *RCTC Truck Study and Regional Logistics Mitigation Fee Technical Memorandum: Task 3 – Nexus Study* describes the needs for this fee and how the proposed amount of the fee was determined.

The objective of this document is to assess the potential impacts of this fee on warehouse development within Riverside County. Such development affects many other aspects of the county's economy, including direct employment, induced employment in businesses supporting warehousing, transportation volumes, demand for other county services, and local and state tax revenues. Major factors addressed include the following:

- The market for logistics and warehouse development in Southern California. How likely will the proposed fee affect the pace of development given the overall supply and demand for warehouse space in Southern California?
- The extent to which locational decisions within the Southern California market could be affected by the proposed fee:
 - How does the proposed fee compare to total development costs (including land and construction costs)?
 - How does the proposed fee compare to similar fees elsewhere in the market?
 - Will the fee substantially influence developers to locate in areas outside Riverside County?
- The possibility that other changes in regional development fees or development costs might affect the potential impacts of the proposed Riverside mitigation fee. Mitigation fees have been applied across multiple building types and for multiple purposes as shown in Appendix 1, and such fees are likely to evolve over time.

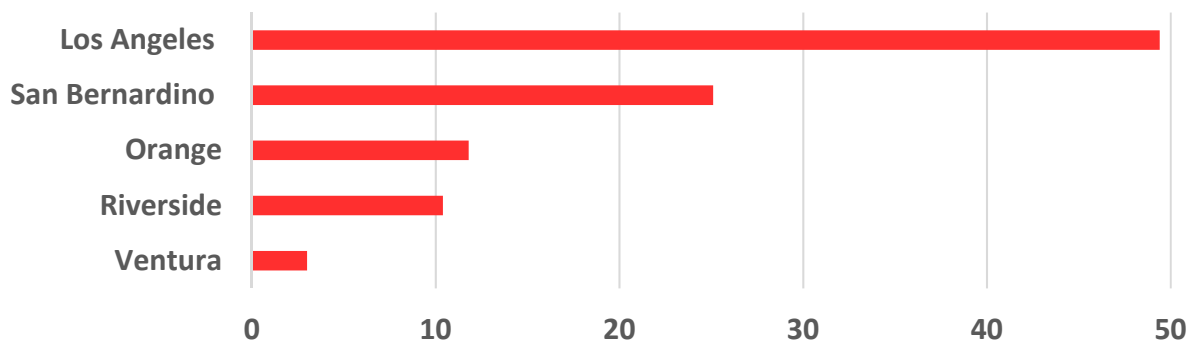
The following sections address these questions.

2. Profile and Outlook for Southern California Warehouse Development

2.1. PROFILE OF SOUTHERN CALIFORNIA WAREHOUSE DEVELOPMENT

The *Industrial Warehousing in the SCAG Region* study (Industrial Warehousing Study) completed by the Southern California Association of Governments (SCAG) in 2018 details the location of industrial warehouse buildings in Southern California and provides projections of new developments for 43 sub-regions. As shown in Exhibit 1, these buildings are heavily concentrated in Los Angeles and San Bernardino, and to a lesser extent Orange, and Riverside Counties.

Exhibit 1. 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

Exhibit 2 shows the 43 sub-regions used in the Industrial Warehousing Study.

Riverside County includes the following submarket areas:

- Riverside (18)
- Corona (25)
- South Riverside (32)
- Coachella Valley (25)
- Riverside Outlying (36)

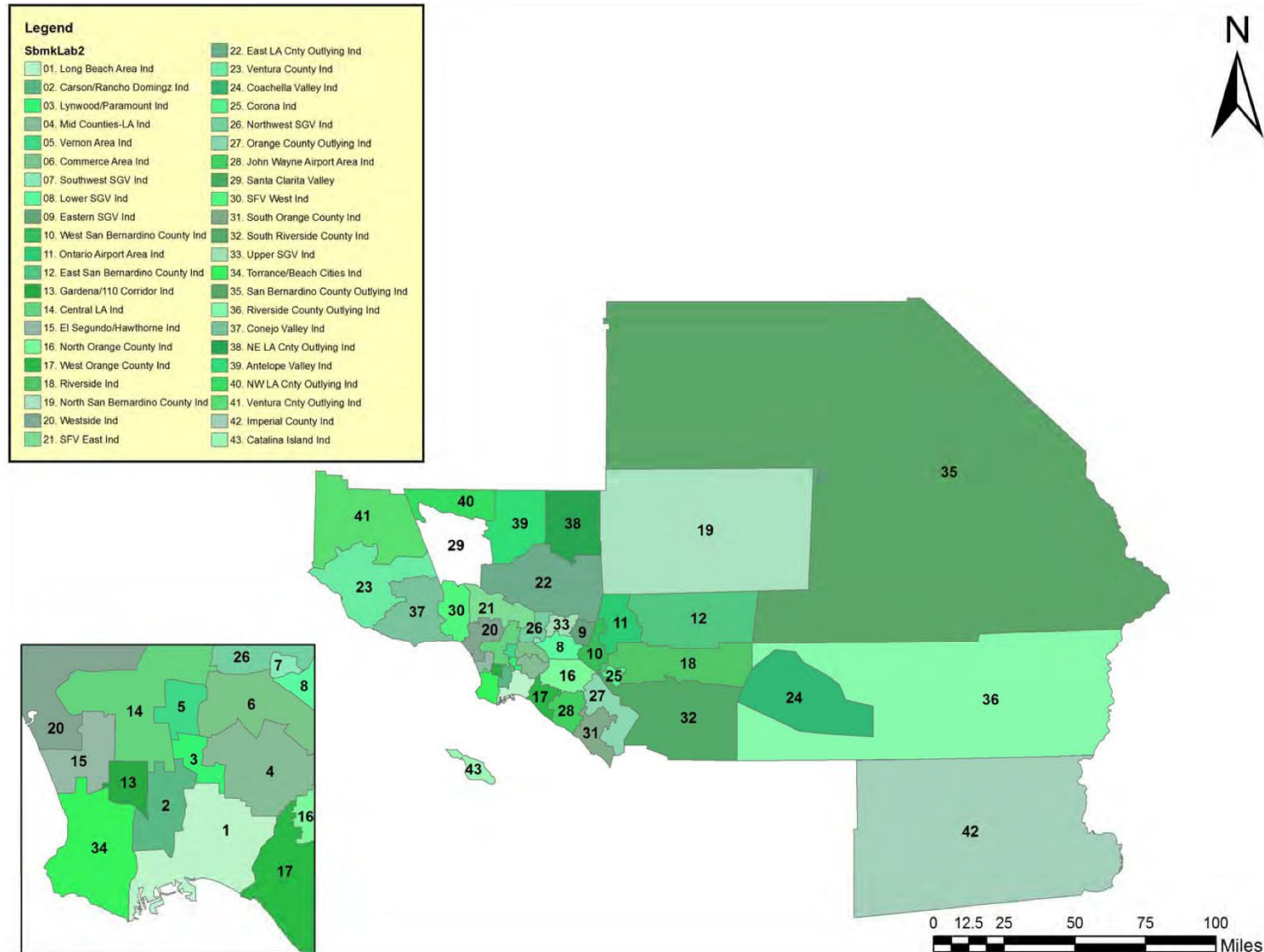
San Bernardino County includes the following submarket areas:

- West San Bernardino (10)
- Ontario Airport Area (11)
- East San Bernardino (12)
- North San Bernardino (19)

- San Bernardino Outlying Areas (35)

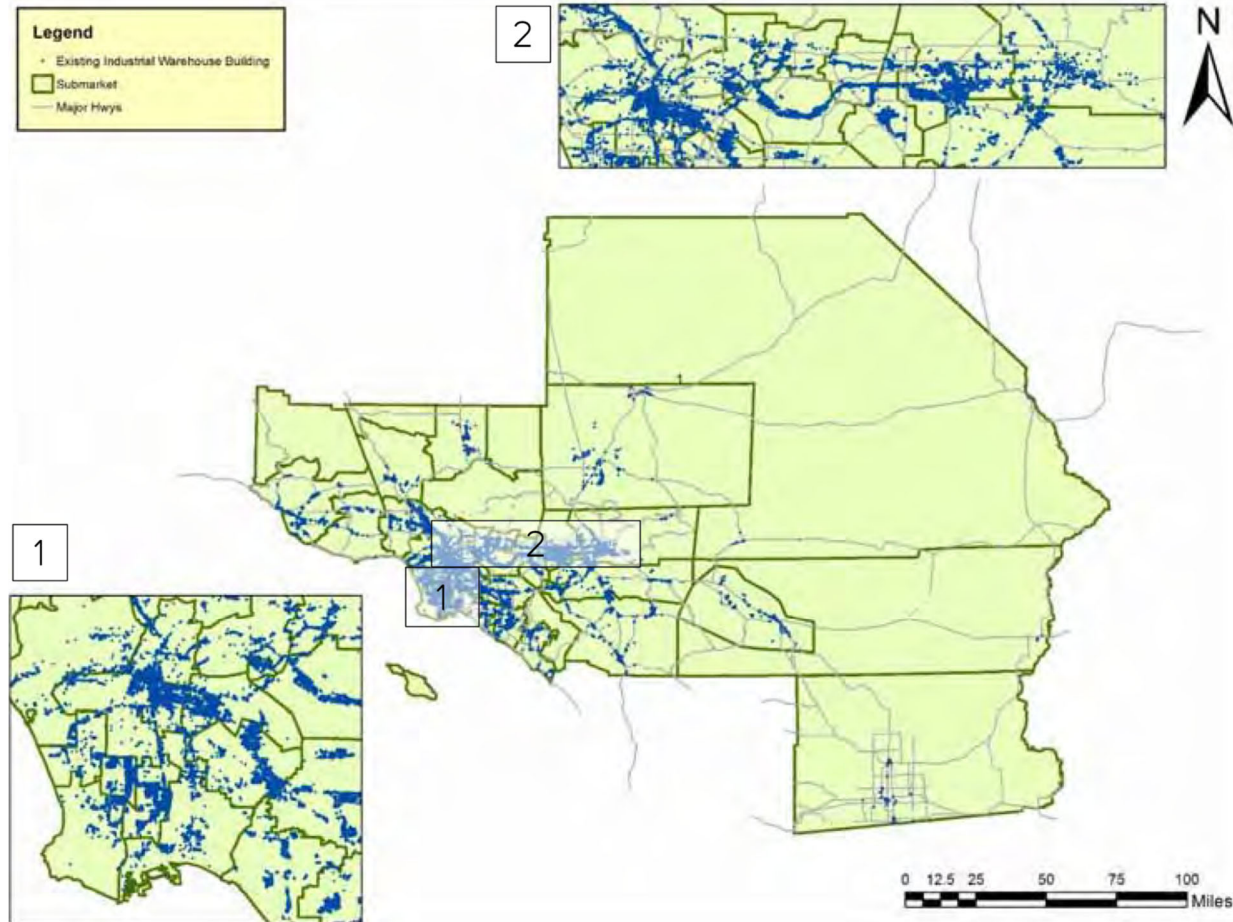
Exhibit 3 shows detail for existing warehouse buildings, with inset 2 extending from the East San Bernardino County submarket to areas to the west. This detail shows that industrial warehouse buildings in San Bernardino are concentrated in the southwest part of the county. To the south of inset 1, it can be seen that in Riverside County industrial warehouse buildings are concentrated in the western portion of the county.

Exhibit 2. Submarket Areas in the SCAC Region



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

Exhibit 3. Existing Industrial Warehouse Buildings in the SCAG Region (All Building Sizes and All Secondary Types), 2014



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

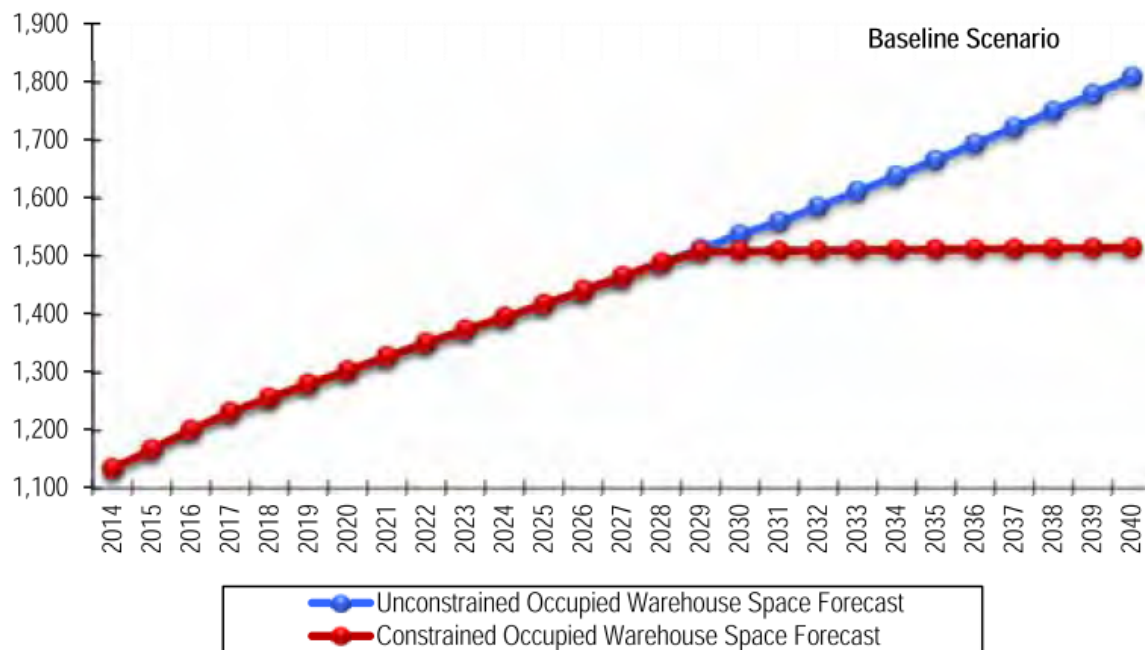
2.2 PROJECTED INDUSTRIAL WAREHOUSE SPACE

The Industrial Warehousing Study included forecasts of supply and demand for warehousing space in 43 geographical submarket areas of the SCAG region shown in Exhibit 2. The forecast was based on an inventory of warehouse space for 2014 and annual forecasts through 2040 for containerized port-related, border-crossing-related, and domestic cargo markets.¹ Each of these cargo sources was further segmented by type of warehouse use.

The Industrial Warehousing Study's baseline scenario used recent forecasts of port- and border-crossing-related cargo and assumed no efficiency gains in cargo storage over time and no replacement of obsolete buildings. It also assumed that the warehouse functional-use mix would not change and that current estimates of existing developable space were available for new facilities. The study developed two demand projections – one that assumed no constraint on total warehouse space and the other that would be constrained by limitations on developable areas.

The two projections are shown in Exhibit 4. As shown, total unconstrained 2040 demand for the Industrial Warehousing Study's baseline scenario is 1.81 billion square feet—an increase of 59 percent from 1.13 billion square feet in 2014 (a compound annual growth rate of 1.8 percent).

Exhibit 4. Unconstrained versus Constrained Regional-Level Total Occupied Warehouse Space Forecasts by Year in the SCAG Region, 2040 (millions of square feet)



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

¹ "Port-related," is containerized cargo handled at San Pedro Bay Ports (i.e., excluding containerized cargo handled at Port Hueneme or Port of San Diego). "Border-crossing related" refers to goods that cross the land ports of entry in Imperial County. "Domestic cargo" is any other type of containerized cargo not classified as "port-related" or "border-crossing-related" cargo.

3. Potential Effects of the Proposed Fee on Locational Decisions

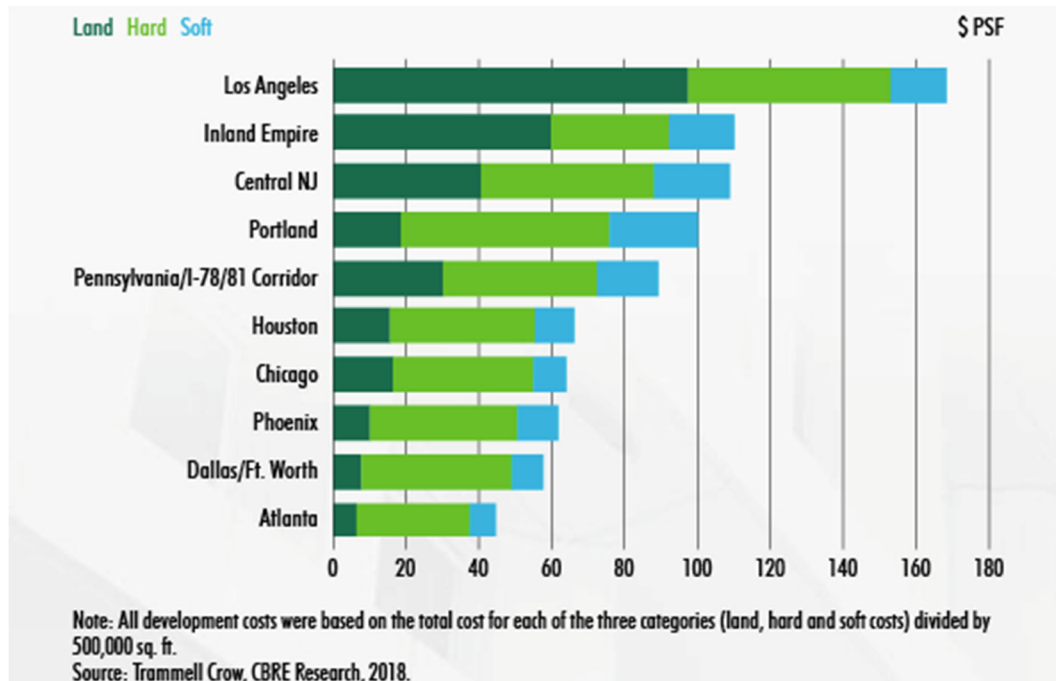
The previous section provided baseline projections of industrial warehouse development in Southern California. However, these projections did not account for changes in costs that could affect locational decisions of developers. In theory, higher development costs represented by the proposed mitigation fee could marginally induce developers to choose locations outside of Riverside County (e.g., in Los Angeles or San Bernardino Counties). The principal question concerning these impacts is how much the proposed fee would increase total development costs including land and construction.

The impacts of larger development costs would also, theoretically, be offset by any perceived benefits developers could see from improved highway transportation that would result from the mitigation fee. This is a smaller point, that is addressed separately, below.

3.1. COST OF PROPOSED FEE COMPARED TO TOTAL CONSTRUCTION COSTS

Exhibit 5 shows that total construction costs for warehouse space in Los Angeles are the highest in the country at nearly \$170 per square foot. Costs in the Inland Empire are the second highest in the country at \$110 per square foot. The \$110-per-square-foot estimate is slightly less than the \$121 per square foot cost estimated in the Western Riverside Council of Governments (WRCOG) Comparative Fee Study that includes \$75.35 per square foot in total direct and indirect costs plus \$45.35 per square foot in land costs (see Appendix A).² Using the \$121 per square foot estimate from the WRCOG study, the proposed fee would represent 1.1 percent of total construction costs.

² Updated *Analysis of Development Impact Fees in Western Riverside County*, Western Riverside Council of Governments, March 2019

Exhibit 5. Average New Construction Cost Breakdown for a 500,000-square-foot Warehouse

The attraction, and scarcity, of space in Los Angeles clearly results in a large cost premium, so it is unlikely that small additional marginal costs in Riverside County would significantly tip the balance of location toward Los Angeles. As shown in Exhibit 5, development costs are about 55 percent higher in Los Angeles County than in the Inland Empire. Therefore, a 1.1 percent fee is insignificant in comparison.

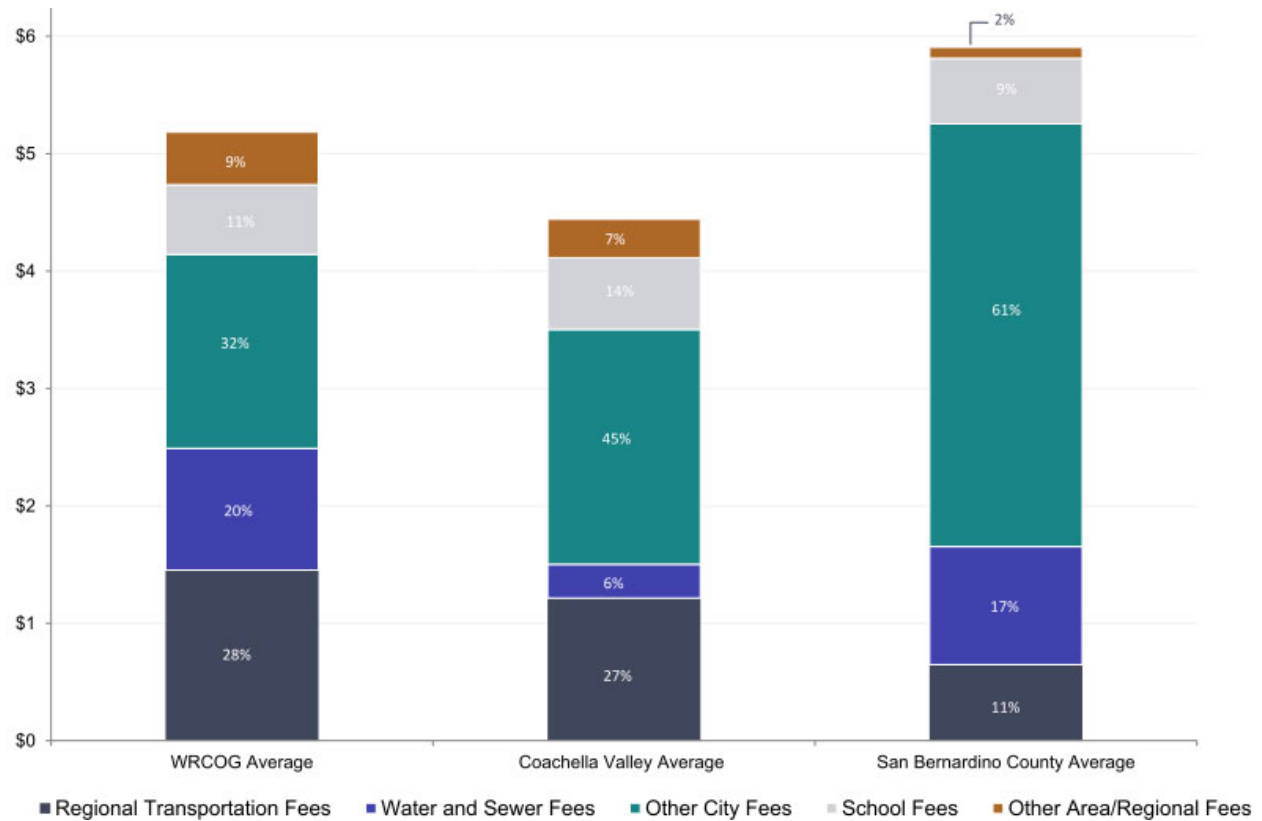
3.2. COMPARATIVE FEES COSTS IN OTHER AREAS OUTSIDE RIVERSIDE COUNTY

The question then becomes whether a 1.1 percent increase in development costs would cause developers to locate in other areas outside of Riverside County, especially in San Bernardino County, part of the Inland Empire immediately to the north of Riverside County and where warehouse development has been concentrated as discussed in the previous section.

In addition to representing a small, 1.1 percent share of total development costs, the proposed fee of \$1.28 per square foot would also be much smaller than current fees for industrial development in Riverside and San Bernardino Counties, about 25 percent of the average level of fees in Riverside County, and about 22 percent of the average level of these fees in San Bernardino (see Exhibit 6).

A possible additional consideration is that the proposed fee would be used to fund improvements to highway transportation in Riverside County. This would, over time, reduce transportation costs for industrial warehouse users, and developers could possibly view this as a benefit. Realistically, however, the mitigation fee will represent a real upfront cost while future transportation costs reductions would likely be heavily discounted and therefore have only minimal impacts on locational decisions. In addition, it is difficult to know how much developers would link any future improvements to the fee. This is a possible additional consideration and is not addressed further within this analysis.

Exhibit 6. Current Average Industrial Development Impact Fee Costs Per Square Foot and Proportions in Inland Empire Jurisdictions



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

4. Comparative Fee Costs

4.1. CURRENT FEE COSTS

The proposed mitigation fee would increase construction costs for warehouse development in Riverside County by about 1.1 percent and, taken alone, this could make San Bernardino County slightly more attractive to developers. However, higher fees in San Bernardino County could dampen this small effect. San Bernardino County's impact fees are higher than those in Riverside County according to the fee comparison study done by the WRCOG. Exhibit 7 shows the jurisdictions that were used to compare fees.

Exhibit 7. Jurisdictions Included in Fee Study

WRCOG Jurisdictions		Coachella Valley	San Bernardino County
Banning	Murrieta	Indio	Fontana
Canyon Lake	Norco	Palm Desert	Yucaipa
Beaumont	Perris	Palm Springs	San Bernardino
Calimesa	Riverside		Ontario
Corona	San Jacinto		Chino
Eastvale	Temecula		Rialto
Hemet	Wildomar		
Jurupa Valley	Temescal Valley		
Lake Elsinore	Winchester		
Menifee	March JPA		
Moreno Valley			

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

Exhibit 6 showed that average industrial development impact fees in WRCOG jurisdictions as well as areas in Coachella Valley are both notably lower than average fees in San Bernardino County. A few WRCOG jurisdictions have relatively high fees. Appendix B includes fee details for individual WRCOG jurisdictions.

4.2. FUTURE FEE DEVELOPMENT COSTS

In addition to current average industrial fees being higher in San Bernardino County than in Riverside County, a factor that could affect warehouse development location decisions is the possibility that fees or other costs could change in San Bernardino County, or other Southern California market areas. The possibility exists, for example, that other counties could implement a fee like the one proposed in Riverside County. While entirely speculative, such a scenario would also be based on needs to fund highway development in San Bernardino County or other regions in Southern California.

5. Summary of Findings

The Southern California region is a well-established, prime location for industrial warehouse development and will continue to be so. Los Angeles County is especially attractive because of its proximity to ports, large regional markets, and transportation connectivity. Because of these advantages and relatively scarce land availability, that market also has the highest construction costs for warehouse development in the United States.

While significantly less than Los Angeles, the Inland Empire has the second-highest costs for warehouse development in the country.

The proposed mitigation fee in Riverside County is likely to have limited impacts on reducing demand on warehouse development in Riverside County because of the following:

- It will represent a small (1.1 percent) share of total development costs, including land and construction 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 those in Riverside County.
- Any possible impacts of the proposed fee could be affected by offsetting changes in development costs in San Bernardino County and in other regions in the Southern California market, including increases in mitigation fees.

Appendix A

Development Prototypes – Total Development Costs

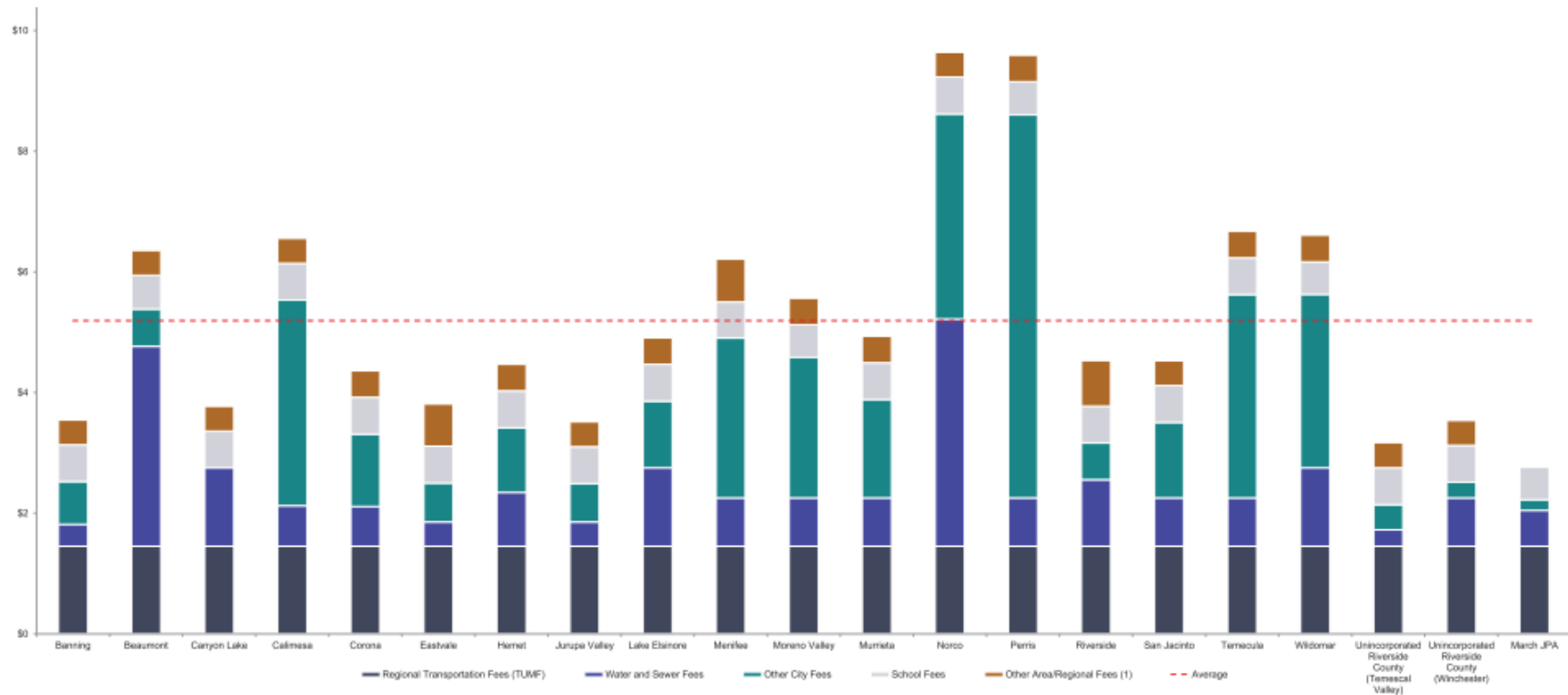
Total development costs per building square foot of \$121.10 for industrial buildings include total direct and indirect costs of \$75.35 plus the land value of \$45.75.

Development Costs, Land Values, and Return	Single Family Per Unit	Multifamily Per Unit	Industrial Per Bldg Sq.Ft.	Retail Per Bldg Sq.Ft.	Office Per Bldg Sq.Ft.
<u>DIRECT</u>					
Basic Site Work/ Lot Improvements	\$31,652	\$9,766	\$12.13	\$26.38	\$15.07
Direct Construction Cost	<u>\$227,898</u>	<u>\$196,540</u>	<u>\$37.98</u>	<u>\$138.75</u>	<u>\$148.31</u>
Hard Cost Total	\$259,550	\$206,307	\$50.12	\$165.13	\$163.38
<u>INDIRECT</u>					
TUMF	\$8,873	\$6,134	\$1.45	\$7.50	\$2.19
Other Development Impact Fees	\$38,597	\$23,572	\$3.74	\$16.13	\$11.87
Other Soft Costs	<u>\$56,893</u>	<u>\$47,674</u>	<u>\$20.05</u>	<u>\$31.26</u>	<u>\$33.02</u>
Soft Cost Total	\$104,363	\$77,380	\$25.24	\$54.89	\$47.08
Total Direct and Indirect Costs	\$363,913	\$283,686	\$75.35	\$220.01	\$210.46
Developer Return Requirement	\$56,160	\$33,492	\$13.68	\$34.02	\$32.52
Land Value	\$141,527	\$17,737	\$45.75	\$86.21	\$82.38
TOTAL COST/RETURN	\$561,600	\$334,915	\$136.19	\$340.25	\$325.36

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

Appendix B

Industrial Prototype Development Fees by Jurisdiction (per building sq. ft.)



* Fee estimates for specified development prototypes as of July 2016. Actual fees will vary based on project specifics and any fee updates.
 (1) "Other Area Fees/Regional Fees" include, but are not limited to, regional parks, trails, multi-service center fees, area specific fees, and habitat mitigation fees.

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