Western Riverside Council of Governments
Public Works Committee

AGENDA

Thursday, October 13, 2016
2:00 p.m.

Transportation's 14th Street Annex
3525 14th Street
2nd Floor, Conference Room 3
Riverside, CA 92501

In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if special assistance is needed to participate in the WRCOG Public Works Committee meeting, please contact WRCOG at (951) 955-8933. 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 the 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 items, will be available for inspection by members of the public prior to the meeting at 4080 Lemon Street, 3rd Floor, Riverside, CA, 92501.

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

1. CALL TO ORDER (Dan York, Chair)

2. SELF INTRODUCTIONS

3. PUBLIC COMMENTS

At this time members of the public can address the WRCOG Public Works Committee regarding any items with 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.

4. 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 September 8, 2016, WRCOG Public Works Committee meeting are available for consideration.** **P. 1**

Requested Action: *1. Approve the Summary Minutes from the September 8, 2016, WRCOG Public Works Committee.*

B. **TUMF Revenue and Expenditures Update** ***Ernie Reyna*** **P. 9**

Requested Action: *1. Receive and file.*

C. **WRCOG Financial Report Summary through August 2016** ***Ernie Reyna*** **P. 23**

Requested Action: *1. Receive and file.*

5. **REPORTS/DISCUSSION**

A. **TUMF Nexus Study Ad Hoc Committee** ***Christopher Gray, WRCOG*** **P. 29**

Requested Action: *1. Receive and file.*

B. **TUMF Network Revisions** ***Daniel Ramirez-Cornejo, WRCOG*** **P. 31**

Requested Action: *1. Direct WRCOG staff to continue reviewing the TUMF Network and identify facilities for potential removal from the TUMF Network.*

C. **TUMF Administrative Plan Revision** ***Christopher Gray, WRCOG*** **P. 41**

Requested Action: *1. Approve the TUMF Administrative Plan revision to include an additional process in which developers receive credit against TUMF obligations.*

D. **Proposed Grant Writing Assistance Program for Local Jurisdictions and SCAG Sustainability Planning Grant Program Update** ***Christopher Gray, WRCOG*** **P. 43**

Requested Actions:
1. Designate two (2) Public Works Committee members to serve on Grant Writing Assistance Program focus group.
2. Request partner agencies for WRCOG applications for SCAG Sustainability Planning Grant Program.

E. **The Effects of Big Data in Transportation** ***Jason Pack, Fehr & Peers*** **P. 55**

Requested Action: *1. Receive and file.*

F. **Riverside County Traffic Analysis Model (RIVTAM) Update** ***Christopher Gray, WRCOG*** **P. 57**

Requested Action: *1. Receive and file.*

G. **Update on Analysis of Fees and Their Potential Impact on Economic Development in Western Riverside County** ***Christopher Gray, WRCOG*** **P. 119**

Requested Action: *1. Receive and file.*

H. **Riverside Transit Agency First-Mile / Last-Mile Study Update** ***Joe Punsalan, KTU+A*** **P. 149**

Requested Action: *1. Receive and file.*

6. REPORT FROM THE DIRECTOR OF TRANSPORTATION ***Christopher Gray***

7. ITEMS FOR FUTURE AGENDAS ***Members***

Members are invited to suggest additional items to be brought forward for discussion at future WRCOG Public Works Committee meetings.

8. GENERAL ANNOUCEMENTS ***Members***

Members are invited to announce items / activities which may be of general interest to the WRCOG Public Works Committee.

9. NEXT MEETING: **The next WRCOG Public Works Committee meeting is scheduled for Thursday, November 10, 2016, at 2:00 p.m., in the Transportation 14th Street Annex, 2nd Floor, Conference Room 3.**

10. ADJOURNMENT

Page Intentionally Left Blank

Public Works Committee **Item 4.A**
September 8, 2016
Summary Minutes

1. CALL TO ORDER

The meeting of the WRCOG Public Works Committee (PWC) was called to order at 2:00 p.m. by Chairman Dan York at Transportation's 14^{th} Street Annex, 2^{nd} Floor in Conference Room 3.

2. ROLL CALL

Members present:

Art Vela, City Banning
Michael Thornton, City of Calimesa
Nelson Nelson, City of Corona
Craig Bradshaw, City of Eastvale
Mike Myers, City of Jurupa Valley
Ati Eskandari, City of Lake Elsinore
Jonathan Smith, City of Menifee
Ahmad Ansari, City of Moreno Valley
Bob Moehling, City of Murrieta
Sam Nelson, City of Norco
Brad Brophy, Cities of Perris, San Jacinto and March Joint Powers Authority
Jeff Hart, City of Riverside
Thomas Garcia, City of Temecula (arrival 2:10 pm)
Dan York, City of Wildomar (Chair)
Glenn Higa, County of Riverside Transportation & Land Management (TLMA)
Grace Alvarez, Riverside County Transportation Commission (RCTC)
Rohan Kuruppu, Riverside Transit Agency

Staff present:

Christopher Gray, Director of Transportation
Jennifer Ward, Director of Government Relations
Donna Dean, Program Manager
Christopher Tzeng, Program Manager
Tyler Masters, Program Manager
Andrew Ruiz, Program Manager
Daniel Ramirez-Cornejo, Staff Analyst

Guests present:

Nino Abad, City of Hemet
Paul Rodriguez, Rodriguez Consulting Group, TUMF Consultant
Darren Henderson, WSP Parsons Brinckerhoff, TUMF Consultant
Sudi Shoja, Interwest Consulting Group

3. PUBLIC COMMENTS

Tyler Masters provided an update on the Regional Streetlight Program. WRCOG is looking to identify the feasibility of acquiring LS2 in the cities and then retrofitting to LED. Regarding the test bed in the City of Hemet, WRCOG has secured interest from eleven LED manufactures and has installed over 133 LED fixtures across the City of Hemet. Demonstration areas are approximately 90% complete.

Upon completion, WRCOG will provide media kits and press releases to the cities. The purpose of the test bed is to receive the public's opinion on the LED lights. WRCOG is meeting all the requirements necessary from the medical association regarding shielding and colors.

4. CONSENT CALENDAR - *(Smith/Moehling) 16 yes; 0 no; 0 abstention. Items 4.A through 4.D were approved by a unanimous vote of those members present. The Cities of Canyon Lake and Temecula were not present.*

A. Summary Minutes from the August 11, 2016, WRCOG Public Works Committee meeting.

Action: *1. Approved the Summary Minutes from the August 11, 2016, WRCOG Public Works Committee meeting.*

B. TUMF Revenue and Expenditures Update

Action: *1. Received and filed.*

C. WRCOG Financial Report Summary through July 2016

Action: *1. Received and filed.*

D. CEQA Cases in the WRCOG Subregion and the SCAG Region

Action: *1. Received and filed.*

5. REPORTS/DISCUSSION

A. TUMF Nexus Study Ad Hoc Committee

Christopher Gray reported that at its August meeting, the Technical Advisory Committee requested that there only be one representative from any jurisdiction on the Ad Hoc Committee. The first Ad Hoc Committee meeting will be scheduled for late September in which WRCOG will present a packet of materials in regard to the TUMF Nexus Study.

Committee member Ati Eskandari asked if each agency could review the completed model runs.

Mr. Gray indicated that the model runs have been completed and Parsons Brinckerhoff is conducting the existing need analysis of the TUMF Network.

Mr. Gray indicated that one of the key variables is the split between residential and non-residential trips that significantly affects the fee.

Committee member Mike Myers asked to identify what Network changes have been requested.

Mr. Gray replied that the County of Riverside requested to swap a project. The City of Lake Elsinore requested WRCOG to review additional projects. Mr. Gray replied that staff will distribute the most recent requests that WRCOG has received.

Committee member Michael Thornton asked when a proposed fee schedule will be presented.

Mr. Gray replied that there will be a presentation regarding the preliminary TUMF schedule for the October PWC meeting.

Committee member Eskandari mentioned that it would be helpful to get an updated TUMF Network and the TUMF fair share split.

Darren Henderson replied that the Network as it is today could certainly be provided in terms of the unit cost and obligating funds.

Mr. Gray offered to redistribute the facilities, unit cost information, and WRCOG's log of TUMF Network adjustments to the PWC.

Action: *1. Appointed three members to assist on the Ad Hoc Committee to discuss potential options related to the completion of the Nexus Study; 1) Patricia Romo (County of Riverside); 2) Art Vela (City of Banning); and 3) Craig Bradshaw (City of Eastvale). This Action supersedes WRCOG's Public Works Committee Prior Action of August 11, 2016.*

(York/Thornton) 17 yes; 0 no; 0 abstention. Item 5.A.1 was approved by a unanimous vote of those members present. The City of Canyon Lake was not present.

Action: *2. Appointed Thomas Garcia (City of Temecula) as the Alternate Ad Hoc Committee member when needed.*

(York/Smith) 17 yes; 0 no; 0 abstention. Item 5.A.2 was approved by a unanimous vote of those members present. The City of Canyon Lake was not present.

B. TUMF Financial and Programming Review

Daniel Ramirez-Cornejo reported that for Fiscal Year 2015/2016, TUMF revenues exceeded $44 million.

The Northwest Zone collected the highest, at $20 million. The Zones will have a combined amount of $20 million in TUMF to program during the Transportation Improvement Program (TIP) update due to the delay in the TUMF Nexus Study. Staff presented options for Zone members to consider during the TIP Update. Mr. Ramirez-Cornejo shared the TIP Update schedule, which is expected to be completed by February 2017.

WRCOG received an inquiry on how local match contributions are applied. Currently, WRCOG reviews each invoice submitted for verification that the local match has been applied until the jurisdiction has satisfied the requirement. WRCOG would like feedback on whether this practice should be reviewed for revision.

The County of Riverside held a ribbon cutting for the Magnolia Avenue Grade Separation in August. This project is the 87 completed project that TUMF has contributed funding towards, which, to date, represents approximately $320 million in TUMF contributions.

Action: *1. Received and filed.*

C. Upcoming Grant Opportunities for Local Jurisdictions

Christopher Tzeng reported that one of the grant opportunities is from the BEYOND Framework Fund. The Executive Committee is going through the review process of funds for the second round. WRCOG has earmarked $1.8 million to its member jurisdictions, and a little over $200K for regional projects. A list of potential projects and information on a demonstration center was provided. The projects have to meet the goals of the sustainability framework study. Details are still to come. The allocated funds depend on jurisdictions' population and are still being reviewed. Staff anticipates providing updates next month.

Another grant opportunity is from the SCAG Sustainability Planning Grant (SPG) Program, formerly known as the Compass Blueprint Grant Program. The grant provides technical assistance to all of the member jurisdictions for 1) Integrated Land Use; 2) Active Transportation Plan (ATP); and 3) Green Region. A call for projects is scheduled to be released on September 29, 2016. The past SPG funded projects can be found directly on SCAG's Sustainability website. $1 million is set aside for Fiscal Year 2016/2017.

Part of the SPG is the statewide ATP. The statewide ATP has specific components to allocate funds. Only planning projects are allowed for SCAG.

WRCOG has identified funds for a Grant Writing Assistance Program. Specific amounts have not yet been determined. WRCOG would like to convene a focus group to provide feedback on program specifics. After specifics have been approved, a Request for Proposals will be issued for a consultant bench. Benches will be made available on a first-come, first-serve basis. The consultants will assist on the grant application process only.

Last week the legislature agreed on allocating $900 million towards the Cap-and-Trade Program and placed $462 million in reserves for transportation in future years.

Christopher Gray indicated that a grant program update will be brought back next month with more information. WRCOG is interested in any feedback. WRCOG is going to hire firms who have experience in active transportation and writing ATP grants. This program will be funded out of WRCOG's revenues.

Committee member Mike Myers asked how is WRCOG receiving volunteers for the WRCOG Grant Writing Assistance Program.

Mr. Gray replied that a working group of Planning and Public Works Directors' will be formed. At the next meeting, WRCOG will have more information to provide the committee.

Committee member Myers asked if the working group is open to other staff from the agencies.

Mr. Gray replied yes.

Committee member Ati Eskandari asked if funding from the BEYOND Framework Fund pays for construction only or planning as well.

Mr. Gray replied that this grant could pay for anything (i.e. Calimesa – electric cars, Wildomar - website, Temecula – job training for special needs).

Committee member Art Vela asked what the method of distribution will be for Round 2 of the BEYOND Framework Fund.

Jennifer Ward replied that $1.8 million has been approved. WRCOG is in the process of determining the breakout. Every jurisdiction will be guaranteed an amount of funding. Through the application process, the project needs to be identified. The Executive Committee may use the same population formula as last year. Three tiers are currently being considered. The WRCOG Administration & Finance Committee will provide a recommendation to the Executive Committee on how to allocate.

Ms. Ward indicated that additional differences for Round 2 are to be completed by the end of the year, an additional funding of $200K for jurisdictions that collaborate on a project, and a healthy community's incentive of $100K with a set cap. Any set-asides will be distributed on a first come, first serve basis.

Committee member Jonathan Smith asked if will there be any special consideration to the agencies for a first time award versus another agency.

Ms. Ward replied that for the healthy incentive, preference will be given to those who do not have healthy communities.

Committee member Vela asked what the timeline to spend the money is.

Ms. Ward replied 18 months with a 6-month extension. WRCOG does not want jurisdictions to hold funding.

Action: *1. Received and filed.*

D. Alternative Compliance Framework Introduction

Christopher Tzeng reported that Municipal Separate Storm Water Sewer System permits in the WRCOG region are controlled by three Regional Water Quality Control Boards: 1) San Diego; 2) Colorado River; and 3) Santa Ana. New permit requirements may negatively affect new development. Two potential solutions for Alternative Compliance Program (ACP) are utilizing an in-lieu or credit system tied to a regional program and regional storm water management system. Types of ACP permits are best practices to land purchases to preserve floodplain functions. One benefit found of an ACP is that it serves as an economic development tool by promoting flexible land development and allows cost-effective and market-driven solutions. Another benefit promotes regional solutions, supports TOD, and has potential for CEQA streamline. A SCAG planning grant was used to conduct a feasibility study for the southwest region; therefore, WRCOG is looking into potential options. A technical working group was convened and has met three times. This is a volunteer program with a high level of interest. WRCOG would like to establish and administer a program. WRCOG will continue to work with Flood Control and various Regional Boards. It is anticipated for the working group to meet regularly over the next 18 to 24 months to discuss how to establish an alternative compliance framework for the WRCOG subregion.

Committee member Jeff Hart asked how the costs are comprised and what they are.

Christopher Gray responded that the costs will be looked in to and forwarded to the committee members.

Committee member Ati Eskandari asked if it would be more appropriate if the County Flood Control and/or the County of Riverside take the lead on this initiative.

Mr. Gray indicated that WRCOG may have an advisory role.

Chairman Dan York asked who is paying for the staff time to focus on storm water.

Mr. Gray replied the HERO carryover revenues are currently being used.

Jennifer Ward indicated that the County Flood Control does not have the resources of committees that WRCOG has. It is a collaborative effort.

Committee member Mike Myers asked if Los Angeles has been looked at regarding research on trying to solve this issue.

Mr. Gray indicated that Orange County is looking at joint use facilities and San Diego has a flexible program. A report will be brought back to the committee.

Action: *1. Received and filed.*

E. Five-Year Expenditure Report

Christopher Gray introduced Paul Rodriguez from Rodriguez Consulting Group, who was contracted by WRCOG to prepare a 5-Year Expenditure Report, which is a requirement of AB 1600 for the TUMF Program.

Paul Rodriguez reported that this presentation is an update to the June PWC meeting presentation. WRCOG is following the requirements provided under AB 1600. The report covers Fiscal Years 2008/2009 through 2014/2015. The findings of the report are based on the assumptions of the 2009 Nexus Study. During this reporting period approximately $170 million was collected in revenue which equates to $680 million since inception. There has been more programming this reporting period and there was a decline in fund balances from $341 million to $84 million.

Program revisions have been requested, such as developing standardized reporting documents for all program partners to include expenditure, balance, and programming; reviewing options to improve the timely use of funds (through reimbursements); continuous monitoring of the fund balance to maintain no more than one year of revenues; and reconciliation of projects eligible for TUMF funding either through the Zones or regional program.

Action: *1. Received and filed.*

6. RECOGNITION: RETIREMENT OF DONNA DEAN

Chairman York recognized Donna Dean, WRCOG's TUMF Program Manager, for her 11.5 years of service at WRCOG.

7. REPORT FROM THE DIRECTOR OF TRANSPORTATION

Christopher Gray reported that staff will provide updates at the September PWC meeting on the water quality framework and the County of Riverside RivTAM. WRCOG will be sending out a survey regarding RivTAM; requesting feedback from member jurisdictions and users of RivTAM.

8. ITEMS FOR FUTURE AGENDAS

Committee member Michael Thornton asked if a fee analysis study update was being brought back as a future item.

Christopher Gray replied yes, the item will be brought back next month.

9. GENERAL ANNOUNCEMENTS

Christopher Gray announced that WRCOG is looking at arranging a tour of the water facilities if anyone is interested in viewing it.

Committee member Mike Myers thanked WRCOG and the TUMF Program because the City of Jurupa Valley just received notice to proceed on the Limonite Avenue project.

<u>10. NEXT MEETING</u>: The next WRCOG Public Works Committee meeting is scheduled for Thursday, October 13, 2016, at 2:00 p.m., in the Transportation 14th Street Annex, 2nd Floor, in Conference Room 3.

<u>11. ADJOURNMENT</u>: The meeting was adjourned at 3:43 p.m.

Page Intentionally Left Blank

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **TUMF Revenue and Expenditures Update**

Contact: **Ernie Reyna, Chief Financial Officer, reyna@wrcog.cog.ca.us, (951) 955-8432**

Date: **October 13, 2016**

Requested Action:

1. Receive and file.

To date, revenues received into the TUMF Program total $684,321,420. Interest amounts to $32,687,270, for a total collection of $717,008,690.

WRCOG has dispersed a total of $303,823,436, primarily through project reimbursements and refunds, and $19,742,850 in administrative expenses.

The Riverside County Transportation Commission share payments have totaled $307,793,160 through August 31, 2016.

Prior WRCOG Action:

September 8, 2016: The WRCOG Public Works Committee received report.

WRCOG Fiscal Impact:

This item is informational only; therefore, there is no fiscal impact.

Attachment:

1. Summary TUMF Program Revenues.

Page Intentionally Left Blank

Item 4.B

TUMF Revenue and Expenditures Update

Attachment 1

Summary TUMF Program Revenues

Page Intentionally Left Blank

ZONE SUMMARY

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

REVENUES	Month-to-Date Total	Fiscal Year-to-Date Total	Life-to-Date Total
Commercial/Services	231,169	613,570	29,797,532
Retail	443,905	510,926	63,294,016
Industrial	75,885	2,453,145	48,231,619
Single Family/Residential	2,606,682	6,230,239	490,199,301
Multi-Family Dwellings	149,544	436,170	52,798,953
Revenue Sub Total	3,507,186	10,244,049	684,321,420
Interest Earned	-	-	32,687,270
Revenue Total	3,507,186	10,244,049	717,008,690
EXPENDITURES			
Refunds	-	-	17,094,884
Developer/Credit Reimbursements	589,891	1,179,782	12,275,381
Local Jurisdiction Reimbursements	5,640,306	6,208,228	274,453,171
RCTC Share Payments	-	-	307,793,160
WRCOG Expenditures	57,798	152,758	19,742,850
Expenditure Total	6,287,995	7,540,769	631,359,447
Transfer-In from Zones to WRCOG	***82,489***	***257,004***	***(1,282,167)***
REVENUES OVER<UNDER> EXPENDITURES	**(2,698,320)**	**2,960,284**	**84,367,076**
ZONE NET REVENUE TOTALS SINCE INCEPTION			
Northwest Zone	(4,320,664)	(3,098,545)	7,148,330
Southwest Zone	176,711	(199,684)	26,455,309
Central Zone	(330,959)	866,916	18,097,868
Pass Zone	8,232	12,349	252,237
Hemet/SJ Zone	(121,262)	(190,913)	4,197,539
RTA	42,246	142,084	13,442,268
RCTC	1,626,983	4,752,214	4,482,940
MSHCP	55,414	161,856	692,092
WRCOG	-	-	-
WRCOG Reserves	-	-	3,881,594
Zone Totals	**(2,863,299)**	**2,446,277**	**78,650,177**

NORTHWEST ZONE

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

	Month-to-Date	Fiscal Year-to-Date	Life-to-Date
REVENUES	***Total***	***Total***	***Total***
Commercial/Services	-	36,717.52	5,455,804.28
Retail	-	9,503.91	5,607,373.65
Industrial	21,554.00	589,736.41	11,484,989.61
Single Family/Residential	226,244.76	781,929.69	84,927,590.72
Multi-Family Dwellings	-	52,030.10	9,442,224.34
Revenue Sub Total	247,799	1,469,918	116,917,983
Interest Earned	-	-	8,740,594
Revenue Total	247,799	1,469,918	125,658,576
EXPENDITURES			
Refunds	-	-	3,719,228
Developer/Credit Reimbursements	589,891	589,891	5,510,955
Local Jurisdiction Reimbursements	3,978,571	3,978,571	107,338,372
Expenditure Total	4,568,462	4,568,462	116,568,555
REVENUES OVER<UNDER> EXPENDITURES	***(4,320,664)***	***(3,098,545)***	***9,090,022***

Fiscal Year 2016/2017 Estimated Revenue	***5,000,000***
Actual Revenue YTD	**1,469,918**
Over/<Under> Budget for FY 2016/2017	***(3,530,082)***

SOUTHWEST ZONE

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

REVENUES	**Month-to-Date** ***Total***	**Fiscal Year-to-Date** ***Total***	**Life-to-Date** ***Total***
Commercial/Services	52,381.21	69,032.85	5,521,968
Retail	17,908.02	39,494.97	13,011,408
Industrial	-	-	1,818,507
Single Family/Residential	447,137.33	950,876.24	66,150,991
Multi-Family Dwellings	69,373.46	150,309.17	10,521,474
Revenue Sub Total	586,800	1,209,713.23	97,024,348
Interest Earned	-	-	10,638,813
Revenue Total	586,800	1,209,713	107,663,160
EXPENDITURES			
Refunds	-	-	3,017,054
Developer/Credit Reimbursements	-	589,891	5,970,242
Local Jurisdiction Reimbursements	410,089	819,507	67,827,783
Expenditure Total	410,089	1,409,398	76,815,079
REVENUES OVER<UNDER> EXPENDITURES	***176,711***	***(199,684)***	***30,848,081***

Fiscal Year 2015/2016 Estimated Revenue	***4,000,000***
Actual Revenue YTD	**1,209,713**
Over/<Under> Budget for FY 2015/2016	***(2,790,287)***

CENTRAL ZONE

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

REVENUES	**Month-to-Date** ***Total***	**Fiscal Year-to-Date** ***Total***	**Life-to-Date** ***Total***
Commercial/Services	54,858	178,885	1,341,087
Retail	188,020	188,020	6,458,369
Industrial	13,649	548,278	8,258,273
Single Family/Residential	490,580	1,029,800	55,316,077
Multi-Family Dwellings		-	3,878,985
Revenue Sub Total	747,107	1,944,982	75,252,790
Interest Earned	-	-	7,312,849
Revenue Total	747,107	1,944,981.88	82,565,639
EXPENDITURES			
Refunds	-	-	1,011,889
Developer/Credit Reimbursements	-	-	712,455
Local Jurisdiction Reimbursements	1,078,066	1,078,066	59,911,493
Expenditure Total	1,078,066	1,078,066	61,635,837
REVENUES OVER<UNDER> EXPENDITURES	***(330,959)***	***866,916***	***20,929,802***

Fiscal Year 2015/2016 Estimated Revenue	***3,000,000***
Actual Revenue YTD	**1,944,982**
Over/<Under> Budget for FY 2015/2016	***(1,055,018)***

PASS ZONE

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

REVENUES	**Month-to-Date** ***Total***	**Fiscal Year-to-Date** ***Total***	**Life-to-Date** ***Total***
Commercial/Services			621,989
Retail			989,813
Industrial			641,009
Single Family/Residential	8,232	12,349	4,256,158
Multi-Family Dwellings			162,895
Revenue Sub Total	8,232	12,349	6,671,863
Interest Earned	-	-	885,144
Revenue Total	8,232	12,349	7,557,007
EXPENDITURES			
Refunds	-	-	119,248
Developer/Credit Reimbursements	-	-	-
Local Jurisdiction Reimbursements	-	-	5,109,260
Expenditure Total	-	-	5,228,508
REVENUES OVER<UNDER> EXPENDITURES	***8,232***	***12,349***	***328,499***

Fiscal Year 2015/2016 Estimated Revenue	***200,000***
Actual Revenue YTD	**12,349**
Over/<Under> Budget for FY 2015/2016	***(187,651)***

HEMET/SAN JACINTO ZONE

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

REVENUES	**Month-to-Date** ***Total***	**Fiscal Year-to-Date** ***Total***	**Life-to-Date** ***Total***
Commercial/Services			839,595
Retail			3,542,110
Industrial			284,755
Single Family/Residential	37,046	115,253	19,291,131
Multi-Family Dwellings			553,442
Revenue Sub Total	37,046	115,253	24,511,032
Interest Earned	-	-	2,438,028
Revenue Total	*37,046*	*115,253*	*26,949,061*
EXPENDITURES			
Refunds	-	-	322,647
Developer/Credit Reimbursements	-	-	81,729
Local Jurisdiction Reimbursements	158,308	306,166	23,617,196
Expenditure Total	158,308	306,166	24,021,572
REVENUES OVER<UNDER> EXPENDITURES	***(121,262)***	***(190,913)***	***4,927,488***

Fiscal Year 2015/2016 Estimated Revenue	***800,000***
Actual Revenue YTD	**115,253**
Over/<Under> Budget for FY 2015/2016	***(684,747)***

RIVERSIDE TRANSIT AUTHORITY

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

	Month-to-Date	Fiscal Year-to-Date	Life-to-Date
REVENUES	***Total***	***Total***	***Total***
Commercial/Services	3,791.19	10,062.58	780,214
Retail	7,280.04	8,379.18	1,614,319
Industrial	1,244.52	40,231.59	1,216,944
Single Family/Residential	42,749.62	102,175.96	15,421,650
Multi-Family Dwellings	2,452.52	7,153.16	1,272,581
Revenue Sub Total	57,518	168,002	20,305,708
Interest Earned	-	-	2,517,508
Revenue Total	57,518	168,002	22,823,216
EXPENDITURES			
Refunds	-	-	541,895
Developer/Credit Reimbursements	-	-	-
Local Jurisdiction Reimbursements	15,272	25,918	6,648,834
Expenditure Total	15,272	25,918	7,190,729
REVENUES OVER<UNDER> EXPENDITURES	***42,246***	***142,084***	***15,632,487***

Fiscal Year 2015/2016 Estimated Revenue	***350,000***
Actual Revenue YTD	**168,002**
Over/<Under> Budget for FY 2015/2016	***(181,998)***

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

	Month-to-Date Total	Fiscal Year-to-Date Total	Life-to-Date Total
REVENUES			
Commercial/Services	107,239.41	284,634.93	14,014,189
Retail	205,927.68	237,018.54	29,545,059
Industrial	35,202.92	1,138,014.05	22,521,825
Single Family/Residential	1,209,239.93	2,890,207.66	229,674,474
Multi-Family Dwellings	69,373.46	202,339.27	24,622,597
Revenue Sub Total	1,626,983	4,752,214	320,378,145
Interest Earned	-	-	32,918
Revenue Total	1,626,983	4,752,214	320,411,062
EXPENDITURES			
Refunds	-	-	8,134,962
RCTC Share Payments	-	-	307,793,160
Local Jursidiction Reimbursement	-	-	-
Expenditure Total	-	-	315,928,123
REVENUES OVER<UNDER> EXPENDITURES	***1,626,983***	***4,752,214***	***4,482,940***

MULTI-SPECIES HABITAT CONSERVATION PROGRAM

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

	Month-to-Date	Fiscal Year-to-Date	Life-to-Date
REVENUES	**Total**	**Total**	**Total**
Commercial/Services	3,652	9,694	326,763
Retail	7,014	8,073	711,347
Industrial	1,199	38,760	519,439
Single Family/Residential	41,186	98,438	2,503,519
Multi-Family Dwellings	2,363	6,892	612,810
Revenue Sub Total	55,414	161,856	4,673,878
Interest Earned	-	-	119,762
Revenue Total	55,414	161,856	4,793,640
EXPENDITURES			
Refunds	-	-	101,316
RCA Reimbursements	-	-	4,000,232
Expenditure Total	-	-	4,101,548
REVENUES OVER<UNDER> EXPENDITURES	***55,414***	***161,856***	***692,092***

WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

Transportation Uniform Mitigation Fee Revenues and Expenditures
For the Month Ending August 31, 2016

	Month-to-Date Total	Fiscal Year-to-Date Total	Life-to-Date Total
REVENUES			
Commercial/Services	9,247	24,543	895,924
Retail	17,756	20,437	1,814,218
Industrial	3,035	98,126	1,485,878
Single Family/Residential	104,267	249,210	12,657,710
Multi-Family Dwellings	5,982	17,447	1,731,944
Revenue Sub Total	140,287	409,762	18,585,674
Interest Earned	-	-	1,655
Revenue Total	140,287	409,762	18,587,329
EXPENDITURES			
Refunds	-	-	126,646
Expenditures	57,798	152,758	19,742,850
Expenditure Total	57,798	152,758	19,869,496
Transfer-In from Zones	*82,489*	*257,004*	*(1,282,167)*
REVENUES OVER<UNDER> EXPENDITURES	*-*	*-*	*-*

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **WRCOG Financial Report Summary through August 2016**

Contact: **Ernie Reyna, Chief Financial Officer, reyna@wrcog.cog.ca.us, (951) 955-8432**

Date: **October 13, 2016**

Requested Action:

1. Receive and file.

Attached is WRCOG's financial statement through August 2016.

Prior WRCOG Actions:

October 3, 2016: The WRCOG Executive Committee received report.
September 15, 2016: The WRCOG Technical Advisory Committee received report.

WRCOG Fiscal Impact:

This item is informational only; therefore there is no fiscal impact.

Attachment:

1. WRCOG Financial Report Summary – August 2016.

Page Intentionally Left Blank

Item 4.C
WRCOG Financial Report Summary through August 2016

Attachment 1
WRCOG Financial Report Summary – August 2016

Page Intentionally Left Blank

Western Riverside Council of Governments
Monthly Budget to Actuals
For the Month Ending August 31, 2016

		Approved 6/30/2017 Budget	Thru 8/31/2016 Actual	Remaining 6/30/2017 Budget
	Revenues			
40001	Member Dues	309,410	306,410	3,000
40601	WRCOG HERO	1,963,735	263,351	1,700,384
40604	CA HERO	7,615,461	1,217,328	6,398,133
40607	WRCOG HERO Commercial	25,000	756	24,244
40611	WRCOG HERO Recording Revenue	335,555	73,620	261,935
40612	CA HERO Recording Revenue	1,301,300	301,745	999,555
41201	Solid Waste	93,415	93,415	(0)
41401	Used Oil Opportunity Grants	200,000	24,093	175,907
41402	Air Quality-Clean Cities	139,500	128,000	11,500
43001	Commercial/Service - Admin (4%)	37,074	5,952	31,122
43002	Retail - Admin (4%)	142,224	16,212	126,012
43003	Industrial - Admin 4%)	128,446	3,035	125,411
43004	Residential/Multi/Single - Admin (4%)	1,067,271	69,130	998,141
43005	Multi-Family - Admin (4%)	224,983	3,489	221,494
43001	Commercial/Service	889,786	142,855	746,931
43002	Retail	3,413,375	389,090	3,024,285
43003	Industrial	3,082,710	72,849	3,009,861
43004	Residential/Multi/Single	25,614,514	1,659,125	23,955,389
43005	Multi-Family	5,399,595	83,745	5,315,851
	Total Revenues	**60,858,676**	**4,854,202**	**56,004,473**
	Expenditures			
	Wages and Benefits			
60001	Wages & Salaries	1,993,083	288,776	1,704,307
61000	Fringe Benefits	579,799	104,711	475,088
	Total Wages and Benefits	**2,632,882**	**393,487**	**2,239,396**
	General Operations			
63000	Overhead Allocation	1,518,136	253,022	1,265,114
65101	General Legal Services	405,750	93,523	312,227
65505	Bank Fees	25,500	159	25,341
65507	Commissioners Per Diem	45,000	7,650	37,350
73001	Office Lease	145,000	22,426	122,574
73107	Event Support	183,000	8,906	174,094
73108	General Supplies	22,750	1,277	21,473
73109	Computer Supplies	7,500	649	6,851
73110	Computer Software	13,000	50	12,950
73111	Rent/Lease Equipment	25,000	1,643	23,357
73113	Membership Dues	40,600	6,330	34,270
73115	Meeting Support/Services	13,750	700	13,050
73116	Postage	5,600	312	5,288
73117	Other Household Expenditures	2,100	1,262	838
73122	Computer Hardware	4,000	238	3,762
73201	Communications-Regular	2,000	140	1,860
73203	Communications-Long Distance	1,200	38	1,162
73204	Communications-Cellular	10,863	846	10,017
73206	Communications-Comp Sv	17,000	10	16,990
73302	Equipment Maintenance - Computers	2,000	3,267	(1,267)
73405	Insurance - General/Business Liason	63,170	28,270	34,900
73601	Seminars/Conferences	25,050	175	24,875
73611	Travel - Mileage Reimbursement	22,433	1,216	21,217
73612	Travel - Ground Transportation	9,985	270	9,715
73630	Meals	8,850	234	8,616
73640	Other Incidentals	13,550	1,176	12,374
73706	Radio & TV Ads	44,853	5,000	39,853
XXXXX	TUMF Projects	38,399,980	6,240,841	32,159,138
85101	Consulting Labor	3,523,948	36,375	3,487,573
XXXXX	Overhead Transfer In	(1,518,136)	(253,023)	(1,265,113)
	Total General Operations	**57,402,253**	**6,463,424**	**50,938,829**
	Total Expenditures	**60,035,135**	**6,856,910**	**53,178,225**

Page Intentionally Left Blank

Item 5.A

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: TUMF Nexus Study Ad Hoc Committee

Contact: Christopher Gray, Director of Transportation, gray@wrcog.cog.ca.us, (951) 955-8304

Date: October 13, 2016

Requested Action:

1. Receive and file.

WRCOG's Transportation Uniform Mitigation Fee (TUMF) Program is a regional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in Western Riverside County. Each of WRCOG's member jurisdictions participates in the Program through an adopted ordinance, collects fees from new development, and remits the fees to WRCOG. WRCOG, as administrator of the TUMF Program, allocates TUMF to the Riverside County Transportation Commission (RCTC), groupings of jurisdictions – referred to as TUMF Zones – based on the amounts of fees collected in these groups, and the Riverside Transit Agency (RTA). The TUMF Nexus Study is intended to satisfy the requirements of California Government Code Chapter 5 Section 66000-66008 (also known as the California Mitigation Fee Act) which governs imposing development impact fees in California. The Study establishes a nexus or reasonable relationship between the development impact fee's use and the type of project for which the fee is required. The TUMF Program is a development impact fee and is subject to the California Mitigation Fee Act (AB 1600, Govt. Code § 6600), which mandates that a Nexus Study be prepared to demonstrate a reasonable and rational relationship between the fee and the proposed improvements for which the fee is used. AB 1600 also requires the regular review and update of the Program and Nexus Study to ensure the validity of the Program. The last TUMF Program Update was completed in October 2009.

TUMF Nexus Study Ad Hoc Committee

In September 2016, the WRCOG Executive Committee took action to form an Ad Hoc Committee to review the options prepared in regard to the TUMF Nexus Study Update. The Ad Hoc Committee is comprised of representatives from the Public Works (Cities of Banning and Eastvale, and the County of Riverside), Technical Advisory (Cities of Jurupa Valley, Menifee, and Lake Elsinore) , and Executive Committees (Cities of Calimesa, Moreno Valley, and Riverside). In addition to developing a preferred option in regarding to the completion of the TUMF Nexus Study, the Ad Hoc Committee will review the updates that WRCOG and TUMF Consultant, Parsons Brinckerhoff, made to the TUMF Nexus Study since the delay. The following are items in the TUMF Nexus Study that were updated since the delay:

- Revised growth forecast from the 2016 SCAG RTP/SCS
- Updated unit cost assumptions
- The RivTAM 2012 Existing and 2040 No-Build model runs were examined to determine the vehicle miles of travel (VMT) of various trip types that would take place in western Riverside County (excluding through trips)
- Updated data sets to include more recent studies for employees per square footage
- Reviewed TUMF Network to remove completed projects

The items were revised as a result of comments WRCOG received during the comment period of the draft 2015 TUMF Nexus Study. WRCOG addressed each of the comments received during the comment period, which can be reviewed online at wrcog.cog.ca.us.

On September 26, 2016, the Ad Hoc Committee held its first meeting, which was attended by all members of the Ad Hoc Committee except for the City of Jurupa Valley. The Ad Hoc Committee discussed the potential for WRCOG and member jurisdictions to review the TUMF Network to remove facilities that do not meet the criteria for inclusion in the TUMF Network. As a result of the discussion during the first meeting staff is preparing the following items for review and discussion at the next Ad Hoc meeting:

- Fee phase-in scenarios based on the draft TUMF Schedule and the potential revenue loss of each scenario
- Potential fee schedule with reductions in contingency/soft cost allocations
- Facilities that are candidates for potential removal from the TUMF Network
- Facilities that are proposed to be improvement to two lanes
- Change in fee burden if TUMF increases by a particular percentage
- Effect of the proposed logistics fee on industrial uses

The Ad Hoc Committee will be meeting on October 19th to review the additional information and discuss potential options for the TUMF Nexus Study Update.

Prior WRCOG Actions:

September 15, 2016: The WRCOG Technical Advisory Committee received report.

September 8, 2016: The WRCOG Public Works Committee appointed the Cities of Banning and Eastvale, and the County of Riverside to assist members of the Ad Hoc Committee in discussing potential options related to completion of the Nexus Study.

August 18, 2016: The WRCOG Technical Advisory Committee 1) appointed Gary Thompson (Jurupa Valley), Grant Yates (Lake Elsinore), and Rob Johnson (Menifee) to assist member of the Ad Hoc Committee in discussing potential options related to completion of the Nexus Study; and 2) recommended that only one representative from any member jurisdiction serve on the Ad Hoc Committee.

August 10, 2016: The WRCOG Administration & Finance Committee received report.

August 1, 2016: The WRCOG Executive Committee 1) directed staff to convene an Ad Hoc Committee composed of three members of the Executive Committee, with assistance from three members of the Technical Advisory Committee and two members of the Public Works Committee, to discuss potential options related to completion of the Nexus Study; and 2) appointed three members of the Executive Committee to serve on the Ad Hoc Committee.

WRCOG Fiscal Impact:

Transportation department activities are included in the Agency's adopted Fiscal Year 2016/2017 Budget under the Transportation Department.

Attachment:

None.

Item 5.B

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **TUMF Network Revisions**

Contact: **Daniel Ramirez-Cornejo, Staff Analyst, cornejo@wrcog.cog.ca.us, (951) 955-8307**

Date: **October 13, 2016**

Requested Action:

1. Direct WRCOG staff to continue reviewing the TUMF Network and identify facilities for potential removal from the TUMF Network.

WRCOG's Transportation Uniform Mitigation Fee (TUMF) Program is a regional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in Western Riverside County. Each of WRCOG's member jurisdictions and the March JPA participates in the Program through an adopted ordinance, collects fees from new development, and remits the fees to WRCOG. WRCOG, as administrator of the TUMF Program, allocates TUMF to the Riverside County Transportation Commission (RCTC), groupings of jurisdictions – referred to as TUMF Zones – based on the amounts of fees collected in these groups, and the Riverside Transit Agency (RTA). Fees are used for planning, engineering, right-of-way acquisition, and construction of eligible TUMF facilities. Since the Program began in 2003, more than $680 million in revenues has been collected, and 87 projects have been completed. In all, TUMF will provide nearly $4 billion in transportation and transit improvements to Western Riverside County.

2016 TUMF Network Revisions

In an effort to conduct a final review of the TUMF Network that will be incorporated into the 2016 TUMF Nexus Study, WRCOG distributed individual jurisdiction facilities line items to each member jurisdiction, which provided member jurisdictions the opportunity to report any completed facilities that could be removed from the TUMF Network. The exercise provided the opportunity to reflect any minor adjustments (completed projects / changes in other funding sources) that were not captured in the previous TUMF Network review, while maintaining the total TUMF Network costs approved in March 2015.

For reference, the criteria for facilities to be included in the TUMF Network are shown below:

1. Arterial highway facilities proposed to have a minimum of four lanes at ultimate build-out (not including freeways).
2. Facilities that serve multiple jurisdictions and/or provide connectivity between communities both within and adjoining Western Riverside County.
3. Facilities with forecast traffic volumes in excess of 20,000 vehicles per day by 2040.
4. Facilities with forecast volume to capacity ratio of 0.90 (LOS E) or greater in 2040.
5. Facilities that accommodate regional fixed route transit services.
6. Facilities that provide direct access to major commercial, industrial, institutional, recreational or tourist activity centers, and multi-modal transportation facilities (such as airports, railway terminals and transit centers).

Staff received requests from member jurisdictions for facilities to be included in the 2016 TUMF Network. The model runs for the TUMF Nexus Study have been completed, for which the following facilities meet the criteria for inclusion in the TUMF Network:

- Ramona Expressway/I-215 Interchange (Type 2 Interchange)
- Iowa Avenue, Martin Luther King to University Avenue (Widen 2 to 4 lanes)
- Cajalco Road, I-15 to Bedford Canyon Road (Widen 2 to 4 lanes)
- Keller Road/I-215 Interchange (Type 3 Interchange)
- Rancho California Road, Butterfield Stage Road to Glen Oaks (Widen 2 to 4 lanes)
- Moreno Beach Drive/SR-60 Interchange

The facilities below were requested for inclusion in the TUMF Network; however do not meet the criteria for inclusion in the TUMF Network:

- Keller Road, I-215 to Eastern City Limits (Widen 2 to 4 lanes)

WRCOG will not be accepting any further requests for additions to the TUMF Network beyond the above-mentioned facilities.

Additionally, staff has identified facilities that can potentially be removed from the TUMF Network because they do not meet the minimum criteria for inclusion in the TUMF Network. These are facilities that do not have a minimum of four lanes at building and/or do not have a forecast volume to capacity ratio of .90 or greater in 2040. Attachments 1 and 2 to the Staff Report contain the identified facilities. Those these facilities have been identified for potential removal, they cannot be definitively removed until further review is conducted. As part of this review of facilities that do not meet the volume to capacity ratio of .90 or greater, staff did not take into consideration removing facilities that would create a bottleneck. Removing these facilities may potentially result in additional congestion and have can remain in the TUMF Network for system continuity.

WRCOG will continue with the process of reviewing these facilities to verify that they no longer meet the criteria identified above. Any projects which do not meet these criteria will be removed from the Nexus Study but will remain on the TUMF Network and will be eligible for inclusion in future TUMF Nexus Studies. The aggregate value for these projects is approximately $450 million.

WRCOG is available to meet with any City that would like to discuss these Network modifications as we continue to refine the Network prior to further action on the Nexus Study.

Prior WRCOG Action:

August 11, 2016: The WRCOG Public Works Committee received report.

WRCOG Fiscal Impact:

TUMF Nexus Study Update activities are included in the Agency's adopted Fiscal Year 2016/2017 Budget under the Transportation Department.

Attachments:

1. TUMF Network – Facilities with Volume/Capacity Ratio Less than .90.
2. TUMF Network – 2 Lane Facilities That Have Costs.

Item 5.B

TUMF Network Revisions

Attachment 1

TUMF Network – Facilities with Volume/Capacity Ration Less than .90

Page Intentionally Left Blank

Facilities with Volume/Capacity Ratio less than .90

Jurisdiction	Facility	From	To	Improvement
Banning	Highland Springs	Cherry Valley	Oak Valley	Widen 2 to 3 lanes
Banning	Sunset	Ramsey	Lincoln	Widen 2 to 4 lanes
Calimesa	County Line	Roberts	Bryant	Widen 2 to 4 lanes
Calimesa	Desert Lawn	Palmer	Champions	Widen 2 to 4 lanes
Calimesa	Singleton	Condit	Roberts	Widen 2 to 4 lanes
Corona	Main	SR-91	S. Grand	Widen 4 to 6 lanes
Eastvale	Schleisman	Sumner	Scholar	Widen 2 to 6 lanes
Eastvale	Hamner	Mission	Bellegrave	Widen 4 to 6 lanes
Eastvale	Hamner	Bellegrave	Amberhill	Widen 4 to 6 lanes
Lake Elsinore	Railroad Canyon	I-15	Canyon Hills	Widen 4 to 6 lanes
Lake Elsinore	Corydon	Mission	Grand	Widen 2 to 4 lanes
Menifee	Ethanac	Goetz	Murrieta	Widen 2 to 4 lanes
Menifee	Ethanac	Murrieta	I-215	Widen 2 to 4 lanes
Menifee	Menifee	SR-74 (Pinacate)	Simpson	Widen 2 to 4 lanes
Menifee	Menifee	Salt Creek	bridge	Widen 2 to 4 lanes
Menifee	Scott	I-215	Briggs	Widen 4 to 6 lanes
Menifee	Briggs	Newport	Scott	Widen 2 to 4 lanes
Menifee	Murrieta	Ethanac	McCall	Widen 2 to 4 lanes
Moreno Valley	Alessandro	Nason	Moreno Beach	Widen 2 to 4 lanes
Moreno Valley	Alessandro	Moreno Beach	Gilman Springs	Widen 2 to 4 lanes
Moreno Valley	Perris	Reche Vista	Ironwood	Widen 2 to 4 lanes
Moreno Valley	Perris	Ironwood	Sunnymead	Widen 4 to 6 lanes
Moreno Valley	Perris	Sunnymead	Cactus	Widen 4 to 6 lanes
Moreno Valley	Pigeon Pass/CETAP	Cantarini	Ironwood	Widen 2 to 4 lanes
Norco	Norco	Corydon	Hamner	Widen 2 to 4 lanes
Perris	11th/Case	Perris	Goetz	Widen 2 to 4 lanes
Perris	Ramona	I-215	Perris	Widen 4 to 6 lanes
Perris	Evans	Morgan	Rider	Widen 4 to 6 lanes
Perris	Evans	Rider	Placentia	Widen 2 to 4 lanes
Riverside	Arlington	North	Magnolia	Widen 2 to 4 lanes
Riverside	1st	Market	Main	Widen 2 to 4 lanes
Riverside	Central	SR-91	Magnolia	Widen 4 to 6 lanes

Temecula	Rancho California	Margarita	Butterfield Stage	Widen 4 to 6 lanes
Unincorporated	Benton	SR-79	Eastern Bypass	Widen 2 to 4 lanes
Unincorporated	SR-79 (Eastern Bypass)	SR-79 Winchester	Borel	Widen 2 to 4 lanes
Unincorporated	SR-79 (Eastern Bypass)	Tucalota Creek	Bridge	Widen 2 to 4 lanes
Unincorporated	SR-79 (Eastern Bypass)	Vino	SR-79 Constance	Widen 2 to 4 lanes
Unincorporated	Briggs	Simpson	Newport	Widen 2 to 4 lanes
Unincorporated	Briggs	Salt Creek	Bridge	Widen 2 to 4 lanes
Unincorporated	Center (Main)	I-215	Mt. Vernon	Widen 2 to 4 lanes
Unincorporated	Center (Main)	BNSF	Grade Separation	Widen 2 to 4 lanes
Unincorporated	Cherry Valley	Noble	Desert Lawn	Widen 2 to 4 lanes
Unincorporated	Cherry Valley	San Timoteo Wash	Bridge	Widen 2 to 4 lanes
Unincorporated	Cherry Valley	Highland Springs	Bellflower	Widen 2 to 4 lanes
Unincorporated	Horsethief Canyon	Temescal Canyon	I-15	Widen 2 to 4 lanes

Item 5.B

TUMF Network Revisions

Attachment 2

TUMF Network – 2 Lane Facilities That Have Costs

Page Intentionally Left Blank

2-Lane Facilities in the TUMF Network That Have Associated Costs

Jurisdiction	Facility	From	To
Banning	I-10 Bypass South	I-10	Morongo Trail (Apache Trail)
Banning	I-10 Bypass South	I-10	interchange
Banning	I-10 Bypass South	San Gorgonio	bridge
Banning	I-10 Bypass South	UP	railroad crossing
Menifee	Menifee	Ramona	Nuevo
Menifee	McCall	Menifee	SR 79 (Winchester)
Menifee	McCall	SR-79 (Winchester)	Warren
Perris	Ellis	SR-74 (4th)	I-215
Perris	Ellis	I-215	interchange
Perris	Ellis	BNSF San Jacinto Branch	railroad crossing
Unincorporated	Potrero	4th	1st
Unincorporated	Potrero	1st	SR-79 (Beaumont)
Unincorporated	SR-79 (Eastern Bypass)/Anza	Borel	Vino
Unincorporated	SR-79 (Eastern Bypass)/Anza	Santa Gertrudis Creek	bridge
Unincorporated	SR-79 (Eastern Bypass/Anza)	SR-79 (Constance)	Santa Rita
Unincorporated	SR-79 (Eastern Bypass/Anza)	Temecula Creek	Bridge
Unincorporated	SR-79 (Eastern Bypass/Anza)	Santa Rita	Murphy Road
Unincorporated	SR-79 (Eastern Bypass)	Murphy Road	Pala
Unincorporated	SR-79 (Eastern Bypass)	Pala	I-15
Unincorporated	SR-79 (Eastern Bypass)	I-15	interchange
Unincorporated	SR-79 (Eastern Bypass)	Rainbow Creek	bridge

Page Intentionally Left Blank

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: TUMF Administrative Plan Revision

Contact: Christopher Gray, Director of Transportation, gray@wrcog.cog.ca.us, (951) 955-8304

Date: October 13, 2016

Requested Action:

1. Approve the TUMF Administrative Plan revision to include an additional process in which developers receive credit against TUMF obligations.

WRCOG's Transportation Uniform Mitigation Fee (TUMF) Program is a regional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in Western Riverside County. Each of WRCOG's member jurisdictions and the March JPA participates in the Program through an adopted ordinance, collects fees from new development, and remits the fees to WRCOG. WRCOG, as administrator of the TUMF Program, allocates TUMF to the Riverside County Transportation Commission (RCTC), groupings of jurisdictions – referred to as TUMF Zones – based on the amounts of fees collected in these groups, and the Riverside Transit Agency (RTA). The Administrative Plan serves as the governance document for the TUMF Program and outlines various roles and responsibilities for WRCOG, the Riverside County Transportation Commission, member agencies, and other parties involved in the TUMF Program. The Administrative Plan dates back to 2003 and was updated in mid-2016.

TUMF Administrative Plan

In June 2016, the WRCOG Executive Committee approved revisions to the TUMF Administrative Plan, for which the following updates were included:

- Two or more party TUMF Reimbursement Agreement signature authority
- Combine "Guest Dwellings" and "Detached Second Units" exemptions and refine definitions
- Establishing a time limit on TUMF refunds
- Balance due on incorrectly calculated TUMF funded items

As administrator of the TUMF Program, WRCOG would like to continue identifying areas of the Program that require additional clarity/assistance for member jurisdictions. WRCOG has received inquiries regarding the process of a developer option to receive credit against TUMF obligation.

Under the current TUMF Administrative Plan, if a developer constructs improvements identified on the TUMF Network, the developer is entitled to a TUMF credit up to 100% of the TUMF obligation, not to exceed the Maximum TUMF Share, if the developer follows the requirements outlined in Exhibit "B" of the Administrative Plan. Pursuant to the language of the TUMF Improvement and Credit Agreement (Section 2.3), developers shall comply with the jurisdictions Public Works Requirements (award to the lowest responsible bidder, pay prevailing wages, etc.).

The inquiry that WRCOG has received is whether under the Administrative Plan a developer can receive credit though it has assigned the duties of retaining a contractor to the member jurisdiction in which the TUMF facility is located. In one inquiry received, a developer will be providing the funding to construct the TUMF improvements and the member jurisdiction will retain the contractor and manage the project. Staff proposes that language to the TUMF Administrative Plan follow the format in which member jurisdictions have the option to allow a developer to receive credit in lieu of payment of TUMF for participating in financing districts such as a Community Facility District (CFD). As with CFD's if credit is issued in lieu of requiring the payment of TUMF, then the improvements shall not be eligible for TUMF Program prioritization or funding. Facilities that this policy would pertain to include the following:

1. A Regionally Significant Transportation Improvement, as defined as those facilities that typically are proposed to have six lanes at build out and extend between multiple jurisdictions, or discrete useable segment thereof, as determined by WRCOG;
2. Any type 1, 2, or 3 interchange on an interstate or state highway;
3. Any railroad crossing with an estimated construction cost of more than ten million dollars ($10,000,000);
4. Any bridge located on a regionally significant arterial as defined in (1.) of this section.

With this revision to the TUMF Administrative Plan, a developer will have the following options to meet a developments TUMF obligation:

1. Pay TUMF at issuance of building permit or certificate of occupancy/final inspection;
2. Build a regional facility in lieu of payment of TUMF to receive credit;
3. Fund 100% of a regional facility in lieu of payment of TUMF to receive credit; or
4. Participate in a CFD and receive TUMF credit.

Prior WRCOG Action:

May 12, 2016: The WRCOG Public Works Committee recommended that the WRCOG Executive Committee approve the proposed updates to the TUMF Administrative Plan.

WRCOG Fiscal Impact:

TUMF Program activities are included in the Agency's adopted Fiscal Year 2016/2017 Budget under the Transportation Department.

Attachment:

None.

Item 5.D

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Proposed Grant Writing Assistance Program for Local Jurisdictions and SCAG Sustainability Planning Grant Program Update**

Contact: **Christopher Gray, Director of Transportation, gray@wrcog.cog.ca.us, (951) 955-8304**

Date: **October 13, 2016**

Requested Actions:

1. Designate two (2) Public Works Committee members to serve on Grant Writing Assistance Program focus group.
2. Request partner agencies for WRCOG applications for SCAG Sustainability Planning Grant Program.

WRCOG has received a number of requests to assist WRCOG member jurisdictions in grant writing. WRCOG would like to assist member jurisdictions in this capacity and has set aside funds to assist. WRCOG is proposing to create a grant writing assistance program to assist jurisdictions on an as-needed basis as funding is available. WRCOG staff seeks committee members to participate in a focus group that looks into the program specifics. WRCOG is also providing an update on SCAG's Sustainability Planning Grant Program. This grant opportunity is offered to assist member jurisdictions in moving forward with sustainable planning efforts. WRCOG will continue to monitor, provide updates, and offer assistance.

Grant Writing Request for Proposals from WRCOG

WRCOG has received requests in the past to assist jurisdictions in preparing proposals for grant opportunities, especially with the robust Caltrans ATP. WRCOG has identified funds to commence a grant writing program for its member jurisdictions and/or agencies. The specifics and amount for this program have not been determined. WRCOG staff would like to convene a focus group of agency staff to provide feedback on the specifics. WRCOG envisions that once the funds have been approved, WRCOG staff will proceed with a Request for Proposals from consultants to serve on a "bench" for assistance as grant writers to WRCOG member jurisdictions and/or agencies. The bench of consultants will then be made available to member jurisdictions and/or agencies on a first-come, first-serve basis. The consultants will assist jurisdictions and/or agencies on the grant application process only.

Focus Group

Prior to program commencement, WRCOG seeks to convene a focus group to examine the program details and logistics. WRCOG has not undertaken such a program before, and would like to gather input and feedback from local jurisdictions. WRCOG requests two (2) members from the Public Works Committee and Planning Directors' Committee serve on the focus group – WRCOG will also include staff from Riverside County Transportation Commission (RCTC). RCTC is also looking into implementing a similar program for grant opportunities that deal with capital projects, so including RCTC in the focus groups ensures there are no duplicative efforts.

The goal of the focus group is to discuss and propose parameters and rules of the program. Some items the focus group may discuss are:

- types of grants the program should assist jurisdictions with
- pros-and-cons of program structure, such as first-come, first-serve or whether there is a priority system based on jurisdiction need
- how grant writers are dispersed amongst jurisdictions

Initial feedback from the focus groups will be brought back to the committees for discussion and input. The focus group will reconvene to discuss necessary revisions to the program. The program will then be vetted through the committees, and eventually the Executive Committee.

SCAG Sustainability Planning Grant Program Update

SCAG's Sustainability Planning Grants Program (SPG) provides resources and direct technical assistance to member jurisdictions to complete important local planning efforts and enable implementation of the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). Since its inception in 2005, many WRCOG jurisdictions have funded projects through the SPG program, formerly known as the Compass Blueprint Grant Program. The Program provides direct technical assistance to SCAG member jurisdictions to complete planning and policy efforts that enable implementation of the regional Sustainable Communities Strategy. For the 2017 SPG cycle grants are available in the following three categories:

1. Active Transportation (AT): Bicycle, Pedestrian, and Safe Routes to School Plans;
2. Integrated Land Use (ILU): Sustainable Land Use Planning, Transit Oriented Developed (TOD) and Land Use, and Transportation Integration;
3. Green Region Initiative (GRI): Natural Resource Plans, Climate Action Plans (CAPs), and Greenhouse Gas (GHG) emissions reduction programs.

Since the Program commenced in 2005, WRCOG and its member jurisdictions have been awarded funding for 23 projects for a combined total of over $3,000,000 to advance planning efforts in the respective jurisdictions and the Western Riverside County region. In the past, all applications submitted for funding through the SPG have attained funding. However, for this round, SPG grants are not guaranteed to financial constraints.

WRCOG staff prepared a comprehensive synthesis of the SPG Program (included as attachment 1 to this report) including an overview of eligibility requirements and scoring criteria. Of note, is the strict requirement that projects must be able to demonstrate a nexus to transportation to be eligible. WRCOG encourages member jurisdictions to apply for funding to support SPG eligible projects. WRCOG staff can be available to support member agencies with the identification of eligible projects and the application process. Below is a short list of studies which have received Program funding in the past:

- Circulation Elements
- General Plan Updates
- Specific Plans
- Corridor Plans
- Economic Development Strategies
- Community / Specific Area Visioning Projects
- Station Area Plans
- TOD District/Plans
- Bicycle / Pedestrian Master Plans

In addition to supporting application from our member jurisdictions, WRCOG is interested in attaining grant funding for subregional studies which assist local jurisdictions in planning for the future and continue to facilitate regional collaboration. The planned projects aim to reduce the need to duplicate efforts in the subregion, increase information sharing, and broadly enhance Western Riverside's future. Listed below are the studies that WRCOG is interested in submitting:

- Smart Cities Readiness Plan – WRCOG would prepare a regional effort to identify specific implementation actions local agencies can undertake related to technologies, such as but not limited to, autonomous vehicles, bike sharing, car sharing, and how that affects land use.

- SB 743 Implementation – WRCOG aims to update traffic study guidelines, as well as include a local agency VMT calculator. This study will also include a VMT threshold for optional use by local agencies.
- Safe Routes to School (SRTS) Plan – WRCOG aims to create a strategic SRTS plan for Western Riverside County that will provide school districts, schools, and jurisdictions a plan to create a program that will identify schools and the improvements needed to create safe routes to school for students.
- WRCOG Climate Action Plan (CAP) Update – WRCOG seeks to update the CAP to conduct a programmatic EIR, an economic analysis, and a Health Impact Analysis (HIA). The economic analysis may be structured similar to the City of Riverside's Growthprint, and the HIA would be conducted to show the CAP's co-benefits.
    - GHG Reinventory – WRCOG would update the last GHG inventory conducted for the CAP
- Subregional Sustainability Demonstration Center Feasibility Study – WRCOG seeks to assess the feasibility of developing an experiential center for modeling innovative technologies and best practices in resource conservation, efficiency, and healthy environments with a facility that would also fill the need for conference and meeting space in the subregion.

Due to eligibility constraints of the Program, WRCOG would be required to partner with a SCAG member city in order to apply for funding for any of the proposed studies above. WRCOG staff will be seeking partnerships with interested member jurisdictions to move forward with applications for these projects and welcomes interest from all members.

A complete list of past SCAG-funded projects is available on SCAG's Sustainability website: http://sustain.scag.ca.gov. Additional Program details can be accessed at: http://sustain.scag.ca.gov/Pages/DemoProjApplication.aspx.

Prior WRCOG Action:

September 8, 2016: The WRCOG Public Works Committee received report.

WRCOG Fiscal Impact:

This item is informational only; therefore there is no fiscal impact.

Attachment:

1. WRCOG Staff Highlights: SCAG Sustainability Planning Grants.

Page Intentionally Left Blank

Item 5.D

Proposed Grant Writing Assistance Program for Local Jurisdictions and SCAG Sustainability Planning Grant Program Update

Attachment 1

WRCOG Staff Highlights: SCAG Sustainability Planning Grants

Page Intentionally Left Blank

WRCOG Staff Highlights: SCAG Sustainability Planning Grants

SPG PROGRAM OVERVIEW

SCAG's Sustainability Planning Grant Program provides resources and direct technical assistance to member jurisdictions to complete important local planning efforts and enable implementation of the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). A critical component of SPG eligibility is demonstrating a nexus to transportation. The SPG is a multi-year program funded through federal, state and local resources.

SPG PROGRAM GOALS

The SPG Call for Proposals seeks to support the goals below. In addition, each category has additional
goals for the eligible project proposal types.

- Provide needed planning resources to local jurisdictions for sustainability planning efforts
- Develop local plans that support the implementation of the 2016 RTP/SCS
- Increase the region's competitiveness for federal and state funds, including but not limited to the California Active Transportation Program and Greenhouse Gas Reduction Funds.

FUNDING SOURCES

Funding for the 2016 SPG will be provided through a combination of federal, state and local sources.
SCAG will allocate funding for successful project proposals based on the eligibility of each funding source and the applicant's readiness. Grants will be managed by SCAG and implemented through its consultants, unless otherwise negotiated with the project sponsor.

REGIONAL EQUITY

The majority of funds to be programmed through the SPG-AT are constrained based on county and geographic equity requirements established by the funding guidelines for each of the respective funding sources. To ensure compliance with funding guidelines, minimum funding targets will be established for each county and project proposals will be evaluated against other proposals received in their respective county. Capacity Building Mini-Grants are not subject to geographic equity requirements and will be competitively awarded by SCAG based on scoring criteria.

PROGRAM SCHEDULE & TIMELINE

The table below highlights important program milestones, including the application due date of November 18, 2016:

Schedule	
SCAG SPG Call for Proposals Opens	9/29/2016
Application Workshop	Week of 10/13/2016
SCAG SPG Call for Project Application Deadline	11/18/16, by 5:00 p.m.

Staff Recommended Draft SPG project list	12/21/16
SCAG Regional Council Approval of 2017 SPG Proposal Rankings	2/2/2017

All project sponsors must be prepared to initiate their projects in Spring 2017. All work must be completed within 12 to 36 months of project initiation. A more exact period of performance will be determined at the time of project initiation based on project complexity and funding source. Time extensions will be considered on a case-by-case basis.

PROJECT TYPES

The 2016 Sustainability Planning Grants Call for Proposals is comprised of 3 main project proposal categories that meet the goals of the overall program: 1) Active Transportation, 2) Integrated Land Use, and 3) Green Region Initiatives. The Active Transportation Category (SPG-AT) will fund planning and non-infrastructure projects or programs that promote safety and encourage people to walk and bicycle. These projects will be designed to enhance local interest and/or capacity to build safe, efficient active transportation networks. The Integrated Land Use/Green Region Initiatives Categories (SPG-ILU/GRI) will fund planning, visioning, and capacity building projects or programs that promote sustainable development, transportation/land use integration, resource efficiency, climate action, and adaptation/resiliency studies.

APPLICATION ELIGIBILITY

All applying entities must be from within the SCAG region. Eligibility varies slightly between SPG-AT and SPG-ILU/GRI:

<u>SPG-AT Eligibility</u>

- Local or Regional Agency - Examples include cities, counties, councils of government, Regional Transportation Planning Agency and County Public Health Departments.
- Transit Agencies - Any agency responsible for public transportation that is eligible for funds under the Federal Transit Administration.
- Public schools or School districts
- Tribal Governments - Federally-recognized Native American Tribes.

<u>SPG-ILU/GRI Eligibility</u>

- SCAG member jurisdictions
- Tribal Governments
- County Transportation Commissions
- Councils of Governments (Must apply in partnership with a SCAG member jurisdiction.) *
- Non-profit groups, community based organizations and non-member government agencies may apply if a dues-paying member agency sponsors their application. These applications must identify both a sponsoring agency project manager as well as a Managing Organization project manager.

*Note, WRCOG is not eligible to apply under this category independently and will be seeking application sponsors or co-applicants for several ILU/GRI projects.

FUNDING AVAILABILITY MAXIMUMS

	Project Categories		
Project Types	**AT**	**ILU**	**GRI**
Shared Vision		$1 M max	
Focused Purpose	$200K max	$200K max	
Non-Infrastructure	$200K max		
Capacity Building	$50K max	$50K max	

APPLICATION PROCESS

Eligible applicants are encouraged to apply to the SPG by completing an application specific to one of the overall project categories and sub-project types. Applicants should contact SCAG staff if the project includes multiple components, or if support is needed in identifying the proper application to use for a project proposal. **Non-Infrastructure and planning projects that were submitted through the 2017 ATP statewide competition, but not selected for funding, will be considered for funding through the SPG-AT** For more information, see page 7/8 of the Guidelines.

The 6 individual application forms for each of the project types include a variety of questions with fill-in-the-blank questions, multiple choice selections, and short answer questions ranging from 500-1500 character limits. On average, the short answer questions combine to equal an approximate maximum of 5 pages of text. Note that some of the applications involve letters of support, which must be submitted along with the application by the November 18 deadline.

Applicants are encouraged to review strategies promoted in the 2016 RTP/SCS to align project proposals with regional planning priorities and concepts. The most competitive proposals will advance multiple planning goals, utilize new or innovative planning practices, and result in planning products or programs that are clearly tied to implementation. Conducting collaborative public participation efforts to further extend planning to communities previously not engaged in land use and transportation discussions is highly encouraged.

EXAMPLE APPLICATIONS

Overviews of completed projects from previous Sustainability Planning Grant Programs can be found here: http://sustain.scag.ca.gov/Pages/Demonstation%20Projects/DemonstrationProjects.aspx.

SCORING CRITERIA

The scoring criteria across all three project proposal types funded through the SPG will include the same three categories – 1) Project Need, 2) Goals, Objectives and Outcomes, and 3) Partnerships and Leveraging. Application questions vary by category within each topic area depending on the eligibility category the project applies through, see below:

Scoring Criteria – Active Transportation	
Topic 1: Project Need	**50 Points**
Mobility	15
Safety	20
Public Health	5
Disadvantaged Communities (Plans and NI) / Community Need (Capacity Building Mini-Grants)	10
Topic 1: Project Goals, Objectives and outcomes	**35 Points**
Readiness	20
Sustainability	5
Resource Need	5
Public Participation	5
Topic 3: Partnerships and Leveraging	**15 Points**
Leveraging	5
Cost Effectiveness	5
Public Participation / Collaboration	5

Scoring Criteria – ILU/GRI	
Topic 1: Project Need	**50 Points**
Readiness	15
Sustainability	20
Resource Need	10
Disadvantaged Communities	5
Topic 1: Project Goals, Objectives and Outcomes	**35 Points**
Mobility	20
Safety	5
Public Health	5
Public Participation	5
Topic 3: Partnerships and Leveraging	**15 Points**
Leveraging	5
Cost Effectiveness	5
Public Participation	5

EVALUATION PROCESS

For SPG-AT projects, six evaluation teams, one per county, will be established to review, score and rank applications submitted to the SPG-AT. Each team will be comprised of staff from the county transportation commissions and SCAG. <u>Projects will compete and be ranked against other projects within their respective **county**</u>*. Final awards will be based on application score, regional equity targets and funding eligibility.

> *Unlike other APG-AT projects, Capacity Building Mini-Grants will be awarded competitively across the region and scored by SCAG staff only to avoid a conflict of interest. In addition, if a county transportation commission submits a proposal for any of the project types, the application will be reviewed and scored by SCAG staff only.

For SPG-ILU/GRI, three evaluation teams, one for each project type, will be established to review, score and rank applications submitted to the SPG-ILU/GRI. Each team will be comprised of staff from partner agencies, and from SCAG. Projects will compete with and be ranked against other projects within their respective **types**. For example, Integrated Shared Vision projects from across the region will be ranked separately from Focused Planning Proposals, and from Capacity Building Mini-Grants. Final awards will be based on application score, regional geographic equity and funding eligibility.

ALL SPG PROGRAM RELATED RESOURCES

http://sustain.scag.ca.gov/Pages/DemoProjApplication.aspx

- Program Guidelines: http://sustain.scag.ca.gov/Documents/2016CallForProjects/2_SustainabilityGuidelines.pdf
- FAQs: http://sustain.scag.ca.gov/Documents/2016CallForProjects/1_FrequentlyAskedQuestions.pdf
- Application Instructions: http://sustain.scag.ca.gov/Documents/2016CallForProjects/3_ApplicationInstructions.pdf
- Application Template – Excel document including template spreadsheets for SOW, Budget, and Timeline: http://sustain.scag.ca.gov/Documents/2016CallForProjects/4_ApplicationTemplates.xls

Page Intentionally Left Blank

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **The Effects of Big Data in Transportation**

Contact: **Jason Pack, Principal, Fehr & Peers, j.pack@fehrandpeers.com, (951) 274-4800**

Date: **October 13, 2016**

Requested Action:

1. Receive and file.

This item is reserved for a discussion, led by Jason Pack of Fehr & Peers, on different data sets available to assist transportation engineers and planners, and information will be provided on the types of projects the data could be applied to.

Ten years ago, transportation planners and engineers made decisions about massive infrastructure projects using computer models, counts collected in the field, and utilizing household survey data (which only represents a fraction of the people). In recent years, a variety of Big Data firms has come to market. These firms purchase data from GPS providers, cell phone provides, and other data sources and are learning to filter the data for commercial use. Although there are still some limitations in the data sets, it does provide transportation professionals access to data sources that were not available before.

Prior WRCOG Action:

None.

WRCOG Fiscal Impact:

This item is informational only; therefore, there is no fiscal impact.

Attachment:

None.

Page Intentionally Left Blank

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Riverside County Traffic Analysis Model (RIVTAM) Update**

Contact: **Christopher Gray, Director of Transportation, gray@wrcog.cog.ca.us, (951) 955-8304**

Date: **October 13, 2016**

Requested Action:

1. Receive and file.

WRCOG's Transportation Department seeks to conduct research on updating the Riverside County Traffic Analysis Model (RIVTAM). RIVTAM was developed in 2009 to provide Riverside County jurisdictions a more detailed tool to develop long-term forecasts of future travel behavior. Since 2009, RIVTAM has not undergone a comprehensive update, so the land use and transportation data the RIVTAM utilizes is significantly outdated. WRCOG staff surveyed different types of model users and would like to provide an update on the survey results.

Riverside County Traffic Analysis Model (RIVTAM) Update

WRCOG is proposing to lead an effort to prepare a work plan to update RIVTAM in 2017, and met with the original MOU signatories in June and July to discuss the update process. This report is to provide an introduction of the RIVTAM and summarize WRCOG's proposed work plan for a RIVTAM update.

The original MOU signatories are:
- Riverside County Transportation and Land Management Agency (TLMA)
- Western Riverside Council of Governments (WRCOG)
- Coachella Valley Council of Governments (CVAG)
- Riverside County Transportation Commission (RCTC)
- Southern California Association of Governments (SCAG)
- California Department of Transportation (Caltrans)

Development of this countywide model (RIVTAM) was completed in May 2009. At the time the model was finalized, it used data from the SCAG Regional Transportation Model available at that time, which was Existing Year Data for 2008 and Forecast Year Data for 2035. Since 2008 was the beginning of the Great Recession, many assumptions incorporated into the model may be considered aggressive related to land use assumptions.

SCAG's Regional Transportation Model (RTM) encompasses a large geographic area that consists of the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura. The primary goal of developing the RIVTAM was to provide a greater level of detail in Riverside County, while maintaining consistency with the SCAG RTM.

Following development of RIVTAM, a MOU was executed between the six agencies identified above. The MOU can be found as an attachment. Key elements of this MOU included:

- RIVTAM maintenance
- How RIVTAM would be utilized by the MOU signatories
- Updates to RIVTAM
- Use of RIVTAM by other governmental jurisdictions and by private entities
- Technical guidelines

RIVTAM Implementation: After implementation of the MOU, agencies used RIVTAM for a variety of projects. TLMA also developed an on-call list of consultants allowed to use RIVTAM, which was one of the provisions of the MOU. Based on a cursory review of RIVTAM users, it appears a majority of the RIVTAM applications were done through consultants for projects such as the WRCOG Nexus Study Update, Citywide Traffic Models for, among others, Coachella, Corona and Palm Desert, a detailed model for the Wine Country in Riverside County, and other efforts.

While many agencies have benefitted directly from the development of RIVTAM, there are certain challenges with its continued use. The primary issue is that RIVTAM has not undergone a comprehensive update since the initial development work, meaning the land use and transportation data is significantly outdated. The SCAG RTM has also undergone updates since the initial development of RIVTAM, meaning the RIVTAM and SCAG RTM may no longer be consistent.

Other unique challenges that should be considered in the future of RIVTAM are the recent legislation, grants, and innovations created that will affect the future of transportation. Senate Bill (SB) 375 and SB 743 were passed with the goal to reduce Vehicle Miles Traveled (VMT) and may have effect on travel behavior. The State of California also passed SB 99 which created the Active Transportation Program and made funds available to, among other goals, increase the proportion of trips accomplished by bicycling and walking. The future of vehicles may also change travel behavior with the continued development of autonomous vehicles – this will have a great effect on the transportation network in Riverside County.

Needs Assessment: In order to garner feedback, WRCOG identified three different groups that would offer insights from their utilization of RIVTAM: 1. RIVTAM users, 2. RIVTAM data users, and 3. Riverside County jurisdictions. The RIVTAM users consist of the on-call consultant list originally developed by TLMA. The RIVTAM data users consists of consultants who utilize RIVTAM outputs for studies, such as General Plan updates, Specific Plans, etc. The data users list was gathered based on WRCOG staff and MOU signatory staff's experience with consultants.

Preliminary survey questions were developed and shared with the Public Works Committee, Planning Directors' Committee and the MOU signatories. The survey questions were revised and placed on Survey Monkey, and an email was sent out in late August and early September requesting feedback. Feedback was received for the following:

- RIVTAM users – seven (7) respondents
- RIVTAM data users – six (6) respondents
- WRCOG jurisdictions – nine (9) respondents

Feedback has been summarized and provided as an attachment to this report. Survey respondents indicate there are several features of RIVTAM that should be kept. The model is user-friendly, and there are a few technical features that make the RIVTAM standout. As far as a RIVTAM update, survey respondents generally echoed what has been mentioned above. There were five overarching themes to feedback from all three surveys.

1. RIVTAM updates are needed for consistency. All survey responses included some language that RIVTAM is not consistent with SCAG's regional travel model and the RTP/SCS. Additionally, some of the respondents indicated that agencies could be susceptible to challenges to CEQA because of inconsistency.
2. RIVTAM updates are needed to update network and SED. Riverside County's transportation network and housing, employment and population have changed since 2008. Given the economic changes, as well as shifts in forecasts, RIVTAM should be updated to reflect that, or else the outputs RIVTAM produces will not be accurate.
3. Transparency is needed. All three groups stressed the importance of documenting the RIVTAM update

and the need to make sources files available to all users. Specific examples of documentation are trip distribution assignment and error finding purposes. Many users experienced trouble troubleshooting model errors without source files.

4. RIVTAM update should reflect emerging transportation trends. Since 2008, transportation has changed. There has been an increase in multi-modal planning and demand, especially with active transportation. Ride-sharing/sourcing, such as Lyft and Uber, has greatly affected the transportation network. The emergence of the automated vehicle becoming an everyday vehicle is prevalent. The RIVTAM needs to incorporate such trends.

Next Steps: WRCOG will reconvene the group of MOU signatories to review the feedback. Following this, WRCOG will collaborate with the MOU signatories on three documents. WRCOG is willing to facilitate these discussions and take the lead in preparing these documents, if amenable to the other MOU signatories.

The first document would be an updated MOU, which would outline various agency roles and responsibilities related to the updated version of RIVTAM. Specific items identified in the updated MOU will be updated based on the Needs Assessment, and also through a review of the existing MOU. The second document would be a proposed Model Update Work Plan, which would outline how RIVTAM would be updated, including potential funding sources from the various agencies and roles/responsibilities. The final document would be a model update Request for Proposal, which would extract from the updated MOU and Model Update Work Plan.

WRCOG anticipates these three items above could be accomplished using WRCOG internal resources and would not require any funding from outside agencies at this time. WRCOG is requesting the other MOU signatories to commit staff to participate in the Needs Assessment, the review of the MOU, and the development of the RFP process to the extent feasible. WRCOG is also suggesting regular monthly meetings be scheduled to discuss progress once WRCOG initiates the work on the Needs Assessment. Please contact WRCOG staff if any staff from local jurisdictions would like to participate in these monthly meetings.

Prior WRCOG Action:

July 14, 2016: The WRCOG Public Works Committee received an update.

WRCOG Fiscal Impact:

The RIVTAM activities are included in the Agency's adopted Fiscal Year 2016/2017 Budget under the Transportation Department.

Attachments:

1. RIVTAM Signed MOU.
2. RIVTAM Update Needs Assessment.
    a. Survey Results – RIVTAM Users
    b. Survey Results – RIVTAM Data Users
    c. Survey Results – Agencies

Page Intentionally Left Blank

Item 5.F
Riverside County Traffic Analysis model (RIVTAM) Update

Attachment 1
RIVTAM Signed MOU

Page Intentionally Left Blank

RIVERSIDE COUNTY TRAFFIC ANALYSIS MODEL (RivTAM)

EXECUTIVE SUMMARY

The County of Riverside Transportation Department (RCTD), with the cooperation of the Western Riverside Council of Governments (WRCOG), The Coachella Valley Council of Governments (CVAG), the Riverside County Transportation Commission (RCTC), The Southern California Association of Governments (SCAG), and the California Department of Transportation (Caltrans), completed the development of the Riverside County Traffic Analysis Model (RivTAM) in May 2009. RivTAM is a TransCAD model, based on SCAG's Regional Transportation Model that SCAG used in developing the 2035 Regional Transportation Plan (RTP). TransCAD is the name of a commercially-available software package used for transportation system modeling. TransCAD has very good graphic presentation and data retrieval capabilities due to its integration with Geographic Information Systems (GIS) and the associated capabilities.

SCAG's Regional Transportation Model encompasses a large geographic area that consists of the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. Because of the size of the area, the SCAG model lacks the degree of detail, that is often necessary for transportation planning at the County and local jurisdiction levels. RivTAM incorporates a great deal of detail in Riverside County, while maintaining consistency with the SCAG Regional Model.

Listed below are the benefits the County and other entities will gain using RivTAM:

RivTAM has been validated to a finer level of detail than the SCAG Regional Model. The SCAG model has been validated for 2003 as the base year. Model validation is the process whereby traffic estimates for individual roadways are compared to actual ground counts on those roadways. For RivTAM, the validation base year was set at 2007. Traffic counts were made at over 300 locations late in 2007 and early 2008. These counts, supplemented by counts available from Caltrans and local jurisdictions, were used in the RivTAM validation process. The SCAG Regional Model validation within Riverside County addressed five traffic flow corridors and about 50 individual segments in these corridors. For RivTAM about 46 traffic flow corridors and about 350 individual roadway segments within these corridors were analyzed.

The Traffic Analysis Zone (TAZ) system in RivTAM is more detailed than the SCAG Regional Model. Within Riverside County, the SCAG model has 478 Traffic Analysis Zones (TAZ). These 478 TAZs were subdivided into 1,807 in RivTAM. This finer level of TAZ disaggregation, coupled with a finer roadway network, yields to better traffic forecasts on individual roadway segments.

RivTAM has a more detailed roadway network than the SCAG Regional Model. RivTAM added 570 centerline miles of roadways to the network in the SCAG Regional Model. RivTAM incorporates all facilities in the Riverside County General Plan, classified as Secondary and above. In addition some Collectors are included, as necessary, to insure that all TAZs are connected to the network of General Plan roadways.

RivTAM is fully consistent with the SCAG Regional Model in all technical and procedural aspects. RivTAM does not alter any of the SCAG Regional Model assumptions and parameters. Data inputs for areas outside of Riverside County are identical to the SCAG Regional Model. Within Riverside County more refined data is incorporated as described above.

RivTAM is the product of a truly cooperative multi-agency effort. Staff of the participating agencies met at the policy and technical levels on over 30 occasions to review work products, provide direction to the project consultant, and to discuss a variety of matters. The agencies also collaborated by providing applicable data, reports, and other information.

The RIVTAM MOU was presented to the RCTC TAC in September of 2009. The Committee concurred with the content of the document and the County of Riverside was to take the lead in getting the MOU executed by all agencies that participated in the development and acceptance of RIVTAM as the forecasting tool for Countywide transportation planning purposes.

MOU FOR RIVTAM MODEL MAINTENANCE, UPDATE, AND USAGE

WHEREAS the Riverside County Transportation Department (RCTD), the Riverside County Transportation Commission (RCTC), the Western Riverside Council of Governments (WRCOG), and the Coachella Valley Association of Governments (CVAG) jointly funded the development of the Riverside County Traffic Analysis Model (RIVTAM) using TransCAD software,

WHEREAS the Southern California Association of Governments (SCAG) and the California Department of Transportation (Caltrans) participated actively in the development of RIVTAM by providing data, guidance, and reviewing RIVTAM materials and results,

WHEREAS SCAG and Caltrans have determined that RIVTAM has been developed in conformance with accepted modeling practices and standards,

WHEREAS RCTD, RCTC, WRCOG, CVAG, SCAG, and Caltrans wish to ensure that sub-area models developed for use in Riverside County be consistent with RIVTAM,

WHEREAS RCTD, RCTC, WRCOG, CVAG, SCAG, and Caltrans agree that RIVTAM will provide a consistent tool for cities and the County to evaluate their plans, programs and projects,

WHEREAS RCTD, RCTC, WRCOG, CVAG, SCAG, and Caltrans agree that RIVTAM should be used as the forecasting tool for countywide transportation planning purposes,

WHEREAS RCTD, RCTC, WRCOG, CVAG, SCAG, and Caltrans encourage incorporated Cities in Riverside County to use RIVTAM as the basis for their own transportation planning purposes, where appropriate,

WHEREAS RCTD, RCTC, WRCOG, CVAG, SCAG, and Caltrans encourage private entities, such as developers and consultants to use RIVTAM as the basis for their own transportation planning purposes in Riverside County, where appropriate,

NOW THEREFORE, RCTD, RCTC, WRCOG, CVAG, SCAG, and Caltrans (collectively, the Agencies) agree as follows:

RIVTAM Maintenance

RCTD will maintain official versions of RIVTAM for base year and several horizon years.

RIVTAM routine maintenance activities include:

- Incorporating into RIVTAM any updates necessary due to changes in plans and programs of the AGENCIES or other governmental jurisdictions in Riverside County;
- Corrections, such as facility type or number of lanes, that may arise during the use of RIVTAM by the AGENCIES or other users of RivTAM;
- Documenting and keeping a record of all model revisions and corrections;
- Informing the AGENCIES and other users of RivTAM of revisions and corrections;
- Responding, at no cost, to minor data requests, such as daily traffic volume plots, by the AGENCIES, Cities, or other governmental jurisdictions;
- Other tasks that may be needed by agreement of the AGENCIES.

Use of RIVTAM by the AGENCIES

RCTD, CVAG, Caltrans and SCAG have licensing agreements with Caliper Corporation and have the capability to use RIVTAM in-house;

RCTC and WRCOG would need licensing agreements with Caliper should they desire to use RIVTAM in-house;

Since the AGENCIES anticipate the need to engage the services of consultants from time to time to run RIVTAM, the AGENCIES will establish a list of three to five consulting firms qualified to perform such services and will use no consultants other than those on the list of qualified consultants;

RCTD will lead the AGENCIES' joint effort to compile the list of qualified consultants, by issuing a Request for Qualifications and forming a selection committee;

AGENCIES that need a consultant to run RIVTAM, will select a consultant from the AGENCIES' list of qualified consultants;

Each AGENCY shall bear the cost for its own use and running of RIVTAM.

Updating RIVTAM

The AGENCIES agree that updates to RIVTAM may be necessary in response to changes in the plans and programs of the AGENCIES, or other reasons. Each AGENCY shall bear the cost of updating RIVTAM for its own purposes;

RCTC, WRCOG, CVAG, SCAG, and Caltrans will notify RCTD when they make changes in plans and programs that will necessitate updating the official version of RIVTAM;

RCTD will make updates, as appropriate, and inform RCTC, WRCOG, CVAG, SCAG, and Caltrans, and other users of RivTAM when updates are made to the official version of RIVTAM;

The AGENCIES, or their consultants, will not make any updates that are not consistent with RIVTAM modeling concepts and assumptions;

Periodic updates of RIVTAM will be considered at such time as SCAG adopts new Socio-Economic forecasts, and only be made when the updates affect the RIVTAM consistency with SCAG's Regional Modeling assumptions. RCTC, WRCOG, CVAG, and RCTD will negotiate the cost of such major updates and make a recommendation for funding.

Use of RIVTAM by governmental jurisdictions other than the AGENCIES and by private entities

RIVTAM was designed to address most city and county level modeling needs in Riverside County. The model inputs and zone system were designed with sufficient detail to support most city/county planning applications. The modeling methodology can support the evaluation of a range of highway, HOV and transit scenarios. The Agencies encourage the use of RIVTAM by Cities, other governmental jurisdictions, and private entities for their own transportation planning purposes. Universal use of RIVTAM by the Agencies, Cities, other governmental jurisdictions, and private entities, and their consultants will ensure that planning decisions in Riverside County are made based on accurate and consistent travel forecasts;

Cities and other governmental jurisdictions in Riverside County would need licensing agreements with Caliper, appropriate computer equipment, and staff capabilities should they desire to use RivTAM in-house;

Off-the-shelf modeling results and data, such as daily and peak hourly traffic volume forecasts from completed RIVTAM runs will be available to Cities and other governmental jurisdictions directly from RCTD at no cost. Private entities will be requested to pay a fee for such data retrieval and transmittal;

Requests by Cities, other governmental jurisdictions, or private entities, entailing extensive data retrieval, or additional modeling analysis, and/or model runs will require the payment of a negotiated fee to RCTD or a contract directly with the consultants on the AGENCIES' list of qualified consultants to make the necessary RIVTAM runs;

The full set of RIVTAM files (all files needed to run RIVTAM) will be released only to the AGENCIES, to Cities in Riverside County, to other governmental jurisdictions in Riverside County and to the consultants on the AGENCIES' list of qualified consultants;

Requests for the full set of RIVTAM files will be made directly to RCTD in a letter from the requesting City or other governmental jurisdiction. The request shall include a detailed list of the needed items, the model's scope of work, and intended uses of the model.

Technical Guidelines

The AGENCIES will require that any City or other governmental jurisdiction that develops a sub-area model based on RIVTAM for its own use must demonstrate, by submitting appropriate documentation, that the finished model is consistent with RIVTAM before the model can be used for any purpose that affects the AGENCIES;

Consistency documentation will be reviewed and a consistency determination will be made jointly by an appointed committee of the AGENCIES;

Consistency guidelines will be developed by a technical task force that may include representatives of the AGENCIES, Riverside County cities, and other governmental jurisdictions, as well as members of the consultant community, and others.

Agreed to:

Riverside County Transportation Department (RCTD)

By JUAN C. PEREZ ______ 6/30/10

Print Name Signature Date

Riverside County Transportation Commission (RCTC)

By John Standiford ______ 6/30/2010

Print Name Signature Date

Western Riverside Council of Governments (WRCOG)

By Ruthanne Taylor Berger ______ 30 June 2010

Print Name Signature Date

Coachella Valley Association of Governments (CVAG)

By Tom Kirk   _______________   7/14/10

Print Name   Signature   Date

Southern California Association of Governments (SCAG)

By RICH MACIAS   _______________   8/20/10

Print Name   Signature   Date

California Department of Transportation (Caltrans)

By William A. Mosby   _______________   9/30/10

Print Name   Signature   Date

Page Intentionally Left Blank

Item 5.F

Riverside County Traffic Analysis model (RIVTAM) Update

Attachment 2

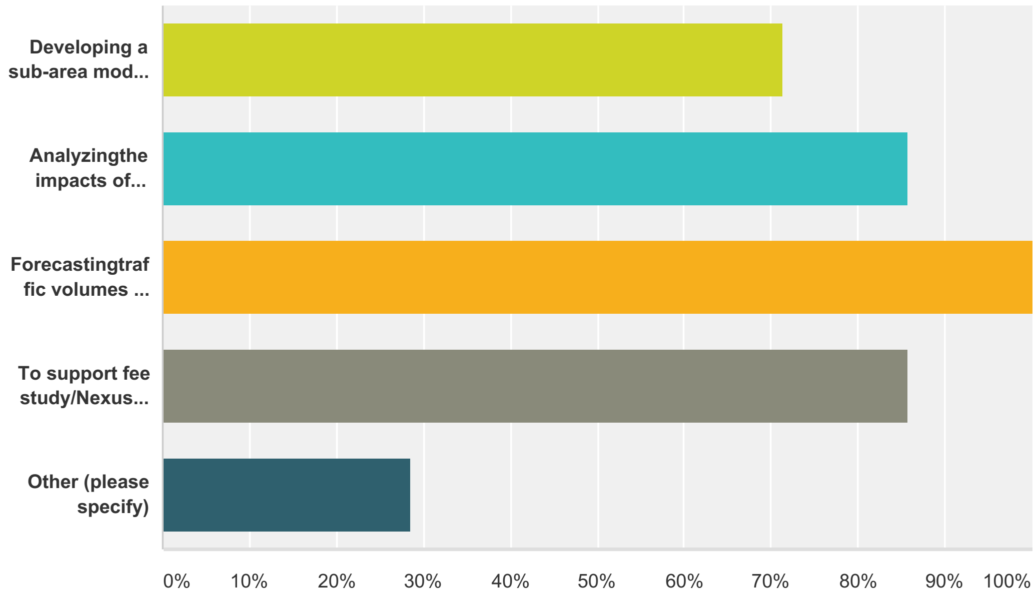
RIVTAM Updated Needs Assessment

a. Survey Results – RIVTAM Users
b. Survey Results – RIVTAM Data Users
c. Survey Results - Agencies

Page Intentionally Left Blank

Q1 How hasyour firm appliedthe RIVTAM? (please check all that apply).

Answered: 7 Skipped: 0

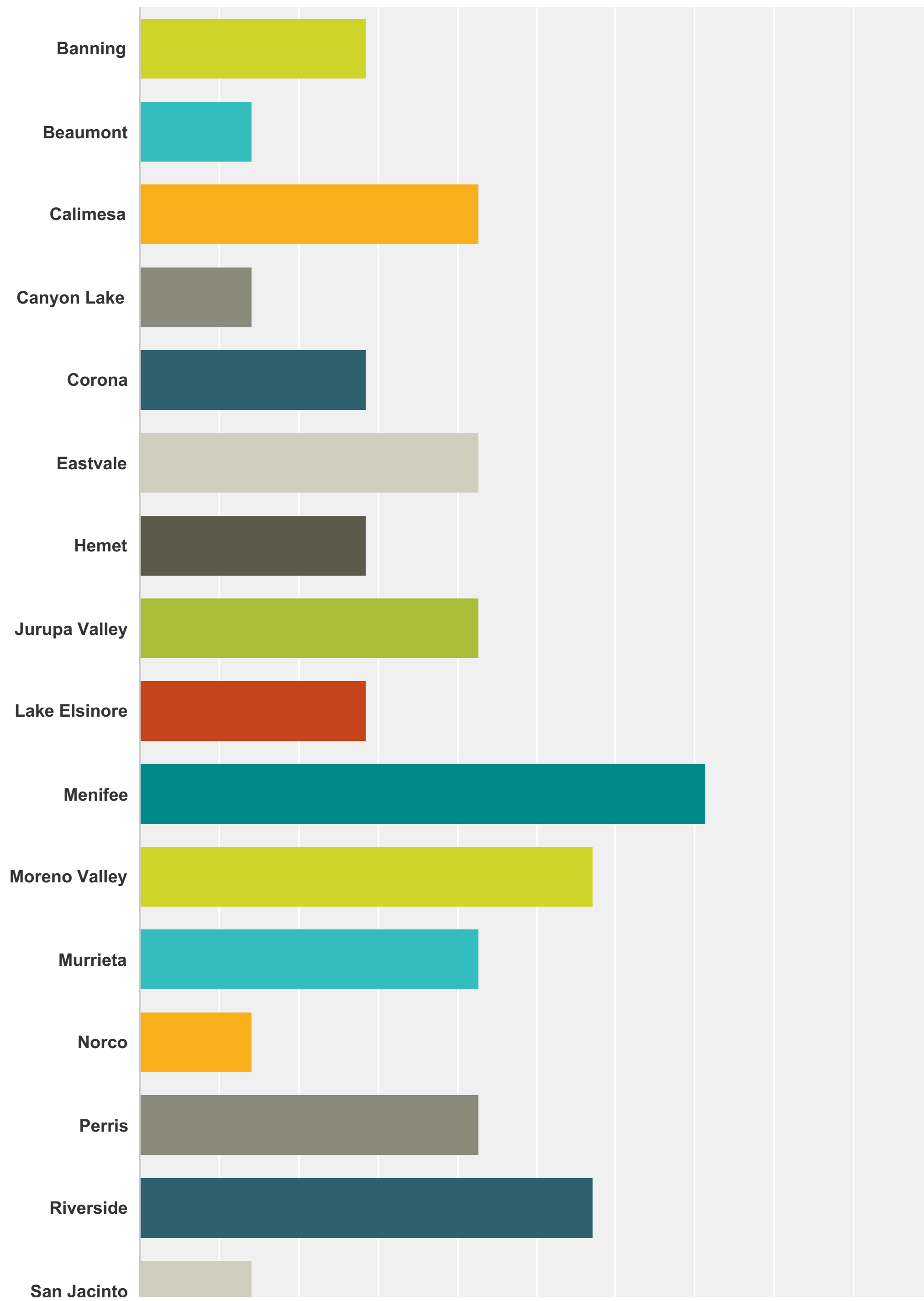


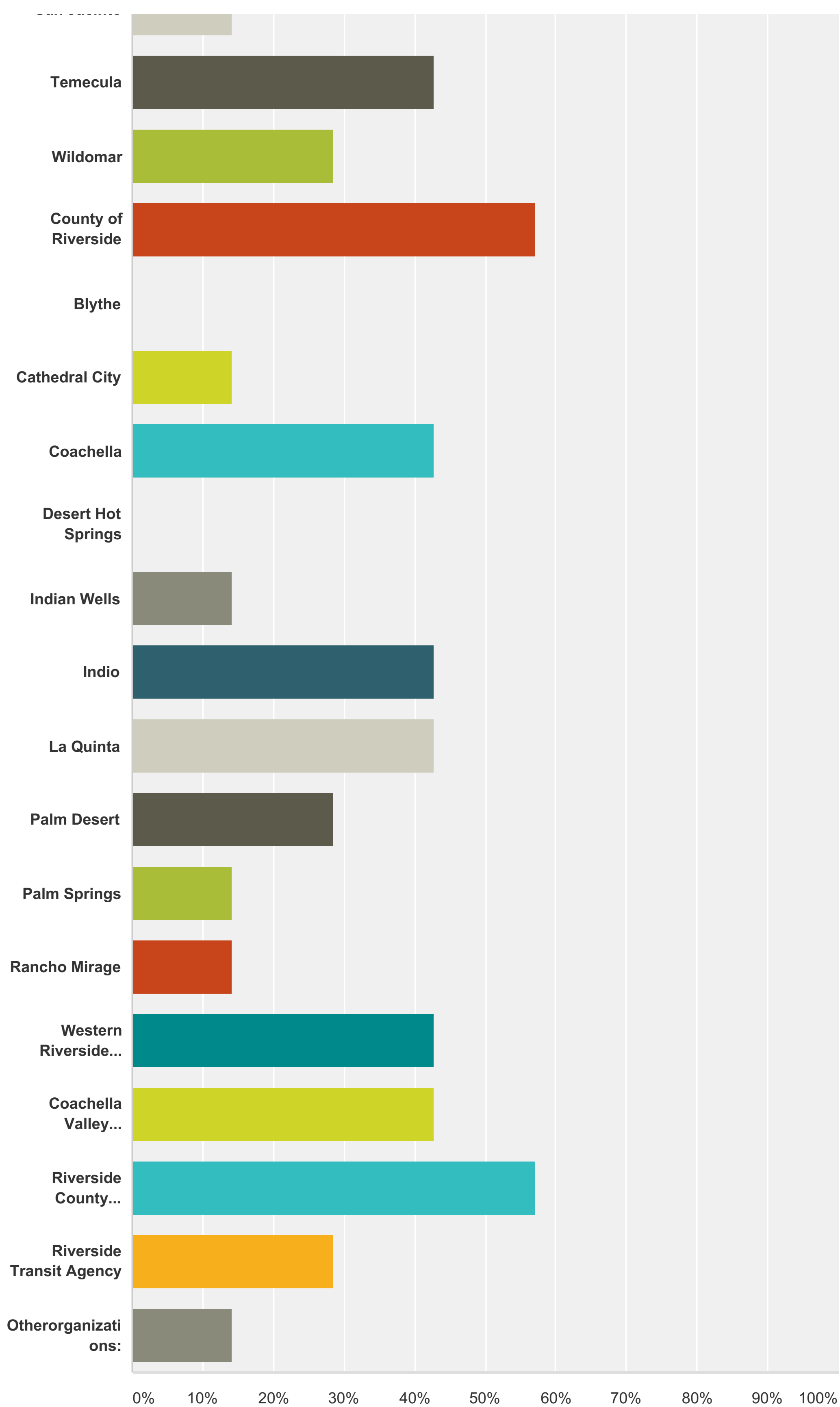
Answer Choices	Responses	
Developing a sub-area model for a general plan or other similar study	**71.43%**	5
Analyzingthe impacts of development projects	**85.71%**	6
Forecastingtraffic volumes for infrastructure projects	**100.00%**	7
To support fee study/Nexus study/or other similar study	**85.71%**	6
Other (please specify)	**28.57%**	2
Total Respondents: 7		

#	Other (please specify)	Date
1	Iteris was the original developer of RIVTAM, which was the first TransCAD focused model based on the SCAG regional model and incorporated a special module for the CVAG area with season and peaking trip estimation. In addition to the development of sub-area models and analyzing impacts for major highway (Mid-County Parkway, Riverside Overlook Parkway, and Cajalco Road Widening Project) and development projects and infrastructure projects, Iteris has used the model for multiple truck route studies. Iteris also used RIVTAM for the I-10/Jefferson Interchange cost sharing analysis in Indio.	8/31/2016 4:18 PM
2	VMT estimation for GHG assessment and for preliminary SB 743 assessment.	8/19/2016 9:01 AM

Q2 Please selectall agenciesfor which your firm provided any of the services identified above - either directly for that agency or for other parties within the boundaries of that agency. For example, if you conducteda traffic impact analysis for a private developer in the City of La Quinta, please list La Quinta.

Answered: 7 Skipped: 0





Answer Choices	Responses

Banning	**28.57%**	2
Beaumont	**14.29%**	1
Calimesa	**42.86%**	3
Canyon Lake	**14.29%**	1
Corona	**28.57%**	2
Eastvale	**42.86%**	3
Hemet	**28.57%**	2
Jurupa Valley	**42.86%**	3
Lake Elsinore	**28.57%**	2
Menifee	**71.43%**	5
Moreno Valley	**57.14%**	4
Murrieta	**42.86%**	3
Norco	**14.29%**	1
Perris	**42.86%**	3
Riverside	**57.14%**	4
San Jacinto	**14.29%**	1
Temecula	**42.86%**	3
Wildomar	**28.57%**	2
County of Riverside	**57.14%**	4
Blythe	**0.00%**	0
Cathedral City	**14.29%**	1
Coachella	**42.86%**	3
Desert Hot Springs	**0.00%**	0
Indian Wells	**14.29%**	1
Indio	**42.86%**	3
La Quinta	**42.86%**	3
Palm Desert	**28.57%**	2
Palm Springs	**14.29%**	1
Rancho Mirage	**14.29%**	1
Western Riverside Council of Governments	**42.86%**	3
Coachella Valley Association of Governments	**42.86%**	3
Riverside County Transportation Commission	**57.14%**	4
Riverside Transit Agency	**28.57%**	2
Otherorganizations:	**14.29%**	1
Total Respondents: 7		

#	Other (please specify)	Date
1	Riverside County Transportation Department (RCTD)	8/23/2016 4:44 PM

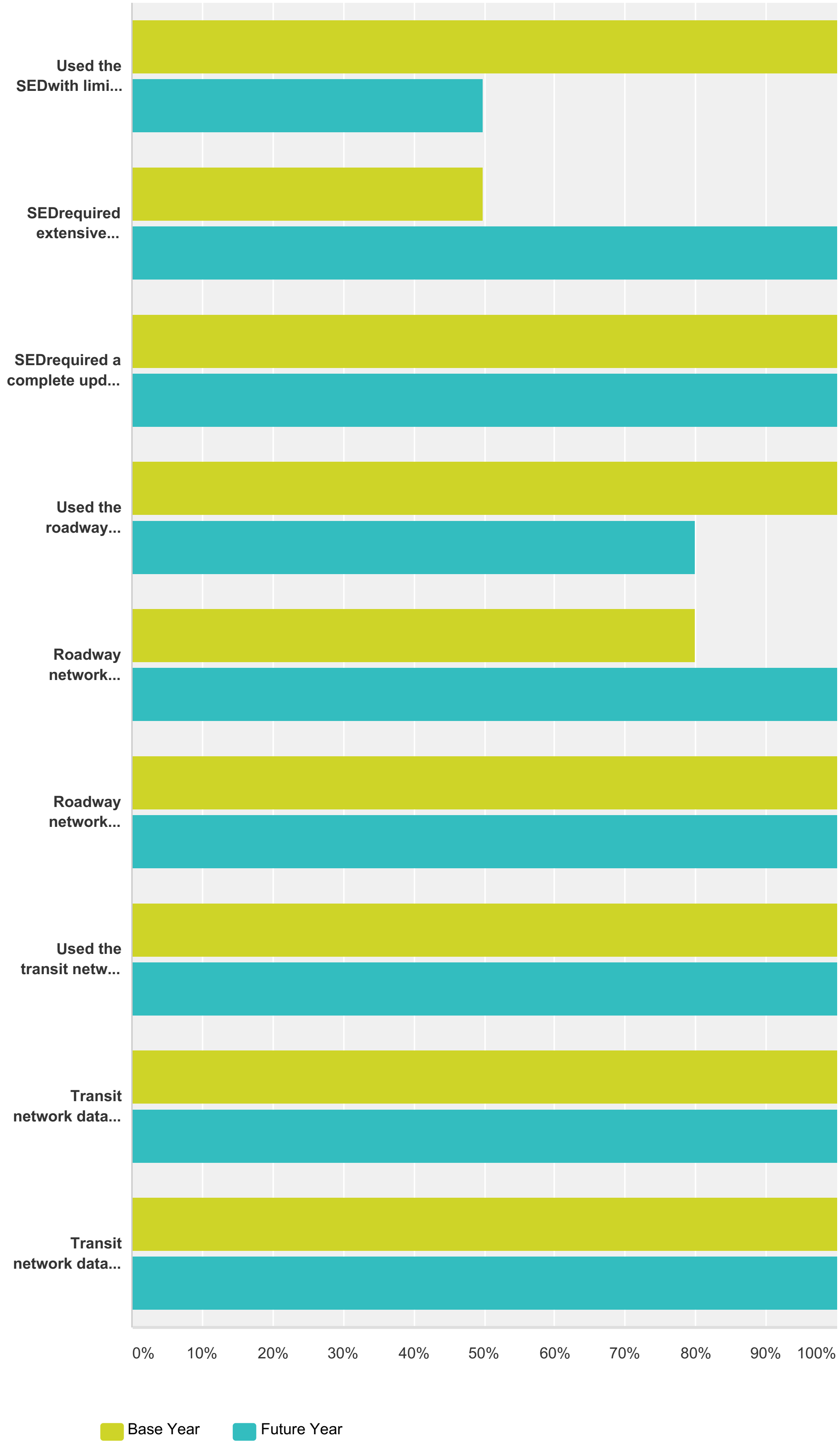
Q3 Please identify any and all agencies for which your firm developed a sub-area model using the RIVTAM.

Answered: 5 Skipped: 2

#	Responses	Date
1	Lake Elsinore, Menifee, Moreno Valley	9/1/2016 3:07 PM
2	Moreno Valley	9/1/2016 12:14 PM
3	Iteris developed sub-area models for the City of Indio, the City of La Quinta, the City of Murrieta, and for Riverside County Transportation Department (for the Mid-County Parkway project).	8/31/2016 4:18 PM
4	City of Corona (Used both RivTAM and SCAG Sub-regional modeling tool), City of Jurupa Valley General Plan Circulation Element (Ongoing)	8/23/2016 4:44 PM
5	Developers, Riverside County, Coachella, Palm Desert	8/19/2016 9:01 AM

Q4 For socio-economic data (SED), roadway network data, and transit network data contained in the RIVTAM, please select from the boxes below to identify which data sets were used and describe the extent to which these data sets required revisions.

Answered: 7 Skipped: 0

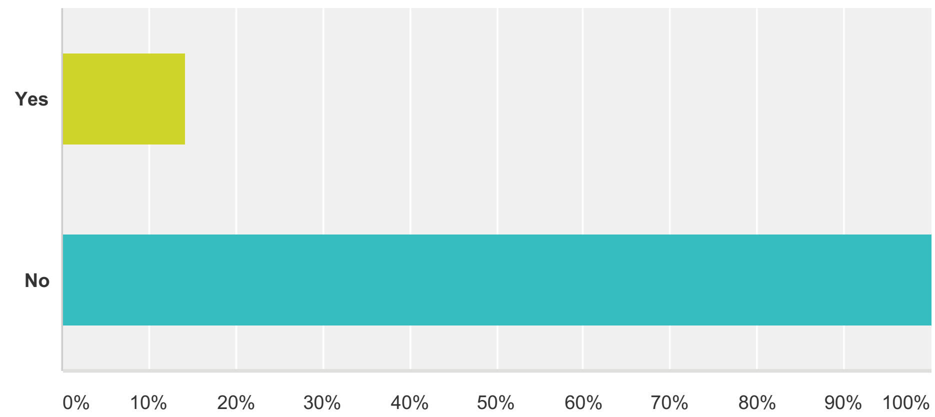

Used the SEDwith limi...
SEDrequired extensive...
SEDrequired a complete upd...
Used the roadway...
Roadway network...
Roadway network...
Used the transit netw...
Transit network data...
Transit network data...
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Base Year
Future Year

	Base Year	Future Year	Total Respondents
Used the SEDwith limited modification	**100.00%** 6	**50.00%** 3	6
SEDrequired extensive revisions	**50.00%** 3	**100.00%** 6	6
SEDrequired a complete update and replacement	**100.00%** 2	**100.00%** 2	2
Used the roadway networkdata with limited modification	**100.00%** 5	**80.00%** 4	5
Roadway network datarequired extensive revisions	**80.00%** 4	**100.00%** 5	5
Roadway network datarequired a complete update and replacement	**100.00%** 2	**100.00%** 2	2
Used the transit network data with limited modification	**100.00%** 5	**100.00%** 5	5
Transit network data required extensive revisions	**100.00%** 2	**100.00%** 2	2
Transit network data required a complete update and replacement	**100.00%** 1	**100.00%** 1	1

#	Please provide any additional details or insights.	Date
1	The SED coming from SCAG seemed reasonable but the conversion of this data to RivTAM TAZs appears to have introduced a lot of errors. This included RivTAM SED deviating from the SCAG SED for the same geographic area, development being assigned to incorrect RivTAM TAZs, issues with how income groups were translated, etc. Regarding the network, we found errors in 5%-to-10% of the links that we checked in the vicinity of Moreno Valley. Some of these weren't really errors in that they may have been correct at the time that the model was created; more like assumptions that needed to be updated. There were a few cases (1%-to-3%) of outright error, such as a dirt trail being coded as a 4-lane arterial. There may have been (and probably were) errors in other parts of the model network beyond the geographic area that we were interested in, but we did not check every area.	9/1/2016 12:14 PM
2	New SED and networks were developed from the SCAG Regional model during the RIVTAM development process. Limited modifications to SED, networks, and transit networks are a typical component to all modeling projects. Transit networks, in particular, are modified based on the addition of more local roadways, and are edited to account for known service changes.	8/31/2016 4:18 PM
3	City of Corona, City of Jurupa Valley - In both cases needed to update network and SED data based on the City's GP land use element which was different than RivTAM SED	8/23/2016 4:44 PM
4	Depending on the project, we have used RIVTAM with the as-is data sets or have completely replaced the data set depending on how important that was for the project. Our thought is that all of the major data sets, including SED, highway and transit networks need at least extensive revisions, or better off, update them completely. RIVTAM was developed based upon SCAG 2008 RTP model (8 year ago) and those inputs are so outdated. Additionally, the SCAG SED data sets have inerrant errors (for example, schools are almost always not coded in the correct TAZs) which made its way into the RIVTAM data set.	8/19/2016 9:01 AM

Q5 Have you utilized RIVTAM for the purposes of transit planning?

Answered: 7 Skipped: 0

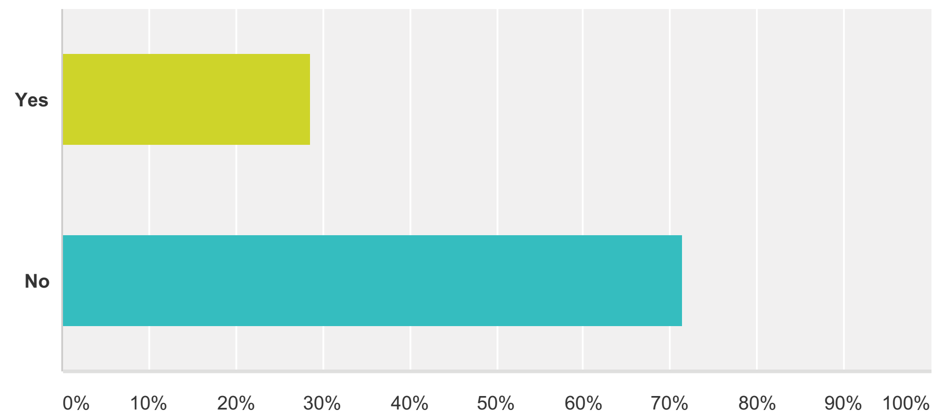


Answer Choices	Responses	
Yes	**14.29%**	1
No	**100.00%**	7
Total Respondents: 7		

#	Please provide any additional details or insights.	Date
1	We have made adjustment to the transit component of RIVTAM for work on the I-10 interchanges in the Coachella Valley, and also for work on circulation system projects. We have not updated a transit plan directly.	9/1/2016 3:07 PM
2	Iteris has indirectly utilized RIVTAM for purposes of transit planning, by utilizing forecast transit loads during general plan update projects. Also, Iteris developed the original transit component through coordination with RTA and validates the transit component of the model in all projects that the model is utilized for. We verify location of routes and stops, headways, and costs.	8/31/2016 4:18 PM
3	RIVTAM was never calibrated to transit so we haven't used it to develop those forecasts. Instead, we have used other models to estimate ridership. Please note that, if a model update did include a calibrated transit model, that could increase the cost of model develop extensively depending on how it is created.	8/19/2016 9:01 AM

Q6 Have you utilized RIVTAM for the purposes of multi-modalplanning (such as bicycle and pedestrian forecasts)?

Answered: 7 Skipped: 0

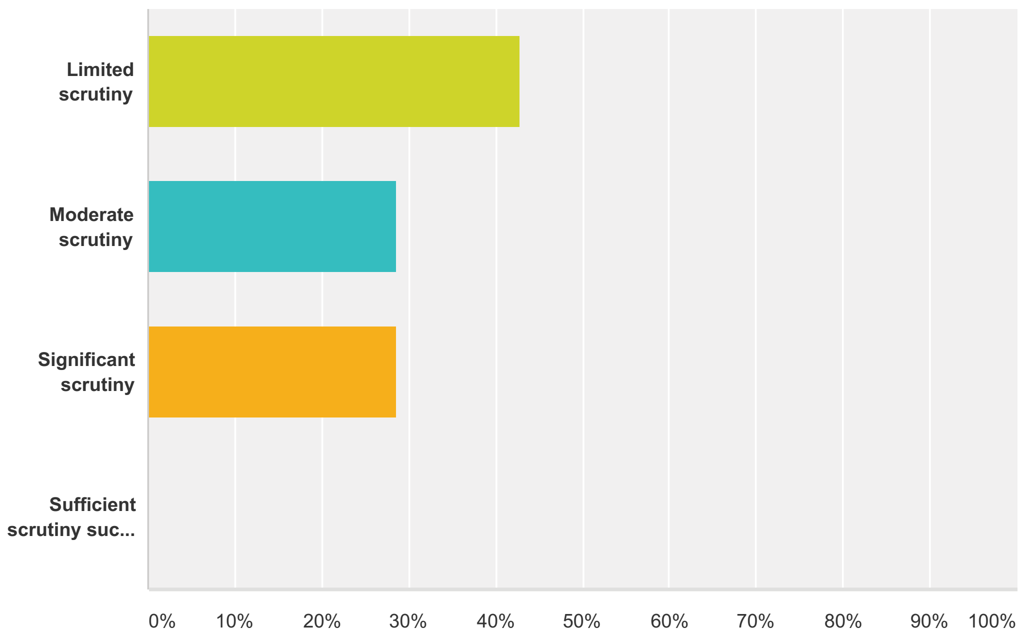


Answer Choices	Responses	
Yes	**28.57%**	2
No	**71.43%**	5
Total Respondents: 7		

#	Please provide any additional details or insights.	Date
1	Yes, we have extracted bike / pedestrian demand for regional network projects (Western Riverside County Non-Motorized Transportation Plan and CV Link).	9/1/2016 3:07 PM
2	As a portion of the development of the subarea model for the City of La Quinta, Iteris utilized forecasts of non-motorized trips for the circulation element of the general plan.	8/31/2016 4:18 PM
3	RivTAM doesn't really have a bike ped component.	8/26/2016 10:47 AM
4	We have not found RIVTAM, or SCAG models in general, to be sensitive to variables that influence bicycle and pedestrian behavior. As such, we have not applied it to develop those types of forecasts. FYI - OCTA is currently incorporating the SCAG active transportation forecasting tool into OCTAM - seems to be working pretty well.	8/19/2016 9:01 AM

Q7 What has your experience been with outside agencies reviewing the RIVTAM inputs or outputs in documents such as General Plans, Nexus Studies, and EIR's? For example, an outside agency could refer to Caltrans reviewing the RIVTAM inputs or outputs as part of the review process for a study your firm conducted for/in the City of Corona.

Answered: 7 Skipped: 0



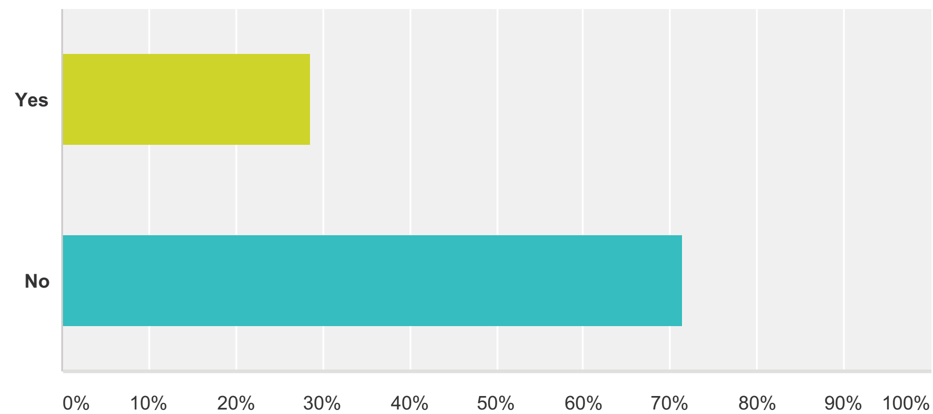
Answer Choices	Responses	
Limited scrutiny	**42.86%**	3
Moderate scrutiny	**28.57%**	2
Significant scrutiny	**28.57%**	2
Sufficient scrutiny such that project approvals have been jeopardized	**0.00%**	0
Total Respondents: 7		

#	Please provide any additional details or insights.	Date
1	For our work in the Coachella Valley, cities affected by a re-allocation study reviewed their own RIVTAM SED and provided significant input.	9/1/2016 3:07 PM
2	There is less scrutiny than there probably should be. This is due to the shortage of seasoned modeling staff and the large number of components that might need to be checked. At most, they might check to see if the more prominent land use and infrastructure projects are represented properly.	9/1/2016 12:14 PM

3	Some recent examples of moderate to significant scrutiny were with Caltrans review for the Mid-County Parkway, Cajalco Road Widening, and Temescal Canyon Widening projects. Iteris views outside review of model forecasts as constructive assistance for project use of regional models. RIVTAM has always shown to have relatively consistent results with previous project forecasts, and has validated relatively easily at the project level for large and small scale projects. Iteris has performed several general plan update projects in the County using RIVTAM data and has frequently coordinated with agency staff to provide and explain model outputs to assist review by external stakeholders.	8/31/2016 4:18 PM
4	Right now, we are getting comments related to RIVTAM's consistency with the 2016 RTP. As such, it does take quite a bit of effort to update the model to reflect the "funded" roadway network and update all of the SED forecasts to reflect the RTP.	8/19/2016 9:01 AM

Q8 Are there any instances in which your firm was asked to apply the RIVTAM for a particular project but was unable to do so?

Answered: 7   Skipped: 0

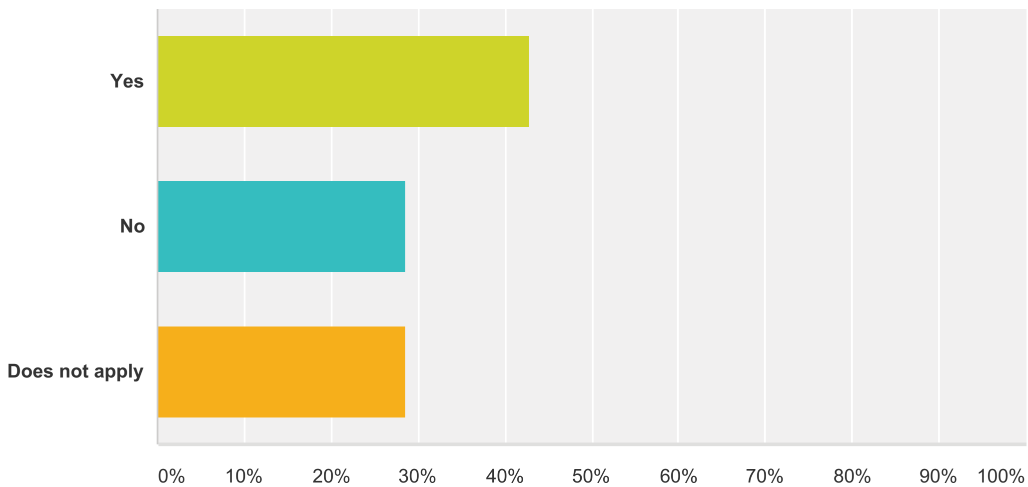


Answer Choices	Responses	
Yes	**28.57%**	2
No	**71.43%**	5
Total		**7**

#	Please provide any additional details or insights.	Date
1	Yes, in a sense. Caltrans requires design studies to use a horizon year at least 20 years past the opening date of the facility. For some of our studies, this was beyond RivTAM's modeling horizon, so we had to create additional model years with our own assumptions regarding land use and network development. One could argue whether or not this is using RivTAM. It would have been better to have an officially-adopted model year further out for Caltrans work.	9/1/2016 12:14 PM
2	Iteris has never had an issue with the applicability of using, or recommending the use of, RIVTAM or Iteris' developed sub-area models based on RIVTAM. However, with the recent updates and reductions (downward adjustments?) to the regional forecasts, there have been recent projects where the use of the regional SCAG model has been recommended rather than RIVTAM to ensure consistency with current forecast trends. Iteris has recently been in discussions about growth forecasts with SCAG modeling staff.	8/31/2016 4:18 PM
3	Riverside County Wine Country Community Plan is probably the biggest one and the one that comes to mind first. Since wineries are not a variable in RIVTAM, there was no way to use it to evaluate that area. Also, RIVTAM did not produce weekend peak travel characteristics which is when activity in Wine Country peak. Additionally, we have had mixed success in using RIVTAM to evaluate VMT for large projects as we couldn't get the model to generate the correct number of trips (where we had to go in and override the OD trip matrix) and/or the model wasn't sensitive enough to account for measures to reduce VMT.	8/19/2016 9:01 AM

Q9 If your firm has used the RIVTAM in both the WRCOG and Coachella Valley Region, have you observed any significant differences in the model performance between regions? Differences can, but are not limited to, the land use differences between the two regions, the seasonality of residents and visitors in the Coachella Valley, etc.

Answered: 7 Skipped: 0



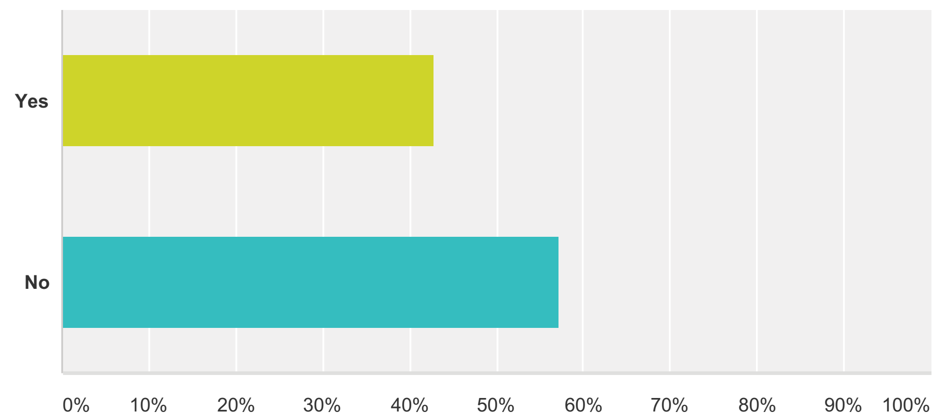
Answer Choices	Responses	
Yes	**42.86%**	3
No	**28.57%**	2
Does not apply	**28.57%**	2
Total		**7**

#	Please provide any additional details or insights.	Date
1	The components of the Coachella Valley SED that represent similar variables (for example households) could be linked in order to maintain consistency between the datasets for the general RIVTAM and the Coachella Valley specific SED.	9/1/2016 3:07 PM
2	Different people used the two models, which hampers comparison.	9/1/2016 12:14 PM
3	Iteris, as the developer of the RIVTAM model and the CVAG peaking component, recognizes that there are differences in travel patterns within Riverside County, that are related primarily to the seasonality of residents and visitors to certain areas. While the model validates rather well in all areas, it was identified that the CVAG model component would need to be included in RIVTAM as a standard process for seasonal time periods. Using the model for projects in various regions of Riverside County, Iteris has not noted any significant differences in terms of validation performance of usability. This is particularly important when looking at areas in the border region between WRCOG and CVAG, e.g. Banning, Beaumont, Cabazon, etc.	8/31/2016 4:18 PM
4	Yes, with the CVAG check box turned on, we noticed noticeable difference in forecasts, especially in areas adjacent to the CVAG area (e.g., Pass Area - Banning and Beaumont)	8/23/2016 4:44 PM

5	We have run into issues in the CVAG region with transit network coding not functioning correctly. It makes it VERY difficult to troubleshoot since we do not have the uncompiled network to see what coding was done in the script in this area. Obviously, we have also had to "turn on" the CVAG module to complete work in the CVAG region.	8/19/2016 9:01 AM

Q10 Are there particular elements of the RIVTAM, such asthe input, model structure, or model output, that your firm found challenging to work with?

Answered: 7 Skipped: 0



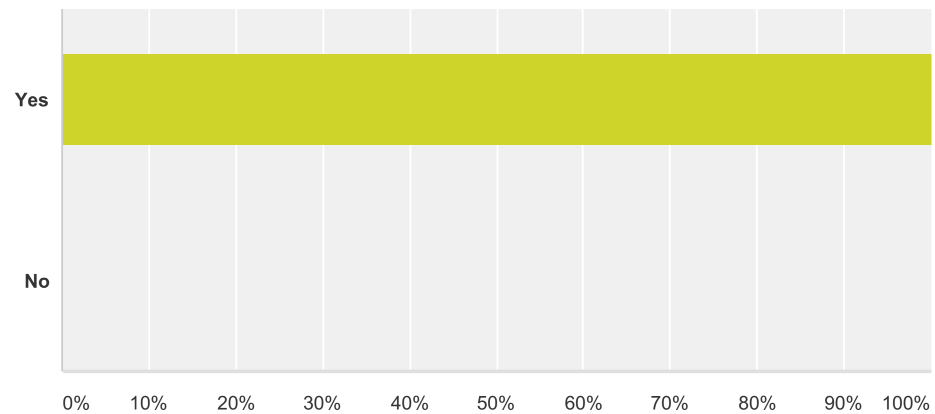
Answer Choices	Responses	
Yes	**42.86%**	3
No	**57.14%**	4
Total		**7**

#	Please provide any additional details or insights.	Date
1	We would suggest additional explanation for what's going on in the background, for ease of finding errors to correct them.	9/1/2016 3:07 PM
2	RivTAM does not have a turn penalty component so it is hard to stop prohibited movements from being made in the model. The user is forced to re-configure intersections by deleting the original links and substituting a set of new 1-way links that represent only the allowable movements. This is labor-intensive, prone to error, and is unlikely to be done for more than the immediate vicinity of the project in question, meaning that uncorrected errors are likely to exist elsewhere in the model. Note that cursory visual inspection of the road network files, such as checking whether such-and-such an intersection has been updated from 3-leg to 4-leg, will not detect errors regarding prohibited movements. RivTAM has very limited ability to represent vehicle restrictions. Basically, the only choice you get is to either prohibit all trucks or no trucks. You cannot, for example, choose which classes of trucks to prohibit. Nor is there any way to prohibit cars from using truck-only facilities. RivTAM has 2 separate SED files, one for person trips and a different one for commercial vehicles. It is a virtual certainty that some users update the 1st file and think that they are done without ever knowing that the 2nd file even exists. It would be much better to have all of the SED in a single file. If needed, a 2nd file for truck-related SED can then be created within the model script. RivTAM features a compiled (i.e. non-viewable, non-editable, black-box) script. It inherits this regrettable feature from the SCAG model. Good modeling practice relies on the "sunshine is the best antiseptic" principle. Who knows how many errors there may be in the script that could be detected and corrected by users if they were given an opportunity to see and edit the script? Moreover, the methodology and assumptions used in CEQA analyses of impacts are supposed to be transparent. Sooner or later someone may challenge the use of the SCAG model or one of its sub-regional models based on the fact that a key component of the impact analysis is not open to inspection. Unfortunately it would be the lead agency, not SCAG, who would then be on the hook for defending the reasonableness of the SCAG model in court, without the benefit of knowing what is actually in the script (i.e. what it is defending). Perhaps such a challenge would fail, but why put local agencies in a completely avoidable, vulnerable situation in the first place?	9/1/2016 12:14 PM

3	Overall, Iteris feels that RIVTAM is one of the more user-friendly models in Southern California, given the fact that it was designed to maintain the integrity of the SCAG Model while providing more functionality and detail in Riverside County. With the ability to easily split zones and modify land uses, obtain intersection turning movements, and perform select link analysis, RIVTAM has many advantages when compared with other models. However, most notably, the forecast year network for RIVTAM has significant network improvements above and beyond what would be considered a “constrained” network, making projects with large study areas (such as Mid-County Parkway or Cajalco Road) difficult to analyze in the future.	8/31/2016 4:18 PM
4	On the challenging side, not having the uncompiled script can make model troubleshooting VERY difficult. Additionally, we have found that the inputs and outputs of the CVAG module embedded in RIVTAM is not clearly documented and took a bit of time to verify that they are working correctly. Additionally, like all SCAG models, it does take a fair bit of time to run.	8/19/2016 9:01 AM

Q11 Have you utilized RIVTAM for the purposes of producingVehicle Miles Traveled (VMT)?

Answered: 7 Skipped: 0



Answer Choices	Responses	
Yes	**100.00%**	7
No	**0.00%**	0
Total Respondents: 7		

#	Please provide any additional details or insights.	Date
1	You can generate a VMT number without too much effort. However, due to lack of field data it is difficult to assess how accurate the model's number really is. It is best used to show differences in VMT between scenarios.	9/1/2016 12:14 PM
2	VMT performance is required for almost all of the projects that Iteris has utilized RIVTAM for. Some projects look at location based VMT (zonal VMT) and some look at geographic area VMT for air quality analysis (County of Riverside, study area, etc.). Most recently Iteris provided VMT calculations from RIVTAM of changes in truck VMT in the area surrounding the City of Jurupa Valley for air quality analysis assessing the impacts of implementing truck prohibitions on certain streets within Jurupa Valley. Iteris has also used VMT, VHT, and average speed data comparison results for evaluation of network alternatives for the Mid-County Parkway and Cajalco Road widening for the corridor study as well as environmental documentation. We have also used VMT/VHT data for General Plan EIRs.	8/31/2016 4:18 PM
3	Working on generating VMT information for various development project, as well as for the Jurupa Valley GP Circulation Element.	8/23/2016 4:44 PM
4	We have had mixed results with this. For Citywide comparison, we feel like it does a pretty good job. However, for large projects, we have found RIVTAM to be "optimistic" on the trip internalization estimates. We have overrode RIVTAM to force the model to generate appropriate trips, but then the comparisons are likely off. Also, we have had to build in several post processors to utilize RIVTAM outputs to generate VMT. Finally, it is difficult to extract trip length by trip purpose for specific land uses (for example, there is no way to extract countywide VMT per employee for office use; making a strict application of the OPR SB 743 guidelines very difficult to navigate).	8/19/2016 9:01 AM

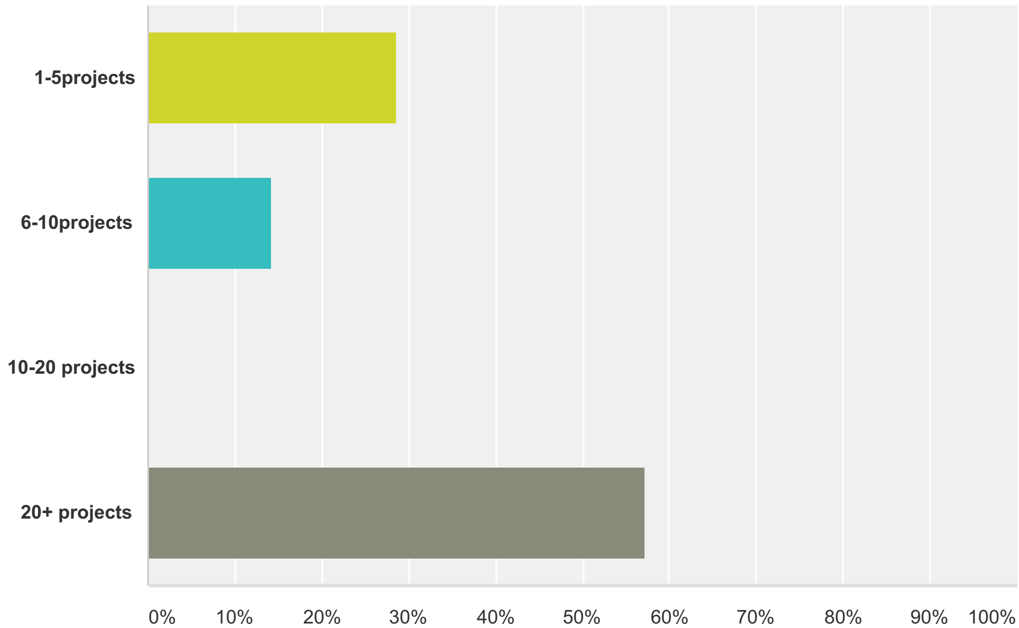
Q12 Do you have any comments on the overall user friendliness of RIVTAM compared to other models you have worked with?

Answered: 6 Skipped: 1

#	Responses	Date
1	See response to Question 10. Riverside County has a relatively complex transportation network and so a model that represents it will also need to be relatively complex. So no matter what you do RivTAM will be harder to use than most local models (especially the 3-step models).	9/1/2016 12:14 PM
2	As mentioned in question 10, our experience is that RIVTAM is user friendly and fairly quick to run. Also, the additional spare TAZs built into RIVTAM mean that additional TAZs can be easily added without changing the model structure which streamlines the process of creating sub-area models.	8/31/2016 4:18 PM
3	Acquainted with the RivTAM model as I was part of the developing team, especially Transit component.	8/30/2016 1:43 PM
4	RIvTAM is a good model. Some (about 100) spare zones in the model would be nice.	8/26/2016 10:47 AM
5	Current version of RivTAM has spare zones (TAZs) which is extremely helpful in creating model runs for different projects. Appendix E-1 of the County's General Plan explains in detail the SED assumptions and methodology which helps in creating/modifying SED information for new projects.	8/23/2016 4:44 PM
6	It isn't bad, but the user interface and presentation of the model outputs can be improved and made more user friendly.	8/19/2016 9:01 AM

Q13 How many projects has your firm used RIVTAM for?

Answered: 7 Skipped: 0



Answer Choices	Responses	
1-5projects	**28.57%**	2
6-10projects	**14.29%**	1
10-20 projects	**0.00%**	0
20+ projects	**57.14%**	4
Total		**7**

Q14 If the RIVTAM were updated, how wouldyou utilize RIVTAM over the next 5-10 years?

Answered: 7 Skipped: 0

#	Responses	Date
1	We expect to perform continued work throughout Riverside County for various agencies and also the development community.	9/1/2016 3:07 PM
2	We would use it for fee studies, TIAs, and for developing road networks for specific plans.	9/1/2016 12:14 PM
3	Iteris would continue to support on-going planning and infrastructure projects and nexus fee studies as well as supporting additional analysis such as active transportation planning, transit oriented development, VMT and SB-743 requirements, as well as the assessment of future transit projects (including potential metrolink service expansion). In addition to the above, the new and improved RIVTAM process should be able to integrate Big Data Analytics such as speeds, travel time, origin/destination data for model validation. Also, potential modeling capabilities for emerging trends in transportation such as: Automated and Connected Vehicles and Transportation Network Companies (e.g. Uber, Lyft) should be considered, as they are making a major impact on ways that people travel.	8/31/2016 4:18 PM
4	Would use as alternative for SCAG model with refined zones in the Riverside county.	8/30/2016 1:43 PM
5	General Plan analyses, sub area models, potentially multi-modal planning, impact analyses, VMT calculations.	8/26/2016 10:47 AM
6	VMT will be a key feature other than traffic forecasting for development and infrastructure projects.	8/23/2016 4:44 PM
7	We will likely use it for a lot of assessment. General Plans, Specific Plans, infrastructure studies, fee studies, VMT assessment, bike/ped/transit forecasting (if calibrated for that use), evaluating the impacts of TNCs and autonomous vehicles on the transportation system, freight assessment, AQ/GHG assessment, congestion pricing studies	8/19/2016 9:01 AM

Q15 Do you have any thoughts or comments regarding a potential update to RIVTAM?

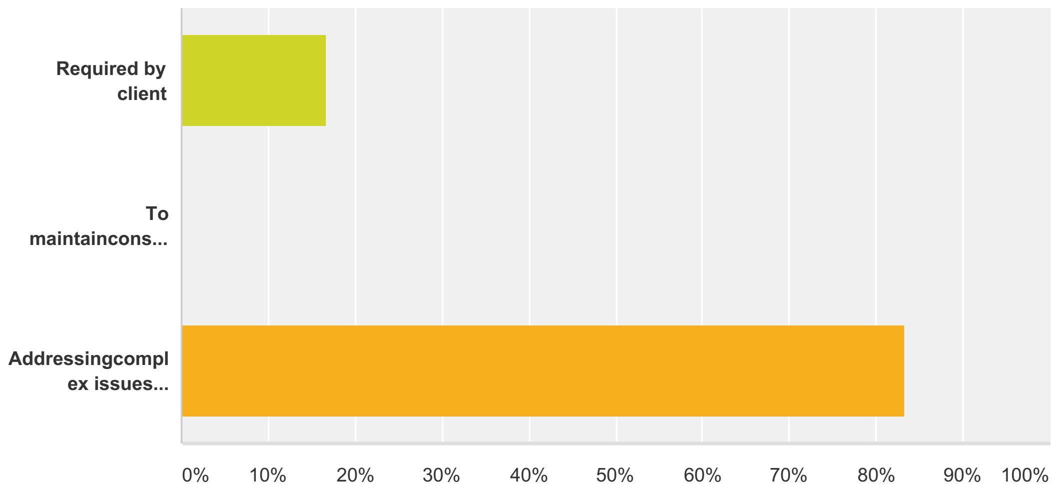
Answered: 7 Skipped: 0

#	Responses	Date
1	We would like to see documentation of procedures (for example, trip distribution assignment), in addition to the previously mentioned explanation for error finding purposes.	9/1/2016 3:07 PM
2	The sooner the better. Agencies using the current version for CEQA work are vulnerable to challenge since the SED and future network do not match the recently-adopted RTP/SCS.	9/1/2016 12:14 PM
3	Iteris is pleased to see the interest in updating RIVTAM. Being one of the first subarea models developed based on SCAG's regional travel demand model in TransCAD, the base year of 2008 and the forecast year of 2035 are reaching the ends of their useful life. The timing for an update to the model is ideal, and coincides well with the most recent acceptance of the 2016 SCAG Regional Transportation Plan/Sustainable Communities Solutions model, which has the added capability of easily developing a subarea model using the subarea modeling tool. Iteris has several local staff working on a similar project for Ventura County Transportation Commission. Maintaining flexibility in adding additional zones is key to keeping the model user friendly, as is maintaining the capability to report intersection turn movements and performing select link analysis. Iteris believes that additional model capabilities could be incorporated into the model to help with the assessment of recent transportation trends and issues such as active transportation plans, climate action plans, and transit oriented developments. If RIVTAM is not updated and made consistent with the SCAG model in a timely manner, several countywide projects including corridor alternatives analysis and interchange improvement projects may be affected due to the lack of a reasonable long-range horizon year beyond 2035.	8/31/2016 4:18 PM
4	Integrating Transit component to the more refined network could be challenging. Both new models from SCAG and Metro should be referred for the Transit network updates.	8/30/2016 1:43 PM
5	The VMT component needs to be updated. Also, the truck type/axle calculations need to be updated (especially because larger warehousing has a different passenger-car/truck split). Also, it will be good if the RivTAM is not released to only a handful of consultants.	8/26/2016 10:47 AM
6	The combined WRCOG & CVAG version helped especially for projects which are in the border areas of the two agencies. Spare TAZs and SED assumption and methodology memo should be continued in the next version.	8/23/2016 4:44 PM
7	It is definitely overdue. In addition to being sensitive to the items listed in Q15, it would be best to have something that is set up to forecast as accurately as possible and answer questions facing jurisdictions in Riverside County. I do think that questions asked in the CVAG area are very different than the WRCOG region and the model structure may need to be fundamentally different for both. Also, it would be great if the model was as transparent as possible (e.g. we had access to an uncompiled script) for trouble shooting and improvement identification. The model could also be updated to assist with policy-related measures and if the model outputs allowed for enhanced data visualization.	8/19/2016 9:01 AM

Page Intentionally Left Blank

Q1 Why has your firm utilized RIVTAM previously?

Answered: 6 Skipped: 0

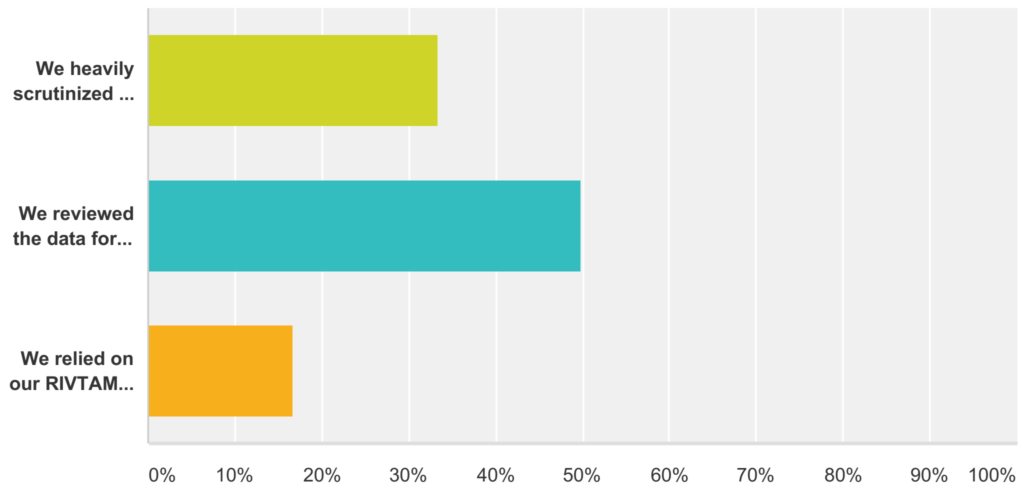


Answer Choices	Responses	
Required by client	**16.67%**	1
To maintainconsistency with other studies	**0.00%**	0
Addressingcomplex issues requiringthe use of a Travel Demand Model	**83.33%**	5
Total		**6**

#	Other reason(s) (please specify):	Date
	There are no responses.	

Q2 What level of scrutiny did you apply to the input data in RIVTAM?

Answered: 6 Skipped: 0

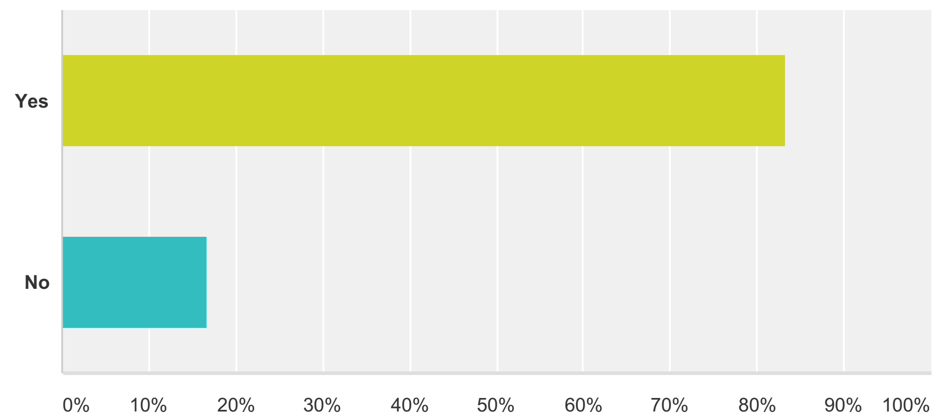


Answer Choices	Responses	
We heavily scrutinized all input data.	**33.33%**	2
We reviewed the data for reasonableness.	**50.00%**	3
We relied on our RIVTAM consultants or the agency we workedwith to provide us with the appropriate information.	**16.67%**	1
Total		**6**

#	Other (please specify)	Date
	There are no responses.	

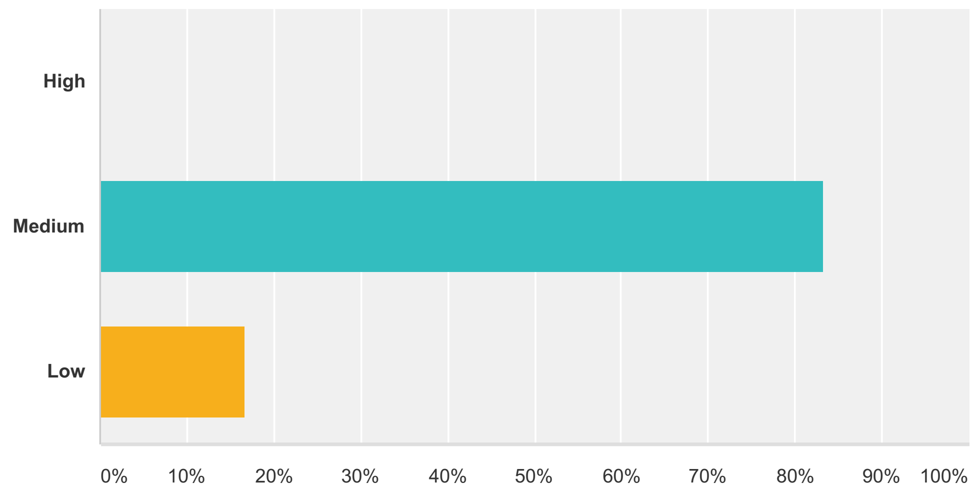
Q3 Do you believe you have sufficient understanding of the input data and overall structure of RIVTAM to determine how best to utilize the model in future studies?

Answered: 6 Skipped: 0



Answer Choices	Responses	
Yes	**83.33%**	5
No	**16.67%**	1
Total		**6**

#	Please provide additional details or insights.	Date
	There are no responses.	

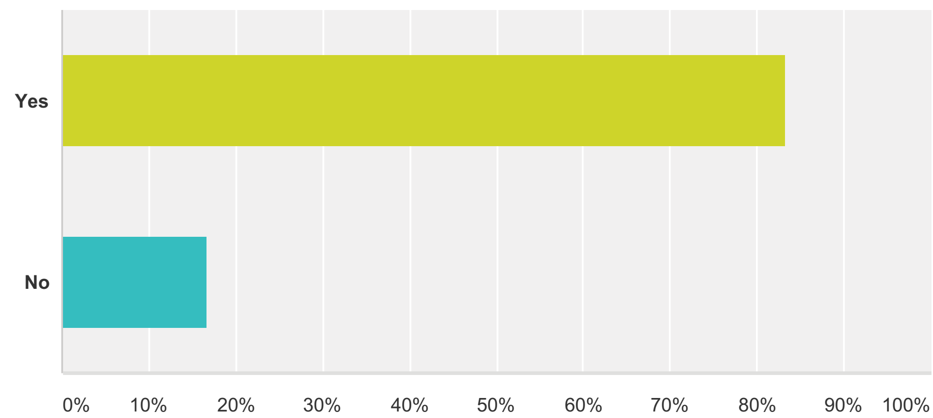


Answer Choices	Responses	
High	**0.00%**	0
Medium	**83.33%**	5
Low	**16.67%**	1
Total		**6**

#	Please elaborate, if possible.	Date
1	Others in my form have directly utilized RivTAM	9/14/2016 9:39 AM
2	We typically rely on a traffic firm to export the data and analyze for our use on projects. The model sheets are friendly relative to volumes.	9/13/2016 9:35 PM
3	I don't think it is more or less friendly than similar models. One of the enhancements would be to publish ADT forecasts on a website for the horizon year and also for intervening years, if available.	9/13/2016 7:12 AM

Q5 When you utilized RIVTAM, did you ever encounter any instances in which you found a significant issue related to the input or output data?

Answered: 6 Skipped: 0

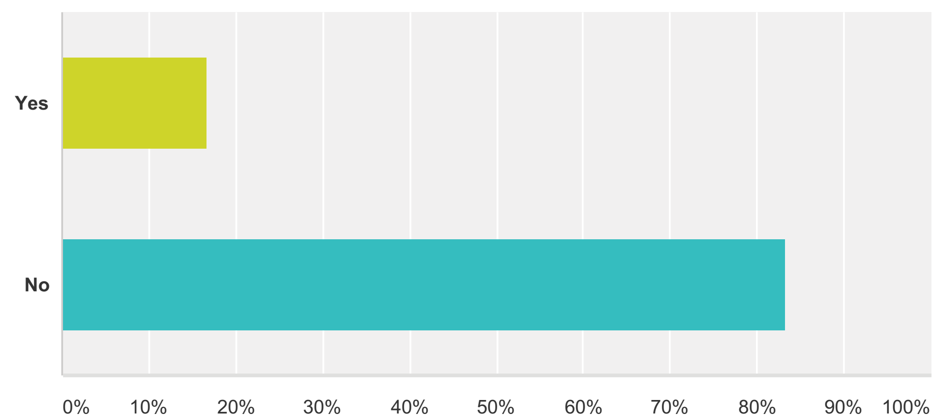


Answer Choices	Responses	
Yes	**83.33%**	5
No	**16.67%**	1
Total		**6**

#	Please elaborate, if possible.	Date
1	We have previously found issues with various model parameters, although the availability of up to date inputs has been the biggest issue	9/14/2016 9:39 AM
2	On a specific project, the forecast volumes were lower than existing volumes.	9/13/2016 9:35 PM
3	I found a number of minor errors in the network and reported them to Riverside County. One agency I worked with had major issues with the SED and we made revisions.	9/13/2016 7:12 AM
4	On multiple occasions, we have found that the input data is rife with errors. For example, under a recent study, we found that the existing and forecast land use data was grossly wrong, attributing very high numbers of jobs to areas in which the land use (nor any reasonable economic trends) would support such intensity. We have also found road segments to be forecast for unrealistic dimensions and capacities (e.g., six-lane arterial in a heavily constrained ROW).	9/12/2016 5:33 PM

Q6 Did you ever have an instance in which you had significant questions regarding input data, the model structure, or other items related to RIVTAM that you were not able to obtain answers from either the agency or consultant you were working with?

Answered: 6 Skipped: 0

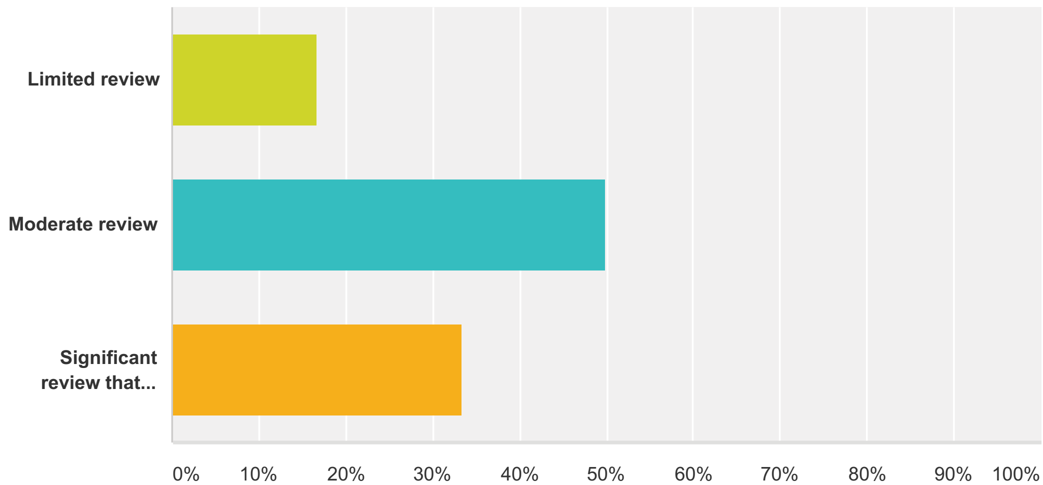


Answer Choices	Responses	
Yes	**16.67%**	1
No	**83.33%**	5
Total		**6**

#	If yes, please elaborate.	Date
	There are no responses.	

Q7 When your reports, such as an EIR, were reviewed, how did outside agencies evaluate the RIVTAM inputs and outputs? For example, if you prepared a study for review by Caltrans, what level of scrutiny did the information based on the RIVTAM receive.

Answered: 6 Skipped: 0

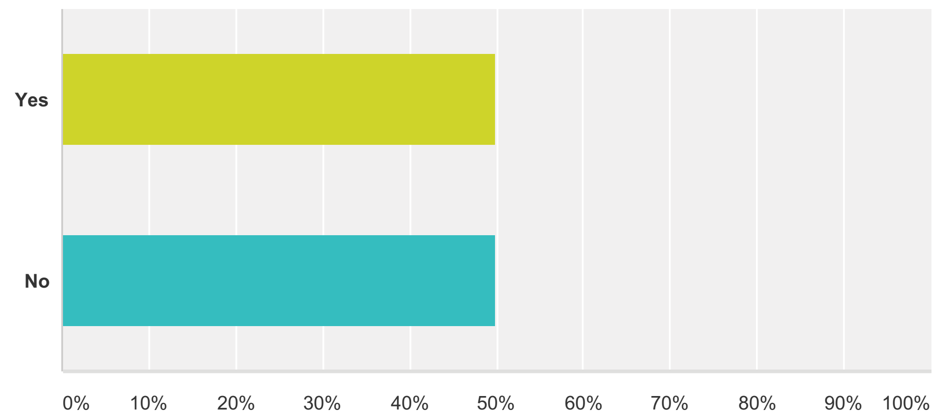


Answer Choices	Responses	
Limited review	**16.67%**	1
Moderate review	**50.00%**	3
Significant review that required additional analysis and updates to technical studies and other studies.	**33.33%**	2
Total		**6**

#	Please elaborate, if possible.	Date
1	Caltrans will review the data for reasonableness for traffic operations.	9/13/2016 9:35 PM
2	Under a recent project, the client agencies heavily scrutinized the model outputs and traced forecast errors back to RIVTAM data and assumptions.	9/12/2016 5:33 PM

Q8 Did you ever experience significant project delays due to any issues related to RIVTAM?

Answered: 6 Skipped: 0

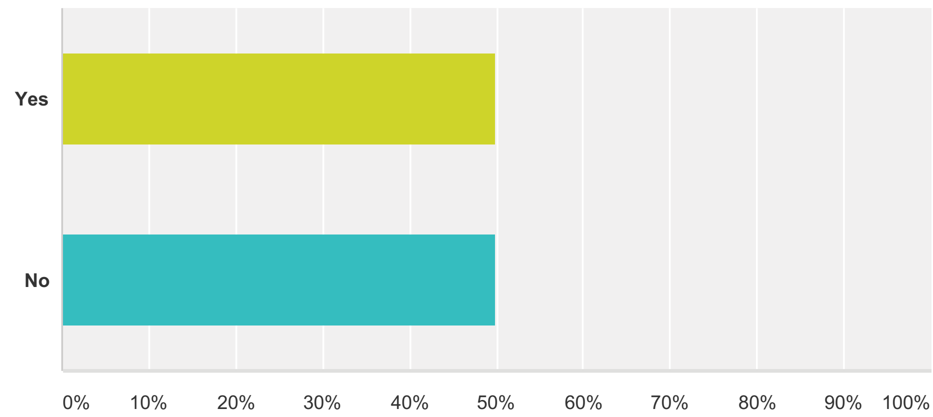


Answer Choices	Responses	
Yes	**50.00%**	3
No	**50.00%**	3
Total		**6**

#	If yes, please elaborate.	Date
1	Having to revise and validate RivTAM information has previously delayed study efforts	9/14/2016 9:39 AM
2	On our last go around, we lost 6 months trying to resolve RIVTAM issues.	9/12/2016 5:33 PM

Q9 Do you have any reservations utilizing RIVTAM currently for any projects?

Answered: 6 Skipped: 0

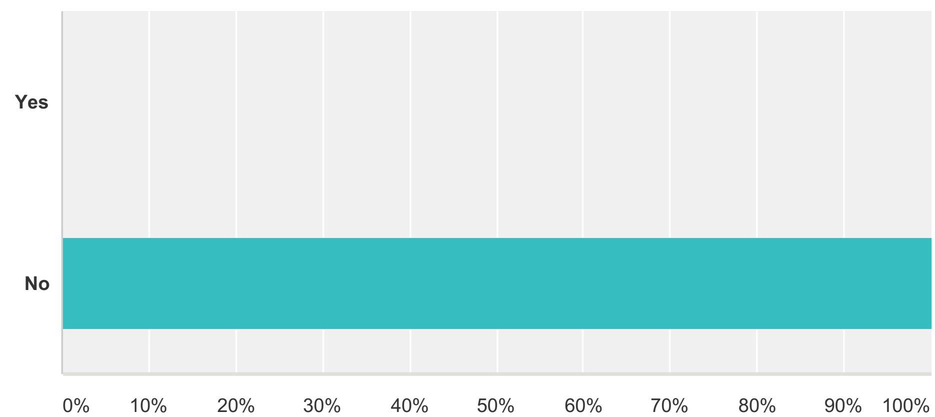


Answer Choices	Responses	
Yes	**50.00%**	3
No	**50.00%**	3
Total		**6**

#	If yes, please elaborate.	Date
1	My primary reservations relate to the dated inputs since the model has not been updated to remain consistent with the current SCAG model	9/14/2016 9:39 AM
2	No more or less than any similar model. There are cases when the regional model is not the right tool. The other issue is as the model becomes less current, it is harder to justify its use. The most critical time is right after a new SCAG regional model comes out. In order to stay current, RIVTAM would have to be updated quickly or it would be easy to justify using the new SCAG model instead.	9/13/2016 7:12 AM
3	Every time we use RIVTAM, we find unexplainable and unreasonable assumptions.	9/12/2016 5:33 PM

Q10 WRCOG, RCTC, County of Riverside, and CVAG are considering an update to RIVTAM. If an updated version of RIVTAM becameavailable, willyou have any reservations regarding its use in future studies?

Answered: 6 Skipped: 0

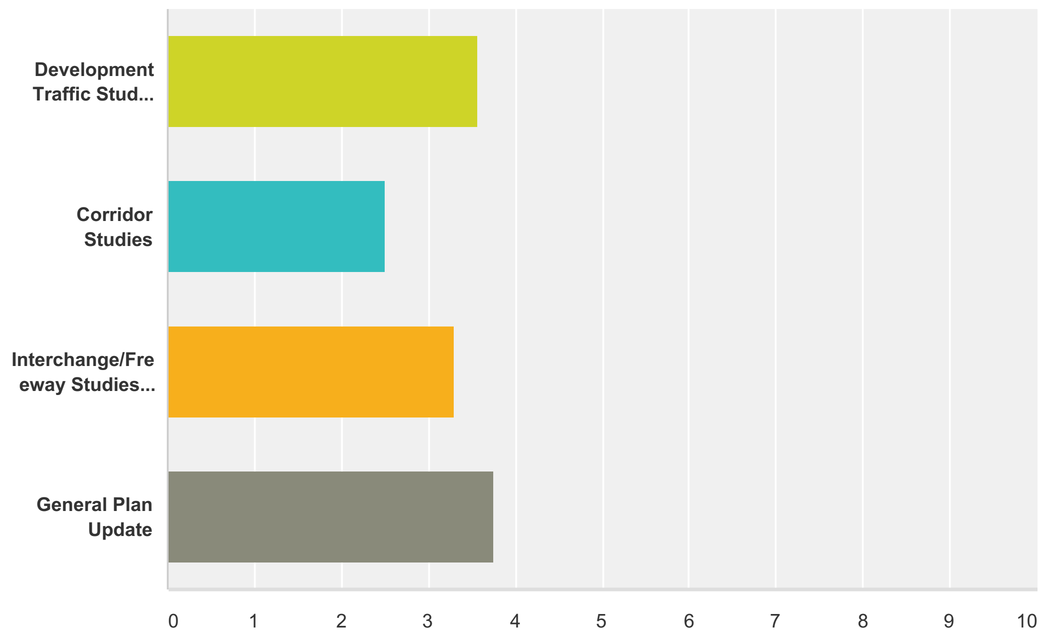


Answer Choices	Responses	
Yes	**0.00%**	0
No	**100.00%**	6
Total		**6**

#	If yes, please elaborate.	Date
	There are no responses.	

Q1 Please list the types of studies for which your agency has utilized RIVTAM, and the frequency of its use?

Answered: 9 Skipped: 0

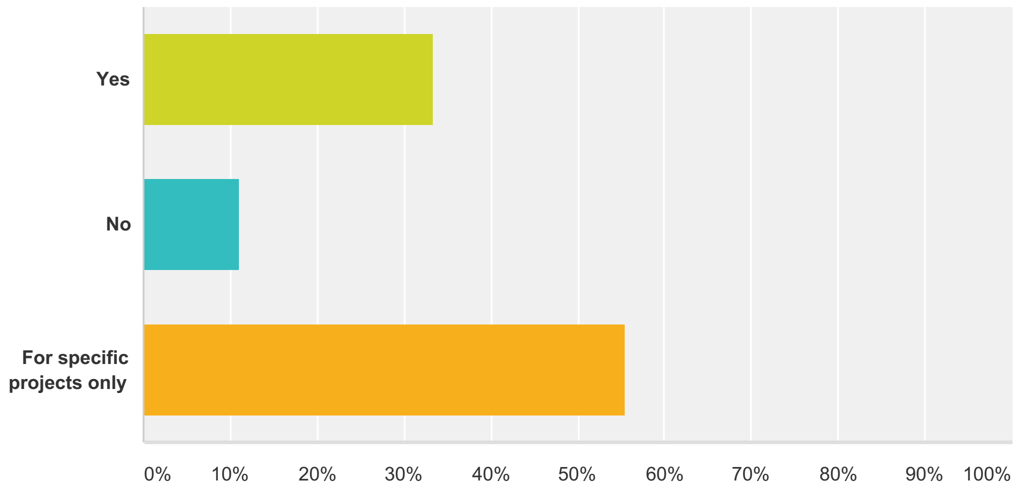


	Never	Rarely	Sometimes	Often	Always	N/A	Total	Weighted Average
Development Traffic Studies (TIA/TIS)	**11.11%** 1	**0.00%** 0	**44.44%** 4	**11.11%** 1	**33.33%** 3	**0.00%** 0	9	3.56
Corridor Studies	**16.67%** 1	**33.33%** 2	**33.33%** 2	**16.67%** 1	**0.00%** 0	**0.00%** 0	6	2.50
Interchange/Freeway Studies (PSR, PR/ED)	**14.29%** 1	**28.57%** 2	**0.00%** 0	**28.57%** 2	**28.57%** 2	**0.00%** 0	7	3.29
General Plan Update	**11.11%** 1	**0.00%** 0	**22.22%** 2	**22.22%** 2	**33.33%** 3	**11.11%** 1	9	3.75

#	Please list othertypes of studies that utilized RIVTAM and the frequency of its use:	Date
1	The City of Murrieta contracted with Iteris to prepare a traffic model for the City the last time that the General Plan was updated (2011). The RIVTAM model was used as the starting point, with all City circulation element roads and TAZ's included. Also, during the update, a few of the roads either increased in size or decreased in size.	9/13/2016 4:55 PM
2	We will often use the model validation data from our General Plan analysis- which was created using RIVTAM	8/31/2016 10:43 PM

Q2 Do you require consultants conducting transportation plans/projects/studies in your City to utilize RIVTAM?

Answered: 9 Skipped: 0

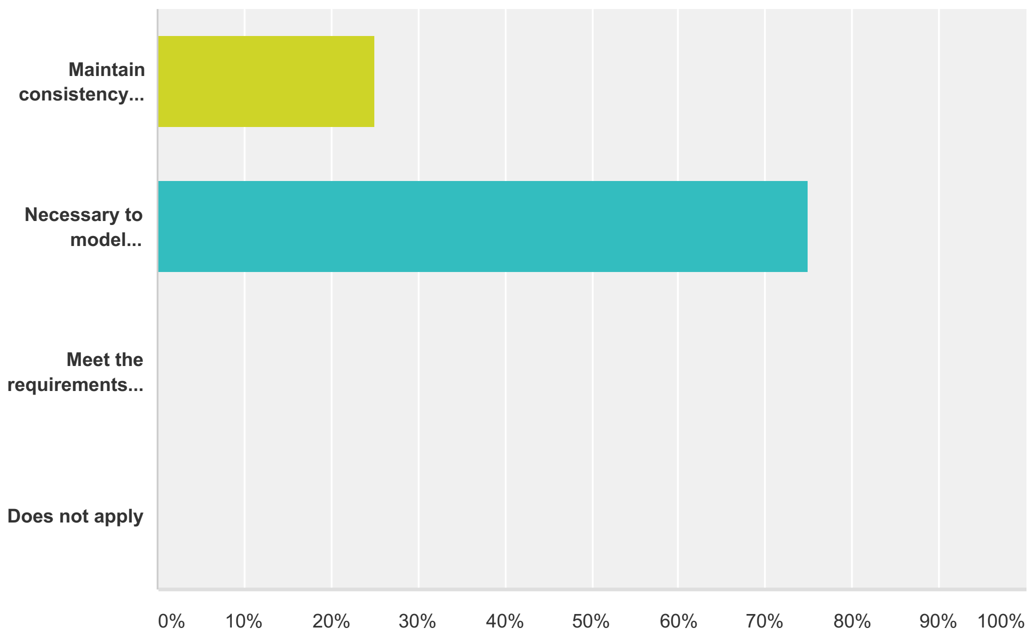


Answer Choices	Responses	
Yes	**33.33%**	3
No	**11.11%**	1
For specific projects only	**55.56%**	5
Total		**9**

#	Please elaborate, if appropriate.	Date
1	We require consultants to use RIVTAM if development is requesting a GPA or Specific Plan.	9/20/2016 11:54 AM
2	Long range forecasting is required when development projects process a General Plan Amendment or Change of Zone. In these instances, RIVTAM is utilized.	9/15/2016 7:31 AM
3	We require consultants to use the City's model, which was based off of the RIVTAM model.	9/13/2016 4:55 PM
4	The City of Corona requires consultants to use the Corona Model to forecast future traffic volumes. The Corona Model is a focused version of the SCAG Model and RIVTAM, so in essence, the consultants are using RIVTAM to conduct traffic studies.	9/7/2016 1:39 PM
5	Consultants use the city-specific traffic model which is based off of RIVTAM.	9/6/2016 9:54 AM
6	the City of Wildomar has only used RivTam as part of TIA analysis with proposed developments	9/2/2016 9:39 AM
7	Projects exceeding a certain trip threshold are required to run the model	8/31/2016 10:43 PM

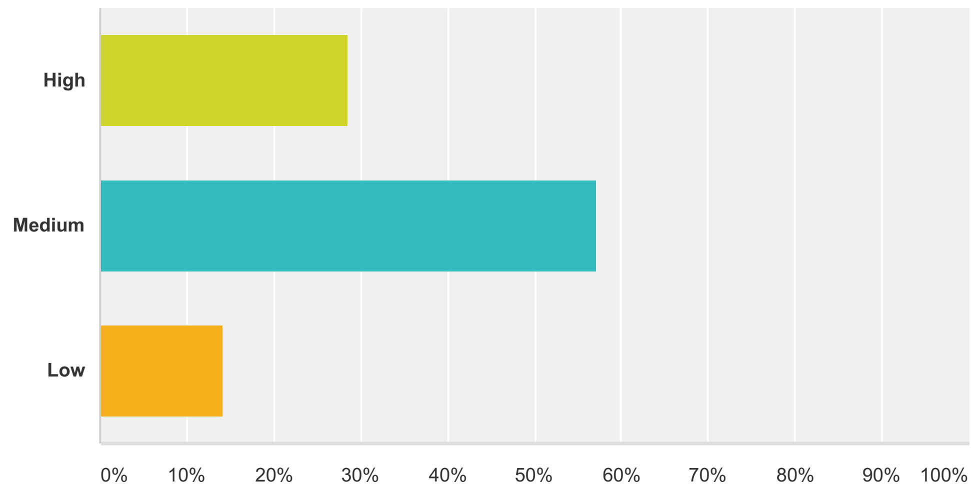
Q3 If you answered yes to Question #2, what are the reasons for requiring the use of RIVTAM? (Please check all that apply)

Answered: 8 Skipped: 1



Answer Choices	Responses	
Maintain consistency with other studies	**25.00%**	2
Necessary to model long-range growth	**75.00%**	6
Meet the requirements of outside agencies	**0.00%**	0
Does not apply	**0.00%**	0
Total		**8**

#	Other:	Date
1	All three apply but the app doesn't allow the checking of all three.	9/20/2016 11:54 AM
2	The city uses its own model which is based off RIVTAM. It is mainly used when long-range forecasts are made.	9/6/2016 9:54 AM

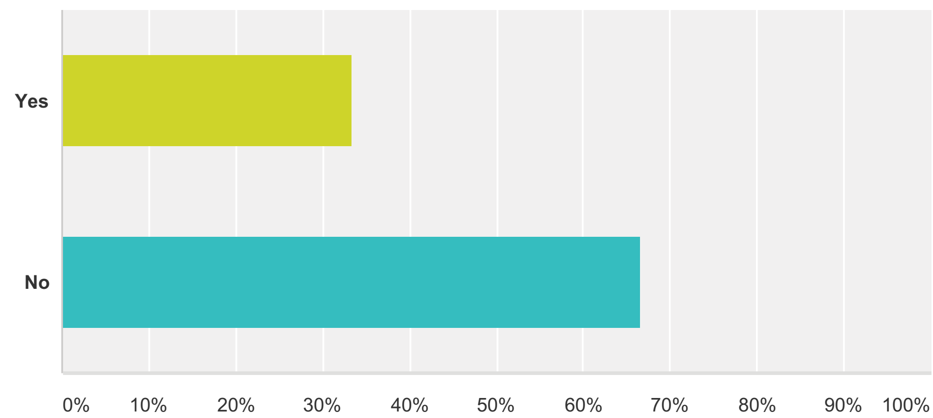


Answer Choices	Responses	
High	**28.57%**	2
Medium	**57.14%**	4
Low	**14.29%**	1
Total		**7**

#	Please elaborate, if possible.	Date
1	Much of the time, our jurisdiction is relying on the consultant's expertise to use RIVTAM appropriately. It would beneficial if the model documentation included guidelines that provide criteria on when and how RIVTAM is to be used for various types of projects (e.g. captial projects, development projects, general plan updates).	9/15/2016 7:31 AM
2	I do not personally use it, so I don't have a response.	9/13/2016 4:55 PM
3	Not applicable since not a user and haven't heard anything negative.	9/12/2016 10:14 AM
4	The city itself does not use RIVTAM itself on a regular basis. Consultants use the city's RIVTAM-based model for studies. There have not been any complaints.	9/6/2016 9:54 AM
5	Consultants do not complain about working with the model	8/31/2016 10:43 PM

Q5 When your consultants have utilized RIVTAM, have you everencountered any instances in which you found a significant issue related to the input or output data?

Answered: 9 Skipped: 0

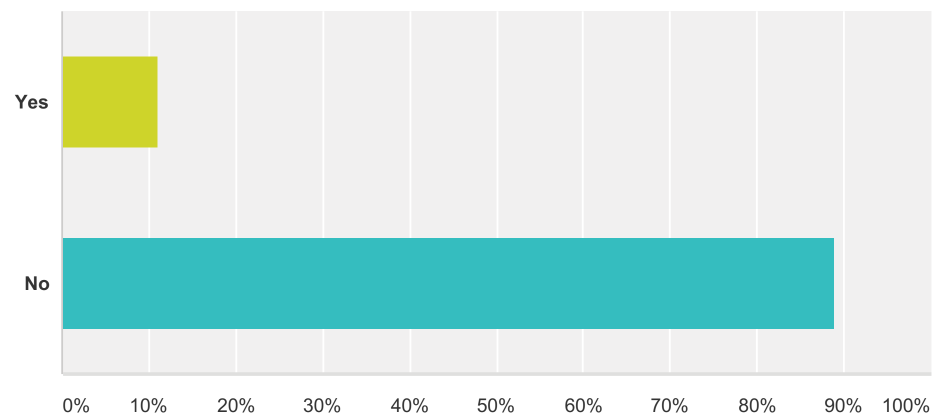


Answer Choices	Responses	
Yes	**33.33%**	3
No	**66.67%**	6
Total		**9**

#	Please elaborate, if possible.	Date
1	Occasionally, consultants will find network errors such as incorrect lanes or unconnected links which affects how traffic is routed.	9/15/2016 7:31 AM
2	the TAZ for Wildomar is too large. We are unable to analyze against Circulation Element implementation timing	9/2/2016 9:39 AM
3	Some significant land uses / SEDs are not correctly reflected	8/31/2016 10:43 PM

Q6 Did you ever have an instance in which you had significant questions regarding input data, the model structure, or other items related to RIVTAM that you were not able to obtain answers from either other agencies or consultants?

Answered: 9 Skipped: 0

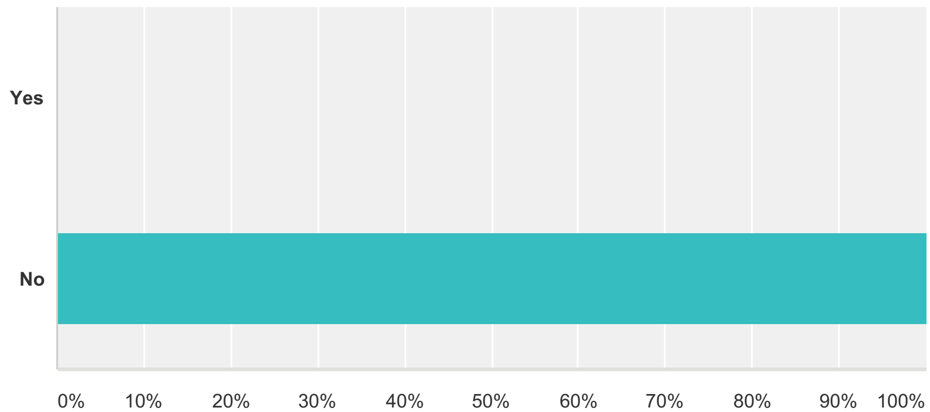


Answer Choices	Responses	
Yes	**11.11%**	1
No	**88.89%**	8
Total		**9**

#	If yes, please elaborate.	Date
1	same response as above	9/2/2016 9:39 AM

Q7 Did you ever experience significant project delays due to any issues related to RIVTAM?

Answered: 9 Skipped: 0

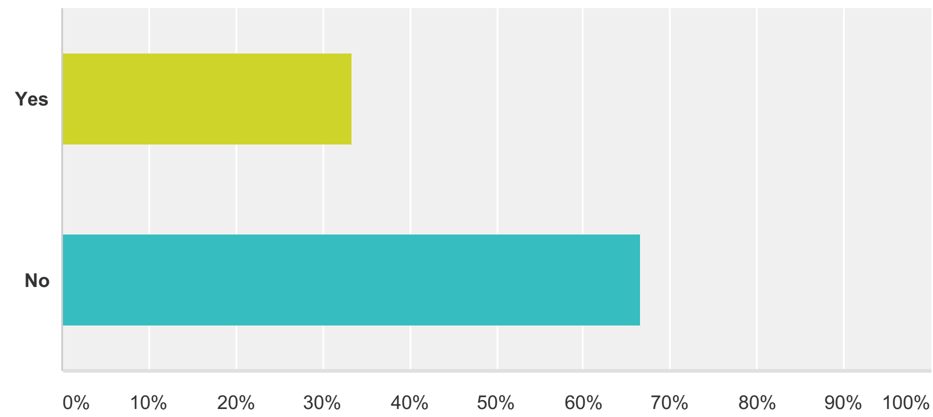


Answer Choices	Responses	
Yes	**0.00%**	0
No	**100.00%**	9
Total		**9**

#	If yes, please elaborate.	Date
	There are no responses.	

Q8 Do you have any reservations utilizing RIVTAM currently for any projects?

Answered: 9 Skipped: 0

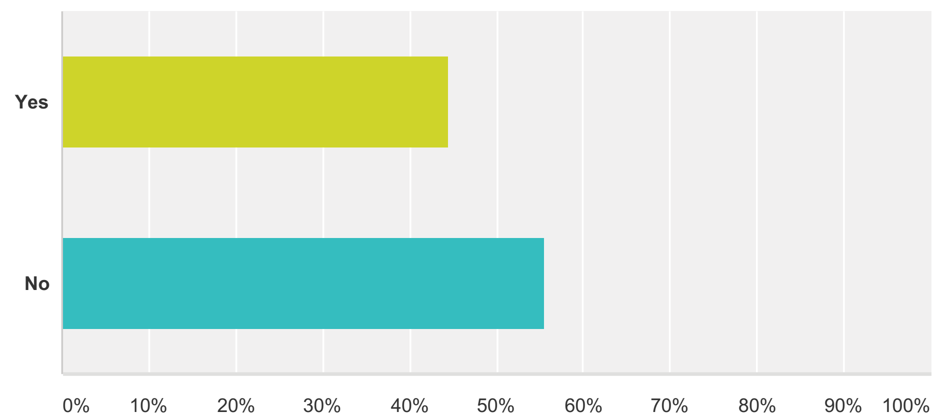


Answer Choices	Responses	
Yes	**33.33%**	3
No	**66.67%**	6
Total		**9**

#	If yes, please elaborate.	Date
1	RIVTAM is based on the 2008 RTP which is two cycles old. The model should be updated with inputs consistent with the current RTP and undergo a re-validation process.	9/15/2016 7:31 AM
2	The RIVTAM is outdated and some data are not consistent with the SCAG model. Our consultant found that the data on the SCAG model is more accurate and complete for the areas outside of the inland empire. RIVTAM needs to coordinate closely with SCAG to include the latest information not just in the Inland Empire.	9/7/2016 1:39 PM
3	General perception is that the model is not up to date, have had instances of incorrect SED values	8/31/2016 10:43 PM

Q9 WRCOG, RCTC, County of Riverside, and CVAG are considering an update to RIVTAM. If an updated version of RIVTAM became available, wouldyou have any reservations regarding its use in future studies?

Answered: 9 Skipped: 0



Answer Choices	Responses	
Yes	**44.44%**	4
No	**55.56%**	5
Total		**9**

#	If yes, please elaborate.	Date
1	An update to the model is probably warranted at this time considering the numerous GPA that are occurring in the County of Riverside and other jurisdictions.	9/20/2016 11:54 AM
2	It's our understanding that the current SCAG model requires several days to a week in order to complete a full run. This timeframe is achieved when using a computer system with the enormous processing power and would likely be longer if a less capable system were used. Many of the TIAs for development projects would considered this timeframe unacceptable and pose a hurdle in completing their TIAs in a timely manner.	9/15/2016 7:31 AM
3	The city's model is based on the 2008 RTP. A change with RIVTAM may have an adverse effect on the city's model and it would have to be updated again.	9/6/2016 9:54 AM
4	I would ask that we detail the TAZ's in Wildomar. the city also desires to update the Circulation Element consistent with AB1358 and would like supporting model runs to achieve this goal.	9/2/2016 9:39 AM

Q10 Do you have any specific suggestions or requests that should be incorporated into an update of RIVTAM?

Answered: 7 Skipped: 2

#	Responses	Date
1	An update to RIVTAM should also consider including tools for users to obtain data to perform analyses to address SB743.	9/15/2016 7:31 AM
2	None.	9/14/2016 8:46 AM
3	None at this time.	9/13/2016 4:55 PM
4	Coordinate with SCAG and local jurisdictions to obtain the latest data.	9/7/2016 1:39 PM
5	Any update of RIVTAM should have a description of what has changed so cities that use RIVTAM in their models can incorporate the changes accurately.	9/6/2016 9:54 AM
6	Assist the City in updating the Circulation Element an refine the TAZ's	9/2/2016 9:39 AM
7	I would like special attention to be paid to use of RIVTAM as a tool for CEQA VMT analysis, the county / WRCOG could also assist in the development of regional thresholds and screening maps	8/31/2016 10:43 PM

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Update on Analysis of Fees and Their Potential Impact on Economic Development in Western Riverside County**

Contact: **Christopher Gray, Director of Transportation, gray@wrcog.cog.ca.us, (951) 955-8304**

Date: **October 13, 2016**

Requested Action:

1. Receive and file.

WRCOG's Transportation Department administers the TUMF Program. WRCOG allocates TUMF to the Riverside County Transportation Commission (RCTC), groupings of jurisdictions – referred to as TUMF Zones – based on the amounts of fees collected in these groups, and the Riverside Transit Agency (RTA). WRCOG has received comments from public and private stakeholders regarding the impact of TUMF on the regional economy and the fees' effect on development in the subregion. WRCOG is conducting a study to analyze fees / exactions required and collected by jurisdictions / agencies in, and immediately adjacent to the WRCOG subregion.

Fee Analysis Study

In July 2015, WRCOG distributed the draft 2015 TUMF Nexus Study for review and comment. During the comment period, WRCOG received various comments from public and private stakeholders regarding the impact of TUMF on the regional economy and the fees' effect on development in the subregion. In response to the comments received on the draft Nexus Study, WRCOG released a Request for Proposal (RFP) to solicit firms interested in performing an analysis of fees / exactions required and collected by jurisdictions / agencies in and immediately adjacent to the WRCOG subregion. In March 2016, the WRCOG Executive Committee authorized a Professional Services Agreement with Economic & Planning Systems (EPS), in association with Rodriguez Consulting Group (RCG), to conduct the fee analysis.

The Fee Analysis Study (Study), expected to be completed by the end September 2016, will provide WRCOG jurisdictions with comprehensive fee comparisons. The Study will also discuss the effect of other development costs, such as the cost of land and interest rates, within the overall development framework. Another key element of the Study will be an analysis documenting the economic benefits of transportation investment.

Jurisdictions for Fee Comparison: In addition to the jurisdictions within the WRCOG subregion, the Study will analyze jurisdictions within the Coachella Valley, San Bernardino County and the northern portion of San Diego County. The inclusion of additional neighboring / peer communities will allow for consideration of relative fee levels between the WRCOG subregion and jurisdictions in surrounding areas that may compete for new development. At its April 14, 2016, meeting, the WRCOG Planning Directors' Committee provided input on the additional jurisdictions to be studied – an additional 11 jurisdictions surrounding the WRCOG region were selected for comparison.

Land Uses and Development Prototypes: Fee comparisons are being 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 develop "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 prototypes were selected based on recent trends in new development in Western Riverside County. The proposed prototypical projects being analyzed are as follows:

- **Single-Family Residential Development:** 50 unit residential subdivision with 2,700 square foot homes and 7,200 square foot lots
- **Multi-Family Residential Development:** 200 unit market-rate, multi-family residential development in 260,000 gross square foot of building space
- **Retail Development:** 10,000 square foot retail building
- **Office Development**: 20,000 square foot, Class A or Class B office building
- **Industrial Development:** 265,000 square foot "high cube" industrial building

<u>Fee Categories</u>: The primary focus of the Study 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. As noted in prior fee comparisons, these fees typically represent 90 to 95 percent of the overall development fees on new development. Additional processing, permitting, and entitlement fees are not included in this analysis. The initial analysis focuses on development impact fees, as these fees are much larger than planning / processing fees for comparison purposes.

<u>Service Providers and Development Prototypes</u>: 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 cities. Multiple entities charge infrastructure / capital facilities fees, e.g., City, Water Districts, School Districts, and Regional Agencies. Additionally, 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. In addition, some City fees, such as storm drain fees, are sometimes differentiated by jurisdictional subareas.

For the purposes of the Study, an individual service provider was selected where multiple service providers were present, and an individual subarea was selected where different fees were charged by subarea. An effort was made to select service providers that cover a substantive portion of the jurisdiction, as well as to include service providers that serve multiple jurisdictions (e.g., Eastern Municipal Water District).

<u>Completed To-Date</u>: After identification of the cities for fee evaluation and development prototypes by land use, the focus of the Study efforts has been on collecting fee schedules and applying them to the development prototypes. The research effort has involved: 1) reviewing available development impact fee schedules online; 2) reaching out to service providers (Jurisdiction, Water Districts, School Districts) where fee levels or fee calculations were difficult to discern; 3) conducting necessary fee calculations; and 4) presenting initial fee estimates for all 17 WRCOG cities.

WRCOG staff sent a PDF file that contained initial fee estimates per jurisdiction to each jurisdiction's representative on the WRCOG Planning Directors' Committee and Public Works Committee for review and comment. WRCOG staff presented an update of the fee analysis to these same Committees on July 14, 2016. Each WRCOG jurisdiction has finalized their initial fee analysis and a report will be produced for their use. The goal of this initial fee analysis is to provide jurisdictions in the WRCOG region the opportunity to review their fee collection structure while being able to compare it to the fee collection structure of neighboring jurisdictions. WRCOG is committed to presenting the findings in the best possible manner. This analysis is an informational item only.

The table below displays each development prototype's range of total fees, and the percentage of the total fees TUMF makes up.

WRCOG Development Impact Fee Summary *

Item	Average	Range Low	Range High
Single Family			
Total Fees per Unit	$44,933	$32,935	$59,366
TUMF as a % of Total Fees	19.7%	26.9%	14.9%
Multifamily			
Total Fees per Unit	$28,314	$19,262	$40,573
TUMF as a % of Total Fees	22.0%	32.3%	15.4%
Retail			
Total Fees per Sq.Ft.	$24.06	$14.88	$33.20
TUMF as a % of Total Fees	43.6%	70.5%	31.6%
Industrial			
Total Fees per Sq.Ft.	$4.65	$2.85	$9.60
TUMF as a % of Total Fees	30.5%	54.9%	14.8%
Office			
Total Fees per Sq.Ft.	$12.96	$6.53	$19.07
TUMF as a % of Total Fees	16.9%	33.6%	11.5%

* Average and ranges as shown encompass 20 jurisdictions, including 17 cities, the unincorporated County areas of Temescal Valley and Winchester, and March JPA.

Note: Total fees and TUMF as a % of total fees are not connected - i.e. low fees do not correlate to low TUMF percentage.

Ongoing / Next Steps: Fee information has also been collected for the non-WRCOG region jurisdictions and similar initial fee estimates are being compiled for each of them. Additionally, preliminary development feasibility analyses are being prepared to provide insights into the costs of new development in Western Riverside County, including development impact fees, as well as the overall economic / feasibility of these development products. Research is also ongoing on the economic benefits of regional transportation. A draft report of the final fee analysis and other tasks should be ready for review in November, 2016.

Some recent research by the fee consultants has concluded the following:

- There does not appear to be a statistical relationship between fee levels and the level of development activity. In fact, several communities with relatively high fee levels are currently experiencing significant levels of development activity
- At a regional level, development activity does not correlate with any changes in fees, instead having a much stronger relationship with larger economic factors such as the employment rate or interest rates
- TUMF generally kept pace with historic inflation rates until recent years in which costs have continued to increase for many items and TUMF fees have been static

WRCOG staff also held two outreach meetings with non-residential developers/consultants. Information shared at the two-outreach meetings was identical. The meetings were held to provide updates on the TUMF Nexus Study and the fee analysis, and those invited were parties who attended previous workshops related to TUMF Nexus Study updates. As part of the meeting, WRCOG did seek attendees to participate and provide feedback on the assumed development costs for the fee study for retail, office, and industrial projects.

One key item of research is the concept of "fee burden" which refers to how much of the overall development costs are associated with fees. Based on preliminary pro-forma analysis completed by the consultant, overall development fees constitute approximately 5-10% of the total development costs. Fees, as a percentage of total development costs, are highest for residential and retail uses and lowest for industrial and offices uses. Major cost factors associated with new development include the building construction, site preparation, other soft costs (design, planning, project management), and purchase of the land.

Prior WRCOG Action:

August 11, 2016: The WRCOG Public Works Committee received report.

WRCOG Fiscal Impact:

The fee analysis study is included in the Agency's adopted Fiscal Year 2016/2017 Budget under the Transportation Department.

Attachment:

1. TUMF Nexus Study Update and Fee Analysis – Stakeholder Meeting Presentation.

Item 5.G

Update of Analysis of Fees in Western Riverside County

Attachment 1

TUMF Nexus Study Update and Fee Analysis – Stakeholder Meeting Presentation

Page Intentionally Left Blank


TUMF Nexus Study Update and Fee Analysis
Stakeholder Meeting
THE VINEYARDS
AT PASEO DEL SOL
32081

2016 TUMF Nexus Study Update

September 2015: Executive Committee delayed finalizing the TUMF Nexus Study to incorporate the growth forecast from the 2016 SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP / SCS)

- Updates to the TUMF Nexus Study since the delay:
  - The growth forecast from the 2016 SCAG RTP/SCS has been incorporated in the Nexus Study
  - WRCOG retained Economic & Planning Systems to perform a fee analysis study to determine the impact that fees, in addition to other factors (labor / material / land costs), affect business decisions
  - WRCOG and member jurisdictions reviewed the TUMF Network to remove projects that were completed
  - Staff has reviewed additional data sources for the conversion of employees to square feet that are more recent which will be used in the TUMF Nexus Study

Fee analysis background

- During the Draft 2015 TUMF Nexus Study, WRCOG received comments regarding the impact of TUMF on the regional economy
- In March 2016, WRCOG hired a Consultant to examine:
  - Review of development prototypes - ***completed***
  - Survey of existing fees in WRCOG area - ***completed***
  - Fees for non-WRCOG regions - ***completed***
  - Examine rates of fee increases vs. other development-related costs
  - Examine economic benefits of transportation infrastructure

Coordination thus far

- 2 meetings with WRCOG Planning Directors Committee
- 3 meetings with WRCOG Public Works Committee
- Multiple rounds of review / comments / revisions with each local agency
- Additional outreach with special districts including Water Districts
- Outreach with the BIA and residential developers
- Meeting with non-residential developers

Development prototypes utilized in fee analysis

- The development prototypes are as follows:
  - Single-Family Development: 50 units composed of 2,700 square foot homes on 7,200 square foot lots
  - Multi-Family Development: 200 units in 260,000 square feet of building space
  - Industrial Development (High-Cube Industrial): 265,000 square foot building
  - Retail Development: 10,000 square foot building
  - Office Development: 20,000 square foot building

Fees included in analysis

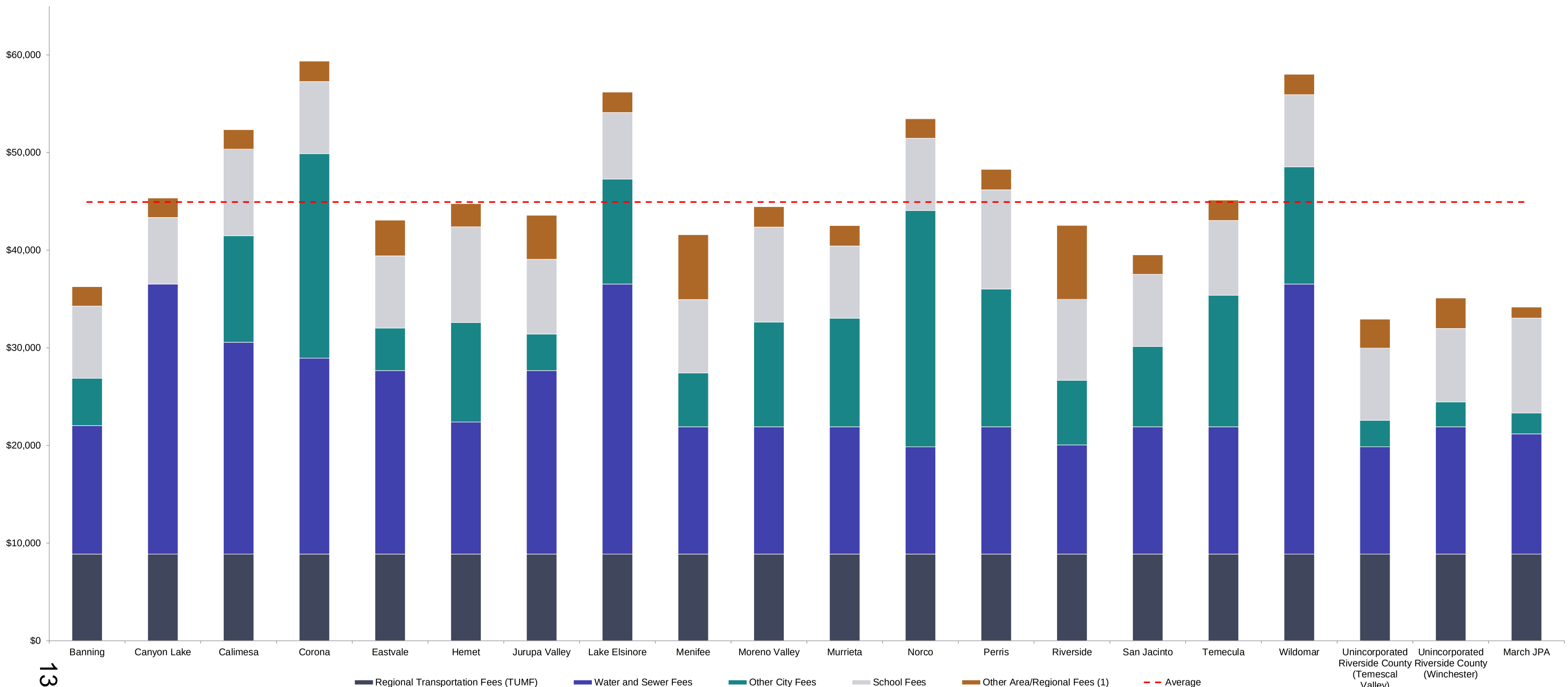
- Major Categories of Fees Analysis:
  - School development impact fees (DIF)
  - Water / sewer connection / capacity fees
  - City capital facilities fees
  - Regional transportation fees (TUMF)
  - Other capital facilities / infrastructure / mitigation fees charged by other regional / subregional agencies
- Fee analysis focuses on development impact fees

Preliminary Fee Comparison

WRCOG Development Impact Fee Summary *			
		Range	
Development Prototype	Average	Low	High
Single Family			
Total Fees per Unit	$44,933	$32,935	$59,366
TUMF as a % of Total Fees	19.7%	26.9%	14.9%
Multifamily			
Total Fees per Unit	$28,314	$19,262	$40,573
TUMF as a % of Total Fees	22.0%	32.3%	15.4%
Retail			
Total Fees per Sq.Ft.	$24.06	$14.88	$33.20
TUMF as a % of Total Fees	43.6%	70.5%	31.6%
Industrial			
Total Fees per Sq.Ft.	$4.65	$2.85	$9.60
TUMF as a % of Total Fees	30.5%	54.9%	14.8%
Office			
Total Fees per Sq.Ft.	$12.89	$6.53	$19.07
TUMF as a % of Total Fees	17.0%	33.6%	11.5%

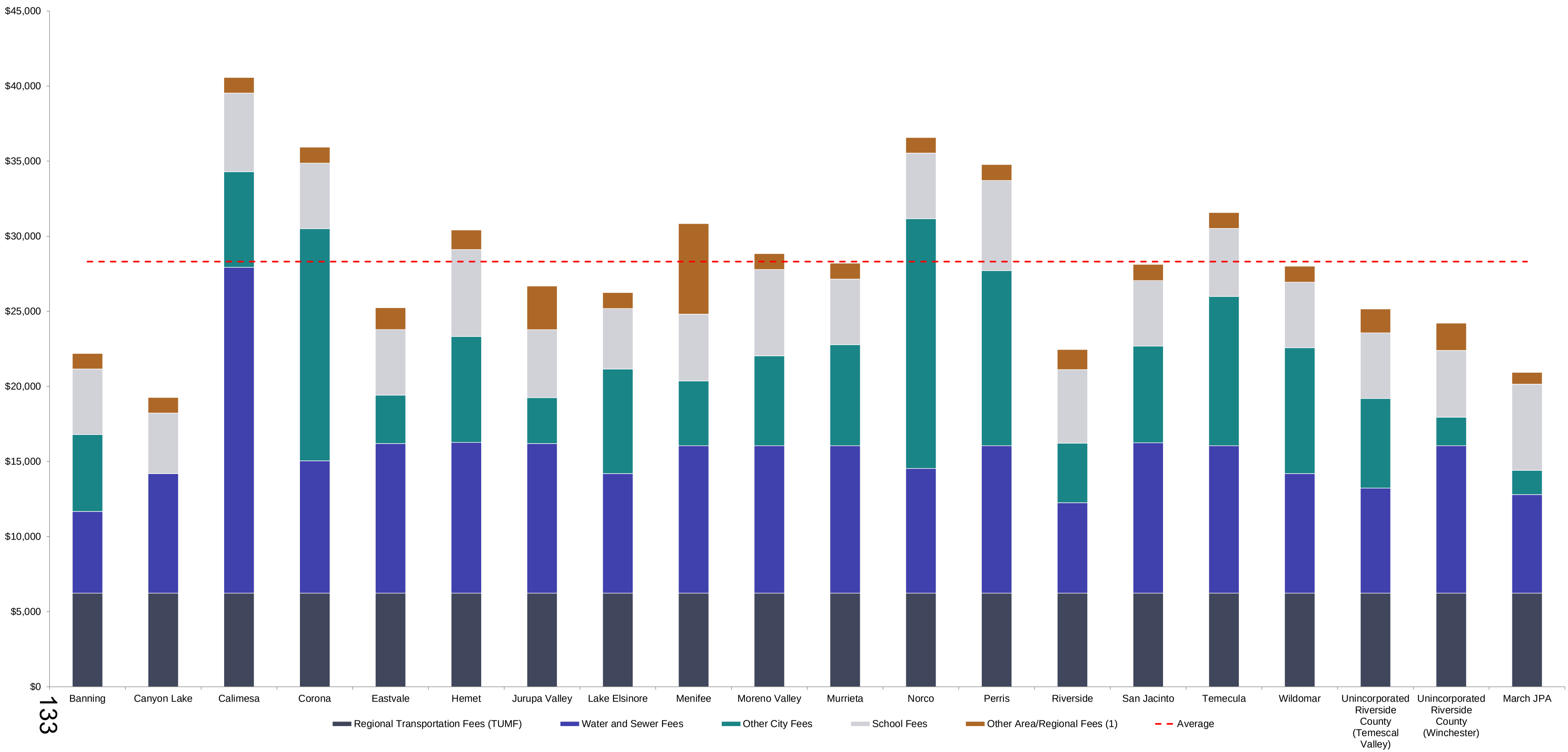
* Average and ranges as shown encompass 20 jurisdictions, including 17 cities, the unincorporated cities of Temescal Valley and Winchester, and March JPA.

Single Family Detached
Prototype Capital Facilities/Infrastructure
Development Fees by Jurisdiction (Per Unit)



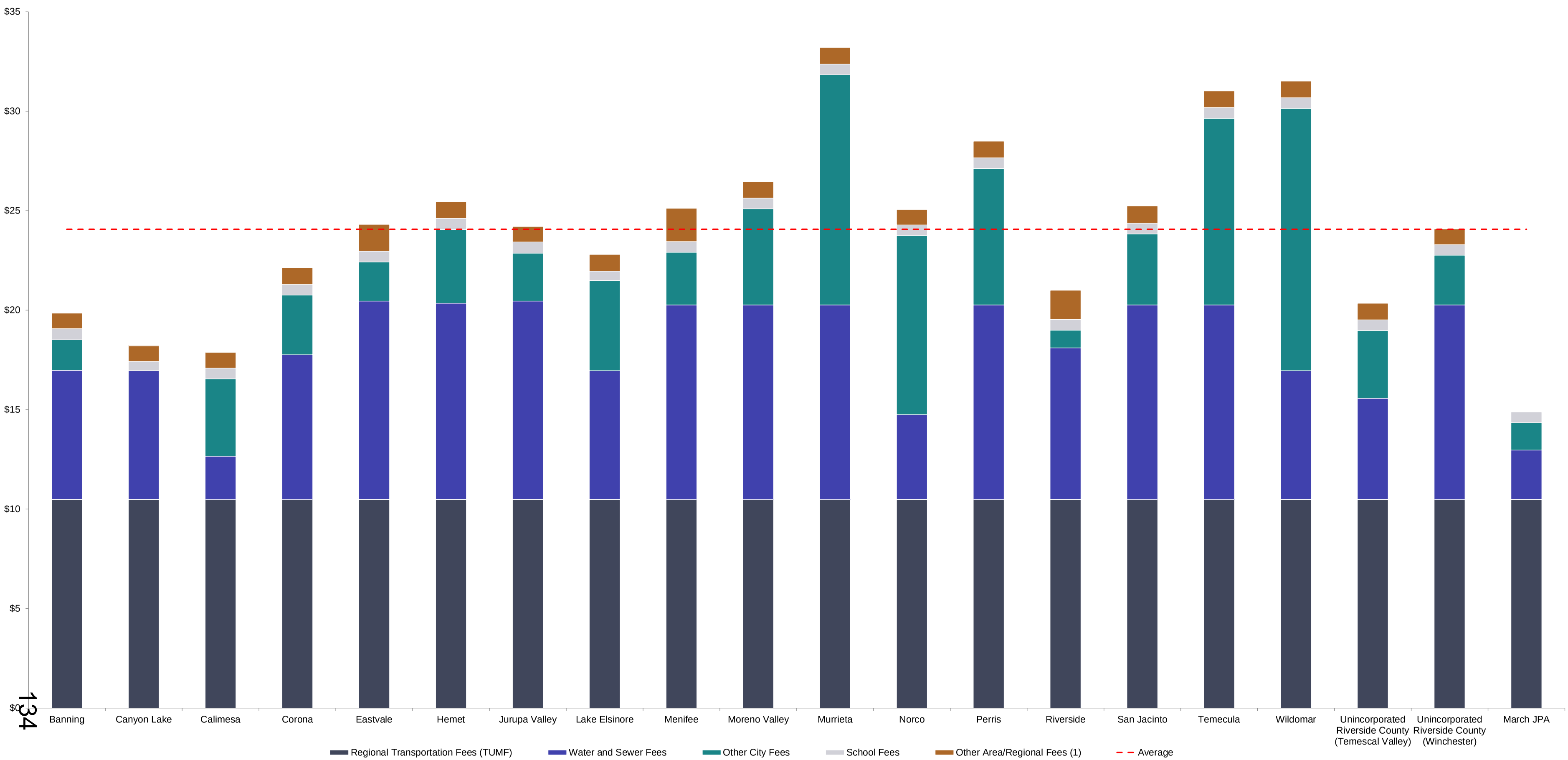
* Fee estimates for specified development prototypes as of July 2016. Actual fees will vary based on project specifics and any fee updates.
(1) "Other Area Fees/ Regional Fees" include, but are not limited to, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation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

Multifamily Detached Prototype
Capital Facilities/Infrastructure
Development Fees by Jurisdiction (Per Unit)



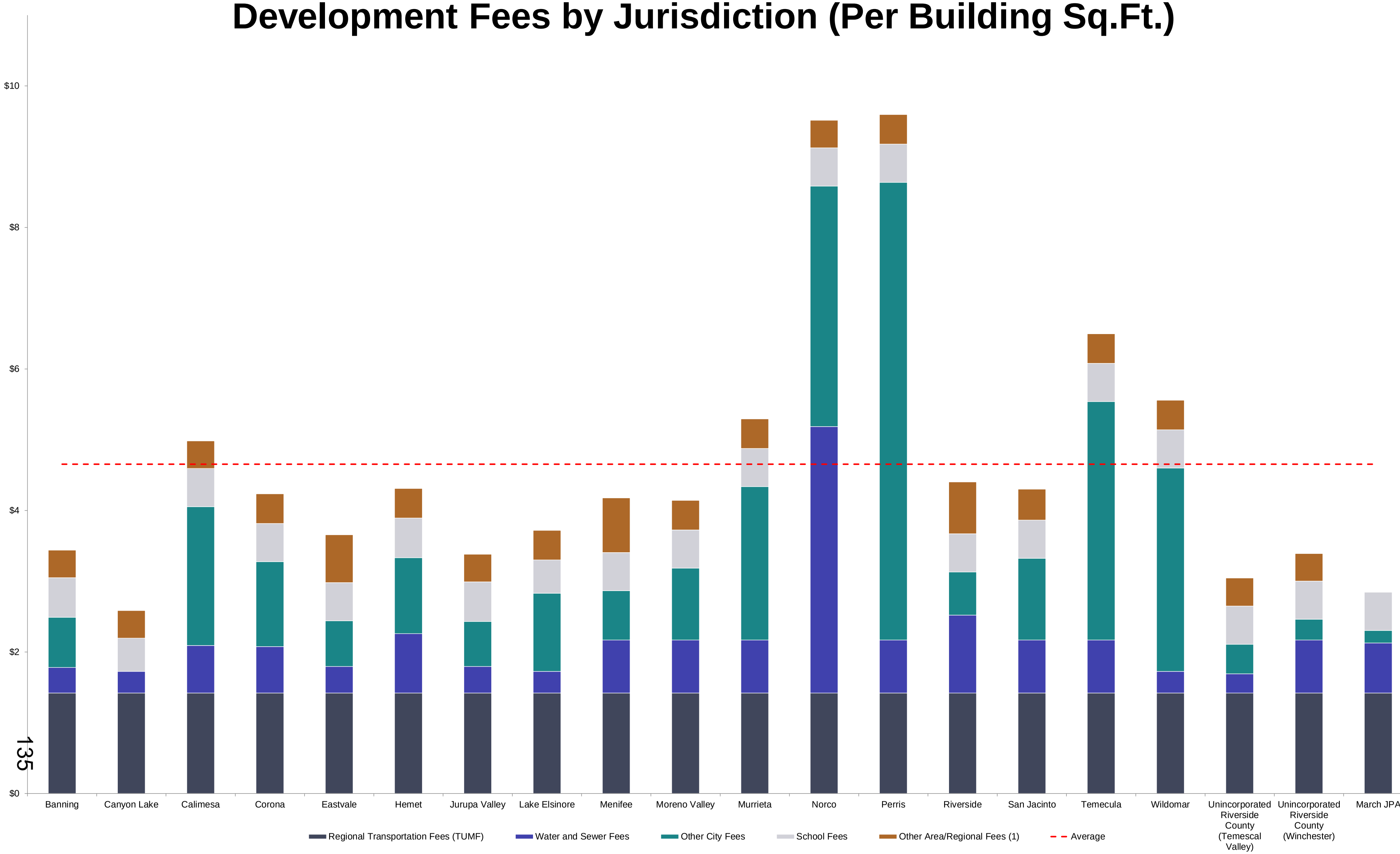
* Fee estimates for specified development prototypes as of July 2016. Actual fees will vary based on project specifics and any fee updates.
(1) "Other Area Fees/ Regional Fees" include, but are not limited to, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation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

Retail Prototype
Capital Facilities/Infrastructure
Development Fees by Jurisdiction (Per Building Sq.Ft.)



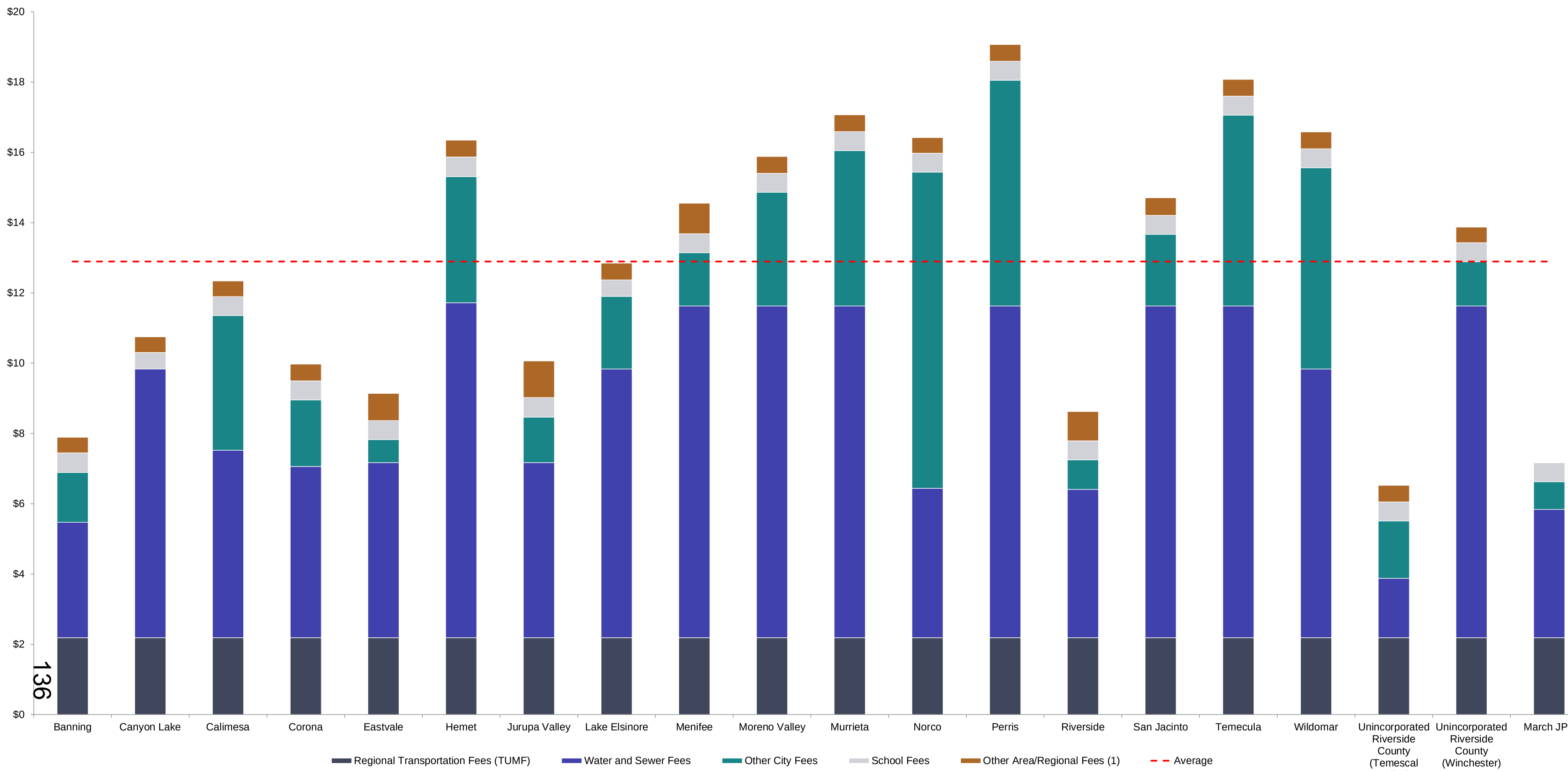
* Fee estimates for specified development prototypes as of July 2016. Actual fees will vary based on project specifics and any fee updates.
(1) "Other Area Fees/ Regional Fees" include, but are not limited to, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation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

Industrial Prototype
Capital Facilities/Infrastructure
Development Fees by Jurisdiction (Per Building Sq.Ft.)



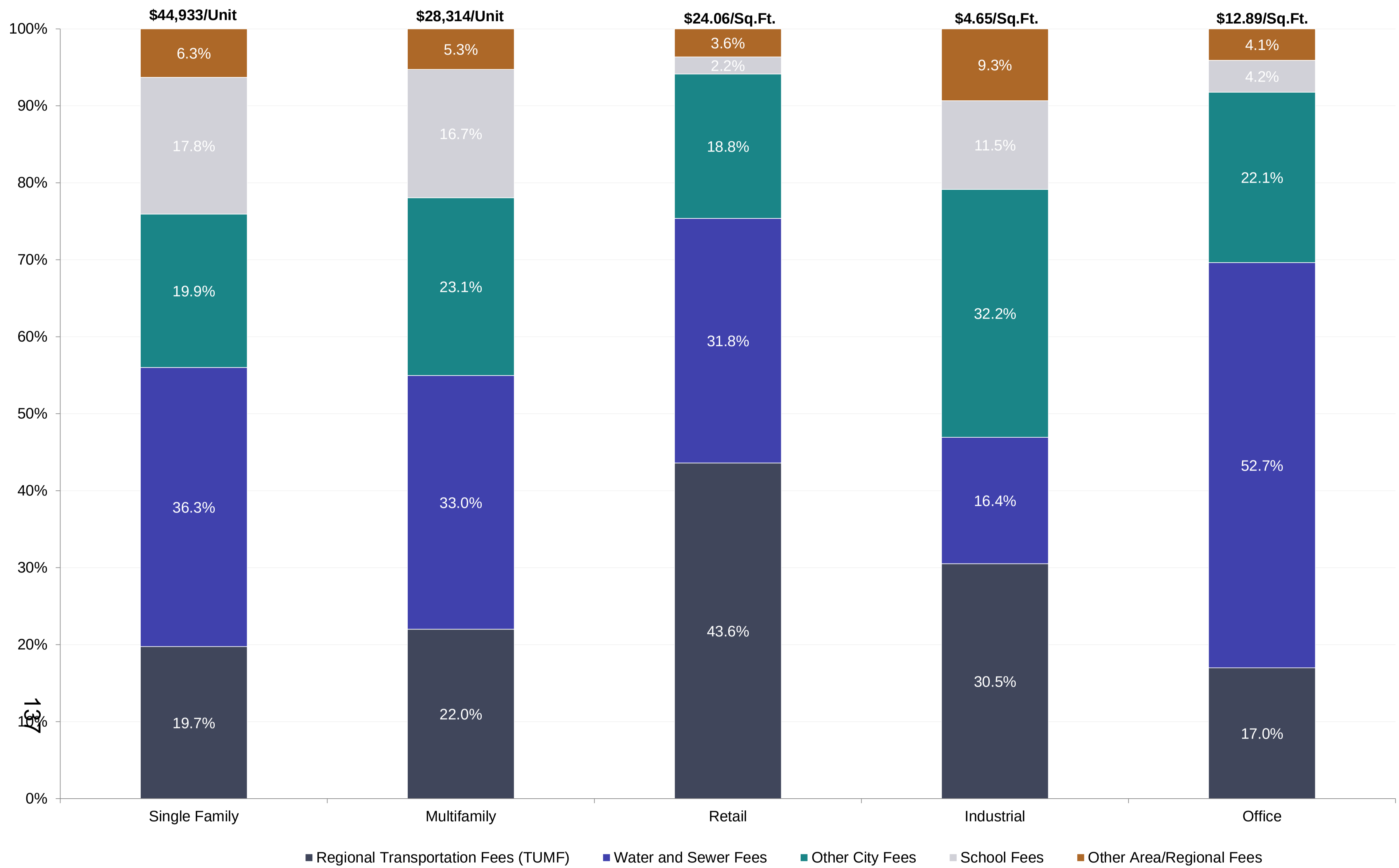
* Fee estimates for specified development prototypes as of July 2016. Actual fees will vary based on project specifics and any fee updates.
(1) "Other Area Fees/ Regional Fees" include, but are not limited to, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation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

Office Prototype
Capital Facilities/Infrastructure
Development Fees by Jurisdiction (Per Building Sq.Ft.)

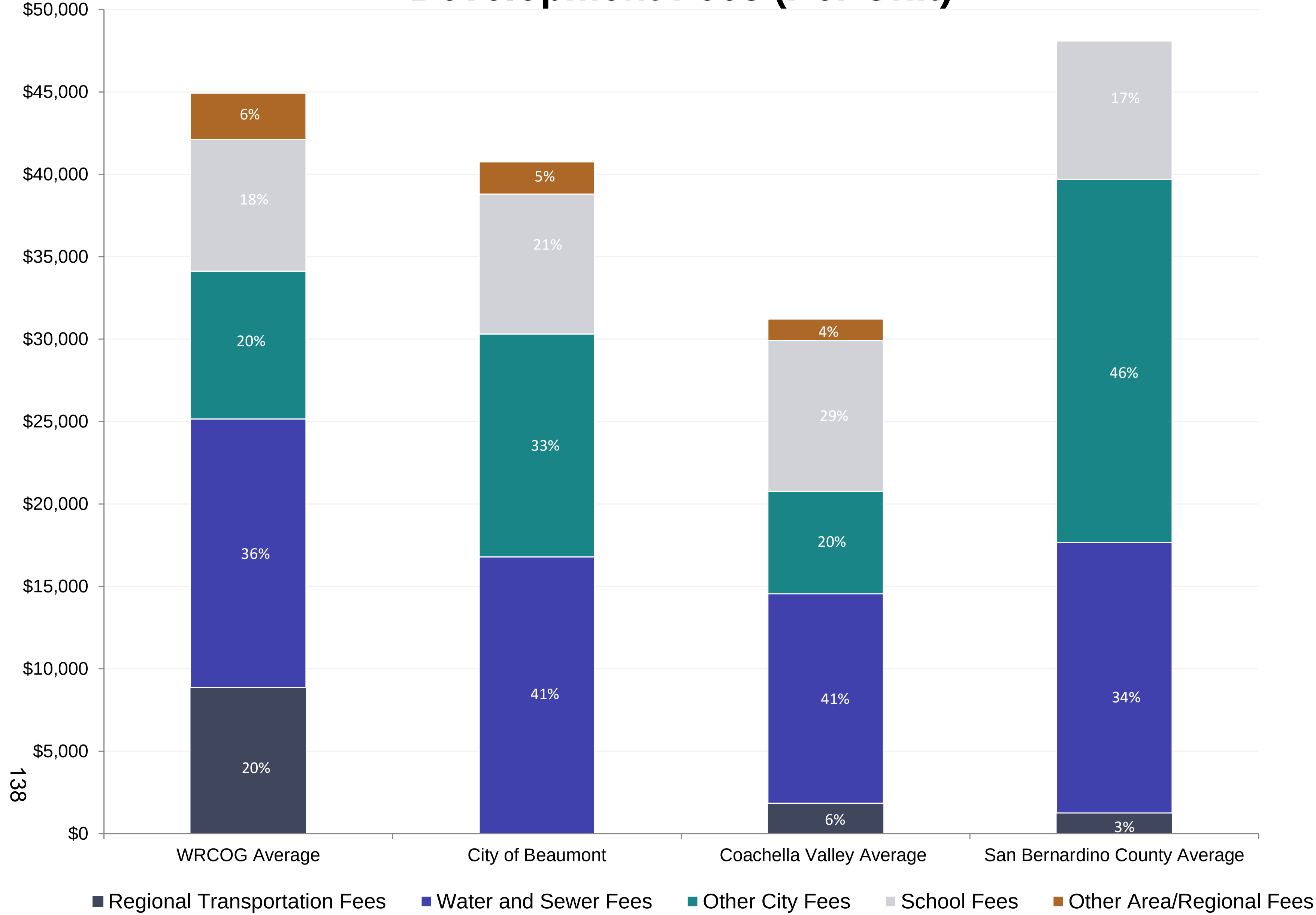


* Fee estimates for specified development prototypes as of July 2016. Actual fees will vary based on project specifics and any fee updates.
(1) "Other Area Fees/ Regional Fees" include, but are not limited to, regional parks, trails, multiservice center fees, area specific fees, and habitat mitigation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

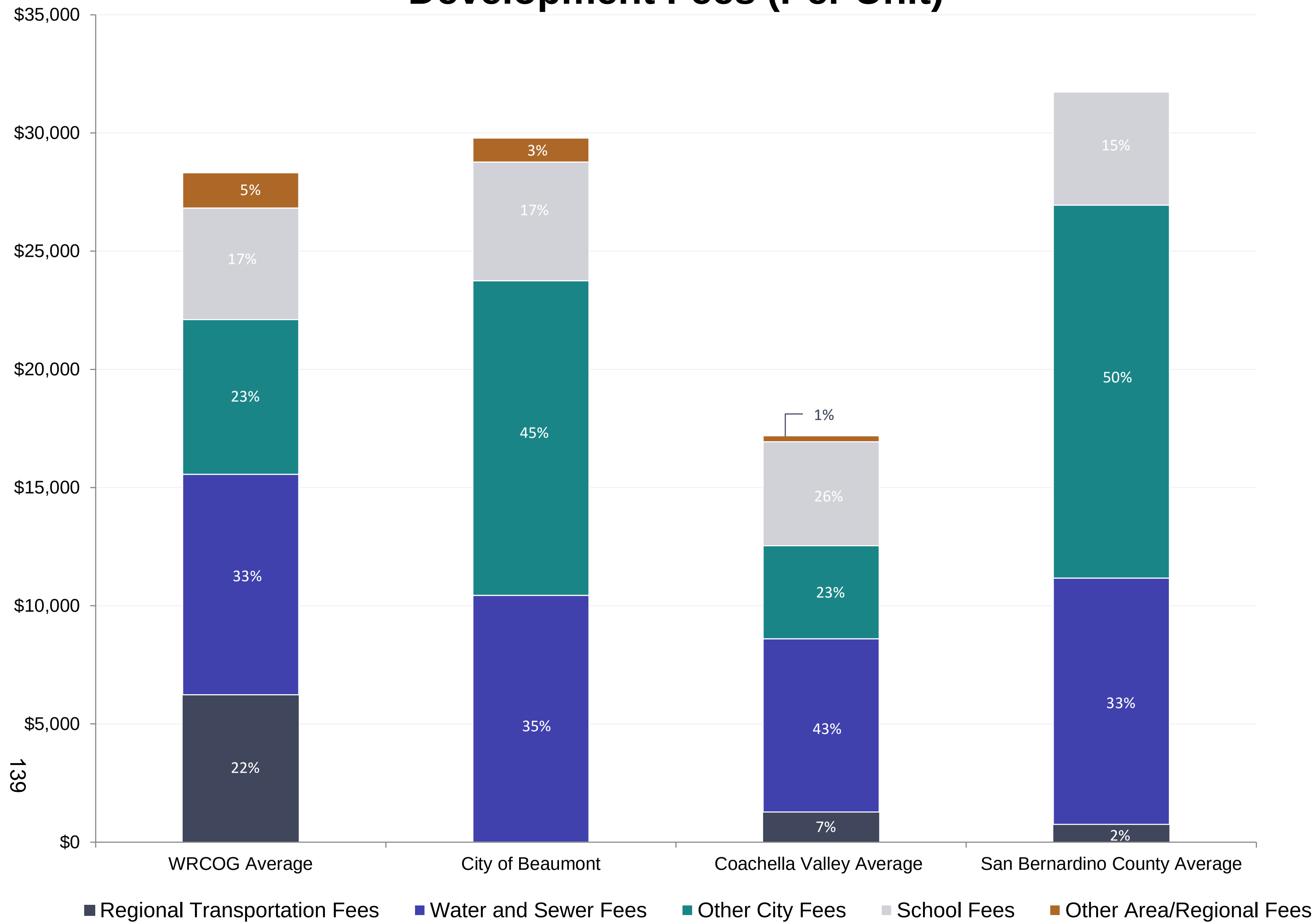
Development Prototypes
Average Capital Facilities/Infrastructure
Development Fee Proportions



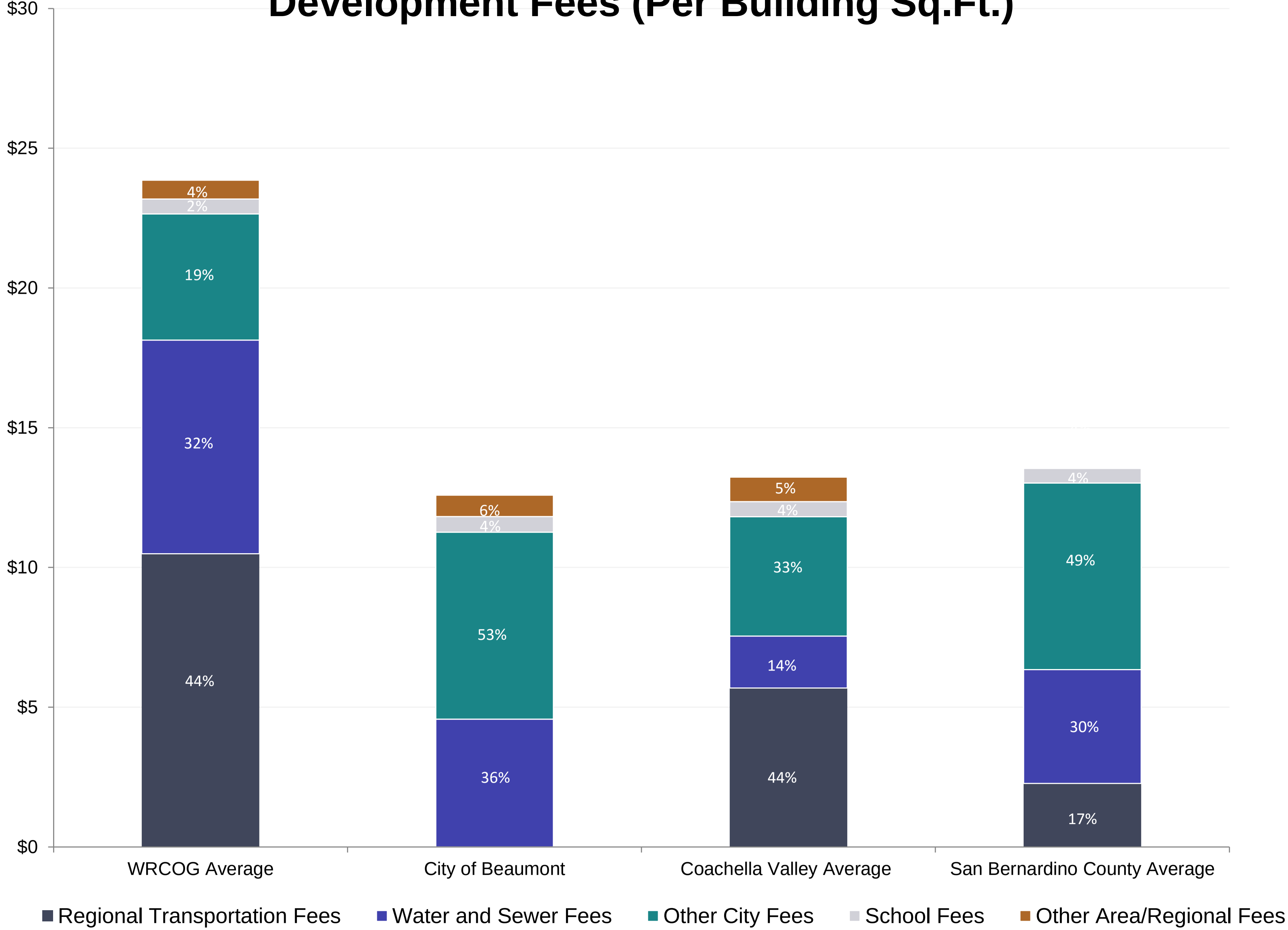
Single Family Prototype Capital Facilities/Infrastructure Development Fees (Per Unit)



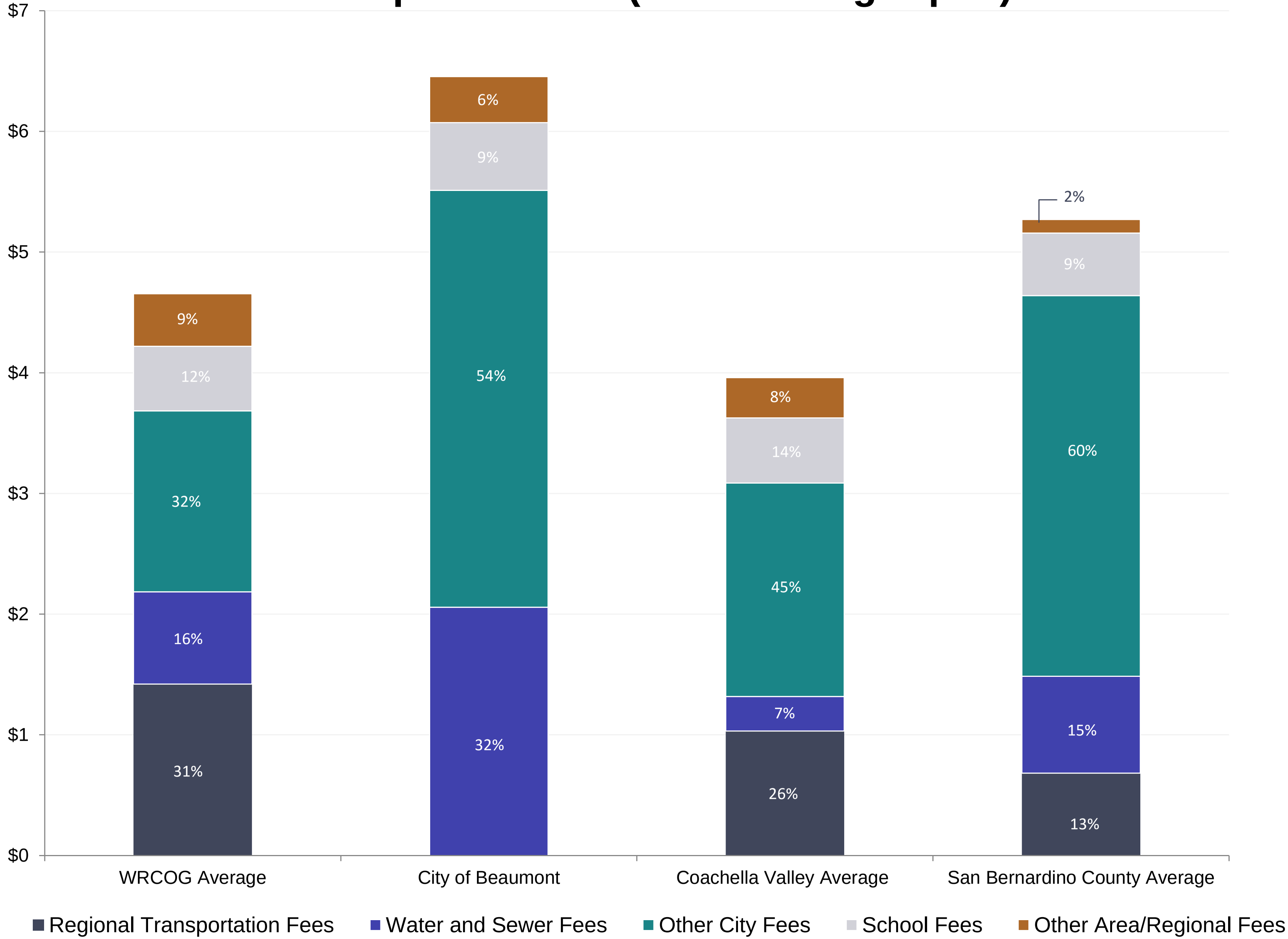
Multifamily Prototype Capital Facilities/Infrastructure Development Fees (Per Unit)



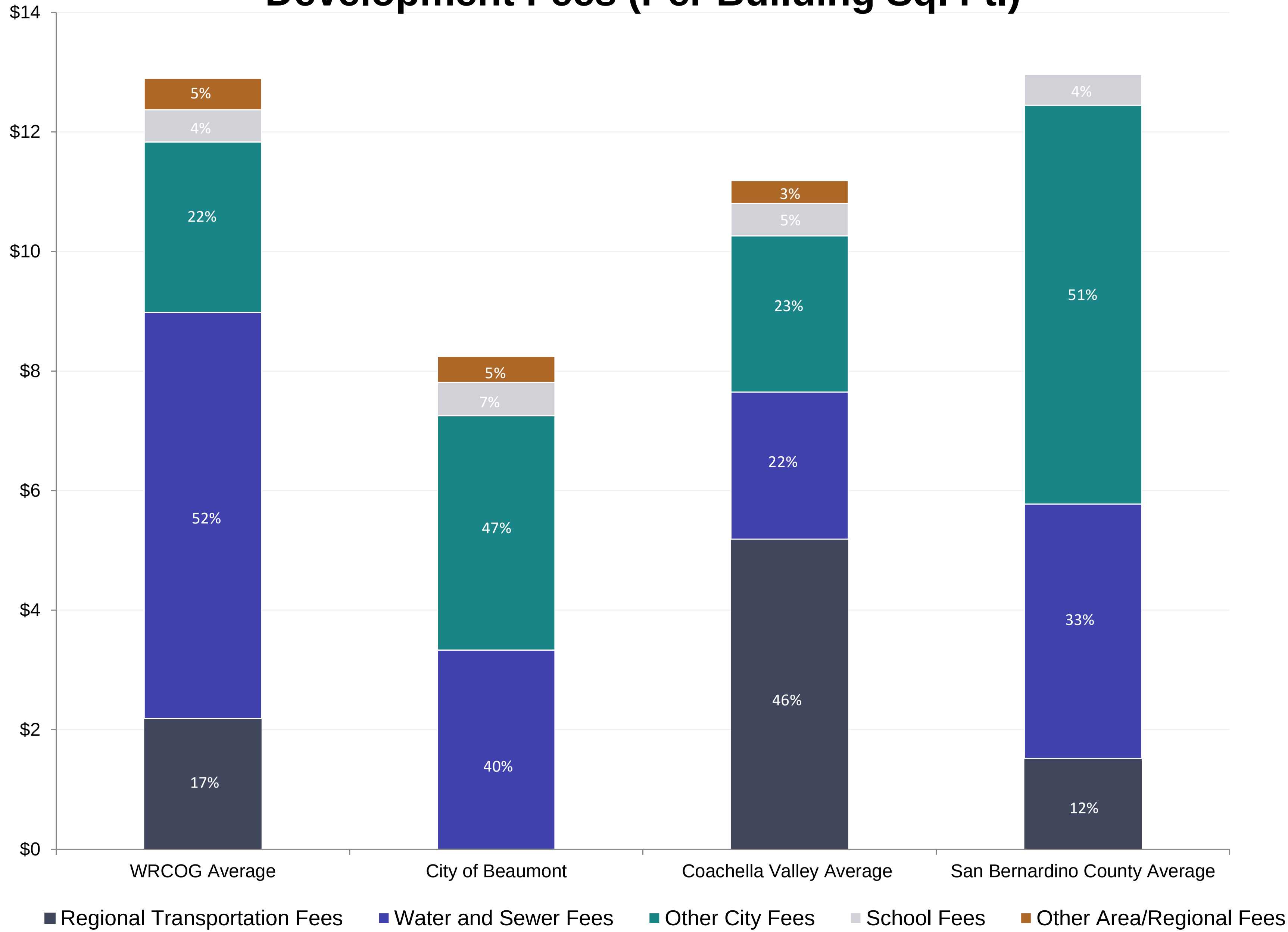
Retail Prototype Capital Facilities/Infrastructure Development Fees (Per Building Sq.Ft.)



Industrial Prototype Capital Facilities/Infrastructure Development Fees (Per Building Sq.Ft.)



Office Prototype Capital Facilities/Infrastructure Development Fees (Per Building Sq. Ft.)



Preliminary conclusions for fee study

- Total fees by development type are generally uniform throughout the region for that development type (i.e. single family residential is similar throughout region)
- Many fees on new development are outside of the direct control of the jurisdictions (TUMF, School, Water, MSHCP, etc.)
- WRCOG fees are comparable to fees charged in similar areas of San Bernardino County for all uses except retail
- Retail fees in WRCOG region are uniformly higher than any other region
- Retail fees are higher because of TUMF, Water, and City fees

Your participation

- WRCOG is seeking opinions on the accuracy of our study's development costs via pro-forma
- Please contact staff (tzeng@wrcog.cog.ca.us) if you would like to provide feedback

2016 TUMF Nexus Study Update, cont.

August 2016: Executive Committee directed staff to form an Ad Hoc Committee to review the following options in regard to the TUMF Nexus Study:

Option 1: Do nothing. Take no action on the revised 2016 TUMF Nexus Study

Option 2: Adopt the revised 2016 TUMF Nexus Study and the full proposed TUMF for all land use categories

Option 3A: Adopt the revised 2016 TUMF Nexus Study and phase-in fees for all land use categories

Option 3B: Adopt the revised 2016 TUMF Nexus Study and phase-in fees for selected land use categories

Option 3C: Adopt the revised 2016 TUMF Nexus Study and reduce recommended fees by adopting a formal match requirement

Option 3D: Adopt the 2016 TUMF Nexus Study and reduce / eliminate soft cost contributions (Planning and / or Engineering phases)

Option 4: Remove projects from the TUMF Network

2016 TUMF Nexus Study Update, cont.

- September / October – Ad Hoc Committee will convene to review and refine the TUMF Nexus Study options
- October / November – WRCOG staff will meet with stakeholders and hold workshops to review revisions made to the 2016 Nexus Study in response to comments received
- November – Ad Hoc Committee to make a formal recommendation to the WRCOG Committee structure for review on the 2016 TUMF Nexus Study
- December - February 2017 – WRCOG Committee structure to review and take action on 2016 TUMF Nexus Study
- July 2017 – Any change(s) in the fee will take effect

Contact Information

Christopher Gray
Director of Transportation
4080 Lemon Street, 3rd Floor MS 1032
Riverside, CA 92501

951-955-8304
gray@wrcog.cog.ca.us

Page Intentionally Left Blank

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Riverside Transit Agency First-Mile / Last-Mile Study Update**

Contact: **Joe Punsalan, KTU+A, joe@ktua.com, (619) 294-4477**

Date: **October 13, 2016**

Requested Action:

1. Receive and file.

This item is reserved for a presentation by KTU+A, which is preparing the RTA First-Mile / Last-Mile Study. At the July 14, 2016, PDC meeting, KTU+A presented on the study – this presentation will serve as an update.

Background:

The Riverside Transit Agency's (RTA) First and Last Mile Plan is intended to develop a plan to identify and provide a toolkit of solutions to remove barriers found in the first and last mile of accessing existing transit throughout the RTA service area in Western Riverside County.

Progress:

Transit stop typologies have been developed based on guidance from the 2015 RTA Comprehensive Operational Analysis Study's Market Assessment and a data driven GIS analysis. This analysis assigned all stations a typology type that closely mirrored their characteristics. By creating six station typologies representative of the 2,500+ bus stops throughout the RTA service area, general guidance on improvements can be made for each of those station types for application at locations across RTA's region-wide network.

Next Steps:

Field work has been completed for the six pilot locations to help with developing recommendations for the next steps. RTA needs to coordinate development of draft recommendations for the six locations with the existing plans of the cities/county for these locations. RTA welcomes the opportunity to partner with the relevant cities/county staff to finalize appropriate recommendations for each of the six pilot locations.

Prior WRCOG Action:

July 14, 2016: The WRCOG Public Works Committee received report from KTU+A

WRCOG Fiscal Impact:

None.

Attachment:

1. RTA First-Mile / Last-Mile Study Presentation.

Page Intentionally Left Blank

Item 5.H

Riverside Transit Agency First-Mile / Last-Mile Study Update

Attachment 1

RTA First-Mile / Last-Mile Study Update

Page Intentionally Left Blank

RTA Riverside Transit Agency

First & Last Mile Mobility Plan

October 13, 2016

Joe Punsalan

KTU+A

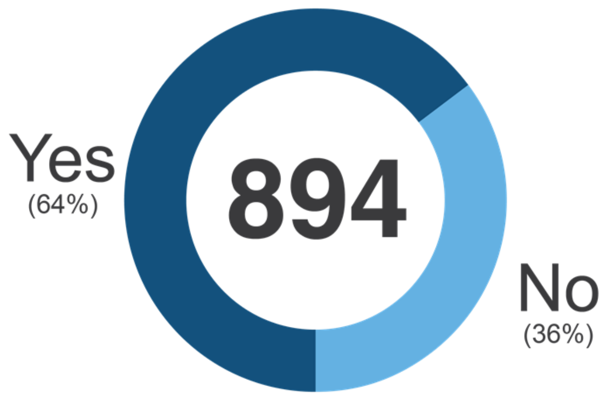
RTA Riverside Transit Agency

April/July WRCOG Meeting Summary

- Project Introduction
- Facility Types
- First & Last Mile Strategies
- Public Outreach
- Station Typologies
- Initial Rankings

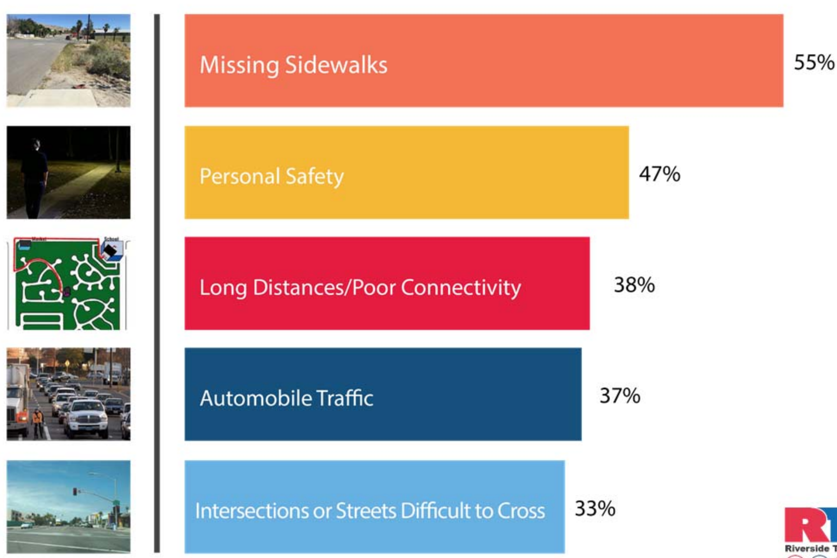
What We Heard

Do you experience any problems walking, cycling or accessing transit at a particular location or along a particular route?



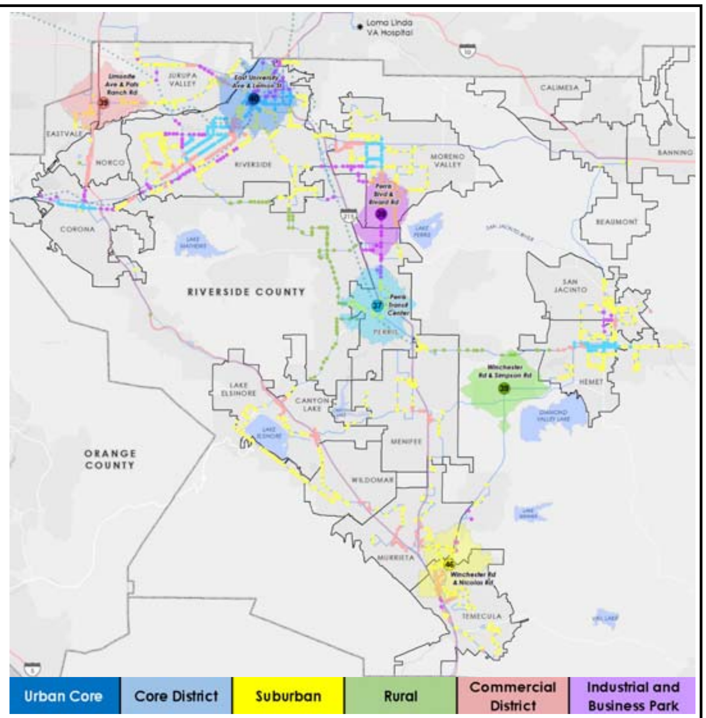
What We Heard

Please note specific problems encountered at particular locations or along a particular routes.



Typology Process

Final Pilot Study Stations



Pilot Stations
- Urban Core
- Core
- Suburban
- Rural
- Commercial
- Industrial and Business Parks

Pilot Station Transitshed
- Urban Core
- Core
- Suburban
- Rural
- Commercial
- Industrial
- Metrolink Line
- Regional Destination
- RTA Route
- City Boundary

RTA staff will work with Hemet and San Jacinto directly with these cities on their specific plan projects to include a First Mile Last Mile element.

Final Pilot Study Stations

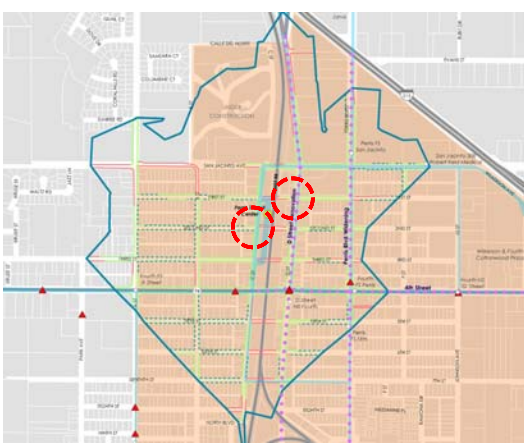
Urban Core
Station: East University Avenue and Lemon Street
Location: City of Riverside
Transitshed Coverage: City of Riverside, Jurupa Valley
Status: Highest ranking Urban Core station

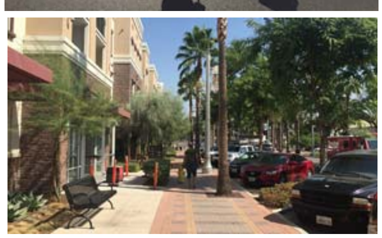


RTA First & Last Mile Mobility Plan | RivCo ATN Meeting | Sept 21, 2016

Final Pilot Study Stations

Core
Station: Perris Transit Center
Location: City of Perris
Transitshed Coverage: Perris, Riverside County
Status: Highest ranking Core station not in within the City of Riverside. Opportunity to for non-motorized access to the new Metrolink line.



RTA First & Last Mile Mobility Plan | RivCo ATN Meeting | Sept 21, 2016

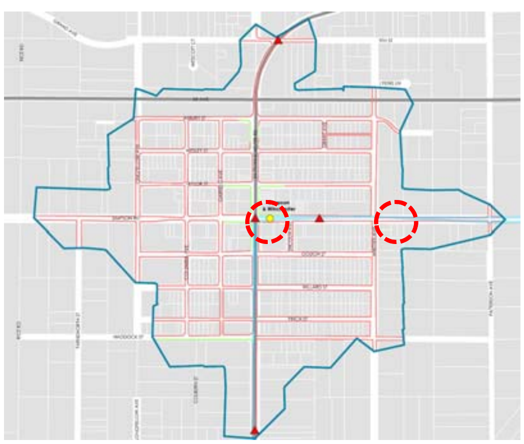
Final Pilot Study Stations

Suburban
Station: Winchester Road and Nicolas Road
Location: Temecula, Murrieta, Riverside County
Transitshed Coverage: City of Temecula, City of Murrieta, Riverside County
Status: Highest ranking & southern most suburban station not within the City of Riverside

RTA First & Last Mile Mobility Plan | RivCo ATN Meeting | Sept 21, 2016

Final Pilot Study Stations

Rural
Station: Winchester Road and Simpson Road
Location: Riverside County
Transitshed Coverage: Riverside County - Winchester, Hemet
Status: High ranking rural station, low density residential, less stops and isolated, and typical of rural development patterns. Covers eastern edge of RTA's service area.



RTA First & Last Mile Mobility Plan | RivCo ATN Meeting | Sept 21, 2016

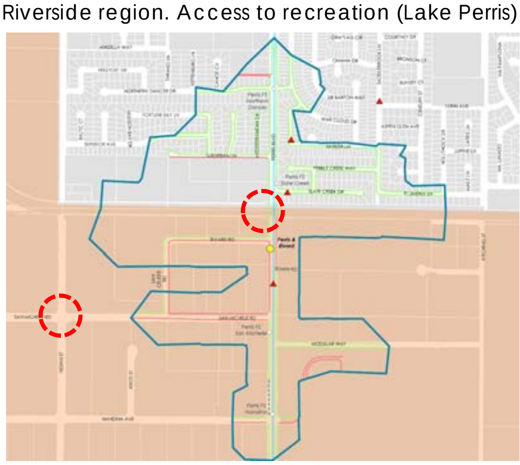
Final Pilot Study Stations

Commercial
Station: Limonite Avenue and Pats Ranch Road
Location: Jurupa Valley
Transitshed Coverage: Eastvale, Norco, Jurupa Valley
Status: High ranking commercial station, mix of rural and single family residential, large shopping centers and arterial roads. Typical curvilinear/cul-de-sac street patterns.

RTA First & Last Mile Mobility Plan | RivCo ATN Meeting | Sept 21, 2016

Final Pilot Study Stations

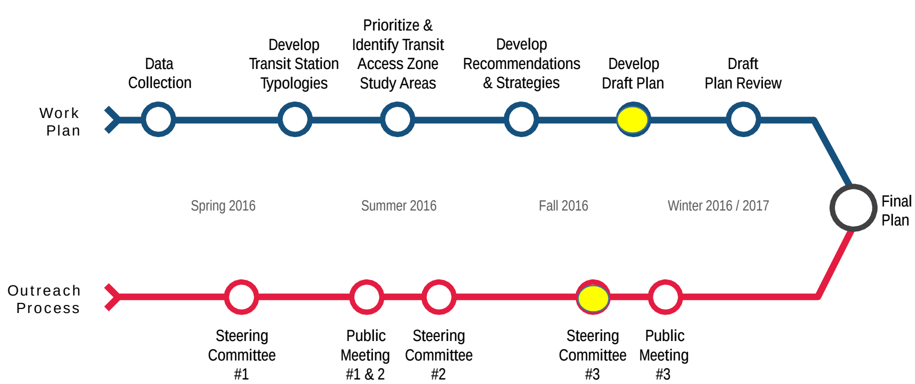
Industrial and Business Parks
Station: Perris Blvd and Rivard Road
Location: City of Moreno Valley
Transitshed Coverage: Moreno Valley, Perris
Status: Site is typical for large business park and industrial sites in the San Bernardino / Riverside region. Access to recreation (Lake Perris) with residential to the north.



RTA First & Last Mile Mobility Plan | RivCo ATN Meeting | Sept 21, 2016

Final Pilot Study Stations: Next Steps

- **Develop Recommendations: a Toolbox of Strategies for the Six Pilot Locations**
- **Partner with relevant jurisdictions: to review the draft strategies for consistency with existing local plans**



Project Schedule / Work Plan

6 Steps in Work Plan

5 Steps in Outreach Process

RTA
Riverside Transit Agency
First & Last Mile Mobility Plan

KTU+A
Joe Punsalan
joe@ktua.com

RTA Riverside Transit Agency
Joe Forgiarini
jforgiarini@riversidetransit.com