Western Riverside Council of Governments
Public Works Committee

REVISED AGENDA

Thursday, April 13, 2023
2:00 PM

Western Riverside Council of Governments
3390 University Avenue, Suite 200
Riverside, CA 92501

Committee members are asked to attend this meeting in person unless remote accommodations have previously been requested and noted on the agenda. The below Zoom link is provided for the convenience of members of the public, presenters, and staff support.

Remote Meeting Location:
March Joint Powers Authority
14205 Meridian Parkway, Suite 140
Riverside, CA 92518

Public Zoom Link
Meeting ID: 897 4107 7886
Passcode: 612739
Dial in: (669) 900 9128 U.S.

In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if special assistance is needed to participate in the Board meeting, please contact WRCOG at (951) 405-6706. Notification of at least 48 hours prior to meeting time will assist staff in assuring that reasonable arrangements can be made to provide accessibility at the meeting. In compliance with Government Code Section 54957.5, agenda materials distributed within 72 hours prior to the meeting which are public records relating to an open session agenda item will be available for inspection by members of the public prior to the meeting at 3390 University Avenue, Suite 200, Riverside, CA, 92501.

In addition to commenting at the Committee meeting, members of the public may also submit written comments before or during the meeting, prior to the close of public comment to lfelix@wrcog.us.

Any member of the public requiring a reasonable accommodation to participate in this meeting in light

of this announcement shall contact Lucy Felix 72 hours prior to the meeting at (951) 405-6702 or lfelix@wrcog.us. Later requests will be accommodated to the extent feasible.

The Committee may take any action on any item listed on the agenda, regardless of the Requested Action.

1. CALL TO ORDER (Stuart McKibben, Chair)

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. PUBLIC COMMENTS

At this time members of the public can address the Committee regarding any items within the subject matter jurisdiction of the Committee that are not separately listed on this agenda. Members of the public will have an opportunity to speak on agendized items at the time the item is called for discussion. No action may be taken on items not listed on the agenda unless authorized by law. Whenever possible, lengthy testimony should be presented to the Committee in writing and only pertinent points presented orally.

5. CONSENT CALENDAR

All items listed under the Consent Calendar are considered to be routine and may be enacted by one motion. Prior to the motion to consider any action by the Committee, any public comments on any of the Consent Items will be heard. There will be no separate action unless members of the Committee request specific items be removed from the Consent Calendar.

A. Summary Minutes from the February 9, 2023, Public Works Committee Meeting

Requested Action(s): 1. Approve the Summary Minutes from the February 9, 2023, Public Works Committee meeting.

B. Western Riverside County Clean Cities Coalition Activities Update

Requested Action(s): 1. Receive and file.

C. 2022 Fee Comparison Analysis Update - Final Report

Requested Action(s): 1. Receive and file.

6. REPORTS / DISCUSSION

Members of the public will have an opportunity to speak on agendized items at the time the item is called for discussion.

A. TUMF Nexus Study Activities Update

Requested Action(s): 1. Receive and file.

B. WRCOG Member Agency Experience as it Relates to State & Federal Agencies in the Infrastructure Planning, Design, and Construction Process

Requested Action(s): 1. Receive and file.

C. Confirmation of the TUMF Nexus Study Roadway Network

Requested Action(s): 1. Approve the Updated TUMF Nexus Study Roadway Network.

D. TUMF Zone Revenue Forecasts for Fiscal Years 2023/2024 to 2027/2028 Transportation Improvement Program Updates

Requested Action(s):

1. Approve the TUMF Zone Revenue Forecasts for Fiscal Years 2023/2024 to 2027/2028 Transportation Improvement Program.

7. REPORT FROM THE DEPUTY EXECUTIVE DIRECTOR
Chris Gray

8. ITEMS FOR FUTURE AGENDAS
Members are invited to suggest additional items to be brought forward for discussion at future Committee meetings.

9. GENERAL ANNOUNCEMENTS
Members are invited to announce items / activities which may be of general interest to the Committee.

10. NEXT MEETING
The next Public Works Committee meeting is scheduled for Thursday, June 8, 2023, at 2:00 p.m., in WRCOG's office at 3390 University Avenue, Suite 200, Riverside.

11. ADJOURNMENT

Public Works Committee

Minutes

1. CALL TO ORDER

The meeting of the WRCOG Public Works Committee was called to order by Chair Stuart McKibben at 2:00 p.m. on February 9, 2023.

2. PLEDGE OF ALLEGIANCE

Chair McKibben led members and guests in the Pledge of Allegiance.

3. ROLL CALL

- City of Banning - Nathan Smith
- City of Beaumont - Jeff Hart
- City of Calimesa - Michael Thornton
- City of Corona - Savat Khamphou
- City of Eastvale - Jimmy Chung
- City of Hemet - Noah Rau
- City of Lake Elsinore - Remon Habib
- City of Menifee - Nick Fidler
- City of Moreno Valley - Melissa Walker
- City of Murrieta - Bob Moehling
- City of Norco - Sam Nelson
- City of Riverside - Gil Hernandez
- City of San Jacinto - Stuart McKibbin (Chair)
- City of Temecula - Patrick Thomas
- City of Wildomar - Jason Farag
- County of Riverside - Mark Lancaster
- March Joint Powers Authority - Habib Motlagh*
- Riverside County Transportation Commission - Jillian Guizado
- Riverside Transit Agency (RTA) - Mauricio Alvarez

* Arrived after Roll Call

4. PUBLIC COMMENTS

There were no public comments.

5. CONSENT CALENDAR – (Calimesa / Murrieta) 19 yes; 0 no; 0 abstention. Items 5.A - 5.C were approved.

A. Summary Minutes from the December 8, 2022, Public Works Committee Meeting

Action:

1. Approved the Summary Minutes from the December 8, 2022, Public Works Committee meeting.

B. Approval of Third Amendment to Professional Services Agreement with Yunex, LLC

Action:

1. Recommended that the Executive Committee approve the Third Amendment with Yunex, LLC.

C. Confirmation of Public Works Committee Vice-Chair for the Remainder of Fiscal Year 2022/2023

Action:

1. Confirmed Octavio Duran, City of Jurupa Valley, as the Public Works Committee Vice-Chair for the remainder of Fiscal Year 2022/2023.

6. REPORTS / DISCUSSION

A. Latest Intelligent Transportation System Innovations

Ryan Calad, Senior Associate, Project Manager II, of Michael Baker International reported that traffic signal devices are becoming smarter and connected, and is only going to develop faster. Signal Performance Measures (SPM) consists of an ATC controller, a system detection to help drive information to the controller to output information, and a post-processor to analyze data.

Software As A Service (SaaS) is also becoming prominent and assists with increasing efficiencies of Intelligent Transportation System (ITS) with the use of crowd source and traffic signal data. Smart Traffic Signal Performance Modules now have algorithms to process data that it collects, which can be stored in the cloud or in a physical database. Gridsmart technology uses video and advanced analytics to track and identify vehicles, pedestrians, cyclists, etc.

Agencies were encouraged to consider all aspects of ITS as “intelligent,” embrace SaaS, address communication / bandwidth needs, and ensure coordinated efforts within the agency for security and access.

John Kerenyi from Jacobs asked if subscriptions may be funded by TUMF.

TUMF Nexus Study consultant Darren Henderson responded that it was a bit of a gray area because TUMF / impact fees can only be used for capital, not for ongoing operations, but more research is necessary.

Action:

1. Received and filed.

B. Resilience Grant Funding Update for Transportation Projects

Timothy Grose of WSP reported that the main criteria for most grants is to emphasize how the project will address vulnerable community needs.

The grants that will assist with resilience planning include Caltrans Climate Adaptation Planning Grants, which require an 11.47% local match minimum, and 50% of funds must used for projects in underserved communities. Grant applications due March 9, 2023.

The Office of Planning and Research (OPR) Integrated Climate Adaptation and Resiliency Program (ICARP) Adaptation Planning Grant Program would provide communities with climate resilient infrastructure projects and requires no match funding. Grant applications due March 31, 2023.

The grants that will assist with resilience project design and construction include BIL / IIJA Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program discretionary funds. Notice of Funding Availability (NOFA) is expected winter / spring of 2023, and requires a benefit cost analysis (BCA) and a non-federal match of 20%.

FEMA Building Resilient Infrastructure and Communities (BRIC) fund requires a BCA, and prioritizes 40% of funding for disadvantaged communities. Applications are predicted to be due in late 2023.

California Transportation Commission Local Transportation Climate Adaptation (LTCAP) Program grant applications are due June 7, 2023, and require a 20% match funding to receive allocations from both the State General Fund and the Federal PROTECT fund. This would be good for projects that address flooding, wildfires, and erosion.

Chris Gray, WRCOG Deputy Executive Director, offered assistance to any of member jurisdictions that would like to apply for any of these grants. Agencies interested in pursuing grant funding for resilience planning or resilience project design and construction are encouraged to contact Christopher Tzeng.

Action:

1. Received and filed.

C. Streetlight Program, Broadband, and Energy Resilience Activities Update

Daniel Soltero, WRCOG Program Manager, provided information on the Integrated Climate Adaptation and Resiliency Program (ICARP) Adaptation Planning Grants Program (APGP), which helps public entities, tribes, and community-based organizations fill planning needs, provides resources to identify climate resilience priorities, and supports development of climate resilience projects across the state. The Energy Resilience Plan was completed in December of 2022 in response to increasing power outages from wildfires, extreme heat, or public safety. Staff are preparing an application to the ICARP APGP to build upon the existing Energy Resilience Plan by proposing to conduct energy resilience / microgrid feasibility studies at 10 different member agency-owned sites or facilities across the subregion to identify the facilities that need energy resilience upgrades the most.

The Middle-Mile Broadband Initiative advertised bids to construct the 10,000-mile fiber optic network in Q4 2022, and bids were due at the end of December 2022. The California Public Utilities Commission (CPUC) provided comments on the Loan Loss Reserve Fund in November 2022, and a Proposed Decision on how funds will be implemented is anticipated in Q1 2023. The Local Agency Technical Assistance (LATA) Grants Program reimburses local agencies and tribes for pre-construction activities in broadband projects, and has received 116 applications that request more funding than the program has

to offer. In Riverside County, four LATA grants have been awarded to public agencies amounting to almost $1.3M. The Federal Funding Account / Last Mile Infrastructure Deployment initiative released Priority Maps in January 2023 which will help facilitate distribution of funds, and although a date has been announced the CPUC will next provide application information and tools.

The Streetlight Program oversees an Agreement with Yunex for streetlight retrofit and maintenance services, which expires on December 1, 2023. Staff are preparing a Request for Proposals (RFP) to solicit bids for streetlight maintenance services, which is expected to be released in March or April 2023. Member agencies will be invited to participate in the bid review process. Moreover, staff are preparing the 2022 annual streetlight maintenance reports for participating member agencies which will provide details on work orders and maps of pole knockdowns or other notable work orders.

Action:

1. Received and filed.

7. REPORT FROM THE DEPUTY EXECUTIVE DIRECTOR

Chris Gray, WRCOG Deputy Executive Director, reported that Committee meetings will be returning to an in-person meeting format, as decided at the February Executive Committee meeting. Meetings will be governed by Brown Act rules, and staff asks that members notify WRCOG staff 10 days prior to a meeting if they will be participating remotely.

8. ITEMS FOR FUTURE AGENDAS

1. TUMF Revenue Update for FY 2022/2023 and 2023/2024
2. Update on TUMF Nexus Study
3. Transportation funding / grant update

9. GENERAL ANNOUNCEMENTS

There were no general announcements.

10. NEXT MEETING

The next Public Works Committee meeting scheduled for Thursday, April 13, 2023, at 2:00 p.m., in WRCOG's office located at 3390 University Avenue, Suite 200, Riverside.

11. ADJOURNMENT

The meeting of the Public Works Committee adjourned at 2:57 p.m.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Western Riverside County Clean Cities Coalition Activities Update**

Contact: **Taylor York, Program Manager, tyork@wrcog.us, (951) 405-6751**

Date: **April 13, 2023**

Requested Action(s):

1. Receive and file.

Purpose:

The purpose of this item is to provide an overview of the WRCOG Clean Cities Program and current activities.

WRCOG 2022-2027 Strategic Plan Goal:

Goal #5 - Develop projects and programs that improve infrastructure and sustainable development in our subregion.

Background:

The Western Riverside County Clean Cities Coalition (Coalition) was established as a WRCOG Program in 1997 and is part of a national network (https://cleancities.energy.gov/) of more than 85 Coalitions supported by the U.S. Department of Energy (DOE). The Coalition brings together local government and private industries to expand the use of alternatives to petroleum fuel, promoting education and technical assistance in support of advanced technologies in transportation. Coalition activities, and those of its stakeholders, also help municipalities manage the expanding use of alternative fuel vehicles (AFV) in the subregion while promoting resources that strengthen AFV infrastructure. Coalition stakeholders include public and private fleets, local and state agencies, fuel providers, technology manufactures, local educational institutions, and more.

Activities from Coalition stakeholders result in the reduction of millions of gallons of petroleum fuel use and thousands of tons of greenhouse gas emissions each year. This is achieved through adopting fleet vehicles, deploying AFV fueling and charging infrastructure, and acquiring funding from state, federal, and local programs.

Clean Cities Energy and Environmental Justice Initiative

As part of the Federal Government's Justice40 initiative, the DOE has directed funding to support Clean Cities Coalition efforts on energy and environmental justice (EEJ) in local communities. The first two rounds of the Clean Cities EEJ Initiative (CCEEJI) provided in-depth training to Coalition staff on building

relationships with community organizations, including accessibility and EEJ principals in planning and conducting Coalition outreach work. WRCOG staff participated in this training in summer and fall 2022.

WRCOG submitted and was awarded a proposal to participate in the third round of the initiative. During this round, the DOE will support a full-time fellow to serve as a Community Engagement Liaison (CEL) for WRCOG and the Coalition. The CEL will focus on relationship-building and outreach activities in EEJ communities, working closely with agencies and community organizations to identify EEJ-related mobility and air quality challenges. The DOE will fund the position for two years, and it is expected that the CEL and Coalition staff will work to seek funding to maintain the position beyond that time. The CEL is expected to begin working in April 2023. As a next step, WRCOG staff are working to conduct an internal needs assessment that will identify the Coalition's strengths, weaknesses, opportunities, and threats related to EEJ work. Staff will then compile a job description and work with DOE to identify an appropriate candidate for the role.

Community Transportation Needs Assessment

Working with community partners, the Coalition recently completed a Community Transportation Needs Assessment (CTNA) for focused census tracts in the Cities of Corona and Moreno Valley, and the San Jacinto Valley area. The goal of this work was to aid in the understanding of mobility needs and options available in disadvantaged communities within the subregion that experience the highest burden from air pollutants and stand to benefit the most from transportation solutions. With the CTNA completed, WRCOG is eligible to apply for Mobility Project Vouchers (MPV) to deploy solutions. Staff are currently working to identify interest.

In an effort to expand the reach of this valuable effort, Coalition staff have applied for a second round of funding to conduct a CTNA in additional areas of the subregion. These areas include census tracts in the Cities of Lake Elsinore and Perris, and surrounding areas of unincorporated Riverside County. If awarded funding, work on this second CTNA will begin in early spring 2023. Similar to the previous round, activities will include a survey, multiple community workshops, and focus group meetings with community organizations and other stakeholders.

Clean Cities Coalition Meeting: CARB Tour and ZEV Listening Session

WRCOG staff hosted the first Clean Cities Coalition member meeting of 2023 on January 31st, at the California Air Resources Board (CARB) southern California Headquarters in Riverside. The meeting opened with a tour the CARB facility, which houses research and testing of next-generation, zero-emission technologies and vehicles. The building contains seven light- / medium-duty test cells, and three test cells to accommodate larger heavy-duty trucks and buses. It is also one of the largest Zero Net Energy buildings in the U.S. It produces as much energy as it uses, aided by solar arrays and a chilled beam temperature management system that provides increased energy efficiency.

Following the tour, Coalition staff hosted a Zero-Emission Vehicle Mandates listening session to hear from Coalition members about technology opportunities and challenges related to state policies that mandate public fleets make the transition to zero-emission vehicles between 2024 and 2027. Outcomes from this listening session will be shared with the DOE and will inform technology research at the national level, as well as Coalition activities at the local level. Coalition staff recognize the challenges related to this transition and are working continuously to build relationships, communicate challenges to decision-makers, and seek resources to support a ZEV transition that is as smooth and beneficial as

possible for fleets.

The next Clean Cities Coalition meeting is scheduled for April 26, 2023, during which staff will present and seek feedback on an updated work plan outlining activities planned for April 1, 2023, to March 31, 2024. A copy of the draft work plan will be provided to members well in advance of the meeting.

Clean Cities Coordinator Training Workshop

Between November 14 and 17, 2022, WRCOG staff attended the annual Clean Cities Coordinator Training in Denver, CO. The workshop provided training for Coalition Directors (Coordinators) on managing successful Coalitions, and provided opportunities to share expertise, success stories, and lessons learned. The training also provided information on DOE Priorities and Investments in alternative fuel technology, as well as opportunities to network with other Coalitions and subject matter experts. WRCOG staff participated in a panel with DOE staff and four other Coalitions. Presenters discussed the important role of Clean Cities Coalitions for federal equity priorities, and examples of how Coalitions are taking on new EEJ-inspired activities.

Prior Action(s):
None.

Fiscal Impact:
This item is for informational purposes only; therefore, there is no fiscal impact. All activities as part of the Western Riverside County Clean Cities Coalition are budgeted under the Clean Cities Program budget (120-80-1010), which is funded by member agencies, the Department of Energy Clean Cities Cooperative Agreement, and other periodic grant funding.

Attachment(s):
None.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: 2022 Fee Comparison Analysis Update - Final Report

Contact: Christopher Tzeng, Program Manager, ctzeng@wrcog.us, (951) 405-6711

Date: April 13, 2023

Requested Action(s):

1. Receive and file.

Purpose:

The purpose of this item is to provide the final report of the 2022 Fee Comparison Analysis Update.

WRCOG 2022-2027 Strategic Plan Goal:

Goal #5 - Develop projects and programs that improve infrastructure and sustainable development in our subregion.

Background:

In 2016 WRCOG conducted a study to analyze fees / exactions required and collected by jurisdictions / agencies in and immediately adjacent to the WRCOG subregion. The study was presented to various WRCOG committees and subsequent presentations were completed to various City Councils in the subregion. Based on the feedback provided and the requests made for data and presentations, WRCOG indicated that the study would be updated on a consistent basis to enable jurisdictions the value of understanding the impact of fees on development and the regional economy. An updated analysis utilizing 2018 data was completed at the beginning of 2019. An update to the analysis utilizing data available in 2022 commenced in May 2022. Updates of the analysis were provided to the WRCOG Administration & Finance, Planning Directors, Public Works, and Technical Advisory Committees in late 2022. The final report will be provided to the WRCOG committees at their April / May 2023 meetings.

The information analyzed and presented in the final report is solely for information purposes. WRCOG is not proposing any fee updates as part of the Fee Comparison Analysis.

Overview

The update to the Fee Comparison Analysis follows the same methodology as in 2016 and 2018, and updates the fee structures of the various fees. The Analysis provides WRCOG jurisdictions with comprehensive fee comparisons and also discusses the effect of other development costs, such as the cost of land and interest rates, within the overall development framework. Another key element of this study is an analysis documenting the economic benefits of transportation investment. Summary and comparison data for WRCOG member agencies is provided in the final report in Attachment 1.

Fee Comparison Methodology

In addition to the jurisdictions within the WRCOG subregion, the study analyzed sample jurisdictions within the Coachella Valley, San Bernardino County, and the northern portion of San Diego County. The inclusion of additional neighboring / peer communities allows for consideration of relative fee levels between the WRCOG subregion and jurisdictions in surrounding areas that may compete for new development.

Land Uses and Development Prototypes

Fee comparisons have been conducted for five key land use categories, "development prototypes," including single-family residential, multi-family residential, office, retail, and industrial developments. Since every development project is different, and because fee structures are often complex and derived based on different development characteristics, it is helpful to have "development prototypes" for each of the land uses studied. The use of consistent development prototypes increases the extent to which the fee comparison is an "apples-to-apples" comparison.

Development prototypical projects that were analyzed are as follows:

- Single-family residential development: 50-unit residential subdivision; 2,700 square foot homes, and 7,200 square foot lots
- Multi-family residential development: 200-unit market-rate, 260,000 gross square foot apartment buildings
- Retail development: 10,000-gross square foot retail buildings
- Office development: 20,000-gross square foot, Class A or Class B office buildings
- Industrial development: 265,000 gross square foot high-cube industrial buildings

Fee Categories

The primary focus of the analysis is on the array of fees charged on new development to pay for a range of infrastructure / capital facilities. The major categories of fees include 1) school development impact fees; 2) water / sewer connection / capacity fees; 3) city capital facilities fees; 4) regional transportation fees (TUMF in Western Riverside County); and 5) other capital facilities / infrastructure / mitigation fees charged by other regional / subregional agencies. These fees typically represent 80% to 90% of the overall development fees on new development. Additional processing, permitting, and entitlement fees are not included in this analysis. The analysis focused on development impact fees, as these fees are much larger than planning / processing fees for comparison purposes.

Service Providers and Development Prototypes

The system of infrastructure and capital facilities fees in most California jurisdictions is complicated by multiple service providers and, often, differential fees in different parts of individual jurisdictions. Multiple entities charge infrastructure / capital facilities fees – e.g., city, water districts, school districts, and regional agencies. In addition, individual jurisdictions are often served by different service providers (e.g., more than one water district or school district) with different subareas within a jurisdiction, sometimes paying different fees for water facilities and school facilities. Also, some city fees, such as storm drain fees, are sometimes differentiated by jurisdictional subareas. To maintain consistency, the

service providers utilized in the previous analyses are utilized in this analysis. Individual service providers were selected where multiple service providers were present, and an individual subarea was selected where different fees were charged by subarea.

Prior Action(s):
December 14, 2022: The Administration & Finance Committee received and filed.

November 17, 2022: The Technical Advisory Committee received and filed.

October 13, 2022: The Public Works Committee received and filed.

October 13, 2022: The Planning Directors Committee received and filed.

Fiscal Impact:
Transportation and Planning Department activities are included in the Agency's adopted Fiscal Year 2022/2023 Budget under the Transportation Department. This analysis is covered under TUMF (Fund 110) to provide additional information on development fees charged to support the TUMF Nexus Study.

Attachment(s):
Attachment 1 - WRCOG Fee Comparison Study Final Report

Report

2022-23 Analysis and Regional Comparison of Development Impact Fees in Western Riverside County

The Economics of Land Use

Prepared for:
Western Riverside Council of Governments (WRCOG)

Prepared by:
Economic & Planning Systems, Inc.

EPS #214063

January 9, 2023

Economic & Planning Systems, Inc.
800 Wilshire Boulevard
Suite 410
Los Angeles, CA 90017
213 489 3838 tel

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

Table of Contents

List of Tables

List of Figures

1. Introduction and Findings

The Western Riverside Council of Governments (WRCOG) commissioned this Report to provide increased regional understanding of development impact fees on new development in Western Riverside County. More specifically, the purpose of this report is to: (1) indicate the types and relative scale of the development impact fees placed on different land uses within WRCOG member jurisdictions, and (2) indicate the level of fees relative to overall development costs in Western Riverside County. The report is also intended to provide helpful background information on the impact of the regional Transportation Uniform Mitigation Fee (TUMF) by placing the TUMF in the context of the broader development impact fee composition, overall development costs, and other regional dynamics.

This report (the 2022-23 Study) represents an update to the 2018-19 Study, which provided similar information on development impact fees and development costs. Information in this report is primarily based fee schedules and development cost estimates from 2022, while the prior study was primarily on schedules and estimates from 2018.

This report recognizes that there are substantive and ongoing debates about the appropriate levels of development impact fees in regions throughout California and elsewhere in the United States. On the one hand, development impact fees provide revenue to support the construction of critical infrastructure and capital facilities (or in-kind capital facility development) that can generate development value, economic development, and quality of life benefits. On the other hand, these fees act as an additional development cost that can influence development feasibility and potentially impact the pace of new development. **Each fee-adopting jurisdiction must weigh the costs and benefits of potential new or increased fee levels in the context of their goals, capital improvement needs, and economic and development dynamics.**

This report considers development impact fees defined as one-time fees collected for the purposes of funding infrastructure and capital facilities.[1] Reflecting the broad range of land use and development projects in Western Riverside County, prototype development projects for single-family, multifamily, retail, Class A/B office, and large industrial use types were all selected to support comparisons of fees in different jurisdictions.

A summary of key findings is provided below, followed by a description of the organization of this report.

[1] As used in this report and discussed further below, the phrase "development impact fee" includes all fees adopted pursuant to the Mitigation Fee Act and other monetary exactions due at the time of development. The term "fee," as used in this report, means "development impact fee."

Summary of Findings

FINDING #1: New development in Western Riverside County pay a wide range of one-time infrastructure/capital facilities associated fees with different public agencies.

New development in Western Riverside County is required to pay development impact fees to help fund:

- Water and Sewer Facilities
- School Facilities
- Regional Transportation Infrastructure
- Additional Local Infrastructure/Capital Facilities (local transportation, parks and recreation, public facility, community/civic facilities, and storm drain infrastructure).
- Subregional/Area Fees (habitat mitigation fees, Road and Bridge Benefit Assessment Districts, and other area-specific infrastructure/capital facilities fees).

These fees are set/administered by a combination of water districts, school districts, individual cities, the County, the Western Riverside Council of Governments, the Western Riverside County Resource Conservation Authority, and other special districts.

- **Fees for each land use type have increased on average by between 6.9 and 24.5 percent since the prior 2018-19 Study.** As shown in **Table 1**, average fee totals for residential uses now range from $32,099 for multifamily units to $57,078 for single-family units, and average fee totals for nonresidential uses now range from $6.48 per square foot for industrial projects to $25.27 per square foot for retail projects**.**

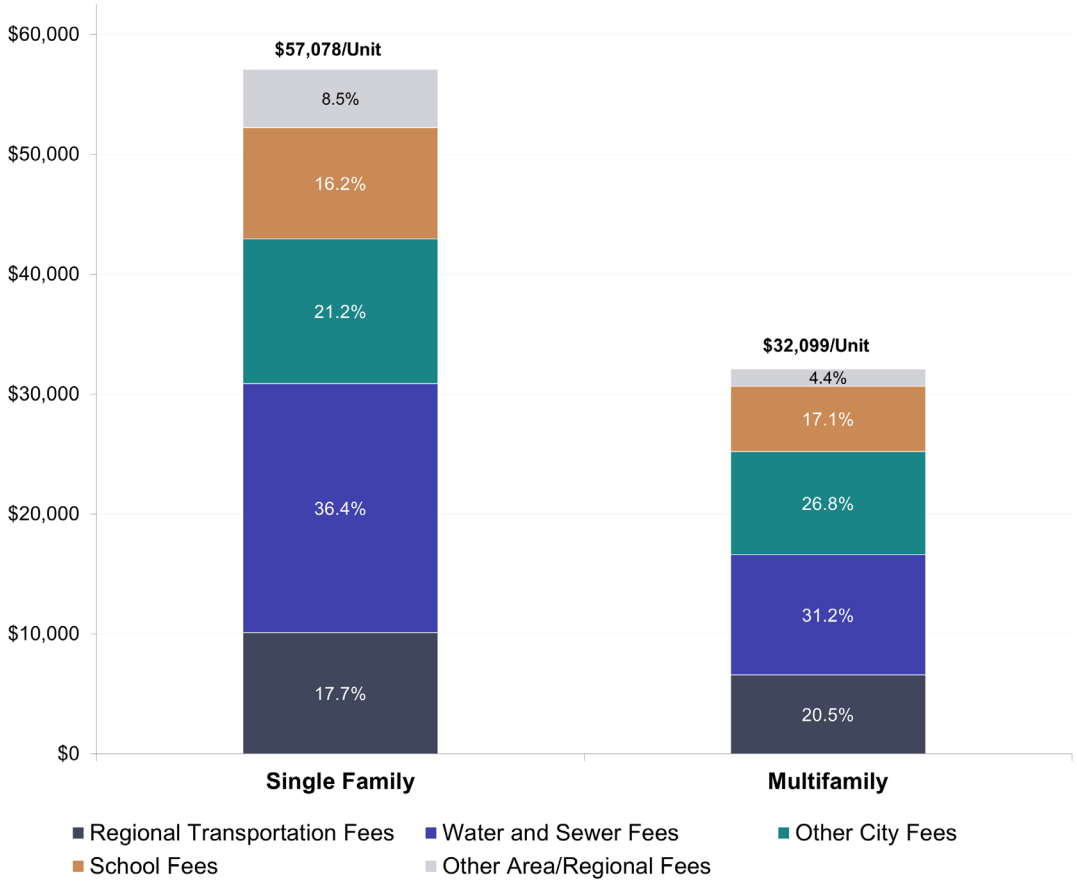
Table 1 Average Total Fee Amounts & Changes since 2018-19 Study by Land Use Type

Land Use	2022-23	2018-19	% Change
Single Family			
Total Fees per Unit	$57,078	$47,470	20.2%
Multifamily			
Total Fees per Unit	$32,099	$29,706	8.1%
Retail			
Total Fees per SF	$25.27	$23.63	6.9%
Office			
Total Fees per SF	$17.04	$14.06	21.2%
Industrial			
Total Fees per SF	$6.48	$5.20	24.5%

FINDING #2: TUMF represents a modest proportion of total residential development impact fees in Western Riverside County and a more variable proportion of nonresidential development impact fees.

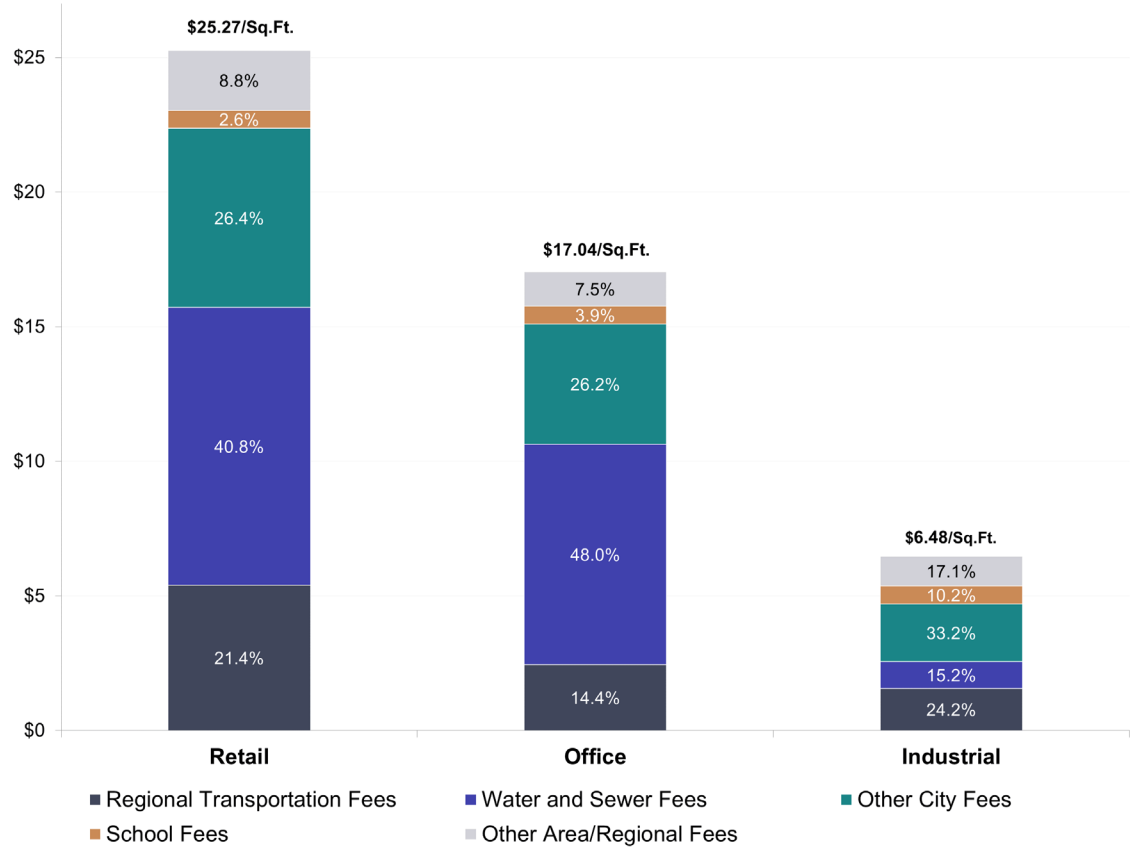
- **For residential developments, TUMF represents close to 20 percent of total development impact fees for both single-family and multifamily development**. Other fee categories are shown in **Figure 1** below. Water and Sewer Fees together represent the greatest proportion of residential development impact fees. The smallest proportion is associated with Other Area/Regional Fees.

Figure 1 Average WRCOG Residential Development Impact Fees by Fee Category



- **Regional Transportation Fees (TUMF) as a proportion of total development impact fees show more variation for nonresidential land uses**. Retail and office fees are dominated by Water and Sewer Fees. For industrial developments, Water and Sewer Fees are substantially lower and Other City Fees are the greatest proportion of total fees (**Figure 2**).

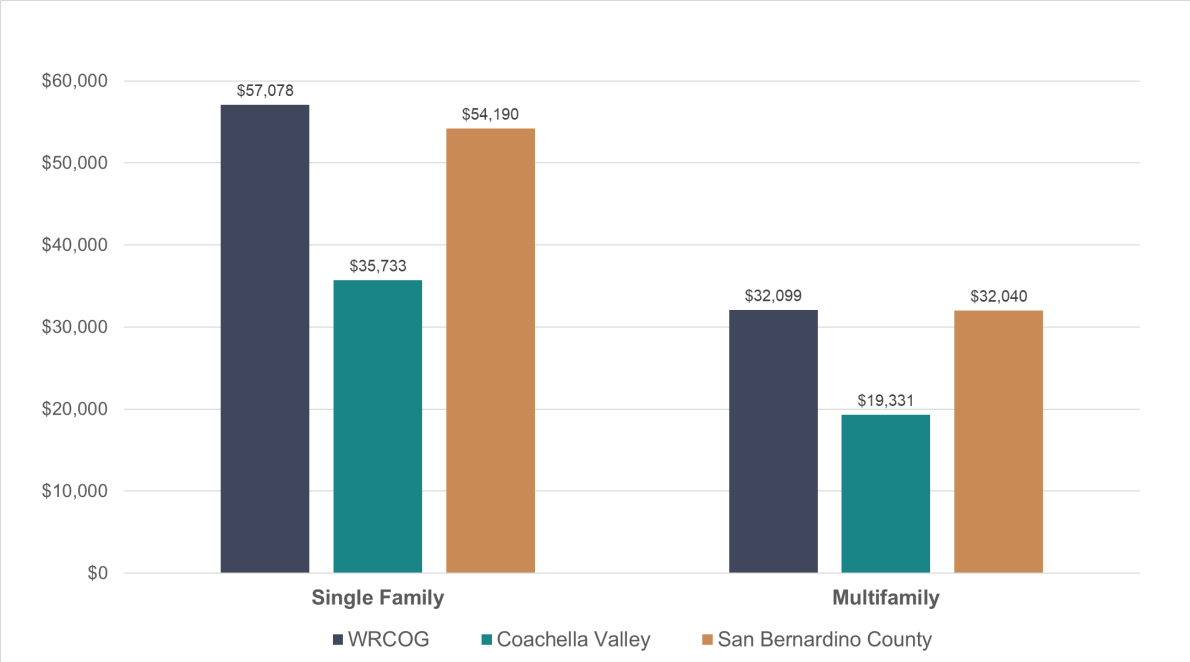
Figure 2 Average WRCOG Nonresidential Development Impact Fees



FINDING #3: Average development impact fees in WRCOG member jurisdictions are generally similar to those in San Bernardino County, though higher than those in Coachella Valley.

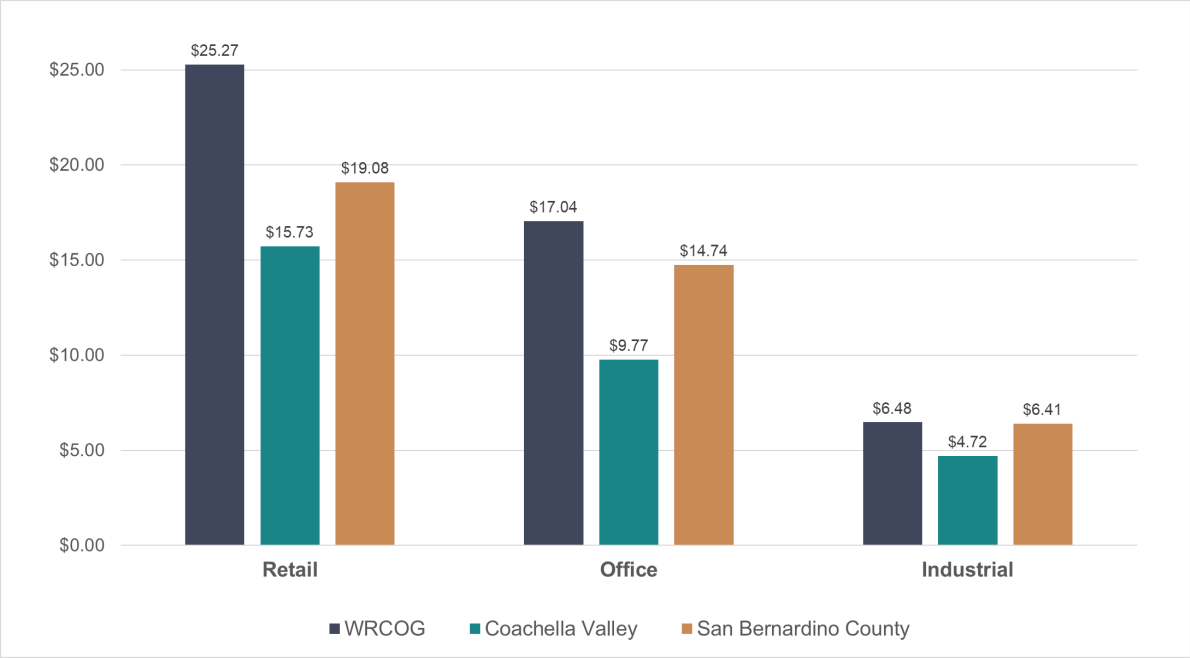
- **Average residential development impact fees for WRCOG jurisdictions are equal to or somewhat higher than the average of selected San Bernardino County cities and the average of selected Coachella Valley cities.** As seen in **Figure 3** below, when compared with the average of selected San Bernardino County cities (Fontana, Yucaipa, San Bernardino, Ontario, Chino, and Rialto) and Coachella Valley cities (Indio, Palm Desert, and Palm Springs), the WRCOG average is slightly higher than the San Bernadino County fees for single-family development and the same for multifamily development. Coachella Valley has substantially lower fees on both single-family and multifamily development.

Figure 3 Average Residential Development Impact Fees in Neighboring Jurisdictions



- **Average nonresidential development impact fees for WRCOG jurisdictions are either higher than or similar to the average of selected San Bernardino County cities for the different land use categories. The average of selected Coachella Valley cities is lower for all land use categories.** As seen in **Figure 4** below, comparing average nonresidential development impact fees in WRCOG to selected San Bernardino County cities shows that, on average, WRCOG fees are substantially higher for retail, somewhat higher for office development, and the same for industrial development. The selected Coachella Valley cities have the lowest average fees in all these nonresidential land uses.

Figure 4 Average Nonresidential Development Impact Fees in Neighboring Jurisdictions



FINDING #4: Average development impact fees among WRCOG member jurisdictions represent between 3.9 percent and 8.9 percent of total development costs/returns, with TUMF as a lower fraction of these proportions.

- **Total development impact fees represent between 3.9 percent and 8.9 percent of total development costs/returns for the prototype feasible projects.** As shown in **Table 2** below, development impact fees represent 8.9 percent of total development costs/returns for the prototype single-family and 7.9 percent of total costs/returns for multifamily developments. As is common, nonresidential development impact fees are lower as a percent of total development cost/return at 3.9 percent for industrial development and 4.7 percent for office development. For retail development, the fee level is 6.8 percent of total costs/returns, between that of residential uses and other nonresidential uses.

- **TUMF represents between 0.7 percent and 1.6 percent of total development costs/returns for the prototype feasible projects**. **While changes in the TUMF can add or subtract from total development costs, it would take a substantial change to increase/decrease overall development costs/returns by more than 1 percent.** As a proportion of overall development costs, TUMF represents 1.6 percent for both single-family and multifamily. For nonresidential uses, TUMF represents 0.7 percent of total development costs for office development, 1.0 percent for industrial development, and 1.4 percent for retail development. TUMF represents between 14.4 percent and 21.4 percent of total development impact fees with the highest ratios for retail and industrial development and lowest for office development, as seen previously in **Figure 2**.

Table 2 Development Impact Fees as % of Total Developments Cost/Returns*

Development Impact Fees	Single Family	Multifamily	Industrial	Retail	Office
TUMF	1.6%	1.6%	1.0%	1.4%	0.7%
Other Development Impact Fees	7.4%	6.2%	3.0%	5.3%	4.0%
Total Development Fees	**8.9%**	**7.9%**	**3.9%**	**6.8%**	**4.7%**

*Totals may not sum due to rounding.

Organization of Report

After this initial chapter, this report is divided into three other chapters and several appendices. **Chapter 2** describes the definitions, methodology, and results of the fee review and comparison for WRCOG and non-WRCOG jurisdictions. **Chapter 3** describes the TUMF and other development impact fees as components of overall estimated development costs and returns for each development prototypes evaluated. Finally, **Chapter 4** provides a brief conclusion on the purposes and goals of this and other development impact fee comparison studies.

The appendices provide a substantial amount of additional supporting detail and information, including:

- **APPENDIX A** provides detailed information on the Development Prototypes.
- **APPENDIX B** provides information on assumptions around location and corresponding service provider (e.g., water district, school district) assignments within each jurisdiction.
- **APPENDIX C** provides fee comparison summaries and detailed fee estimation information for each WRCOG jurisdiction/area and each land use category.

2. Development Impact Fee Review and Comparison

To accomplish the study purpose outlined in **Chapter 1**, development impact fees were estimated for each WRCOG jurisdictions as well as for selected neighboring jurisdictions in Coachella Valley and San Bernardino County. This required detailed research into fee schedules and calculation methodologies for each of these jurisdictions and associated service providers.

All the development impact fee estimates shown are based on fee schedules and information available at the time the research was conducted, primarily during the summer of 2022. EPS attempted to use the most current and up-to-date fee information to enhance comparability and create a representation of fee levels at a single moment in time. However, limited online availability of complete fee information in some jurisdictions and annual fee program update schedules (typically in July) in several jurisdictions added an additional challenge in pinpointing fees at a given moment in time. While every effort was made to ensure that fees are updated and comparable, the final estimates should be considered as planning-level approximations. The actual fees due for a particular project will depend on the specifications of the individual project and the fee schedule at the time of project application.

The first section below provides some key definitions. The subsequent section provides a detailed description of the fee research methodology. The final section provides findings concerning development impacts fees in WRCOG member jurisdictions and other jurisdictions studied. In general, the definitions and approach in this study are consistent with those in the 2018-19 Study to maintain consistency. In some situations, as noted below, refinements were necessary; for example, some water districts provided new information on the water meter assumptions to be used in fee calculations.

Study Definition

Development impact fees have become an increasingly used mechanism among California jurisdictions to require new development to fund the demands it places on local and regional infrastructure and capital facilities. As already noted, this report defines development impact fees as one-time fees collected for the purposes of funding infrastructure and capital facilities. This includes fees for the funding of a broad range of capital improvements, including water, sewer, storm drain, transportation, parks and recreation, public safety, and numerous other types of civic/community facilities. The majority of these fees are adopted under or consistent with the Mitigation Fee Act, though the analysis also includes other one-time capital facilities fees, such as parkland in-lieu fees under the Quimby Act and one-time charges through Community Facilities Districts or Benefit Assessment Districts among others.

This report does not include estimates of other types of fees charged by cities including permitting, planning, and processing fees that are charged on new development, and that do not fund capital facilities/infrastructure. These fees are typically associated with some sort of review

or administrative service provided by a jurisdiction and are typically more modest charges relative to development impact fees (most studies find them to be in the 5 to 15 percent range of development impact fees, between 1 and 2 percent of total development costs).

Some typical fee types that fall in this category of permitting, planning, and processing fees and that are standard across most development projects include:

- ***Building Permit Fee*** – This fee is charged in a various of ways. Jurisdictions charge based on development size, development valuation, or flat fee.
- ***Plan Check Fee*** – This fee is charged in a various of ways. Jurisdictions charge based on development size, development valuation, flat fee, percentage of the Building Permit Fee, or an hourly charge.
- ***California Building Standards Commission Fee*** – This fee is calculated by charging $1 per $25,000 of a development's valuation multiplied by the development's area.
- ***Strong Motion Instrumentation Program Fee*** – This fee is calculated by charging $13 per $100,000 of a development's valuation multiplied by the development's area.
- ***Technology Surcharge*** – This fee is charged differently by jurisdiction. Some jurisdictions charge based on the development's valuation and area, while other some jurisdictions choose to charge this as a percentage of the Building Permit Fee.

Many other fee types exist that are project-dependent and may be related to: various inspections, tentative tract/parcel maps, conditional use permits, plan amendments, annexations, and a wide variety of minor permits. These are typically charged through some combination of flat fee, deposit, and/or actual hourly costs incurred by planning or building department staffs.

Methodology

In order to provide a fee comparison that was as close as possible to an "apples-to-apples" comparison, WRCGOG staff and EPS identified the following parameters to guide the study:

- Jurisdictions to be studied.
- Land uses to be evaluated and associated development prototypes.
- Selection of service providers where there are multiple service providers in same jurisdiction.
- Categorization of the various types of development impact fees

This section describes these study parameters as well as the process of review with the jurisdictions/relevant service providers.

Selection of Jurisdictions for Prototype Analysis

Jurisdictions selected for this analysis include all eighteen (18) WRCOG member cities. WRCOG staff and the EPS also identified three additional unincorporated areas to study, the March JPA, Temescal Valley, and Winchester, all locations where substantial growth is occurring and/or planned within the WRCOG region.

A separate prototype was tested for each city within the WRCOG, as well as three unincorporated areas. Wherever possible, this analysis sought to use the same jurisdictional assumptions as in the 2018-19 Study. Where cities or unincorporated areas are served by multiple school districts, utility districts, and other subdistricts or assessment zones, assumptions were made around subarea locations, as discussed later in this Chapter.

Table 3 shows the cities/communities evaluated, including the twenty-one (21) WRCOG cities/communities and the nine (9) non-WRCOG comparison communities.

Table 3 Jurisdictions Included in Fee Study

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

Land Uses and Development Prototypes

Land Uses

Development impact fees are levied on a variety of residential and nonresidential land uses with variations for different uses and certain product types often built into the fee programs.

For the purposes of this study, five (5) common land use types that reflect typical development projects and are consistent with prior studies were selected: single-family residential, multifamily residential, retail, office, and "high-cube" industrial[2]

Development Prototype Selections

Within each of the five (5) general land use types selected, this study identifies a detailed development prototype meant to represent a typical development that may likely occur anywhere within the WRCOG region. Based on the characteristics of the protype, the development impact fees can be calculated for each jurisdiction based on applicable fee levels.

[2] "High Cube" is defined as warehouses/distribution centers with a minimum gross floor area of 200,000 sq. ft., minimum ceiling height of 24 feet, and minimum dock-high door loading ratio of 1 door per 10,000 sq. ft.

Choosing a representative prototype that is the same across all jurisdictions ensures that the fee comparison will be "apples-to-apples".

As a starting point, this study utilized the development prototypes used in the 2018-19 Study for each of the five land uses. EPS then reviewed recent data on new single-family, multifamily, office, retail, and industrial developments throughout WRCOG jurisdictions to confirm whether the prototypes still match common characteristics.

Information on multifamily, retail, office, and industrial developments built between 2017 and 2022 was reviewed as was information on single-family developments between 2019 and 2022. Single-family developments were reviewed over a shorter timeframe based on the much larger size of the dataset available (the number of homes built has been much greater relative to the number of other projects). From this data, EPS identified the median building/home size in square feet (and lot size for single-family developments) for each of the land use types and compared these against the prior prototypes.

Based on this analysis, EPS confirmed that all prototypes were still representative of typical projects in the WRCOG region and could be used in this study update. That said, the number of very large industrial projects has increased in recent years, along with the median project size. WRCOG Staff and EPS considered doubling the size of the industrial prototype to reflect this trend and focus specifically on high-cube development, however, it was ultimately decided that utilizing the same prototype as prior studies would be more valuable in providing a better comparison to fee levels in the 2018-19 Study. Furthermore, it was determined that the selected industrial prototype still reflects a common, high-cube industrial development, and the per square foot fee estimates can still be viewed as representative of typical development impact fees for industrial projects.

These prototypes used were also vetted and reviewed in 2018 by the WRCOG Planning Directors' Committee, Public Works Committee, and Technical Advisory Committee. The prototypes are summarized below along with images that represent examples projects with matching characteristics.

Single-Family Residential Development
50-unit residential subdivision; 2,700 square foot homes and 7,200 square foot lots

Example Prototype Single-Family Home, City of Riverside

Multifamily Residential Development
200-unit market-rate, 260,000 gross square foot apartment building

Example Prototype Multi-Family Development, City of Temecula

Retail Development
10,000-gross square foot retail building

Example Prototype Retail Development, City of Hemet

Office Development
20,000-gross square foot, Class A or Class B office building

Example Prototype Office Development, City of Hemet

Industrial Development
265,000 gross square foot "high cube" industrial building[3]

Example Prototype Industrial Development, City of Perris

In addition to building size, several other development characteristics can affect development impact fees. For example, many water facilities fees are tied to the number and size of meters

[3] "High cube" is defined as warehouses/distribution centers with a minimum gross floor area of 200,000 sq. ft., minimum ceiling height of 24 feet, and minimum dock-high door loading ratio of 1 door per 10,000 sq. ft.

associated with a new development. Other fees are tied to the gross site or lot area. EPS utilized a set of additional development prototypes assumptions detailed in **Appendix A**.

In general, and wherever possible, these assumptions were kept consistent with those used in the 2018-19 Study to improve comparability. The 2018-19 assumptions were developed based on a review of equivalent assumptions used in other regional fee studies (e.g., in the San Joaquin Valley and the Sacramento Valley) and refined through feedback from Western Riverside County service providers. In a few cases, fee calculation formulas required even more assumptions, such as estimates of water/sewage flow rates, which were specific to and provided by each service provider.

Where assumptions differed from 2018-19, changes primarily occurred where service providers provided updated information on their typical water meter assumptions or otherwise recommended changes. In certain cases, small deviations from listed prototype assumptions were used. For example, Jurupa Community Services District (JCSD) indicated that they typically permit new single-family homes with ¾" water pipes, which is slightly smaller than the prototype assumption of a 1" pipe, but ¾" is more representative of typical/comparable development fees (JCSD charges much higher fees for the larger 1" pipes, so developers rarely use them) and was used in the estimate.

Subarea Location Assumptions

In some cities, there are multiple service providers providing the same type of facilities in different parts of the city. For example, some cities are served by two or more distinct school districts, and many cities are served by two or more water and/or sewer districts. Therefore, an assumption around location within a subarea or zone associated with a given service provider had to be made in order to calculate each fee estimate. Where possible, these assumptions were kept consistent with those used in the 2018-19 Study, and which were developed based on the following factors:

- Suggestions from the City.
- Commonality of service provider between multiple cities; for example, Eastern Municipal Water District serves many cities.
- Scale/nature of service areas was also considered; for example, in some cases the majority of a City was served by one service provider and/or the majority of the growth areas were served by a particular service provider.
- In some cases, there was one service provider – e.g., the City – with different fees by City subarea (e.g., storm drain). In these cases, an effort was made to select the area expected to see the most growth based on discussions with City and WRCOG staff.
- In other cases, area-specific one-time fees/assessments/special taxes were in place to cover the costs of capital facilities in a new growth area. Where substantial in scale, these areas and the associated area fees were used in the fee comparison.

The location and corresponding service provider assignment assumptions are shown in **Appendix B**.

Fee Types and Categories

The primary focus of the fee research is to develop estimates of existing development impact fees charged on new development in the selected jurisdictions. While some fees are highly uniform, such as school district fees, there is substantial variation in the naming and types of facilities included in other development impact fees. The fee review sought to organize the full set of fees in a normalized set of categories to allow for best comparison. The key fee categories are as follows, which are consistent with the 2018-19 Study:

- **Regional Transportation Fees**. This category includes the respective TUMFs in Western Riverside County and Coachella Valley. TUMF in Western Riverside County is charged by WRCOG directly on the following bases:
    - **Single-Family Residential Development** - Per unit basis.
    - **Multifamily Residential Development** - Per unit basis.
    - **Retail Development** - Per gross building square foot basis. There is no fee on the first 3,000 square feet of an retail development.
    - **Industrial Development** - Per gross building square foot basis. The industrial fee includes a base fee on square footage up to 200,000 square feet and then, where the building meets the definition of a "high cube" building[4], an effective discount of 73 percent in the base fee for all additional development above 200,000 square feet.
    - **Office Development** – Per gross building square foot basis.

  This category also includes regional transportation impact fees in other subregions/jurisdictions where they are clearly called out. In San Bernardino County, cities are similarly required to contribute towards regional transportation funding, but not all of them distinguish between local and regional fees, in which case all transportation fees fall under the "Other City Fees" category.

- **Water and Sewer Fees**. All development locations studied were subject to some form of water and sewer development impact fees, whether a connection or capacity related charge, and these are combined into one category. These are typically collected either by a city or directly by a service provider

- **Other City Fees**. Beyond water/sewer fees (which are sometimes charged or collected by cities), jurisdictions frequently adopt a large number of additional citywide (or countywide)

[4] "High Cube" is defined as warehouses/distribution centers with a minimum gross floor area of 200,000 sq. ft., minimum ceiling height of 24 feet, and minimum dock-high door loading ratio of 1 door per 10,000 sq. ft.

fees used to fund various capital facilities. This category captures a wide variety of fees including: local transportation fees, parks and recreation facilities fees, Quimby Act in-lieu parkland fees, storm drain fees, public safety facilities fees, other civic/community facilities fees, and, on occasion, affordable housing, or public art in-lieu fees.

- **School Fees**. School facilities fees are governed by State law and therefore show more similarity between jurisdictions than most fees. Under State law, School Districts can charge specified Level 1 development impact fees. If School Districts go through the process of identifying and estimating required capital improvement costs, higher Level 2 fees can be charged to fund up to 50 percent of the School District's capital improvement costs. Only five school districts serving WRCOG jurisdictions charged Level 2 fees at the time of this study.
- **Other Area/Regional Fees**. A final category was developed to capture other fees not included in the above categories, typically other sub-regional fees or area-specific fees. For example, this category includes the Western Riverside County Multiple Species Habitat Conservation Plan mitigation fee, various Road and Bridge Benefit Districts (RBBD) fees, as well as other one-time community facilities district charges/fees for infrastructure/capital facilities applied in particular growth areas.

Fee Estimation and Review Process

For WRCOG member jurisdictions, EPS worked with WRCOG staff to complete the following data collection and review process to come up with each fee estimate:

- Confirm base assumptions including development prototype characteristics and set of service providers
- Use online sources to obtain development impact fee schedules from each jurisdiction or service provider.
- Identify and list development impact fees charged in jurisdiction and/or for each service provider.
- Where fee schedule provided insufficient information, review available mitigation fee nexus studies, ordinances, or resolutions, as applicable.
- Where sufficient data was not available or incomplete, contact City, County, or other service provider to obtain/confirm appropriate fee schedules.
- Develop initial estimates of each development impact fee for each development prototype.
- Review estimates in comparison with 2018 fee amounts to identify unusual or unexpected discrepancies or large changes in fee levels.
- Compile summary charts showing initial fee estimates and share with representatives of each jurisdiction and/or relevant service providers (e.g., Eastern Municipal Water District).
- Receive feedback, corrections, and refinements (and in some cases actual fee calculations).
- Refine fee estimates based on feedback and confirm changes with jurisdictions.

For non-WRCOG jurisdictions, the process followed was largely the same, except that fee estimate information was not reviewed by jurisdiction representatives.

Findings from WRCOG Member Jurisdiction Fee Review

General findings from fee research for the WRCOG region are summarized below.

On average, WRCOG TUMF residential fees represent close to 20 percent of total development impact fees for both single-family and multifamily development. Regional Transportation Fees (or TUMF) for both single-family TUMF and multifamily TUMF represent around 20 percent of the respective average total development impact fees, with the percentage for single-family development being slightly lower at 17.7% compared with 20.5% for multifamily development. However, within individual jurisdictions, fee totals vary widely – from $41,338 per unit to $82,711 per unit for single-family development and from $19,267 per unit to $47,196 per unit for multifamily development – and TUMF, which is the same across jurisdictions, therefore varies as a percent of total fees from 12.2 percent to 24.4 percent for single-family development and 13.9 percent to 34.2 percent for multifamily development (see **Table 4**, and **Figure 5**). Nominal average fee totals by fee category are shown in **Table 5.**

Table 4 TUMF as a Proportion of Total Fees

Item	Average	Range	
		Low	High
Single Family			
Total Fees per Unit	$57,078	$41,338	$82,711
TUMF as a % of Total Fees	17.7%	24.4%	12.2%
Multifamily			
Total Fees per Unit	$32,099	$19,267	$47,196
TUMF as a % of Total Fees	20.5%	34.2%	13.9%
Industrial			
Total Fees per SF	$6.48	$4.02	$10.98
TUMF as a % of Total Fees	24.2%	39.0%	14.3%
Retail			
Total Fees per SF	$25.27	$14.21	$39.61
TUMF as a % of Total Fees	21.4%	38.0%	13.6%
Office			
Total Fees per SF	$17.04	$8.30	$25.11
TUMF as a % of Total Fees	14.4%	29.5%	9.8%

* Average and ranges as shown encompass 21 jurisdiction, including 18 cities and the incorporated areas of Temescal Valley, Winchester, and March JPA.

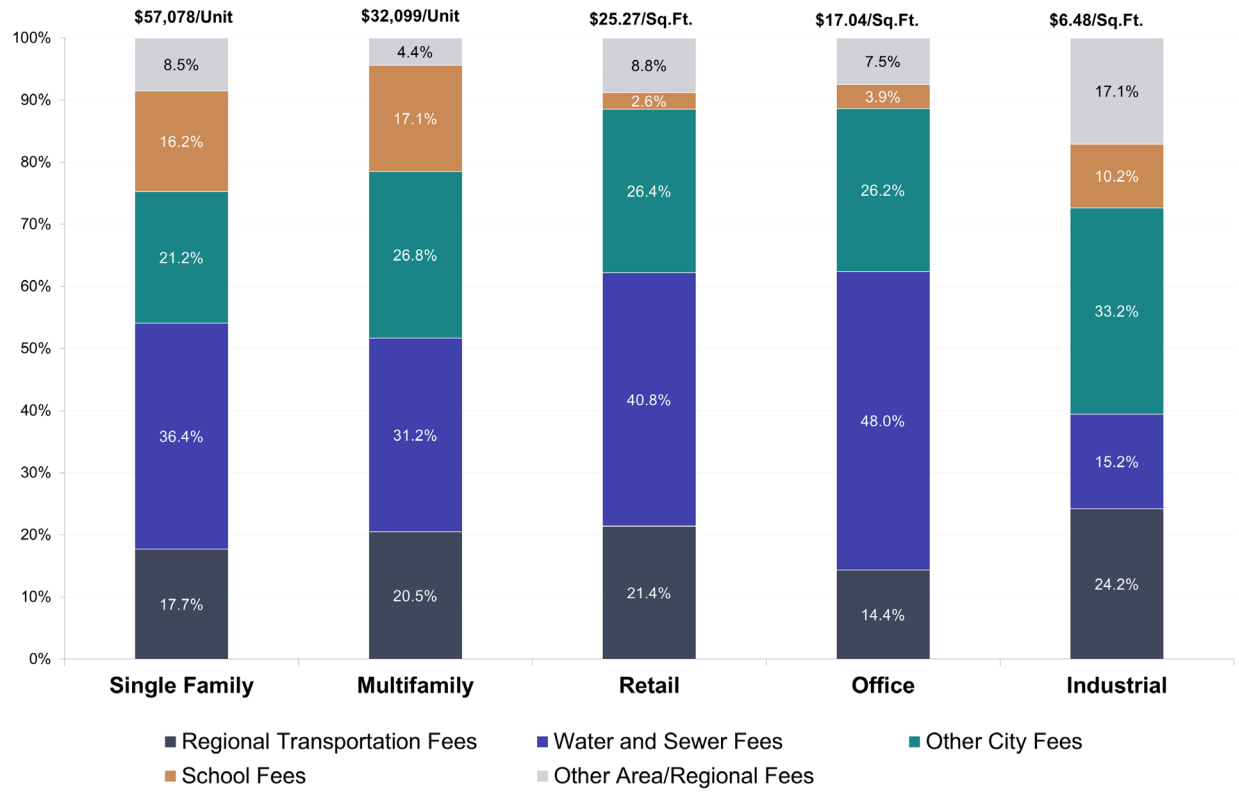
On average, WRCOG nonresidential TUMF shows more variation in level and in proportion of overall development impact fees (between 10 percent and 39 percent) than for the residential fee categories. Average total retail fees are about $25 per square foot, of which Regional Transportation Fees represent 21 percent. Due to the variation in the total fees on retail development among jurisdictions (from $14.21 to $39.26 per square foot), TUMF as a percent of total fees ranges from 13.6 percent to 38 percent. Average total industrial fees are substantially lower at $6.48 per square foot with a range from $4.08 per square foot to $10.98 per square foot. TUMF represents about 24 percent of the average total industrial fees, with a range from 14.3 percent to 39 percent. Total fees on office development fall in between the retail and industrial fees at an average of $17.04 per square foot and a range from $8.30 to $25.11 per square foot. The TUMF fee represents a relatively low 14.4 percent of average overall fees on office development with a range from 9.8 percent to 29.5 percent (see **Table 4**, **Table 5**, and **Figure 5**).

Nonresidential development impact fees show more variation in terms of the distribution between fee categories. Retail fees are dominated by water and sewer fees (40.8 percent) as well as Regional Transportation Fees (21.4 percent). Fees for industrial buildings, which are typically less intensive water users, are lower overall and more dominated on a proportionate basis by Other City fees (33.2 percent) and Regional Transportation Fees (24.2 percent). Office fees reflect a different pattern with substantial Water and Sewer Fees at 48 percent followed by Other City fees at 26.2 percent (see **Table 5** and **Figure 5**).

Table 5 Average Development Impact Fee Costs by Category in WRCOG Region

Fee	Single Family (per Unit)	Multifamily (per Unit)	Industrial (per Sq.Ft)	Retail (per Sq.Ft)	Office (per Sq.Ft)
Regional Transportation Fees	$10,104	$6,580	$1.57	$5.40	$2.45
Water and Sewer Fees	$20,772	$10,012	$0.99	$10.31	$8.19
Other City Fees	$12,075	$8,608	$2.15	$6.66	$4.47
School Fees	$9,275	$5,480	$0.66	$0.66	$0.66
Other Area/Regional Fees	$4,853	$1,418	$1.11	$2.23	$1.27
Total Fees	**$57,078**	**$32,099**	**$6.48**	**$25.27**	**$17.04**

Figure 5 Average Development Impact Fee Costs in WRCOG Jurisdictions



Unincorporated jurisdictions have slightly lower total fees as compared to the average for all WRCOG study jurisdictions. For single-family and multifamily residential uses, total fees for the unincorporated study areas were 85 percent and 95 percent, respectively, of the WRCOG average total fee amount for residential uses, as shown in **Table 6**. For nonresidential uses, total fees for unincorporated study areas were between 67 and 73 percent of the WRCOG average for nonresidential uses. Across land use types, this difference can be primarily attributed to fewer fees in the Other City Fees category.

Table 6 Unincorporated Jurisdictions/March JPA and Total Jurisdictions Comparisons

Item	Single Family (per Unit)	Multifamily (per Unit)	Industrial (per Sq.Ft)	Retail (per Sq.Ft)	Office (per Sq.Ft)
Unincorporated Jurisdictions and March JPA	$48,672	$30,341	$4.37	$17.61	$12.49
Total Jurisdictions	$57,078	$32,099	$6.48	$25.27	$17.04
Unincorporated Jurisdictions and March JPA / Total Jurisdiction	85%	95%	67%	70%	73%

Fee Level Changes since 2018-19 Study

Table 7 through **Table 11** provide additional detail on the changes in fee levels by fee category.

Table 7 Single Family 2018-2022 Fee Comparison

	Average Fee Per Dwelling Unit			
Single Family	**2018**	**2022**	**$ Change**	**% Change**
Regional Transportation Fees	$8,873	$10,104	$1,231.00	13.9%
Water and Sewer Fees	$17,070	$20,772	$3,702	21.7%
Other City Fees	$10,055	$12,075	$2,020	20.1%
School Fees	$8,785	$9,275	$489	5.6%
Other Area/Regional Fees	$2,686	$4,853	$2,167	80.7%
Total Fees	$47,470	$57,078	$9,609	20.2%

Table 8 Multifamily 2018-2022 Fee Comparison

	Average Fee Per Dwelling Unit			
Multifamily	**2018**	**2022**	**$ Change**	**% Change**
Regional Transportation Fees	$6,134	$6,580	$446	7.3%
Water and Sewer Fees	$9,636	$10,012	$376	3.9%
Other City Fees	$7,231	$8,608	$1,377	19.0%
School Fees	$5,191	$5,480	$289	5.6%
Other Area/Regional Fees	$1,512	$1,418	-$94	-6.2%
Total Fees	$29,706	$32,099	$2,393	8.1%

Table 9 Retail 2018-2022 Fee Comparison

	Average Fee Per Square Foot			
Retail	**2018**	**2022**	**$ Change**	**% Change**
Regional Transportation Fees	$7.50	$5.40	-$2.10	-27.9%
Water and Sewer Fees	$9.84	$10.31	$0.47	4.8%
Other City Fees	$4.75	$6.66	$1.91	40.3%
School Fees	$0.59	$0.66	$0.07	11.7%
Other Area/Regional Fees	$0.95	$2.23	$1.28	135.7%
Total Fees	$23.63	$25.27	$1.64	6.9%

Table 10 Office 2018-2022 Fee Comparison

	Average Fee Per Square Foot			
Office	**2018**	**2022**	**$ Change**	**% Change**
Regional Transportation Fees	$2.19	$2.45	$0.26	11.9%
Water and Sewer Fees	$7.34	$8.19	$0.84	11.5%
Other City Fees	$3.39	$4.47	$1.07	31.6%
School Fees	$0.59	$0.66	$0.07	11.7%
Other Area/Regional Fees	$0.54	$1.27	$0.73	135.8%
Total Fees	$14.06	$17.04	$2.98	21.2%

Table 11 Industrial 2018-2022 Fee Comparison

Industrial	Average Fee Per Square Foot			
	2018	2022	$ Change	% Change
Regional Transportation Fees	$1.45	$1.57	$0.11	7.9%
Water and Sewer Fees	$1.04	$0.99	-$0.05	-4.7%
Other City Fees	$1.65	$2.15	$0.50	30.1%
School Fees	$0.59	$0.66	$0.07	11.7%
Other Area/Regional Fees	$0.47	$1.11	$0.64	137.1%
Total Fees	$5.20	$6.48	$1.27	24.5%

Findings from Fee Comparison with Non-WRCOG Jurisdictions

Figure 6 through **Figure 9** compare the average overall WRCOG development impact fees (and their proportionate distributions between the five major fee categories) with other cities/groups of cities for all five land uses/development prototypes studied. The comparative cities/subregions include selected jurisdictions in the Coachella Valley and San Bernardino County.

Average development impact fees for WRCOG jurisdictions are equal to or somewhat higher than the average of selected San Bernardino County cities. When compared with the average of selected San Bernardino County cities (Fontana, Yucaipa, San Bernardino, Ontario, Chino, and Rialto), the WRCOG average is higher for all land uses, and roughly equivalent for multifamily and industrial. New development in San Bernardino County cities is required to make payments towards regional transportation infrastructure, though the distinction between the regional and local transportation fees is often unclear. Overall, the combination of Regional Transportation Fees, Other City fees, and Area/Other Regional fees is lower in San Bernardino County than in Riverside County for all land uses.

The average development impact fees for selected Coachella Valley cities are lower than the WRCOG averages for all land uses. The average for selected Coachella Valley cities (Indio, Palm Desert, and Palm Springs) is substantially lower for single-family, multifamily, office, and retail development, and modestly lower industrial development. In the case of residential uses, this is primarily due to lower Regional Transportation Fees and Other City Fees. For nonresidential uses, this is more generally attributable to lower Water and Sewer Fees and lower Other Area/Regional Fees.

Figure 6 Average Single-Family Development Impact Fee Costs and Proportions in Neighboring Jurisdictions

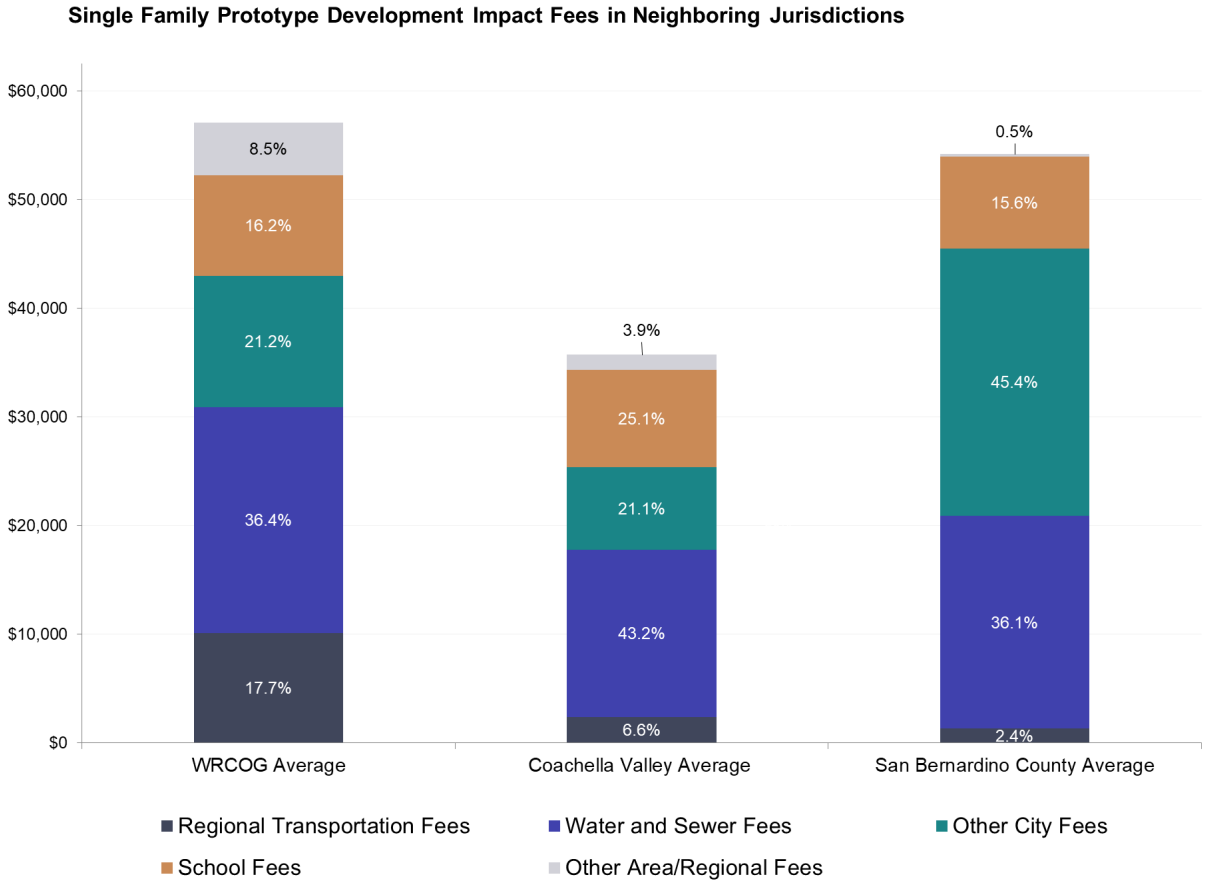


Figure 7 Average Multifamily Development Impact Fee Costs and Proportions in Neighboring Jurisdictions

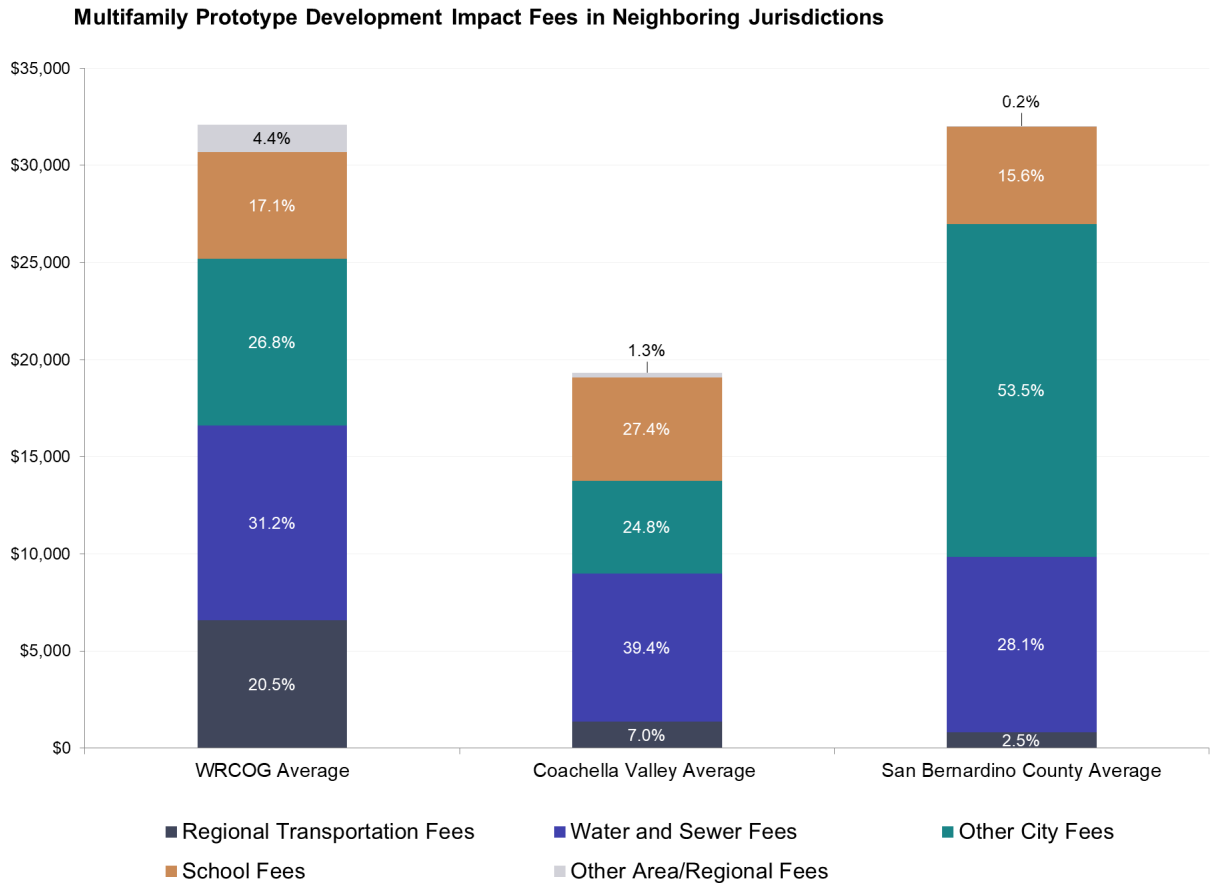


Figure 8 Average Retail Development Impact Fee Costs and Proportions in Neighboring Jurisdictions

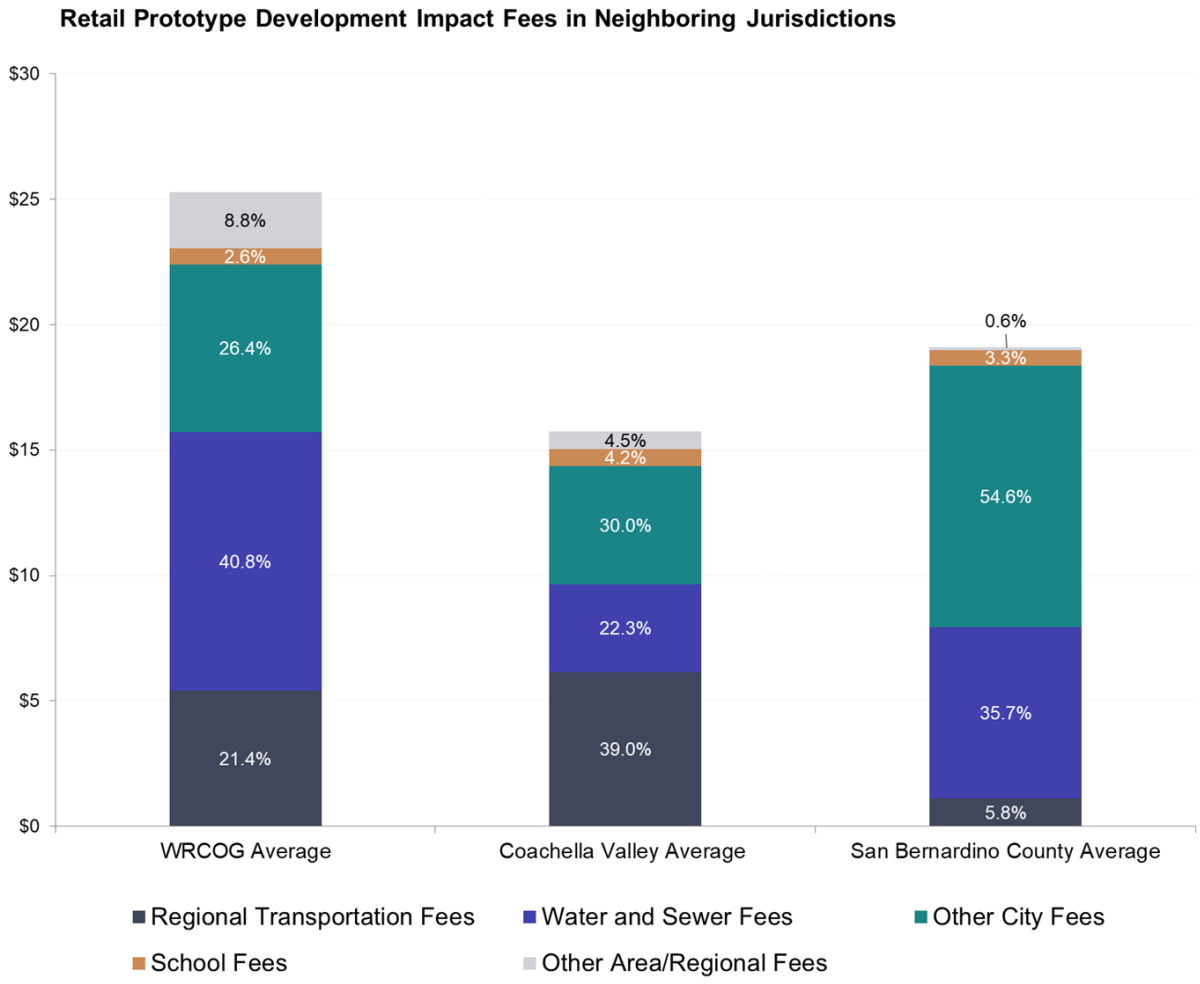


Figure 9 Average Office Development Impact Fee Costs and Proportions in Neighboring Jurisdictions

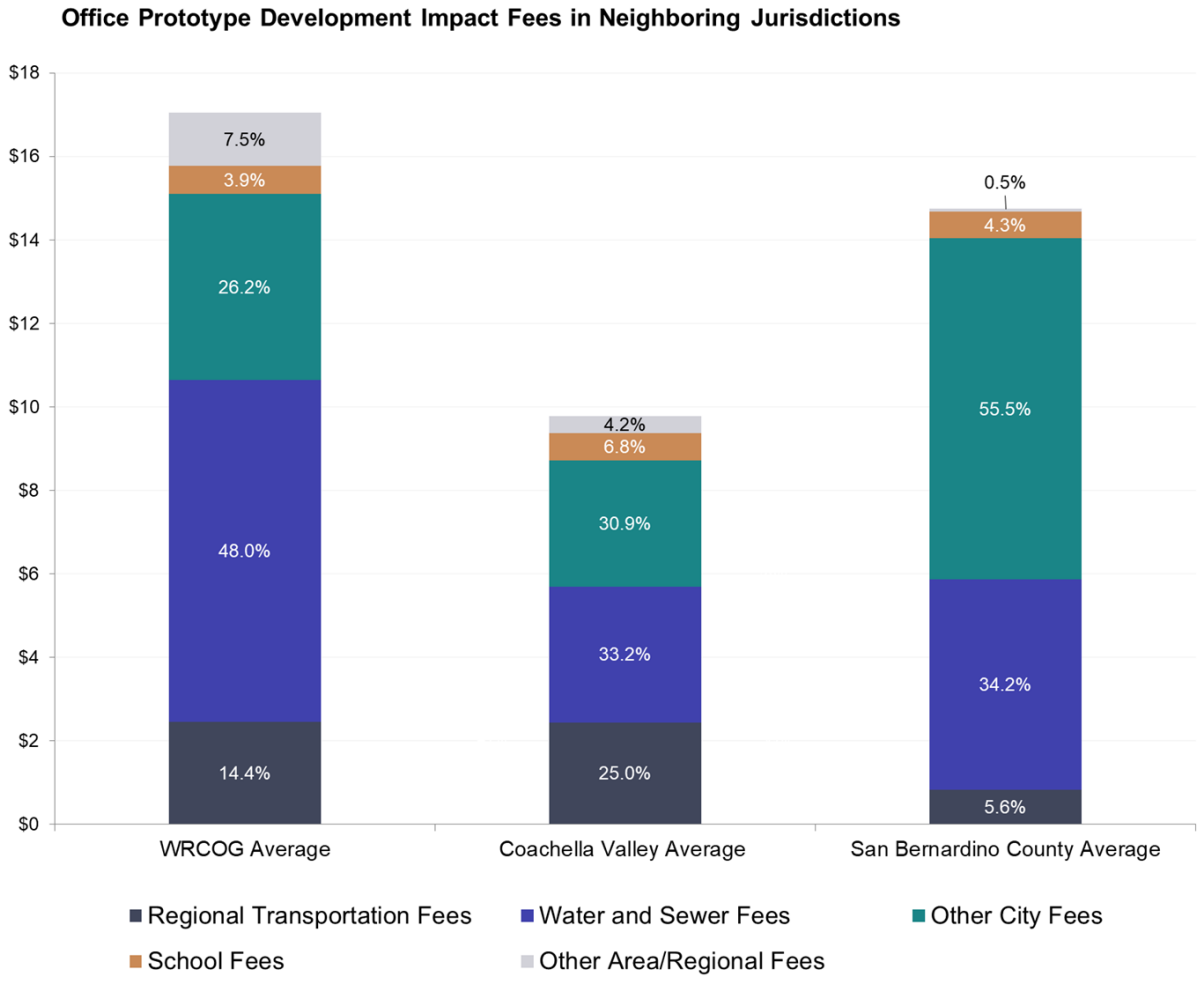
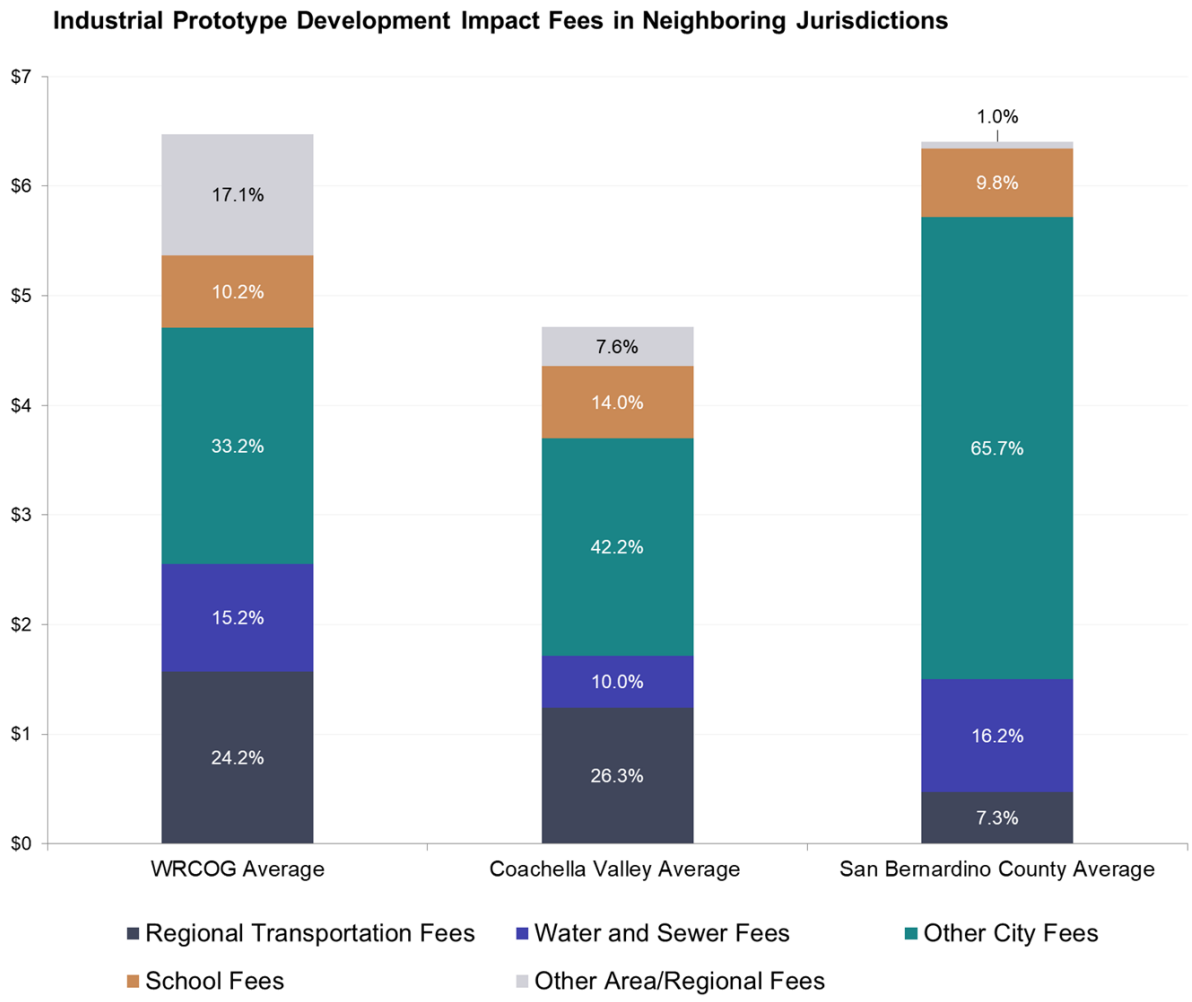


Figure 10 Average Industrial Development Impact Fee Costs and Proportions in Neighboring Jurisdictions



3. Development Impact Fees and Development Costs

This chapter evaluates development impact fees, including the TUMF, in Western Riverside County in the context of overall development costs. The first section below provides an overview of the complex factors that influence decisions to develop, one of which is development cost. The subsequent section describes the methodology used to estimate development costs for different land use types. The next section provides conclusions concerning the level of fees and TUMF in the context of overall costs.

It is critical to note that this analysis uses generalized development prototypes and development cost and return estimates to draw overall conclusions about development impact fees relative to development costs. This analysis does not represent a project-specific analysis as the development program, development costs, and returns associated with any individual project can vary widely. No conclusions concerning the feasibility of any specific project should be drawn from this analysis.

Economics of Development

Key Factors in New Development

The drivers of growth and development are complex and multifaceted, and market conditions influenced by broader global, national, and regional economic conditions are typically the strongest factor. Though regional and local policies (including the choice of whether and how much to charge in impact fees) will not be sufficient to attract or capture development when market conditions are poor, they can influence the feasibility and pace of development during more moderate or strong market conditions. Market strength is typically reflected by the price point or lease rate that users/homeowners/renters are willing to pay.

Developers (whether looking to do speculative development or to provide build-to-suit developments for larger users) will review a number of conditions before determining whether to move forward with site acquisition/optioning and pre-development activities. Factors will include: (1) the availability of appropriate sites, (2) the availability of/proximity to/quality of infrastructure/facilities (e.g., proximity to transportation corridors, schools, and other amenities), (3) local market strength (achievable sales prices/lease rates) in the context of competitive supply, (4) expected development costs (including land acquisition costs, construction materials and labor costs, the availability and costs of financing, and development impact fees, among others), and, (5) where sites are unentitled, the entitlement risk.

When the strength of market demand for new residential and nonresidential development is sufficient, it typically spurs more detailed review and evaluation of sites by developers. Even in cases where market factors look strong, there is a complex balance between development revenues, development costs, land costs, and required developer returns that must be achieved

to catalyze new development. Modest fluctuations in development revenues (i.e., market prices), development costs (materials, labor costs, etc.), and landowner expectations (perceived value of land) can all affect development decisions as can assessments of entitlement risk and complexity, where entitlements are still required.

While many of these factors, such as the price of steel, the complexities of CEQA, the market for labor, and land values, are outside of the control of local public agencies, development impact fees represent one factor that can be adjusted at the local level. That said, given limited sources of revenue for local jurisdictions, there are policy tradeoffs to not charging development impact fees, especially as they can have long-term influence on other factors that influence market demand, including local infrastructure/amenities, transportation connections to job centers, and school district quality.

Methodology

Every development project is different and will have different development costs. For the purposes of this analysis, EPS considered the same set of land use prototypes as for the fee review and comparison and developed an illustrative estimate of the full set of development costs. The steps taken in developing the development cost estimates are described in the subsections below.

Land Uses Evaluated

The development cost evaluation was completed for the same development prototypes as used in the estimation of development impact fees described in **Chapter 2**:

- Residential Single-family Development – Single-family homes in a 50-unit subdivision
- Residential Multifamily Development – Multifamily apartments in a 200-unit building
- Industrial Development – Industrial space in a 265,000 square foot "high cube" building
- Office Development – Office space in a 20,000 square foot office building
- Retail Development – Retail space in a 10,000 square foot retail building

Development Cost Estimates

An illustrative static pro forma structure was developed. The pro forma incorporated different categories of development costs (see below). It also considered potential land values/acquisition costs based on a residual land value approach that considered potential development values, subtracted direct and indirect development costs and developer return requirements, and indicated a potential residual land value. The development values were refined based on available market data ranges and the need to generate a land value of an appropriate level to support land acquisition and new development. Available information on land transactions was also reviewed. As noted above, this analysis is designed to provide overall insights on general economic relationships and does not draw conclusions concerning the feasibility of individual projects.

It is also important to note that the pro formas developed were specifically configured to represent a potentially feasible set of relationships, in terms of revenues, costs, and returns. This allows for consideration of development impact fees in the context of illustrative projects that would make sense to undertake. To the extent, development costs/returns are higher than those indicated – a reality which could certainly be true for many projects – development values would need to be higher or feasibility is not likely to be attained. To the extent, this is true, development impact fees as a proportion of development costs/returns would be lower than those shown.

In this study, major cost categories were revised from the 2018-19 Study, including direct construction costs, land costs, and development impact fees.

- **Direct Construction Costs** – Site Work/Improvements and Vertical Construction Costs. Estimates were taken from Marshal & Swift (a construction cost data provider) estimates, available pro formas, and information from developers where available.
- **Indirect Costs** – Architecture and Engineering Costs, Sales and Marketing, Financing, Development Impact Fee, and other soft costs. Estimates were taken from Marshal & Swift, the WRCOG Fee Comparison, available pro formas, and information from developers where available.
- **Developer Return Requirements** – Developer return requirements were set to be equal to between 9 and 10 percent of development value for all land uses. This represented between 10 and 20 percent of direct and indirect construction costs consistent with typical developer hurdle returns.
- **Land Costs** – Land costs were based on the estimated residual land values when costs and returns were subtracted from estimates of development value and/or information on actual land transactions. Land costs as a percent of development value were reviewed to make sure they fell within a viable range.

Results

As context for the description of the results of this analysis, it is worth repeating that there will be considerable variation throughout Western Riverside County in terms of different development cost components and overall development costs. On an average/illustrative basis, overall development costs included in this analysis may be conservative as they do not include union labor costs and may be conservative with regard to entitlement costs. Given that the focus of this analysis is on the relationship between development impact fees and total development costs, an underestimate in total development costs would mean that the proportionate significance of impact fees has been overestimated.

It is again important to note that the analysis shown here is not an evaluation of development feasibility. Such an analysis would require a more-location specific analysis and is highly dependent on site characteristics, local market conditions, and site land values, among other factors.

Table 12 summarizes the estimated development costs/returns on a per residential unit and per Nonresidential building square foot basis. **Table 13** converts the cost estimates into percent allocations out of the total development/return. It should be noted that the total cost/return (equivalent to the 100 percent) equals the sum of direct and indirect costs, estimated land costs, and required development return. This total cost/return is equivalent to the sales prices/capitalized building value a developer would need to command to cover all costs/return requirements. To the extent, actual costs are higher (e.g., higher land costs or construction costs), the achievable sales prices/capitalized lease rates would also need to be higher.

Table 12 Average Development Cost and Return Estimates by Development Prototype

Development Costs, Land Values, and Return	Single Family (per Unit)	Multifamily (per Unit)	Industrial (per Sq.Ft)	Retail (per Sq.Ft)	Office (per Sq.Ft)
DIRECT					
Basic Site Work/ Lot Improveme	$30,000	$9,257	$11.50	$25.00	$14.29
Direct Construction Cost	$302,400	$220,350	$80.00	$158.00	$203.00
Hard Cost Total	$332,400	$229,607	$91.50	$183.00	$217.29
INDIRECT					
TUMF	$10,104	$6,580	$1.57	$5.40	$2.45
Other Development Impact Fees	$46,974	$25,519	$4.91	$19.87	$14.59
Other Soft Costs	$74,420	$53,791	$18.30	$35.46	$44.34
Soft Cost Total	$131,498	$85,890	$24.78	$60.73	$61.38
Total Direct and Indirect Costs	**$463,898**	**$315,497**	**$116.28**	**$243.73**	**$278.66**
Developer Return Requirement	$63,800	$40,863	$15.00	$34.61	$38.18
Land Value	$110,302	$52,269	$33.80	$95.93	$45.70
TOTAL COST/RETURN	**$638,000**	**$408,629**	**$165.08**	**$374.27**	**$362.54**

* Assumes generally feasible market conditions (i.e. ability to generate developer return and positive land value).

Table 13 Proportional Development Costs and Returns by Development Prototype

Development Costs, Land Values, and Return	Single Family	Multifamily	Industrial	Retail	Office
DIRECT					
Basic Site Work/ Lot Improveme	4.7%	2.3%	7.0%	6.7%	3.9%
Direct Construction Cost	47.4%	53.9%	48.5%	42.2%	56.0%
Hard Cost Total	52.1%	56.2%	55.4%	48.9%	59.9%
INDIRECT					
TUMF	1.6%	1.6%	1.0%	1.4%	0.7%
Other Development Impact Fees	7.4%	6.2%	3.0%	5.3%	4.0%
Other Soft Costs	11.7%	13.2%	11.1%	9.5%	12.2%
Soft Cost Total	20.6%	21.0%	15.0%	16.2%	16.9%
Total Direct and Indirect Costs	**72.7%**	**77.2%**	**70.4%**	**65.1%**	**76.9%**
Developer Return Requirement	10.0%	10.0%	9.1%	9.2%	10.5%
Land Value	17.3%	12.8%	20.5%	25.6%	12.6%
TOTAL COST/RETURN (%)	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

* Assumes generally feasible market conditions (i.e. ability to generate developer return and positive land value).

Key findings include:

- **Direct construction costs represent the largest proportion of total development costs/returns, typically followed by other land costs, other soft costs (collectively), developer returns, and development impact fees.** Unsurprisingly, direct construction costs are the largest cost, representing between 42.2 percent and 56 percent of total costs/returns for the prototypes evaluated. Land costs are likely to be most variable, and depending on circumstance, range from 12.6 percent to 25.6 percent for the prototypes. Other soft costs collectively are the next highest component, though their subcomponents (not shown), such as sales and marketing, architecture and engineering, financing costs, are smaller. The expected hurdle developer return at 9 to 10 percent is the next highest factor. The range for total development impact fees is below all these other ranges, though when indirect costs are considered individually development impact fees are larger than other subcomponents.

- **Total development impact fees represent between 4 percent and 8.9 percent of total development costs/returns for the prototype feasible projects.** Total development impact fees represent 8.9 percent and 7.9 percent of total development costs/returns respectively for single-family and multifamily developments, respectively. As discussed in Chapter 2, these capital facilities fees included water and sewer fees, school district fees, other local jurisdiction fees, TUMF, and other agency/subarea fees. As is common, nonresidential development impact fees are lower as a percent though show a

significant range from 4 percent for industrial development, to 4.7 percent for office development, to 6.8 percent for retail development. Since the 2018-19 Study, the percent of costs that the development impact fees represent has seen a minimal change. The largest change was seen in the proportion of fees on multifamily projects, which decreased by 1 percentage point.

- **TUMF represent between 0.7 percent and 1.6 percent of total development costs/returns for the prototype feasible projects**. As a proportion of overall development costs, TUMF represent 1.6 percent total residential development costs for both single-family and multifamily. For nonresidential uses there is greater variation with TUMF representing 0.7 percent of total costs for office development, 1 percent of total costs for industrial development, and 1.4 percent of total costs for retail development. TUMF represent between 14.4 percent and 24.2 percent of total development impact fees, on average, as indicated in the Fee Comparison with the highest ratios for industrial development and lowest for office development.

4. Conclusions

The Western Riverside Council of Governments (WRCOG) commissioned this and prior studies to provide increased regional understanding of development impact fees on new development in Western Riverside County. It is common practice for new and updated Development Impact Fee Nexus Studies to be accompanied by some consideration of impact fees in neighboring and peer communities and, less frequently, by consideration of impact fees in the context of overall development costs and economics. This is true where individual jurisdictions are introducing/updating a single development impact fee category (e.g. transportation or parks) as well as when undertaking a more comprehensive update to multiple fee categories.

Following the first study in 2016, WRCOG recommended that this report and study be updated periodically to ensure the regional understanding of the region's impact fees remains current in the context of: (1) frequent adjustments to fee levels by individual jurisdictions, (2) changing development cost and economic conditions, and (3) less frequent, but highly significant changes in State law that affect the use and availability of other public financing tools.

The development of this updated study follows that recommendation and represents the second effort to bring the original study up to date.

APPENDIX A:

Development Prototypes

Single Family Prototype

- Reflects median home size for Western Riverside County home sales since 2014

Product Type:	Single Family Detached Unit	
Development Type:	Residential Subdivision	
No. of Acres:	10	Acres
No. of Units:	50	Units
Building Sq.Ft.	2,700	Sq.Ft.
No. of Bedrooms:	4	
No. of Bathrooms:	3	
Garage Space (Sq.Ft):	500	Sq.Ft.
Habitable Space (Sq.Ft:)	2,200	Sq.Ft.
Lot Size:	7,200	Sq.Ft.
Density:	5	DU/AC
Lot Width:	60	Ft.
Lot Depth:	120	Ft.
Total Lot Dimensions (Sq.Ft.):	7,200	Sq.Ft.
Water Meter Size	One 1	Inch Meter

Example Prototype Home, City of Riverside

Multi-Family Prototype

- Reflects median building size for multi-family developments since 2010

Example Prototype Multi-Family Development, City of Temecula

Product Type:	Multi Family Apartment Unit	
Development Type:	Multi Family Apartment Building	
Number of Acres:	10	Acres
Apartment Building Square Feet:	260,000	Sq.Ft.
FAR:	0.60	
Number of Stories:	3	
Dwelling Units:	200	
Density:	20.0	DU/AC
Average Unit Size:	1,100	
Water Meter Sizes*:	Eight 2 inch Meters	
Roof Area:	86,667	Sq.Ft.
Lot Width:	515.0	Ft.
Lot Depth:	846.6	Ft.

*Note: Assumption is for analytical simplicity. Different assumptions are used where recommended by individual jurisdictions.

Industrial Prototype

- Reflects median building size for industrial developments since 2010

Product Type:	Warehouse/ Distribution	
Criteria:	Meets criteria for High-Cube	
No. of Acres:	15.2	Acres
Rentable Square Feet:	265,000	Sq.Ft.
FAR:	0.4	
Water Meter Sizes:	One 2	Inch Meter
Roof Area:	265,000	Sq.Ft.
Lot Width:	813.7	Ft.
Lot Depth:	813.7	Ft.

Example Prototype Industrial Development, City of Perris

Retail Prototype

- Reflects building size for retail developments since 2010

Example Prototype Retail Development, City of Hemet

Product Type:	Retail Building
No. of Acres:	1.15 Acres
Rentable Square Feet:	10,000 Sq.Ft.
FAR:	0.2
No. of Stories:	1
Water Meter Sizes:	One 2 Inch Meter
Roof Area:	10,000 Sq.Ft.
Lot Width:	223.6 Ft.
Lot Depth:	223.6 Ft.

Office Prototype

- Reflects median building size for office developments since 2010

Product Type:	Office Building	
Number of Acres:	1.3	Acres
Rentable Square Feet:	20,000	Sq.Ft.
FAR:	0.35	
No. of Stories:	2	
Water Meter Sizes:	One 2	Inch Meter
Roof Area:	10,000	Sq.Ft.
Lot Width:	239.0	Ft.
Lot Depth:	239.0	Ft.

Example Prototype Office Development, City of Hemet

APPENDIX B:

Location & Service Provider Assumptions

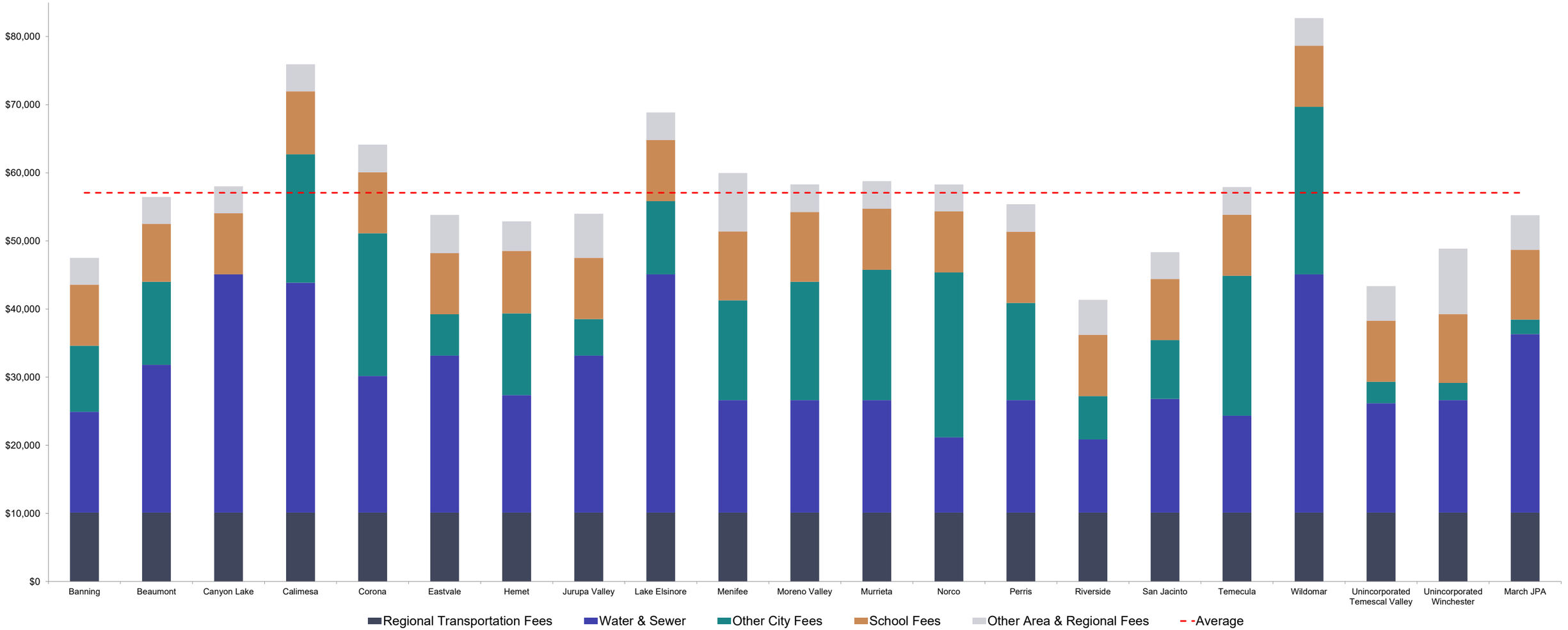
Study Location and Service Provider Assumptions

	City / Location	School District	Water District	Sewer District
Western Riverside Council of Governments				
1	Banning	Banning Unified School District	City of Banning	City of Banning
2	Beaumont	Beaumont Unified School District	Beaumont-Cherry Valley Water District	City of Beaumont Sewer & Refuse Service
3	Calimesa	Yucaipa- Calimesa Joint Unified School District	Yucaipa Valley Water District	Yucaipa Valley Water District
4	Canyon Lake	Lake Elsinore Unified School District	Elsinore Valley Municipal Water District	Elsinore Valley Municipal Water District
5	Corona	Corona-Norco Unified School District	City of Corona	City of Corona
6	Eastvale	Corona-Norco Unified School District	Jurupa Community Services District (JCSD)	Jurupa Community Services District (JCSD)
7	Hemet	Hemet Unified School District	Eastern Municipal Water District (EMWD)	Eastern Municipal Water District (EMWD)
8	Jurupa Valley	Jurupa Unified School District	Jurupa Community Services District (JCSD)	Jurupa Community Services District (JCSD)
9	Lake Elsinore	Lake Elsinore Unified School District	Elsinore Valley Municipal Water District	Elsinore Valley Municipal Water District
10	Menifee	Menifee Union (Elementary) & Perris Union (High)	Eastern Municipal Water District (EMWD)	Eastern Municipal Water District (EMWD)
11	Moreno Valley	Moreno Valley Unified School District	Eastern Municipal Water District (EMWD)	Eastern Municipal Water District (EMWD)
12	Murrieta	Murrieta Valley Unified School District	Eastern Municipal Water District (EMWD)	Eastern Municipal Water District (EMWD)
13	Norco	Corona-Norco Unified School District	City of Norco	City of Norco
14	Perris	Perris Union High & Perris Union Elementary	Eastern Municipal Water District (EMWD)	Eastern Municipal Water District
15	Riverside	Riverside Unified School District	City of Riverside	City of Riverside
16	San Jacinto	San Jacinto Unified School District	Eastern Municipal Water District	Eastern Municipal Water District (EMWD)
17	Temecula	Temecula Valley Unified School District	Rancho California Water District	Eastern Municipal Water District (EMWD)
18	Wildomar	Lake Elsinore Unified School District	Elsinore Valley Municipal Water District	Elsinore Valley Municipal Water District
19	Unincorporated Temescal Valley	Corona-Norco Unified School District	Temescal Valley Water District	Temescal Valley Water District
20	Unincorporated Winchester	Menifee Union (Elementary) & Perris Union (High)	Eastern Municipal Water District (EMWD)	Eastern Municipal Water District (EMWD)
21	March JPA	Moreno Valley Unified School District	Western Municipal Water District (WMWD)	Western Municipal Water District (WMWD)
San Bernardino County				
1	Fontana	Fontana unified School District	Fontana Water Company	City of Fontana
2	Yucaipa	Yucaipa- Calimesa Joint Unified School District	Yucaipa Valley Water District	Yucaipa Valley Water District
3	San Bernardino	San Bernadino City Unified School District	East Valley Water District	San Bernardino Municipal Water Department
4	Ontario	Ontario-Montclier School District	Inland Empire Utilities Agency	Inland Empire Utilities Agency (formerly Ontario Municipal Utilities Company)
5	Chino	Chino Valley Unified School District	Inland Empire Utilities Agency	Inland Empire Utilities Agency (formerly City of Chino Public Works Department)
6	Rialto	Rialto Unified School District	Rialto Water Services	Rialto Water Services
Coachella Valley Association of Governments				
1	Indio	Desert Sands Unified School District	Indio Water Authority	Valley Sanitary District
2	Palm Desert	Desert Sands Unified School District	Coachella Valley Water District	Coachella Valley Water District
3	Palm Spring	Palm Springs Unified School District	Desert Water Agency	Desert Water Agency

APPENDIX C:

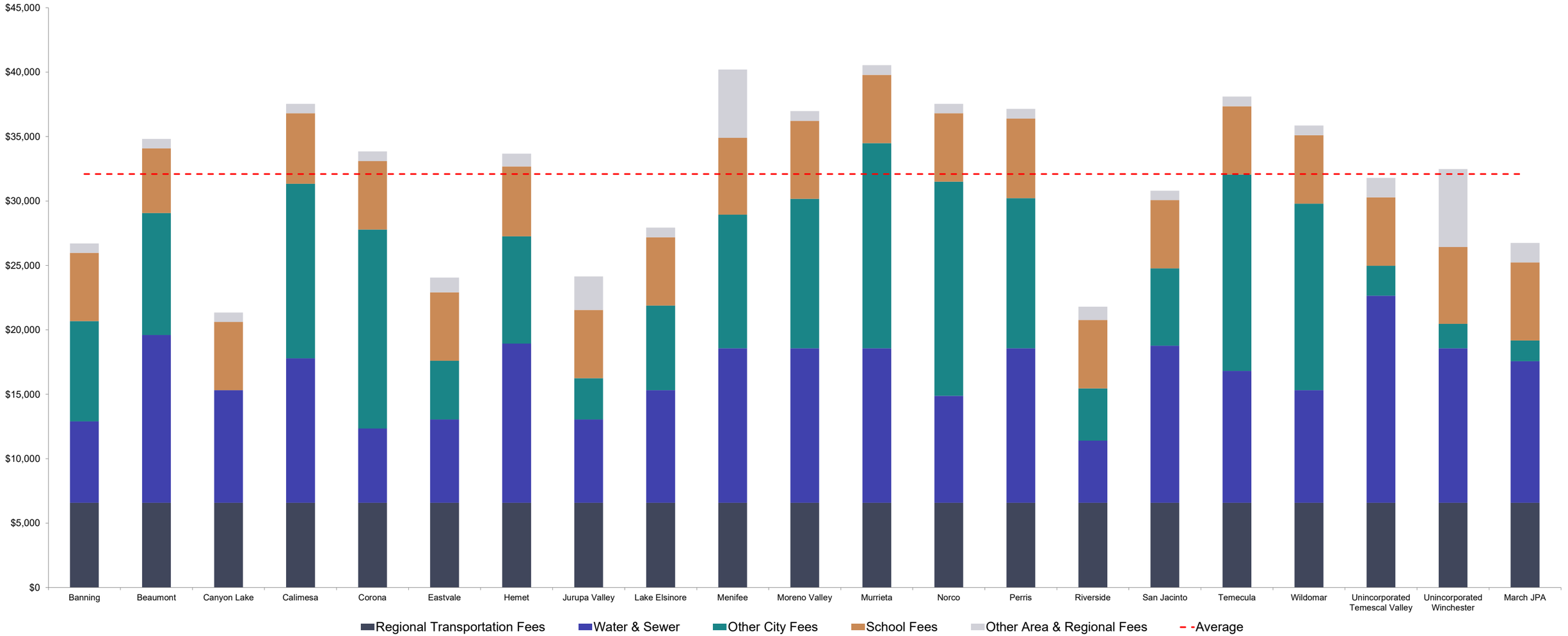
Development Impact Fee Comparison by WRCOG Jurisdictions

Single Family Prototype
Development Fees by Jurisdiction (Per Unit)



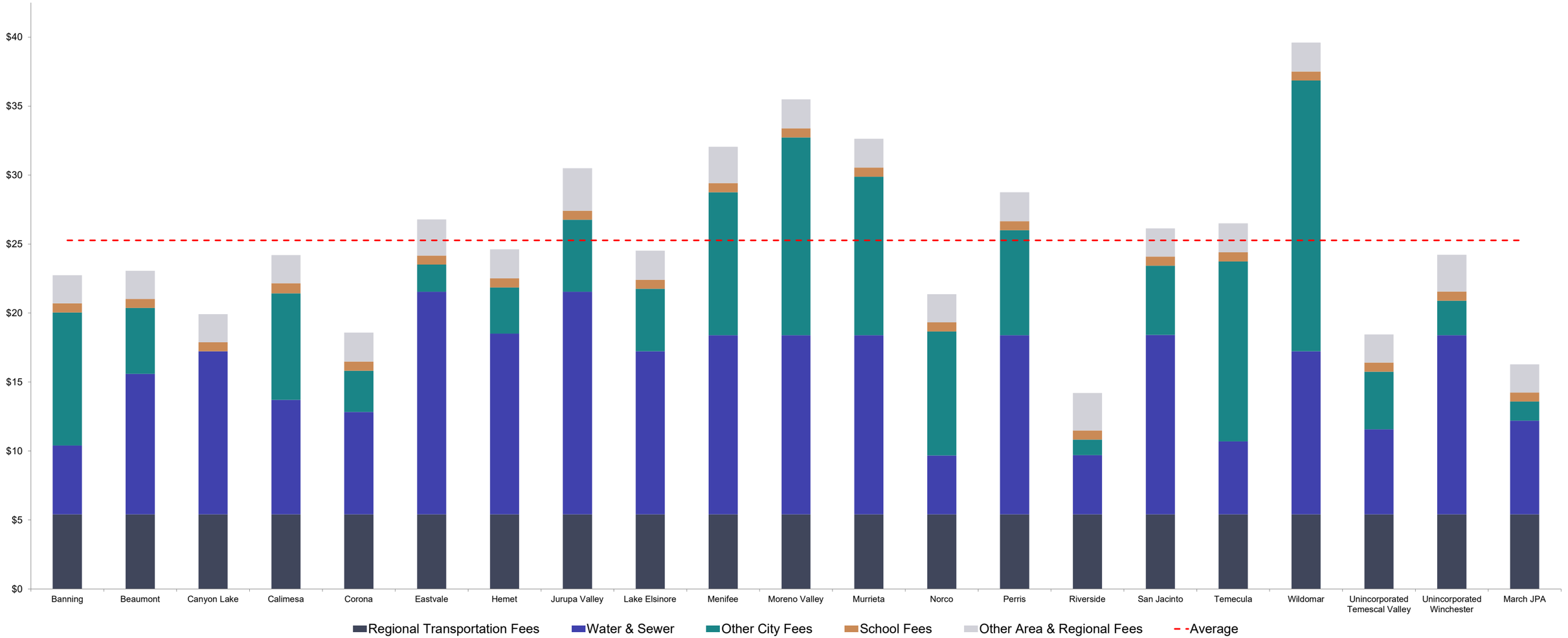
Fee estimates for specified development prototypes as of 2022. Actual fees will vary based on project specifics and any fee updates.
"Other Area Fees/ Regional Fees" include, but are not limited to, roads and bridges, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation fees.

Multifamily Prototype
Development Fees by Jurisdiction (Per Unit)



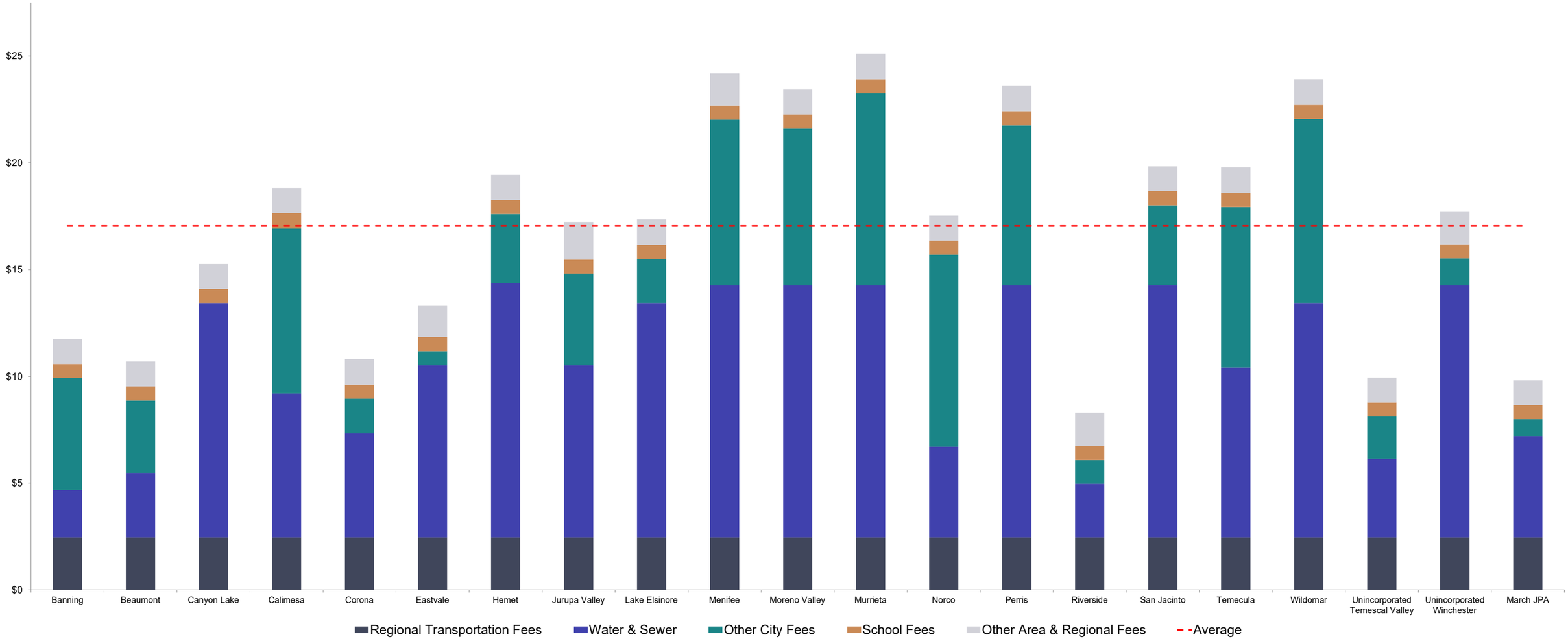
Fee estimates for specified development prototypes as of 2022. Actual fees will vary based on project specifics and any fee updates.
"Other Area Fees/ Regional Fees" include, but are not limited to, roads and bridges, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation fees.

Retail Prototype
Development Fees by Jurisdiction (Per Square Foot)



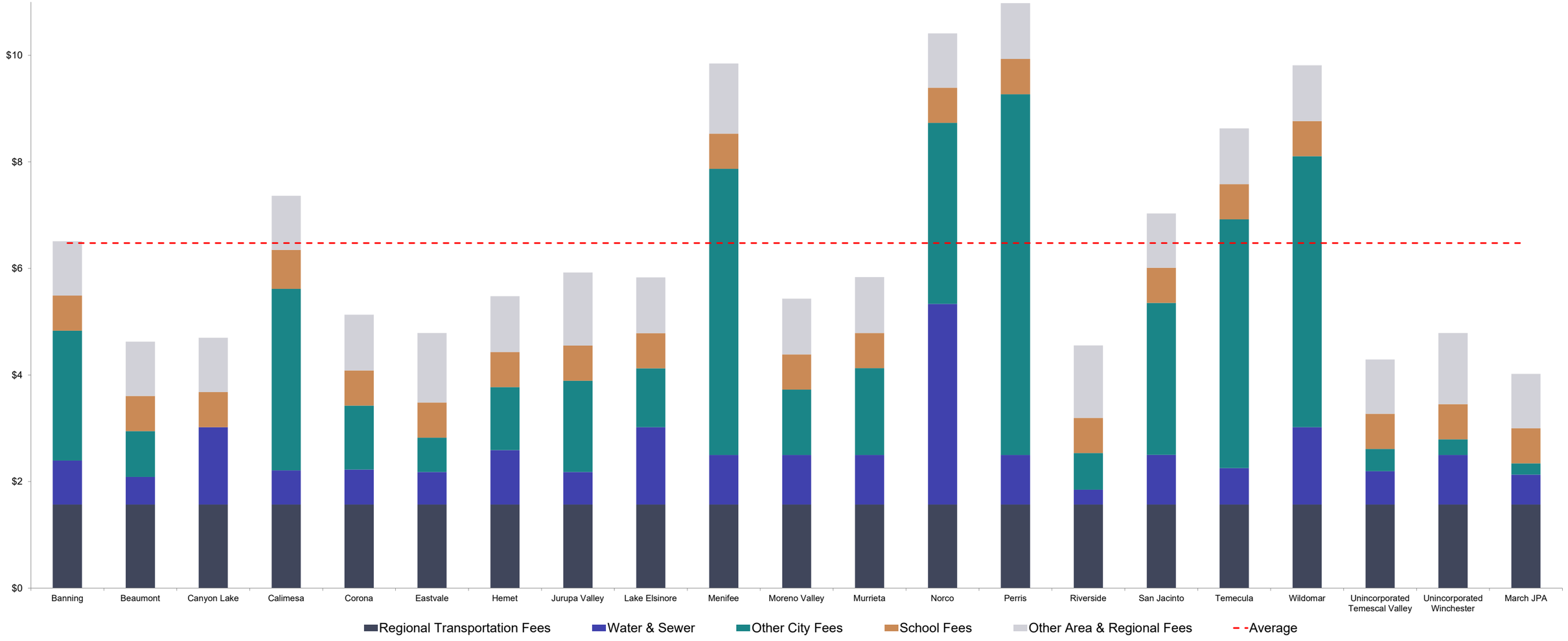
Fee estimates for specified development prototypes as of 2022. Actual fees will vary based on project specifics and any fee updates.
"Other Area Fees/ Regional Fees" include, but are not limited to, roads and bridges, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation fees.

Office Prototype
Development Fees by Jurisdiction (Per Square Foot)



Fee estimates for specified development prototypes as of 2022. Actual fees will vary based on project specifics and any fee updates.
"Other Area Fees/ Regional Fees" include, but are not limited to, roads and bridges, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation fees.

Industrial Prototype
Development Fees by Jurisdiction (Per Square Foot)



Fee estimates for specified development prototypes as of 2022. Actual fees will vary based on project specifics and any fee updates.
"Other Area Fees/ Regional Fees" include, but are not limited to, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation fees.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: TUMF Nexus Study Activities Update

Contact: Darren Henderson, Technical Director - Freeway Operations and Advanced Traffic Management, darren.henderson@ghd.com, (951) 833-7763

Date: April 13, 2023

Requested Action(s):

1. Receive and file.

Purpose:

The purpose of this item is to provide information on the TUMF Nexus Study update.

WRCOG 2022-2027 Strategic Plan Goal:

Goal #5 - Develop projects and programs that improve infrastructure and sustainable development in the subregion.

Background:

TUMF Nexus Study Update

At its October 4, 2021, meeting, the Executive Committee gave direction for staff to begin work on a TUMF Nexus Study update. The TUMF Nexus Study draws a connection between the needs of the Program and the TUMF Program Fee Schedule. This Nexus Study identifies projects requiring mitigation from new development, determines what the cost of those projects will be, and what fees need to be assessed to fund these projects. TUMF Nexus Study updates have occurred on a regular basis with updates done in 2005, 2009, 2011, and 2017.

The key reasons for a Nexus Study update include the following:

- It is considered a best practice to update on a regular basis
- Underlying growth forecasts have changed since the last update
- Travel behavior has changed, particularly viewed in light of COVID-19
- The project list has changed with past projects completed and new projects identified
- Opportunity to add new project types, such as Intelligent Transportation System (ITS) infrastructure

Staff and consultants have worked to update the three key elements of the Nexus Study:

1. Land use forecasts

2. List of TUMF projects
3. Project cost estimates

Land Use Forecasts: The updated Nexus Study uses the land use forecasts for the region developed during the adopted SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS). WRCOG, consultants, and member agencies conducted a detailed review of the SCAG data at the Traffic Analysis Zone (TAZ) level to verify that the existing and projected distributions matched local data. Based on these adopted growth projections, SCAG is projecting that the WRCOG subregion will experience a population growth of 33% (from 2016 to 2045) and employment is projected to grow by 46% (from 2016 to 2045).

Roadway Network: Since 2021, staff has been working with local agencies to update the needs of the TUMF Network. Staff has met with representatives of all TUMF participating agencies. Each agency has had an opportunity to make revisions, corrections, and additions to the TUMF Network. WRCOG has met with all of WRCOG's member agencies who have submitted requests for additions and changes to the Network.

Each project request was submitted by WRCOG member agencies and reviewed during a TUMF Zone staff meeting. Please note that the process to include projects in the updated Nexus Study is as follows:

1. WRCOG member agencies request that a project be added.
2. The Nexus Study consultant includes the proposed project in the Nexus Study travel demand model.
3. WRCOG staff and consultants evaluate the project against objective criteria such as traffic volume, volume to capacity ratio, and number of future lanes. Projects must have a minimum of four lanes to be included in the Nexus Study.
4. If the proposed project meets the above criteria, then the project is included in the Nexus Study project list.

The proposed list of projects was summarized by WRCOG and provided to the Public Works Committee (PWC) and Executive Committee for review and approval. During the April 13, 2023, PWC meeting, members will be given a final opportunity to update previous requests before consultant GHD completes the evaluation of potential TUMF projects.

Cost Estimates: A key element of the Nexus Study is an update to the project unit costs for construction and Right-of-Way costs. This analysis uses data from recently completed projects, as provided by agencies such as the California Department of Transportation (Caltrans), Riverside County Transportation Commission (RCTC), and member agencies. A draft analysis was completed and presented to the PWC in December 2022. This analysis will be reviewed one last time prior to its inclusion in the updated TUMF Nexus Study.

GHD has been actively working on the Nexus Study since fall 2022 with their main efforts related to the development of Base Year (2021) and Future Year (2045) versions of RIVCOM. GHD has completed this update, verified that the overall RIVCOM performance metrics meet industry standards, and completed an initial set of model runs to determine the overall level of roadway congestion with the anticipated population and employment growth.

Next steps include:

- Confirming the Riverside Transit Agency (RTA) TUMF Project List
- Completing an updated set of RIVCOM model runs to verify the proposed changes to the roadway network
- Determining project cost attributable to new development
- Allocating the project cost to the various development types
- Completing the draft TUMF Nexus Study and Fee Schedule

Darren Henderson from GHD will provide further information regarding the TUMF Nexus Study during the meeting.

Prior Action(s):
July 11, 2022: The Executive Committee received and filed.

March 17, 2022: The Technical Advisory Committee received and filed.

March 10, 2022: The Public Works Committee received and filed.

October 4, 2021: The Executive Committee gave direction to 1) begin work on a TUMF Nexus Study update; 2) update the TUMF Administrative Plan to expand the TUMF-eligible project list to include Intelligent Transportation Systems (ITS) projects; 3) work with the Riverside County Transportation Commission and Riverside Transit Agency to evaluate options to mitigate VMT impacts from new development outside of the TUMF Nexus Study update; and 4) begin work on an update of the Analysis of Development Impact Fees in Western Riverside County.

Fiscal Impact:
Funding for this Nexus Study update is provided by the share of TUMF revenues which are provided to WRCOG for Administration of the Plan. WRCOG collects 4% of all TUMF revenues for Administrative purposes, of which 3% can be used for expenses including consultants to support the TUMF Program, such as the Nexus Study update. Funds for the remainder of the Fiscal Year 2022/2023 are currently allocated in the approved budget for this expense. Funding for subsequent years will be allocated as those subsequent budgets are developed and approved by the Executive Committee. Current cost of the Nexus Study is estimated to be $200,000. TUMF revenues and expenditures are associated with Fund 220.

Attachment(s):
None.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **WRCOG Member Agency Experience as it Relates to State & Federal Agencies in the Infrastructure Planning, Design, and Construction Process**

Contact: **Christopher Gray, Deputy Executive Director, cgray@wrcog.us, (951) 405-6710**

Date: **April 13, 2023**

Requested Action(s):

1. Receive and file.

Purpose:

The purpose of this item is for WRCOG member agencies to discuss their experiences with State & Federal regulatory agencies during the infrastructure planning and design process.

WRCOG 2022-2027 Strategic Plan Goal:

Goal #5 - Develop projects and programs that improve infrastructure and sustainable development in our subregion.

Background:

A key component of the TUMF Program is that TUMF provides funding for pre-construction expenses related to planning, environmental studies, and engineering. For projects in the TUMF Network, up to 35% of the total project funding is allocated to these pre-construction activities.

WRCOG is interested in hearing from member agencies about their current experience with various State and Federal regulatory agencies during these pre-construction activities to gauge their experience and determine if WRCOG is able to assist member agencies with any challenges that they have faced. WRCOG would also like to provide this opportunity for members to share any recent successes that might be of interest to our various members.

Prior Action(s):

None.

Fiscal Impact:

This item is for informational purposes only; therefore, there is no fiscal impact. Any additional actions taken by WRCOG would be implemented in accordance with the adopted WRCOG Strategic Plan and the adopted Agency Budget for Fiscal Year 2023/2024.

Attachment(s):
None.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Confirmation of the TUMF Nexus Study Roadway Network**

Contact: **Chris Gray, Deputy Executive Director, cgray@wrcog.us, (951) 405-6710**

Date: **April 13, 2023**

Requested Action(s):

1. Approve the Updated TUMF Nexus Study Roadway Network.

Purpose:

The purpose of this item is to solicit any final changes to the TUMF Nexus Study Roadway Network and obtain approval of any changes.

WRCOG 2022-2027 Strategic Plan Goal:

Goal #5 - Develop projects and programs that improve infrastructure and sustainable development in our subregion.

Background:

One of the key inputs for the update of the TUMF Nexus Study is the roadway Network, which defines which projects are considered for inclusion in the TUMF Nexus Study. An overview of the process is as follows:

1. WRCOG member agencies request that a project be added.
2. The Nexus Study consultant includes the proposed project in the Nexus Study travel demand model.
3. WRCOG staff and consultants evaluate the project against objective criteria such as traffic volume, volume to capacity ratio, and number of future lanes. Projects must have a minimum of four lanes to be included in the Nexus Study.
4. If the proposed project meets the above criteria, then the project is included in the Nexus Study project list.

WRCOG had previously solicited roadway Network updates in mid-2022 through outreach to individual member agencies and then brought these proposed changes to each TUMF Zone Technical Advisory Committee. This consolidated list of projects was then presented to and approved by the Executive Committee on July 11, 2022.

Since this approval, WRCOG has received a limited number of requests to add additional projects or provide clarification regarding a project previously submitted.

The City of Wildomar requested that the Bundy Canyon Road (I-15 to City Limits), which was included in the 2016 Nexus Study as a 4-lane roadway, be included in the TUMF Nexus Study update as a 6-lane roadway. Portions of Bundy Canyon Road in Wildomar are currently under construction as a 4-lane roadway.

The PWC is being asked to confirm the updated roadway Network with the change identified above as shown in Attachment 1.

Prior Action(s):
July 11, 2022: The Executive Committee approved the TUMF Nexus Study Update Roadway Network.

Fiscal Impact:
Funding for this Nexus Study update is provided by the share of TUMF revenues, which are provided to WRCOG for Administration of the Plan. WRCOG collects 4% of all TUMF revenues for Administrative purposes, of which 3% can be used for expenses including consultants to support the TUMF Program, such as the Nexus Study update. Funds for the remainder of the Fiscal Year 2022/2023 are currently allocated in the approved budget for this expense. Funding for subsequent years will be allocated as those subsequent budgets are developed and approved by the Executive Committee. Current cost of the Nexus Study is estimated to be $200,000. TUMF revenues and expenditures are associated with Fund 220.

Attachment(s):
Attachment 1 - Nexus Study new projects

Attachment

TUMF Nexus Study Project Additions

Northwest Zone

Corona

No new projects

Eastvale

StreetName	From	To	Miles	Existing Lanes	Future Lan
Hellman	River Road	Walter	0.85	2	4
Hellman	Cucamonga Creek	Bridge			
River Rd	Archibald	Hellman	0.50	2	4
ITS (City wide)	Limonite				
ITS (City wide)	Hamner				
ITS (City wide)	Schleisman				
ITS (City wide)	Archibald				
Limonite Bridge over Cucamonga Creek					

Jurupa Valley

No new projects

Norco

No new projects

Riverside

University ITS	Market St	Canyon Crest			
Tyler ITS	California Ave	Indiana Ave			
Alessandro Blvd ITS	Fairview Ave	Meridian			

County

Markham St	Mockingbird Canyon	Wood Rd	2.73	4	6

Central Zone

Menifee

StreetName	From	To	Miles	Existing Lanes	Future Lan
Garbani	Haun	Antelope	0.31	0	4
Garbani	I-215	Interchange	0.00	0	4
Garbani	I-215	Menifee	0.95	2	4
Garbani	Menifee	Briggs	1.00	2	4
Holland	City Limits (West)	Murrieta	0.60	2	4
Holland	Murrieta	Bradley	1.04	2	4
Holland	Bradley	Haun	1.00	2	4
Scott	Haun	Menifee	1.00	4	6
Scott	Menifee	Briggs	1.00	4	6
Briggs	Simpson	Angler		0	4
Briggs	Salt Creek	Bridge		0	4

Moreno Valley

No new projects

Perris

StreetName	From	To	Miles	Existing Lanes	Future Lan
Ethanac	Bridge	San Jacinto River	1.53	0	4

County

StreetName	From	To	Miles	Existing Lanes	Future Lan
Grand Ave	Briggs Rd	SR-79	3.05	2	4

Hemet/San Jacinto Zone

Hemet

StreetName	From	To	Miles	Existing Lanes	Future Lan
New Stetson	Warren	0.85 Miles w/o Warren	0.85	2	4
State St (ITS)	Esplanade	Florida Ave			
Sanderson Ave (ITS)	Esplanade	Domenigoni Pkwy			
Warren Rd (ITS)	Simpson Ave	Esplanade			
Stetson Ave (ITS)	Winchester Rd	Sanderson Ave			

San Jacinto

7th St	Western Terminus	Warren Rd		0.54	4
7st St	Bridge	Channel adjacent to Warren		0	4

County

No new projects

Pass Zone

Calimesa

No new projects

Beaumont

No new projects

Banning

StreetName	From	To	Miles	Existing Lanes	Future Lan
Highland Springs	Cherry Valley	Oak Valley	1.53	2	4
Cottonwood	I-10	Interchange	0		
Wilson	Highland Springs	Highland Home		2	4
Sun Lakes	Smith Creek	Bridge	0		

County

No new projects

Southwest Zone

Lake Elsinore

StreetName	From	To	Miles	Existing Lanes	Future Lan
Camino del Norte	Summerhill	Main	1.68	2	4
Summerhill	Railroad Canyon	Greenwald	2.88	0	4

Canyon Lake

No new projects

Wildomar

StreetName	From	To	Miles	Existing Lanes	Future Lan
Inland Valley Dr	I-15	Overcrossing	0	0	4
Palomar	Starbuck	Washington	0.28	2	4
Bundy Canyon	I-15	City Limits	3.2	4	6

Murrieta

StreetName	From	To	Miles	Existing Lanes	Future Lan
Orange Springs Parkway	Clinton Keith	Scott		0	4
Calle del Oso Oro	Vineyard Pkwy	Washington	0.73	2	4
Calle del Oso Oro (Bridge Widening)	1500 w/o Vineyard Pkwy		0	2	4
Adams	Murrieta Hot Springs/H	Cherry	2.26	2	4

Temecula

StreetName	From	To	Miles	Existing Lanes	Future Lan
Ynez Road	Rancho California	Santiago		3	5
Ynez Road/DePortola Road	Santiago	Margarita		3	5
ITS Infrastructure	Major Arterials (Winchester, Rancho California, Butterfield Stage, Temecula Pkwy, Margarita, Jefferson	City limits	40		

County

No New Projects

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **TUMF Zone Revenue Forecasts for Fiscal Years 2023/2024 to 2027/2028 Transportation Improvement Program Updates**

Contact: **Chris Gray, Deputy Executive Director, cgray@wrcog.us, (951) 405-6710**

Date: **April 13, 2023**

Requested Action(s):

1. Approve the TUMF Zone Revenue Forecasts for Fiscal Years 2023/2024 to 2027/2028 Transportation Improvement Program.

Purpose:

The purpose of this item is to present Zone revenue forecasts for the forthcoming TIP update for the 2023/2024 Fiscal Year.

WRCOG 2022-2027 Strategic Plan Goal:

Goal #5 - Develop projects and programs that improve infrastructure and sustainable development in our subregion.

Background:

WRCOG administers the Transportation Uniform Mitigation Fee (TUMF) Program. As the Program Administrator, WRCOG is responsible for the development of various programmatic documents including the TUMF Administration Plan and the Zone Transportation Improvement Programs (TIP). TIPs are developed for each of the five TUMF Zones including:

- Central Zone (Moreno Valley, Perris, Menifee, March JPA, and Riverside County)
- Hemet/San Jacinto (Hemet, San Jacinto, and Riverside County)
- Northwest Zone (Corona, Eastvale, Jurupa Valley, Norco, Riverside and Riverside County)
- Pass Zone (Banning, Beaumont, Calimesa, and Riverside County)
- Southwest Zone (Lake Elsinore, Canyon Lake, Wildomar, Murrieta, Temecula and Riverside County)

TIPs are prepared on an annual basis. The TIP update process consists of three main stages. The first stage includes the development of Zone revenue forecasts. The second stage is the solicitation of funding requests from member agencies. The final stage involves an analysis of available funding to ensure that there is sufficient funding for the requested projects.

WRCOG reviewed historical collections for each Zone, considering both a three-year and five-year historical average. Based on previous experience, WRCOG is recommending the following annual

forecasts for each Zone:

- Northwest Zone - $9.5M
- Southwest Zone - $4.5M
- Central Zone - $8.0M
- Pass Zone - $2.0M
- Hemet/San Jacinto Zone - $3.0M

Based on a review of the average of the previous three-year and five-year collections, WRCOG can conclude the following:

- Four out of five Zones show an increase in collections from the previously adopted estimates. The only Zone with a decrease in collections was the Southwest Zone, where collections have been trending downward slightly.
- The Northwest Zone continues to lead the region in collections, though the Central Zone collections have been increasing over time.
- Both the Pass Zone and Hemet/San Jacinto Zones have seen continued growth in collections.

One manual adjustment was made to the Pass Zone collections to increase the anticipated revenues by $500K, which reflect anticipated annual collections related to the settlement between the City of Beaumont and WRCOG.

Attachment 1 provides additional information regarding historical revenue collections and anticipated revenues for each of the five TUMF Zones.

Prior Action(s):
None.

Fiscal Impact:
Funds received from the TUMF Program are allocated to TUMF Zone projects through the the development and approval of annual Zone TIP documents. WRCOG reimburses member agencies' TUMF project expenses through a reimbursement process. TUMF reimbursements are funded through Fund 220.

Attachment(s):
Attachment 1 - TUMF revenue estimates as of March 30, 2023

Attachment

TUMF Zone TIP Revenue Estimates

TUMF Collections and Revenue Projections

Zone	Forecast Revenues (FY21-22)	3 Year Average Collections (FY19/20 - FY21/22)	3 Year Average Zone Total Collections (FY19/20 - FY21/22)	3 Year Average Zone Total Collections (FY19/20 - FY21/22)*	5 Year Average Collections (FY17/18 - FY21/22)	5 Year Average Zone Total Collections (FY17/18 - FY21/22)	5 Year Average Zone Total Collections (FY17/18 - FY21/22)*
Northwest	$ 8,000,000	$ 19,417,668	$ 8,873,874	$9.M	$ 20,686,385	$ 9,453,678	$9.5M
Southwest	$ 5,500,000	$ 10,075,712	$ 4,604,601	$4.5M	$ 10,034,210	$ 4,585,634	$4.5M
Central	$ 7,500,000	$ 18,194,005	$ 8,314,660	$8.5M	$ 17,763,882	$ 8,118,094	$8.M
Pass	$ 1,000,000	$ 4,440,517	$ 2,029,316	$2.M	$ 3,540,773	$ 1,618,133	$1.5M
Hemet/San Jacinto	$ 2,500,000	$ 8,058,233	$ 3,682,612	$3.5M	$ 6,416,339	$ 2,932,267	$3.M
	$ 24,500,000	**$ 60,186,136**	**$ 27,505,064**	**$27.5M**	**$ 58,441,589**	**$ 26,707,806**	**$26.5M**