



Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

AGENDA

Monday, September 9, 2024
2:00 PM

County of Riverside Administrative Center
4080 Lemon Street, 1st Floor, Board Chambers
Riverside, CA 92501

Remote Location:

Western Water
14205 Meridian Parkway
Training Room
Riverside, CA 92518

French Valley Airport Conference Room
37600 Sky Canyon Road
Murrieta, CA 92563

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

[Public Zoom Link](#)

Meeting ID: 893 7088 6219
Passcode: 20242024
Dial in: (669) 900 9128 U.S.

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

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

Any member of the public requiring a reasonable accommodation to participate in this meeting in light of this announcement shall contact Janis Leonard 72 hours prior to the meeting at (951) 405-6706 or lfelix@wrcog.us. Later requests will be accommodated to the extent feasible.

1. CALL TO ORDER (Rita Rogers, Chair)

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. PUBLIC COMMENTS

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

5. CONSENT CALENDAR

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

A. Action Minutes from the August 5, 2024, Executive Committee Meeting

Requested Action(s): 1. Approve the Action Minutes from the August 5, 2024, Executive Committee meeting.

B. Fiscal Department Activities Update and Budget Amendment

Requested Action(s): 1. Approve the Fiscal Year 2024/2025 Budget Amendment.

C. WRCOG Committees and Agency Activities Update

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

D. Report out of WRCOG Representatives on Various Committees

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

E. TUMF Program Activities Update: One TUMF Credit Agreement, One TUMF

Reimbursement Agreement, and One TUMF Reimbursement Agreement Amendment

Requested Action(s):

1. Authorize the Executive Director to execute a TUMF Credit Agreement between WRCOG, the City of Norco, and CRP LDF Palomino, LLC, for the construction of Palomino Business Park located at Second Street & Mountain Avenue with a maximum credit of \$1,651,497.
2. Authorize the Executive Director to execute a TUMF Reimbursement Agreement between WRCOG and the City of Jurupa Valley for the Planning and Engineering phases of the Rubidoux/SR-60 Interchange in an amount not to exceed \$4,500,000.
3. Authorize the Executive Director to execute a second TUMF Reimbursement Agreement Amendment between WRCOG and the City of Riverside for the Right of Way phase of the Third Street Grade Separation in an amount not to exceed \$7,250,000.

F. Approval of the 2024 TUMF Southwest 5-Year Transportation Improvement Programs

Requested Action(s):

1. Approve the 2024 TUMF Southwest Zone 5-Year Transportation Improvement Program.

G. I-REN Monthly Activities Update

Requested Action(s):

1. Receive and file.

H. Deferral of Judicial Foreclosures on Delinquent PACE Properties

Requested Action(s):

1. Adopt Resolution Number 27-24; A Resolution of the Executive Committee of the Western Riverside Council of Governments to defer foreclosure proceedings.

I. Amendment to the Appendix of the WRCOG Conflict of Interest Code

Requested Action(s):

1. Adopt WRCOG Resolution Number 26-24; A Resolution of the Executive Committee of the Western Riverside Council of Governments Amending the Conflict of Interest Code Pursuant to the Political Reform Act of 1974.

6. REPORTS / DISCUSSION

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

A. Overview of the TUMF Nexus Study - Final Draft

Requested Action(s):

1. Approve the TUMF Nexus Study.
2. Approve the recommended Fee Schedule with an effective date of April 1, 2025.

B. WRCOG 2024 General Assembly & Leadership Address Recap and 2025 Speaker Selection by the WRCOG Supporting Foundation

Requested Action(s):

1. Authorize the Supporting Foundation Secretary to execute a speaker agreement between the Supporting

Foundation and the Washington Speakers Bureau to engage Admiral William H. McRaven for the 2025 General Assembly & Leadership Address in an amount not to exceed \$76,000 plus travel, meal, and lodging expenses.

2. Authorize the Supporting Foundation Secretary to take any necessary actions to carry out the purpose and intent of this authorization.

C. Increase Maximum Bond Authorization for Greenworks / Nuveen Green Capital (NGC) C-PACE Program

Requested Action(s):

1. Adopt Resolution Number 25-24, A Resolution of the Executive Committee of the Western Riverside Council of Governments increasing maximum bond authorization for the Greenworks PACE Program and making certain required disclosures; **OR**
2. Adopt Resolution Number 29-24, A Resolution of the Executive Committee of the Western Riverside Council of Governments increasing maximum bond authorization for the Greenworks PACE Program with certain limitations and making certain required disclosures.

D. Policy Setting the Parameters for Adding Agencies to the WRCOG Structure

Requested Action(s):

1. Adopt Resolution Number 26-24, a Resolution of the Executive Committee of the Western Riverside Council of Governments adopting a policy statement for consideration of new voting representatives.

7. REPORT FROM THE TECHNICAL ADVISORY COMMITTEE CHAIR

Clara Miramontes, City of Perris

8. REPORT FROM COMMITTEE REPRESENTATIVES

CALCOG, Brian Tisdale

SANDAG Borders Committee, Crystal Ruiz

SCAG Regional Council and Policy Committee Representatives

9. REPORT FROM THE EXECUTIVE COMMITTEE CHAIR

Rita Rogers, City of Perris

10. REPORT FROM THE EXECUTIVE DIRECTOR

Dr. Kurt Wilson

Access the report [here](#).

11. ITEMS FOR FUTURE AGENDAS

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

12. GENERAL ANNOUNCEMENTS

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

13. NEXT MEETING

The next Joint WRCOG Executive Committee and Supporting Foundation has yet to be scheduled. The next WRCOG Executive Committee meeting is scheduled for Monday, October 7, 2024, at 2:00 p.m., in the County of Riverside Administrative Center, 4080 Lemon Street, 1st Floor, Board Chambers, Riverside.

14. ADJOURNMENT

Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Action Minutes

1. CALL TO ORDER

The meeting of the WRCOG Executive Committee was called to order by Chair Rita Rogers at 2:00 p.m. on August 5, 2024, at the County of Riverside Administrative Center, 1st Floor Board Chambers.

2. PLEDGE OF ALLEGIANCE

Chair Rogers led the Committee members and guests in the Pledge of Allegiance.

3. WRCOG SPECIAL RECOGNITION

A. Government Finance Officer's Association Recognition

Action:

1. Received and filed.

4. ROLL CALL

- City of Beaumont - Mike Lara
- City of Calimesa - Wendy Hewitt
- City of Corona - Jacque Casillas
- City of Eastvale - Christian Dinco
- City of Hemet - Jackie Peterson
- City of Jurupa Valley - Chris Barajas
- City of Lake Elsinore - Brian Tisdale
- City of Menifee - Bob Karwin
- City of Norco - Kevin Bash
- City of Perris - Rita Rogers
- City of Riverside - Chuck Conder
- City of San Jacinto - Crystal Ruiz
- City of Temecula - James Stuart
- City of Wildomar - Joseph Morabito
- County, District 2 - Karen Spiegel
- County, District 3 - Chuck Washington
- Eastern Municipal Water District (EMWD) - Phil Paule
- Western Water - Brenda Dennstedt

Absent:

- City of Banning
- City of Canyon Lake
- City of Moreno Valley
- City of Murrieta
- County, District 1
- County, District 5
- Riverside Co. Superintendent of Schools

5. PUBLIC COMMENTS

Ivette Mejia from SCAG announced that registration is now open for the Southern California Demographic Workshop, which will be held on at the SCAG main office in downtown Los Angeles. The State has allocated \$560M in REAP funding, of which SCAG received a final award of \$231.5M from the California Department of Housing & Community Development; Ms. Mejia thanked those who advocated for full funding. Lastly, the Active Transportation and Safety Call for Projects for the Sustainable Communities Program opened on July 8, 2024, and is open to community plans, area plans, and quick-build projects. Available funding is an estimated \$10.4M, with a submission deadline of September 27, 2024, to be awarded in December 2024. There is an additional application workshop on Wednesday, August 7, 2024, from 1:30 p.m. to 3:00 p.m., and office hours are available on Monday through Friday during the application period.

6. CONSENT CALENDAR

RESULT:	APPROVED AS RECOMMENDED
MOVER:	San Jacinto
SECONDER:	Western Water
AYES:	Beaumont, Calimesa, Corona, Eastvale, Hemet, Jurupa Valley, Lake Elsinore, Menifee, Norco, Perris, Riverside, San Jacinto, Temecula, Wildomar, District 2, District 3, EMWD, Western Water

A. Action Minutes from the June 21, 2024, Joint Meeting of the Executive Committee and Supporting Foundation

Action:

1. Approved the Action Minutes from the June 21, 2024, joint meeting of the Executive Committee and Supporting Foundation.

B. Fiscal Department Activities Update and Budget Amendment

Action:

1. Approved the Fiscal Year 2023/2024 Budget Amendment.

C. WRCOG Committees and Agency Activities Update

Action:

1. Received and filed.

D. Report out of WRCOG Representatives on Various Committees

Action:

- 1. Received and filed.

E. TUMF Program Activities Update: Approval of One TUMF Credit Agreement

Action:

- 1. Authorized the Executive Director to execute a TUMF Credit Agreement between WRCOG, the City of Temecula, and SB Altair, LLC, for the construction of Western Bypass Road from Rancho California Road to SR-79 (1.48 miles) and the construction of the Western Bypass Bridge with maximum credit of \$32,935,000.

F. I-REN Monthly Activities Update

Action:

- 1. Received and filed.

G. PACE Programs Activities Update: Purchase and Sale Agreement with First National Assets

Actions:

- 1. Adopted Resolution Number 24-24; A Resolution of the Executive Committee of the Western Riverside Council of Governments approving a Purchase and Sale Agreement for the sale of Assessment Installment Receivables.
- 2. Authorized the Executive Director, or designee, to enter into a Purchase and Sale Agreement, substantially as to form, with First National Assets for the purchase of delinquent assessment receivables.

7. REPORTS / DISCUSSION

A. Increase Maximum Bond Authorization for Greenworks / Nuveen C-PACE Program

RESULT:	APPROVED AS RECOMMENDED
MOVER:	Lake Elsinore
SECONDER:	San Jacinto
AYES:	Beaumont, Calimesa, Eastvale, Hemet, Jurupa Valley, Lake Elsinore, Norco, Perris, Riverside, San Jacinto, Temecula, Wildomar, District 3, EMWD
NAYS:	Corona, Menifee, District 2, Western Water

Action:

- 1. Instructed staff to convene the PACE Ad Hoc Committee to further discuss this matter and return to this Committee with more information at a future meeting.

B. Activities Update from the Eastern Municipal Water District & Western Water

Action:

- 1. Received and filed.

8. REPORT FROM THE TECHNICAL ADVISORY COMMITTEE CHAIR

TAC Chair Clara Miramontes reported that the TAC recently received updates on SB 1383 activities such as the Regional Food Rescue Program, where over 66 tons of food have been recovered and assistance has been provided to member agencies in the development of inspection and enforcement procedures. There will be a workshop on September 17, 2024, at 9:00 a.m. via Zoom. The REAP 1.0 Program is coming to an end; the \$1.7M received by WRCOG in 2021 has been instrumental in providing assistance to member agencies to meet their housing needs. REAP 2.0 funding has been reinstated, which will continue to aid in planning for future housing needs.

9. REPORT FROM COMMITTEE REPRESENTATIVES

Committee member Brian Tisdale, reported that of the \$510M proposed for REAP 2.0, \$480M was included in the final State budget thanks to the lobbying activities of CALCOG.

10. REPORT FROM THE EXECUTIVE COMMITTEE CHAIR

Chair Rogers had nothing to report.

11. REPORT FROM THE EXECUTIVE DIRECTOR

Dr. Kurt Wilson stated that his report will be emailed to the Committee due to time constraints.

12. ITEMS FOR FUTURE AGENDAS

There were no items for future agendas.

13. GENERAL ANNOUNCEMENTS

Committee member Christian Dinco announced that the Eastvale Little League is now in the Western Region Little League World Series Tournament. They will play in San Bernardino against Hawaii on August 6, 2024, and if they win, will play a championship game on August 9, 2024. They are the first Little League team from Riverside to make it this far. Committee members were encouraged to tune in on ESPN Plus at 2:00 p.m. to cheer them on.

14. NEXT MEETING

The next Executive Committee meeting is scheduled for Monday, September 9, 2024, at 2:00 p.m., at the Riverside County Administrative Center, 4080 Lemon Street, 1st Floor, Board Chambers, Riverside.

15. CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION (Paragraph (1) of subdivision(d) of Section 54956.9)

1. Fabian v. Western Riverside Council of Governments, San Diego County Superior Court, Case No. 37-2018-00023808-CU-BT-NC
2. Andrade v. Western Riverside Council of Governments, San Diego County Superior Court, Case

No. 37-2019-00052111-CU-BT-NC

3. Zuniga v. Western Riverside Council of Governments, et al., San Diego Superior Court, Case No. 37-2021-00007702-CU-MC-NC

CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION

Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9: 1 potential Case

There were no reportable actions.

16. ADJOURNMENT

The meeting was adjourned at 3:54 p.m.



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Fiscal Department Activities Update and Budget Amendment
Contact: Andrew Ruiz, Chief Financial Officer, aruiz@wrcog.us, (951) 405-6741
Date: September 9, 2024

Recommended Action(s):

1. Approve the Fiscal Year 2024/2025 Budget Amendment.
-

Summary:

The Finance Department is currently working through its year-end close, which includes analyzing all of its accounts, accruing revenues and expenditures, and preparing year-end schedules in preparation for the annual audit. A budget amendment is requested in this item, related to an approved settlement offer. The Finance Department has completed the annual audit and has issued its Annual Comprehensive Financial Report. WRCOG has also finalized its Fiscal Year 2024/2025 budget.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to provide information regarding Finance Department activities. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #3 (Ensure fiscal solvency and stability of the Western Riverside Council of Governments).

Discussion:

Background

The Finance Department provides regular updates to WRCOG Committees regarding the financial status of WRCOG and also provides summaries of on-going activities that might be of interest to member agencies. The financial reports document Agency revenues and expenditures through the current fiscal year, as reported by various programs, funds, and other administrative divisions. On-going activities include the preparation of the Agency audit, budget amendments, and preparation of the WRCOG budget for consideration and approval by WRCOG Committees.

Present Situation

Fiscal Year 2023/2024 Year-End Close: WRCOG staff are currently preparing for the Fiscal Year

2023/2024 year-end close, which includes preparing for the interim audit, analyzing all of its accounts, and performing revenue and expenditure accruals. Staff anticipates closing the Agency's books by September and begin the audit in October.

Financial Documents

All of WRCOG's most recent financial statements, budget, monthly financials, amendments, etc., are located on the Agency's Fiscal Department's webpage [here](#).

Fiscal Year 2024/2025 Budget Amendment

The Executive Committee recently authorized settlements related to the HERO Program; however, a budget amendment is being proposed to increase the budget by \$450,900. The proposed amendment increases the available funds in an amount sufficient to implement based on the direction of the Executive Committee. There is no offset to the increased expenditures; therefore, it will increase the overall Program's budget. The HERO Program operates under WRCOG's General Fund (Fund 110), so the proposed amendment will draw down from the assigned fund balance for the Program.

Prior Action(s):

None.

Financial Summary:

Fiscal Department activities are included in the Agency's adopted Fiscal Year 2024/2025 Budget under the Finance Department under Fund 110.

This budget amendment will create a net increase in expenditures in the HERO Program (5000) under the General Fund (110) by \$450,900, which will increase the total Program's budgeted deficit to \$529,791 for the Fiscal Year. The Fiscal Year 2024/2025 starting assigned fund balance specific to the HERO Program in the General Fund is approximately \$195k. Additional funds required to cover the expenditure increase will draw down from the unassigned fund balance of the General Fund.

Attachment(s):

[Attachment 1 - HERO FY 2024/2025 Budget Amendment](#)

Attachment

FY 2024/2025 HERO
Budget Amendment

Fiscal Year 2024/2025 HERO Budget Amendment

Account Description	GL Code	Budget	Amendment	New Budget
Salaries & Wages	60001	\$ 158,778		\$ 158,778
Fringe Benefits	61000	77,425		77,425
Overhead	63000	99,867		99,867
Legal	65101	300,000		300,000
Bank Fees	65505	5,000		5,000
Parking Validations	73102	100		100
Computer Software	73110	3,800		3,800
Postage	73116	750		750
Computer Equipment/Supplies		1,000		1,000
Communications	73200	1,500		1,500
Data Processing Support	73504	20,921		20,921
PACE Recording	73506	7,500		7,500
Seminars/Conferences	73601	500		500
Travel Related Expenses	73610	1,250		1,250
Training	73650	500		500
Compliance Settlements	81010	25,000	450,900	475,900
Consulting Labor	85101	40,000		40,000
Total Expenses		\$ 743,891	\$ 450,900	\$ 1,194,791



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: WRCOG Committees and Agency Activities Update
Contact: Chris Gray, Deputy Executive Director, cgray@wrcog.us, (951) 405-6710
Date: September 9, 2024

Recommended Action(s):

1. Receive and file.

Summary:

Attached are summary recaps of actions and activities from recent WRCOG standing Committee meetings that occurred during the month of July 2024.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to inform the Committee of actions and activities from WRCOG standing Committee meetings. This item aligns with WRCOG's 2022-2027 Strategic Plan Goal #4 (Communicate proactively about the role and activities of the Council of Governments).

Discussion:

A summary is provided for the following meeting that occurred in August 2024:

- August 5, 2024: Executive Committee
- August 8, 2024: Planning Directors Committee
- August 8, 2024: Public Works Committee
- August 14, 2024: Administration & Finance Committee
- August 15, 2024: Technical Advisory Committee
- August 21, 2024: Solid Waste Committee
- August 22, 2024: Finance Directors Committee

Prior Action(s):

None.

Financial Summary:

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

Attachment(s):

[Attachment 1 - WRCOG Committees Activities Update August 2024](#)



Western Riverside Council of Governments
Executive Committee Meeting Recap
August 5, 2024

Following is a summary of key items discussed at the last Executive Committee meeting.

Agenda Packet: <https://wrcog.us/DocumentCenter/View/10329/EC-0824-AP>

PowerPoint Presentation: <https://wrcog.us/DocumentCenter/View/10352/exec-ppt-0824>

Increase Maximum Bond Authorization for Greenworks / Nuveen C-PACE Program

- This matter was presented to increase the maximum bond authorization for Commercial provider Nuveen formerly Greenworks for the PACE Program from \$200M to \$1B due to a pending \$270M retroactive Commercial PACE project in San Jose, CA, with eligible energy efficiency improvements scheduled to close on 8/30/2024.
- Executive Committee members voiced their concerns regarding the recommended increase amount. WRCOG's current flat fee is 0.7% of total project cost, and the fee cap on commercial projects is \$250K.
- The PACE Ad Hoc Committee will meet prior to the next Executive Committee meeting to address concerns.

Activities Update from the Eastern Municipal Water District & Western Water

- Joe Mouwad (Eastern Municipal Water District) and Craig Miller (Western Water) provided an update on key water-related issues of interest to WRCOG member agencies.
- One item of interest is the *Conservation as a California Way of Life* mandate, which requires significant reductions in water use for indoor residential use and outdoor residential use. Commercial, industrial, and institutional users are also banned from using potable water for irrigation.
- SB 366 is currently progressing through the Legislature and requires the State to develop long-term water supply targets and strategies to meet those targets.
- Ongoing coordination with Metropolitan Water District (MWD) was also discussed. Both Eastern Municipal Water District and Western Water are members of MWD.

Next Meeting

Due to the observance of the Labor Day holiday, the next Executive Committee meeting is scheduled for Monday, September 9, 2024, at 10:00 a.m., in the County of Riverside Administrative Center, 4080 Lemon Street, 1st Floor, Board Chambers, Riverside.



Western Riverside Council of Governments Planning Directors Committee Meeting Recap August 8, 2024

Following is a summary of key items discussed at the last Planning Directors Committee meeting.

Agenda Packet: <https://wrcog.us/DocumentCenter/View/10337/PDC-0824-AP>

PowerPoint Presentation: <https://wrcog.us/DocumentCenter/View/10373/pdc-824-ppt>

Senate Bill 4 – Affordable Housing on Faith Based Lands

- Alexa Washburn with National Community Renaissance presented on Senate Bill (SB) 4, the Affordable Housing on Faith Lands Act, which creates a streamlined process to build affordable housing on land owned by faith institutions and non-profit colleges.
- SB 4 is applicable to projects that are 100% affordable, are required to have at least 1 off-street parking space per unit, are a partnership between landowners and nonprofit housing builders, have a density standard of 30 du/ac in residential zones, and 40 du/ac for non-residential zones, and require prevailing wages along with other labor standards.
- There are several pre-requisites to utilize the benefits of SB 4, however, some cities, such as Moreno Valley are going above and beyond to make it easier to build housing on faith-based lands.

Overview of ULI Technical Assistance Panels

- Kendra Chandler with the Urban Land Institute, along with Karen Gulley with PlaceWorks, presented an invitation to local agencies to participate in Technical Assistance Panels.
- Technical Assistance Panels provide assistance with local land use challenges and opportunities in a 2-day session with a panel of experts to deliver a presentation and written documentation on findings.

Overview of TUMF Nexus Study – Final Draft

- WRCOG staff and consultants have been working on this effort since 2021 and all technical work on the study is complete.
- The Nexus Study results, public comments, and responses to comments were presented.
- The Committee recommended that the Executive Committee approve the Nexus Study and adopt the proposed fee schedule effective April 1, 2025.

Next Meeting

The next Planning Directors Committee meeting is scheduled for Thursday, October 10, 2024, at 9:30 a.m., in WRCOG's office at 3390 University Avenue, Suite 200, Riverside.



Western Riverside Council of Governments
Public Works Committee Meeting Recap
August 8, 2024

Following is a summary of key items discussed at the last Public Works Committee meeting.

Agenda Packet: <https://wrcog.us/DocumentCenter/View/10343/PWC-0824-AP>

PowerPoint Presentation: <https://wrcog.us/DocumentCenter/View/10374/pwc-0824-ppt>

Provide Overview of TUMF Nexus Study – Final Draft

- WRCOG staff and consultants have been working on this effort since 2021 and all technical work on the study is complete.
- The Nexus Study results, public comments, and responses to comments were presented.
- The Committee recommended that the Executive Committee approve the Nexus Study and adopt the proposed fee schedule effective of April 1, 2025.

Next Meeting

The next Public Works Committee meeting is scheduled for Thursday, October 10, 2024, at 2:00 p.m., in WRCOG's office located at 3390 University Avenue, Suite 200, Riverside.



Western Riverside Council of Governments
Administration & Finance Committee Meeting Recap
August 14, 2024

Following is a summary of key items discussed at the last Administration & Finance Committee meeting.

Agenda Packet: <https://wrcog.us/DocumentCenter/View/10353/af-0824-ap>

PowerPoint Presentation: <https://wrcog.us/DocumentCenter/View/10363/af-ppt-0824>

Overview of the TUMF Nexus Study

- WRCOG staff and consultants have been working on this effort since 2021 and all technical work on the study is complete.
- The Nexus Study results, public comments, and responses to comments were presented.
- The Committee recommended that the Executive Committee approve the Nexus Study and adopt the proposed fee schedule effective of April 1, 2025.

Policy Setting the Parameters for Adding Agencies to the WRCOG Structure

- This item had been discussed by an Ad Hoc Committee which provided input on proposed language.
- The Administration & Finance Committee recommended that the Executive Committee approve the proposed policy related to potential addition of agencies to the WRCOG structure.

Next Meeting

The next Administration & Finance Committee meeting is scheduled for Wednesday, September 11, 2024, at 12:00 p.m., in WRCOG's office at 3390 University Avenue, Suite 200.



Western Riverside Council of Governments Technical Advisory Committee Meeting Recap August 15, 2024

Following is a summary of key items discussed at the last Technical Advisory Committee meeting.

Agenda Packet: <https://wrcog.us/DocumentCenter/View/10354/TAC-0824-AP>

PowerPoint Presentation: <https://wrcog.us/DocumentCenter/View/10375/TAC-PPT-0824>

WRCOG Fellowship Program Activities Update: Round 9

- Applications are now being accepted for Host Agencies through August 23, 2024 and Fellowships through September 2, 2024.
- Program guidelines for hosting, FAQs, and associated costs are available at www.wrcog.us/fellowship or contact Julian Brambila jbrambila@wrcog.us for assistance.

Overview of the TUMF Nexus Study – Final Draft

- WRCOG staff and consultants have been working on this effort since 2021 and all technical work on the study is complete.
- The Nexus Study results, public comments, and responses to comments were presented.
- The Committee recommended that the Executive Committee approve the Nexus Study and adopt the proposed fee schedule effective of April 1, 2025.

Overview of ULI Technical Assistance Panels

- Kendra Chandler with the Urban Land Institute, along with Karen Gulley with PlaceWorks, presented an invitation to local agencies to participate in Technical Assistance Panels.
- Technical Assistance Panels provide assistance with local land use challenges and opportunities in a 2-day session with a panel of experts to deliver a presentation and written documentation on findings.

Next Meeting

The next Technical Advisory Committee meeting is scheduled for Thursday, September 19, 2024, at 9:30 a.m. in the WRCOG office at 3390 University Avenue, Riverside.



Western Riverside Council of Governments Solid Waste Committee Meeting Recap August 21, 2024

Following is a summary of key items discussed at the last Solid Waste Committee meeting.

Agenda Packet: <https://wrcog.us/DocumentCenter/View/10356/SWC-082124-AP>

PowerPoint Presentation: <https://wrcog.us/DocumentCenter/View/10369/SWC-PPT-0824>

Recycle from Home Presentation

- "Recycle From Home" is a convenient recycling program that allows residents to recycle eligible items directly from their homes. This program typically involves the collection of recyclable CRV materials, such as bottles and cans, without the need for residents to visit a recycling center.
- Participants usually schedule a pickup, place their recyclables in designated containers, and leave them outside their homes on the scheduled day. The program aims to make recycling easier and more accessible, encouraging higher participation rates and reducing the environmental impact by diverting recyclable materials from landfills. Payment, less 10% fee, is made to residents directly via Venmo, PayPal, or check, or proceeds can be donated to a charity.
- Through this service, communities can increase recycling rates, contribute to environmental sustainability, and make recycling a hassle-free part of daily life. They will also collect e-waste. The program currently operates in the Cities of Corona and Riverside.

SB 1383 Activities and Food Rescue Activities Update

- WRCOG, in partnership with MSW Consultants, developed a regional food recovery program to meet the requirements of SB 1383, involving multiple cities.
- Site visits and inspections occur across participating cities, resulting in increased food donations, alongside extensive capacity planning to ensure future compliance.
- The program features a robust public outreach campaign, including multilingual materials and virtual workshops, to educate and train Food Recovery Organizations and edible food generators.
- The program has successfully recovered 71 tons of food, reduced carbon emissions, and planned continuous inspections and enforcement will maintain and enhance compliance.

Next Meeting

The next Solid Waste Committee meeting is scheduled for Wednesday, November 10, 2024, at 1:00 p.m., in WRCOG's office at 3390 University Avenue, Suite 200, Riverside.



Western Riverside Council of Governments Finance Directors Committee Meeting Recap August 22, 2024

Following is a summary of key items discussed at the last Finance Directors Committee meeting.

Agenda Packet: <https://wrcog.us/DocumentCenter/View/10365/FDC-0824-ap>

PowerPoint Presentation: <https://wrcog.us/DocumentCenter/View/10370/fdc-0824-ppt>

Results of Financial Services Software Request for Proposal for WRCOG

- WRCOG received proposals from Tyler Technologies and AccuFund. The interview panel concluded that Tyler would be the best choice, due to its system features, reputation with member agencies and reputation as the largest company in the United States, focused solely on the public sector.
- Contract amount of \$262,860 over five-year span. The first year will be \$117,020 (\$80,560 implementation plus \$36,460 annual fee). This cost amount is aligned with WRCOG's budget amount of \$118k.
- The Executive Committee will be asked to approve the agreement with Tyler Technologies at its September 9, 2024, meeting.
- Once approved, Fiscal staff will coordinate with Tyler's implementation team.

Overview of the TUMF Nexus Study – Final Draft & TUMF Revenue Update

- The TUMF Program collected \$87M with 85% of the revenue collected related to residential development (single-family and multi-family). Industrial development accounts for most of the remaining revenue. Retail and service revenue is only 3% of total TUMF revenue.
- The TUMF Nexus Study is currently being updated. The Final Draft was shared with the Committee which included an updated fee schedule.
- The Executive Committee will be asked to approve the Nexus Study and adopt an updated Fee Schedule at its September 9, 2024, meeting.

The Economy and Financial Markets

- As things currently stand, inflation remains above the Federal Reserve's target, the labor market is coming into better balance, and consumers continue to support growth through spending.
- At least one rate cut is anticipated to happen this calendar year, with the first likely coming in September.
- WRCOG's portfolio continues to out-perform the market benchmark return.

Next Meeting

The next Finance Directors Committee meeting is scheduled for February 20, 2025, at 1:00 p.m., in WRCOG's office at 3390 University Avenue, Suite 200, Riverside.



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Report out of WRCOG Representatives on Various Committees
Contact: Chris Gray, Deputy Executive Director, cgray@wrcog.us, (951) 405-6710
Date: September 9, 2024

Recommended Action(s):

1. Receive and file.

Summary:

One key function of the Executive Committee is to appoint representatives to various external agencies, groups, and committees on behalf of WRCOG. This Staff Report provides a summary of activities related to appointments for CALCOG, the SANDAG Borders Committee, and the SAWPA OWOW Steering Committee.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item to provide information regarding various external agencies, groups, and committees related to WRCOG where WRCOG has appointed one or more representative(s) to serve as its representative. This item supports WRCOG's 2022-2027 Strategic Plan Goal #4 (Communicate proactively about the role and activities of the Council of Governments).

Discussion:

CALCOG Board of Directors (Brian Tisdale)

The CALCOG Board of Directors meeting of August 12, 2024, was cancelled. The next CALCOG Board of Directors meeting is tentatively scheduled for September 30, 2024.

SANDAG Borders Committee (Crystal Ruiz)

The SANDAG Borders Committee has not met since the last update. The next SANDAG Borders Committee meeting is scheduled for Friday, September 27, 2024.

SAWPA OWOW Steering Committee (Wes Speake)

The SAWPA OWOW Steering Committee has not met since the last update. The next SAWPA OWOW Steering Committee meeting is scheduled for September 26, 2024.

Prior Action(s):

None.

Financial Summary:

Appointed Committee members are paid \$150 to attend their respective meetings. WRCOG stipends are included in the Agency's adopted Fiscal Year 2023/2024 Budget under the Administration Department in the General Fund (Fund 110).

Attachment(s):

None.



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: TUMF Program Activities Update: One TUMF Credit Agreement, One TUMF Reimbursement Agreement, and One TUMF Reimbursement Agreement Amendment

Contact: Brian Piche-Cifuentes, Transportation Analyst I, bpiche-cifuentes@wrcog.us, (951) 405-6705

Date: September 9, 2024

Recommended Action(s):

1. Authorize the Executive Director to execute a TUMF Credit Agreement between WRCOG, the City of Norco, and CRP LDF Palomino, LLC, for the construction of Palomino Business Park located at Second Street & Mountain Avenue with a maximum credit of \$1,651,497.
2. Authorize the Executive Director to execute a TUMF Reimbursement Agreement between WRCOG and the City of Jurupa Valley for the Planning and Engineering phases of the Rubidoux/SR-60 Interchange in an amount not to exceed \$4,500,000.
3. Authorize the Executive Director to execute a second TUMF Reimbursement Agreement Amendment between WRCOG and the City of Riverside for the Right of Way phase of the Third Street Grade Separation in an amount not to exceed \$7,250,000.

Summary:

The Cities of Jurupa Valley, Norco, and Riverside are requesting to enter into TUMF agreements with WRCOG. This initiative involves an investment of millions of dollars, which will be directed towards significant enhancements in roads and transportation systems throughout the subregion. Such an investment will improve the infrastructure, stimulate economic growth, reduce traffic congestion, and enhance the overall quality of life for residents and businesses in the area.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to request approval of one TUMF Credit Agreement, one TUMF Reimbursement Agreement, and one TUMF Reimbursement Agreement Amendment. This effort supports WRCOG's 2022-2027 Strategic Plan Goal #5 (Develop projects and programs that improve infrastructure and sustainable development in our subregion).

Discussion:

Background

WRCOG's TUMF Program is a subregional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in western Riverside County. A Reimbursement Agreement is a document between WRCOG and a member agency that allows WRCOG to provide funding for TUMF expenses incurred for the Planning, Design, Engineering, and/or Construction phase(s) of a TUMF project. To enter into a Reimbursement Agreement, the funding for the project must first be allocated in the appropriate TUMF Zone Transportation Improvement Program (TIP). TUMF Agreements and Amendments are initiated by their respective agencies when that agency is ready for the infrastructure development.

A TUMF Credit Agreement is a document between WRCOG, a member agency, and a developer, and allows WRCOG to provide credit towards TUMF fees. This credit is established by work completed for the Planning, Design, Engineering, and/or Construction Phase(s) of a TUMF facility. To enter into a Credit Agreement, the project must have eligible funding identified in WRCOG's current TUMF Nexus Study. TUMF Credit Agreements give credit for eligible infrastructure built as part of new development. Developers contribute to the TUMF Program through direct work on facilities. The maximum amount of credit a developer can receive is determined through the TUMF Nexus Study project list.

Present Situation

TUMF Credit Agreement:

1. The TUMF Credit Agreement between WRCOG, the City of Norco, and CRP LDF Palomino, LLC, will have project work improvements done at First Street between where it intersects with Mountain Ave. and Parkridge Ave and at Second Street between where it intersects with Mountain Ave. and Pacific Ave., with a maximum available credit amount of \$1,651,497 for TUMF-eligible work. The developer has an estimated TUMF obligation of \$1,220,805.18.

TUMF Reimbursement Agreement:

1. The TUMF Reimbursement Agreement between WRCOG and the City of Jurupa Valley will have the project work done reconfiguring the existing interchange at Rubidoux Boulevard and State Route 60 and improve the traffic circulation as well as accommodating future traffic congestion.

TUMF Reimbursement Agreement Amendment:

1. The Third Street Grade Separation project (16-NW-RIV1190) set the amount of funding in the Planning, Engineering, and Right of Way Phases at not to exceed \$8,250,000. An increase in project funding for the Right of Way Phase has now been requested by the City of Riverside in an Amendment not to exceed \$7,250,000, thus making the new reimbursement amount to exceed \$11,250,000. This would be the second amendment for the project.

Prior Action(s):

None.

Financial Summary:

TUMF liabilities with respect to Credit Agreements are recognized when the developer's credit exceeds the developer's obligation and creates projected liability. These liabilities are reflected as fiduciary fund long-term debt in WRCOG's financials under the TUMF Fund. These potential liabilities are subject to reimbursement based on the availability of funding in their respective TUMF Zones. The Reimbursement Agreements noted are consistent and included within the respective Zone TIP.

Attachment(s):

[Attachment 1 - TUMF Credit Agreement - Palomino Business Park](#)

[Attachment 2 - TUMF Reimbursement Agreement - Rubidoux/SR-60 Interchange](#)

[Attachment 3 - TUMF Reimbursement Agreement Amendment - Third Street Grade Separation](#)

Attachment

TUMF Improvement and
Credit Liability Agreement –
Palomino Business Park

For Use Between Public Agency and Developer
"Master Agreement"

**IMPROVEMENT AND CREDIT / REIMBURSEMENT AGREEMENT
TRANSPORTATION UNIFORM MITIGATION FEE PROGRAM**

This **IMPROVEMENT AND CREDIT AGREEMENT** ("Agreement") is entered into this ___ day of _____, 20___, (the "Effective Date") by and between the City of Norco, a California municipal corporation ("AGENCY"), the Western Riverside Council of Governments, a joint powers Agency, ("WRCOG") CRP LDF Palomino, LLC, a California Corporation with its principal place of business at 1300 Dove Street, Suite #200, Newport Beach, CA 92660 ("Developer"). AGENCY and Developer are sometimes hereinafter referred to individually as "Party" and collectively as "Parties".

RECITALS

WHEREAS, Developer owns 110 acres of real property located within the AGENCY of Norco, California, which is more specifically described in the legal description set forth in Exhibit "A", attached hereto and incorporated herein by this reference ("Property");

WHEREAS, Developer has requested from AGENCY-certain entitlements and/or permits for the construction of improvements on the Property, which are more particularly described as "Palomino Business Park" located at Second Street & Mountain Avenue in Norco, CA ("Project");

WHEREAS, the AGENCY is a member agency of WRCOG, a joint powers agency comprised of the County of Riverside and 18 cities located in Western Riverside County. WRCOG is the administrator for the Transportation Uniform Mitigation Fee ("TUMF") Program;

WHEREAS, as part of the TUMF Program, the AGENCY has adopted "Transportation Uniform Mitigation Fee Nexus Study: 2016 Update" ("2016 Nexus Study")

WHEREAS, as a condition to AGENCY's approval of the Project, AGENCY has required Developer to construct certain street and transportation system improvement(s) of regional importance ("TUMF Improvements");

WHEREAS, pursuant to the TUMF Program, the AGENCY requires Developer to pay the TUMF which covers the Developer's fair share of the costs to deliver those TUMF Improvements that help mitigate the Project's traffic impacts and burdens on the Regional System of Highways and Arterials (also known as the "TUMF Network"), generated by the Project and that are necessary to protect the safety, health and welfare of persons that travel to and from the Project using the TUMF Network;

WHEREAS, the TUMF Improvements have been designated as having Regional or Zonal Significance as further described in the 2016 Nexus Study and the 5 year Transportation Improvement Program as may be amended;

WHEREAS, AGENCY, WRCOG and Developer now desire to enter into this Agreement for the following purposes: (1) to provide for the timely delivery of the TUMF Improvements, (2) to ensure that delivery of the TUMF Improvements is undertaken as if the TUMF Improvements were constructed under the direction and authority of the AGENCY, (3) to provide a means by

which the Developer's costs for project delivery of the TUMF Improvements and related right-of-way is offset against Developer's obligation to pay the applicable TUMF for the Project in accordance with the TUMF Administrative Plan adopted by WRCOG, and (4) to provide a means, subject to the separate approval of WRCOG, for Developer to be reimbursed to the extent the actual and authorized costs for the delivery of the TUMF Improvements exceeds Developer's TUMF obligation.

NOW, THEREFORE, for the purposes set forth herein, and for good and valuable consideration, the adequacy of which is hereby acknowledged, Developer and AGENCY hereby agree as follows:

TERMS

1.0 Incorporation of Recitals. The Parties hereby affirm the facts set forth in the Recitals above and agree to the incorporation of the Recitals as though fully set forth herein.

2.0 Construction of TUMF Improvements. Developer shall construct or have constructed at its own cost, expense, and liability certain street and transportation system improvements generally described as **public roadway improvements at First Street between where it intersects with Mountain Avenue and Parkridge Avenue and at Second Street between where it intersects with Mountain Avenue and Pacific Avenue as shown more specifically in the attached Exhibit (See Exhibit A)**, and as shown more specifically on the plans, profiles, and specifications which have been or will be prepared by or on behalf of Developer and approved by AGENCY, and which are incorporated herein by this reference ("TUMF Improvements"). Construction of the TUMF Improvements shall include any transitions and/or other incidental work deemed necessary for drainage or public safety. Developer shall be responsible for the replacement, relocation, or removal of any component of any existing public or private improvement in conflict with the construction or installation of the TUMF Improvements. Such replacement, relocation, or removal shall be performed to the complete satisfaction of AGENCY and the owner of such improvement. Developer further promises and agrees to provide all equipment, tools, materials, labor, tests, design work, and engineering services necessary to fully and adequately complete the TUMF Improvements.

2.1 Pre-approval of Plans and Specifications. Developer is prohibited from commencing work on any portion of the TUMF Improvements until all plans and specifications for the TUMF Improvements have been submitted to and approved by AGENCY. Approval by AGENCY shall not relieve Developer from ensuring that all TUMF Improvements conform with all other requirements and standards set forth in this Agreement.

2.2 Permits and Notices. Prior to commencing any work, Developer shall, at its sole cost, expense, and liability, obtain all necessary permits and licenses and give all necessary and incidental notices required for the lawful construction of the TUMF Improvements and performance of Developer's obligations under this Agreement. Developer shall conduct the work in full compliance with the regulations, rules, and other requirements contained in any permit or license issued to Developer.

2.3 Public Works Requirements. In order to insure that the TUMF Improvements will be constructed as if they had been constructed under the direction and supervision, or under the authority of, AGENCY, Developer shall comply with all of the following requirements with respect to the construction of the TUMF Improvements:

(a) Developer shall obtain bids for the construction of the TUMF Improvements, in conformance with the standard procedures and requirements of AGENCY, with respect to its public works projects, or in a manner which is approved by the Public Works Department.

(b) The contract or contracts for the construction of the TUMF Improvements shall be awarded to the responsible bidder(s) submitting the lowest responsive bid(s) for the construction of the TUMF Improvements.

(c) Developer shall require, and the specifications and bid and contract documents shall require, all such contractors to pay prevailing wages (in accordance with Articles 1 and 2 of Chapter 1, Part 7, Division 2 of the Labor Code) and to otherwise comply with applicable provisions of the Labor Code, the Government Code and the Public Contract Code relating to public works projects of cities/counties and as required by the procedures and standards of AGENCY with respect to the construction of its public works projects or as otherwise directed by the Public Works Department.

(d) All such contractors shall be required to provide proof of insurance coverage throughout the term of the construction of the TUMF Improvements which they will construct in conformance with AGENCY's standard procedures and requirements.

(e) Developer and all such contractors shall comply with such other requirements relating to the construction of the TUMF Improvements which AGENCY may impose by written notification delivered to Developer and each such contractor at any time, either prior to the receipt of bids by Developer for the construction of the TUMF Improvements, or, to the extent required as a result of changes in applicable laws, during the progress of construction thereof.

Developer shall provide proof to AGENCY, at such intervals and in such form as AGENCY may require that the foregoing requirements have been satisfied as to the TUMF Improvements.

2.4 Quality of Work; Compliance With Laws and Codes. The construction plans and specifications for the TUMF Improvements shall be prepared in accordance with all applicable federal, state and local laws, ordinances, regulations, codes, standards, and other requirements. The TUMF Improvements shall be completed in accordance with all approved maps, plans, specifications, standard drawings, and special amendments thereto on file with AGENCY, as well as all applicable federal, state, and local laws, ordinances, regulations, codes, standards, and other requirements applicable at the time work is actually commenced.

2.5 Standard of Performance. Developer and its contractors, if any, shall perform all work required, constructing the TUMF Improvements in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in the same

discipline in the State of California. Developer represents and maintains that it or its contractors shall be skilled in the professional calling necessary to perform the work. Developer warrants that all of its employees and contractors shall have sufficient skill and experience to perform the work assigned to them, and that they shall have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the work, and that such licenses, permits, qualifications and approvals shall be maintained throughout the term of this Agreement.

2.6 Alterations to TUMF Improvements. All work shall be done and the TUMF Improvements completed as shown on approved plans and specifications, and any subsequent alterations thereto. If during the course of construction and installation it is determined that the public interest requires alterations in the TUMF Improvements, Developer shall undertake such design and construction changes as may be reasonably required by AGENCY. Any and all alterations in the plans and specifications and the TUMF Improvements to be completed may be accomplished without first giving prior notice thereof to Developer's surety for this Agreement.

3.0 Maintenance of TUMF Improvements. AGENCY shall not be responsible or liable for the maintenance or care of the TUMF Improvements until AGENCY approves and accepts them. AGENCY shall exercise no control over the TUMF Improvements until accepted. Any use by any person of the TUMF Improvements, or any portion thereof, shall be at the sole and exclusive risk of Developer at all times prior to AGENCY's acceptance of the TUMF Improvements. Developer shall maintain all of the TUMF Improvements in a state of good repair until they are completed by Developer and approved and accepted by AGENCY, and until the security for the performance of this Agreement is released. It shall be Developer's responsibility to initiate all maintenance work, but if it shall fail to do so, it shall promptly perform such maintenance work when notified to do so by AGENCY. If Developer fails to properly prosecute its maintenance obligation under this section, AGENCY may do all work necessary for such maintenance and the cost thereof shall be the responsibility of Developer and its surety under this Agreement. AGENCY shall not be responsible or liable for any damages or injury of any nature in any way related to or caused by the TUMF Improvements or their condition prior to acceptance. In no event shall WRCOG be responsible for the maintenance, operation or care of the TUMF Improvements

4.0 Fees and Charges. Developer shall, at its sole cost, expense, and liability, pay all fees, charges, and taxes arising out of the construction of the TUMF Improvements, including, but not limited to, all plan check, design review, engineering, inspection, sewer treatment connection fees, and other service or impact fees established by AGENCY.

5.0 AGENCY Inspection of TUMF Improvements. Developer shall, at its sole cost, expense, and liability, and at all times during construction of the TUMF Improvements, maintain reasonable and safe facilities and provide safe access for inspection by AGENCY of the TUMF Improvements and areas where construction of the TUMF Improvements is occurring or will occur.

6.0 Liens. Upon the expiration of the time for the recording of claims of liens as prescribed by Sections 8412 and 8414 of the Civil Code with respect to the TUMF Improvements, Developer shall provide to AGENCY such evidence or proof as AGENCY shall require that all persons, firms and corporations supplying work, labor, materials, supplies and equipment to the construction of the TUMF Improvements, have been paid, and that no claims of liens have been recorded by or on behalf of any such person, firm or corporation. Rather than await the expiration of the said time

for the recording of claims of liens, Developer may elect to provide to AGENCY a title insurance policy or other security acceptable to AGENCY guaranteeing that no such claims of liens will be recorded or become a lien upon any of the Property.

7.0 Acceptance of TUMF Improvements; As-Built or Record Drawings. If the TUMF Improvements are properly completed by Developer and approved by AGENCY, and if they comply with all applicable federal, state and local laws, ordinances, regulations, codes, standards, and other requirements, AGENCY shall be authorized to accept the TUMF Improvements. AGENCY may, in its sole and absolute discretion, accept fully completed portions of the TUMF Improvements prior to such time as all of the TUMF Improvements are complete, which shall not release or modify Developer's obligation to complete the remainder of the TUMF Improvements. Upon the total or partial acceptance of the TUMF Improvements by AGENCY, Developer shall file with the Recorder's Office of the County of Riverside a notice of completion for the accepted TUMF Improvements in accordance with California Civil Code sections 8182, 8184, 9204, and 9208 ("Notice of Completion"), at which time the accepted TUMF Improvements shall become the sole and exclusive property of AGENCY without any payment therefore. Notwithstanding the foregoing, AGENCY may not accept any TUMF Improvements unless and until Developer provides one (1) set of "as-built" or record drawings or plans to the AGENCY for all such TUMF Improvements. The drawings shall be certified and shall reflect the condition of the TUMF Improvements as constructed, with all changes incorporated therein.

8.0 Warranty and Guarantee. Developer hereby warrants and guarantees all the TUMF Improvements against any defective work or labor done, or defective materials furnished in the performance of this Agreement, including the maintenance of the TUMF Improvements, for a period of one (1) year following completion of the work and acceptance by AGENCY ("Warranty"). During the Warranty, Developer shall repair, replace, or reconstruct any defective or otherwise unsatisfactory portion of the TUMF Improvements, in accordance with the current ordinances, resolutions, regulations, codes, standards, or other requirements of AGENCY, and to the approval of AGENCY. All repairs, replacements, or reconstruction during the Warranty shall be at the sole cost, expense, and liability of Developer and its surety. As to any TUMF Improvements which have been repaired, replaced, or reconstructed during the Warranty, Developer and its surety hereby agree to extend the Warranty for an additional one (1) year period following AGENCY's acceptance of the repaired, replaced, or reconstructed TUMF Improvements. Nothing herein shall relieve Developer from any other liability it may have under federal, state, or local law to repair, replace, or reconstruct any TUMF Improvement following expiration of the Warranty or any extension thereof. Developer's warranty obligation under this section shall survive the expiration or termination of this Agreement.

9.0 Administrative Costs. If Developer fails to construct and install all or any part of the TUMF Improvements, or if Developer fails to comply with any other obligation contained herein, Developer and its surety shall be jointly and severally liable to AGENCY for all administrative expenses, fees, and costs, including reasonable attorney's fees and costs, incurred in obtaining compliance with this Agreement or in processing any legal action or for any other remedies permitted by law.

10.0 Default; Notice; Remedies.

10.1 Notice. If Developer neglects, refuses, or fails to fulfill or timely complete any obligation, term, or condition of this Agreement, or if AGENCY determines there is a violation of any federal, state, or local law, ordinance, regulation, code, standard, or other requirement, AGENCY may at any time thereafter declare Developer to be in default or violation of this Agreement and make written demand upon Developer or its surety, or both, to immediately remedy the default or violation (“Notice”). Developer shall substantially commence the work required to remedy the default or violation within five (5) days of the Notice. If the default or violation constitutes an immediate threat to the public health, safety, or welfare, AGENCY may provide the Notice verbally, and Developer shall substantially commence the required work within twenty-four (24) hours thereof. Immediately upon AGENCY’s issuance of the Notice, Developer and its surety shall be liable to AGENCY for all costs of construction and installation of the TUMF Improvements and all other administrative costs or expenses as provided for in this Section 10.0 of this Agreement.

10.2 Failure to Remedy; AGENCY Action. If the work required to remedy the noticed default or violation is not diligently prosecuted to a completion acceptable to AGENCY within the time frame contained in the Notice, AGENCY may complete all remaining work, arrange for the completion of all remaining work, and/or conduct such remedial activity as in its sole and absolute discretion it believes is required to remedy the default or violation. All such work or remedial activity shall be at the sole and absolute cost, expense, and liability of Developer and its surety, without the necessity of giving any further notice to Developer or surety. AGENCY’s right to take such actions shall in no way be limited by the fact that Developer or its surety may have constructed any of the TUMF Improvements at the time of AGENCY’s demand for performance. In the event AGENCY elects to complete or arrange for completion of the remaining work and the TUMF Improvements, AGENCY may require all work by Developer or its surety to cease in order to allow adequate coordination by AGENCY.

10.3 Other Remedies. No action by AGENCY pursuant to this Section 10.0 et seq. of this Agreement shall prohibit AGENCY from exercising any other right or pursuing any other legal or equitable remedy available under this Agreement or any federal, state, or local law. AGENCY may exercise its rights and remedies independently or cumulatively, and AGENCY may pursue inconsistent remedies. AGENCY may institute an action for damages, injunctive relief, or specific performance.

11.0 Security; Surety Bonds. Prior to the commencement of any work on the TUMF Improvements, Developer or its contractor shall provide AGENCY with surety bonds in the amounts and under the terms set forth below (“Security”). The amount of the Security shall be based on the estimated actual costs to construct the TUMF Improvements, as determined by AGENCY after Developer has awarded a contract for construction of the TUMF Improvements to the lowest responsive and responsible bidder in accordance with this Agreement (“Estimated Costs”). If AGENCY determines, in its sole and absolute discretion, that the Estimated Costs have changed, Developer or its contractor shall adjust the Security in the amount requested by AGENCY. Developer’s compliance with this Section 11.0 et seq. of this Agreement shall in no way limit or modify Developer’s indemnification obligation provided in Section 12.0 of this Agreement.

11.1 Performance Bond. To guarantee the faithful performance of the TUMF Improvements and all the provisions of this Agreement, to protect AGENCY if Developer is in default as set forth in Section 10.0 et seq. of this Agreement, and to secure the one-year guarantee and warranty of the TUMF Improvements, Developer or its contractor shall provide AGENCY a faithful performance bond in an amount which sum shall be not less than one hundred percent (100%) of the Estimated Costs. The AGENCY may, in its sole and absolute discretion, partially release a portion or portions of the security provided under this section as the TUMF Improvements are accepted by AGENCY, provided that Developer is not in default on any provision of this Agreement and the total remaining security is not less than \$9,368,000.00 (<100%) of the Estimated Costs. All security provided under this section shall be released at the end of the Warranty period, or any extension thereof as provided in Section 11.0 of this Agreement, provided that Developer is not in default on any provision of this Agreement.

11.2 Labor & Material Bond. To secure payment to the contractors, subcontractors, laborers, materialmen, and other persons furnishing labor, materials, or equipment for performance of the TUMF Improvements and this Agreement, Developer or its contractor shall provide AGENCY a labor and materials bond in an amount which sum shall not be less than one hundred percent (100%) of the Estimated Costs. The security provided under this section may be released by written authorization of AGENCY after six (6) months from the date AGENCY accepts the TUMF Improvements. The amount of such security shall be reduced by the total of all stop notice or mechanic's lien claims of which AGENCY is aware, plus an amount equal to twenty percent (20%) of such claims for reimbursement of AGENCY's anticipated administrative and legal expenses arising out of such claims.

11.3 Additional Requirements. The surety for any surety bonds provided as Security shall have a current A.M. Best rating of at least "A" and FSC-VIII, shall be licensed to do business in California, and shall be satisfactory to AGENCY. As part of the obligation secured by the Security and in addition to the face amount of the Security, Developer, its contractor or the surety shall secure the costs and reasonable expenses and fees, including reasonable attorney's fees and costs, incurred by AGENCY in enforcing the obligations of this Agreement. Developer, its contractor and the surety shall stipulate and agree that no change, extension of time, alteration, or addition to the terms of this Agreement, the TUMF Improvements, or the plans and specifications for the TUMF Improvements shall in any way affect its obligation on the Security.

11.4 Evidence and Incorporation of Security. Evidence of the Security shall be provided on the forms set forth in Exhibit "B", unless other forms are deemed acceptable by the AGENCY, and when such forms are completed to the satisfaction of AGENCY, the forms and evidence of the Security shall be attached hereto as Exhibit "B" and incorporated herein by this reference.

12.0 Indemnification. Developer shall defend, indemnify, and hold harmless AGENCY, the Western Riverside Council of Governments (WRCOG), their elected officials, board members, employees, and agents from any and all actual or alleged claims, demands, causes of action, liability, loss, damage, or injury to property or persons, including wrongful death, whether imposed by a court of law or by administrative action of any federal, state, or local governmental agency, arising out of or incident to any acts, omissions, negligence, or willful misconduct of Developer, its employees, contractors, or agents in connection with the performance of this Agreement, or

arising out of or in any way related to or caused by the TUMF Improvements or their condition prior to AGENCY's approval and acceptance of the TUMF Improvements ("Claims"). This indemnification includes, without limitation, the payment of all penalties, fines, judgments, awards, decrees, attorney fees, and related costs or expenses, and the reimbursement of AGENCY, WRCOG, their elected officials, board members, employees, and/or agents for all legal expenses and costs incurred by each of them. This indemnification excludes only such portion of any Claim which is caused solely and exclusively by the negligence or willful misconduct of AGENCY as determined by a court or administrative body of competent jurisdiction. Developer's obligation to indemnify shall survive the expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by AGENCY, WRCOG, their elected officials, board members, employees, or agents.

13.0 Insurance.

13.1 Types; Amounts. Developer shall procure and maintain, and shall require its contractors to procure and maintain, during performance of this Agreement, insurance of the types and in the amounts described below ("Required Insurance"). If any of the Required Insurance contains a general aggregate limit, such insurance shall apply separately to this Agreement or be no less than two times the specified occurrence limit.

13.1.1 General Liability. Occurrence form general liability insurance at least as broad as Insurance Services Office Form CG 00 01, or equivalent form, with an occurrence limit of Two Million Dollars (\$2,000,000) and aggregate limit of Four Million Dollars (\$4,000,000) for bodily injury, personal injury, and property damage.

13.1.2 Business Automobile Liability. Business automobile liability insurance at least as broad as Insurance Services Office Form CA 00 01 (coverage symbol 1 – any auto), or equivalent form, with a combined single limit of not less than One Million Dollars (\$1,000,000) per occurrence. Such insurance shall include coverage for the ownership, operation, maintenance, use, loading, or unloading of any auto owned, leased, hired, or borrowed by the insured or for which the insured is responsible.

13.1.3 Workers' Compensation. Workers' compensation insurance with limits as required by the Labor Code of the State of California and employers' liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence, at all times during which insured retains employees.

13.1.4 Professional Liability. For any consultant or other professional who will engineer or design the TUMF Improvements, liability insurance for errors and omissions with limits not less than Two Million Dollars (\$2,000,000) per occurrence, shall be procured and maintained for a period of five (5) years following completion of the TUMF Improvements. Such insurance shall be endorsed to include contractual liability.

13.2 Deductibles. Any deductibles or self-insured retentions must be declared to and approved by AGENCY. At the option of AGENCY, either: (a) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects AGENCY, its elected officials, officers, employees, agents, and volunteers; or (b) Developer and its contractors shall provide a financial

guarantee satisfactory to AGENCY guaranteeing payment of losses and related investigation costs, claims, and administrative and defense expenses.

13.3 Additional Insured; Separation of Insureds. The Required Insurance, except for the professional liability and workers' compensation insurance, shall name AGENCY, WRCOG, their elected officials, board members, officers, employees, and agents as additional insureds with respect to work performed by or on behalf of Developer or its contractors, including any materials, parts, or equipment furnished in connection therewith. For Required Insurance provided by Developer's contractors, WRCOG shall be added as an additional insured using ISO CG 2038 or an exact equivalent. The Required Insurance shall contain standard separation of insureds provisions, and shall contain no special limitations on the scope of its protection to AGENCY, WRCOG, their elected officials, board members, officers, employees, or agents.

13.4 Primary Insurance; Waiver of Subrogation. The Required Insurance, except for the professional liability and workers' compensation insurance shall be primary with respect to any insurance or self-insurance programs covering AGENCY, WRCOG, their elected officials, board members, officers, employees, or agents. The Required Insurance, except for the professional liability insurance, shall provide that the insurance company waives all right of recovery by way of subrogation against AGENCY and WRCOG in connection with any damage or harm covered by such policy.

13.5 Certificates; Verification. Developer and its contractors shall furnish AGENCY with original certificates of insurance and endorsements effecting coverage for the Required Insurance. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by AGENCY before work pursuant to this Agreement can begin. AGENCY reserves the right to require complete, certified copies of all required insurance policies, at any time.

13.6 Term; Cancellation Notice. Developer and its contractors shall maintain the Required Insurance for the term of this Agreement and shall replace any certificate, policy, or endorsement which will expire prior to that date. All policies shall be endorsed to provide that the Required Insurance shall not be suspended, voided, reduced, canceled, or allowed to expire except on thirty (30) days' prior written notice to AGENCY. If such notice of cancellation endorsements are unavailable, Developer shall provide such thirty (30) days' written notice of cancellation.

13.7 Insurer Rating. Unless approved in writing by AGENCY, all Required Insurance shall be placed with insurers licensed to do business in the State of California and with a current A.M. Best rating of at least "A" and FSC-VIII.

14.0 TUMF Credit.

14.1 Developer's TUMF Obligation. Developer hereby agrees and accepts that as of the date of this Agreement, the amount Developer is obligated to pay to AGENCY pursuant to Ordinance No. 1044 as part of the TUMF Program is ONE MILLION TWO HUNDRED TWENTY THOUSAND EIGHT HUNDRED FIVE DOLLARS AND EIGHTEEN CENTS (\$1,220,805.18) ("TUMF Obligation"). This TUMF Obligation shall be initially determined under

the TUMF fee schedule in effect for the AGENCY at the time the Developer submits a building permit application for the TUMF Improvement. Notwithstanding, this TUMF Obligation does not have to be paid until the Certificate of Occupancy is obtained.

14.2 Fee Adjustments. Notwithstanding the foregoing, Developer agrees that this Agreement shall not estop AGENCY from adjusting the TUMF in accordance with the provisions of Ordinance No. 1044.

14.3 Credit Offset Against TUMF Obligation. Pursuant to Ordinance No 1044 and in consideration for Developer's obligation under this Agreement for the delivery of TUMF Improvements, credit shall be applied by AGENCY to offset the TUMF Obligation ("Credit") subject to adjustment and reconciliation under Section 14.5 of this agreement. Developer hereby agrees that the amount of the Credit shall be applied after Developer has initiated the process of project delivery of TUMF Improvements to the lowest responsible bidder in accordance with this Agreement. Developer further agrees that the dollar amount of the Credit shall be equal to the lesser of: (A) the bid amount set forth in the contract awarded to the lowest responsible bidder, or (B) the unit cost assumptions for the TUMF Improvement in effect at the time of the contract award, as such assumptions are identified and determined in the most recent TUMF Nexus Study and the TUMF Administrative Plan adopted by WRCOG ("Unit Cost Assumptions").

The bid amount and the Unit Cost Assumptions shall hereafter be collectively referred to as "Estimated Credit". At no time will the Credit exceed the Developer's TUMF Obligation. If the dollar amount of the Estimated Credit exceeds the dollar amount of the TUMF Obligation, Developer will be deemed to have completely satisfied its TUMF Obligation for the Project and may apply for a reimbursement agreement, to the extent applicable, as provided in Section 14.6 of this Agreement. If the dollar amount of the Estimated Credit is less than the dollar amount of the TUMF Obligation, the Developer agrees the Credit shall be applied to offset the TUMF Obligation as follows:

(i) For residential units in the Project, the Credit shall be applied to all residential units to offset and/or satisfy the TUMF Obligation. The residential units for which the TUMF Obligation has been offset and/or satisfied by use of the Credit, and the amount of offset applicable to each unit, shall be identified in the notice provided to the Developer by AGENCY pursuant to this section.

(ii) For commercial and industrial structures in the Project, the Credit shall be applied to all commercial and industrial development to offset and/or satisfy the TUMF Obligation. The commercial or industrial structure(s) for which the TUMF Obligation has been offset and/or satisfied by use of the Credit, and the amount of offset applicable to such structure(s), shall be identified in the notice provided to the Developer by AGENCY pursuant to this section.

AGENCY shall provide Developer written notice of the determinations that AGENCY makes pursuant to this section, including how the Credit is applied to offset the TUMF Obligation as described above.

14.4 Verified Cost of the TUMF Improvements. Upon recordation of the Notice of Completion for the TUMF Improvements and acceptance of the TUMF Improvements by AGENCY, Developer shall submit to the AGENCY Public Works Director the information set forth in the attached Exhibit “C”. The AGENCY Public Works Director, or his or her designee, shall use the information provided by Developer to calculate the total actual costs incurred by Developer in delivering the TUMF Improvements covered under this Agreement (“Verified Costs”). The AGENCY Public Works Director will use his or her best efforts to determine the amount of the Verified Costs and provide Developer written notice thereof within thirty (30) calendar days of receipt of all the required information from Developer. The Agency may request that WRCOG calculate the amount of the Verified Cost. In this case, the AGENCY shall provide WRCOG written notice and all necessary documentation and allow WRCOG fifteen (15) days to determine costs. Agency will notify the Developer within the previous thirty (30) day deadline

14.5 Reconciliation; Final Credit Offset Against TUMF Obligation. The Developer is aware of and accepts the fact that Credits are speculative and conceptual in nature. The actual amount of Credit that shall be applied by AGENCY to offset the TUMF Obligation shall be equal to the lesser of: (A) the Verified Costs or (B) Unit Cost Assumptions for the TUMF Improvements as determined in accordance with Section 14.3 of this Agreement (“Actual Credit”). No Actual Credit will be awarded until the Verified Costs are determined through the reconciliation process. Please be advised that while a Developer may use an engineer’s estimates in order to estimate Credits for project planning purposes, the Actual Credit awarded will only be determined by the reconciliation process.

(a) TUMF Balance. If the dollar amount of the Actual Credit is less than the dollar amount of the TUMF Obligation, the AGENCY Public Works Director shall provide written notice to Developer of the amount of the difference owed (“TUMF Balance”) and Developer shall pay the TUMF Balance in accordance with Ordinance No. 1044 to fully satisfy the TUMF Obligation (see Exhibit “F” - Example “A”).

(b) TUMF Reimbursement. If the dollar amount of the Actual Credit exceeds the TUMF Obligation, Developer will be deemed to have fully satisfied the TUMF Obligation for the Project and may apply for a reimbursement agreement, to the extent applicable, as provided in Section 14.6 of this Agreement. AGENCY shall provide Developer written notice of the determinations that AGENCY makes pursuant to this section (see Exhibit “F” - Example “B”).

(c) TUMF Overpayment. If the dollar amount of the Actual Credit exceeds the Estimated Credit, but is less than the TUMF Obligation, but the Actual Credit plus additional monies collected by AGENCY from Developer for the TUMF Obligation exceed the TUMF Obligation (“TUMF Overpayment”), Developer will be deemed to have fully satisfied the TUMF Obligation for the Project and may be entitled to a refund. The AGENCY’s Public Works Director shall provide written notice to WRCOG and the Developer of the amount of the TUMF Overpayment and AGENCY shall direct WRCOG to refund the Developer in accordance with Ordinance No. 1044 (see Exhibit “F” - Example C)

14.6 Reimbursement Agreement. If authorized under either Section 14.3 or Section 14.5 Developer may apply to AGENCY and WRCOG for a reimbursement agreement for the amount by which the Actual Credit exceeds the TUMF Obligation, as determined pursuant to Section 14.3 of this Agreement, Ordinance No. 1044, and the TUMF Administrative Plan adopted by WRCOG (“Reimbursement Agreement”). If AGENCY and WRCOG agree to a Reimbursement Agreement with Developer, the Reimbursement Agreement shall be executed on the form set forth in Exhibit “D,” and shall contain the terms and conditions set forth therein. The Parties agree that the Reimbursement Agreement shall be subject to all terms and conditions of this Agreement, and that upon execution, an executed copy of the Reimbursement Agreement shall be attached hereto and shall be incorporated herein as a material part of this Agreement as though fully set forth herein.

15.0 Miscellaneous.

15.1 Assignment. Developer may, as set forth herein, assign all or a portion of its rights pursuant to this Agreement to a purchaser of a portion or portions of the Property ("Assignment"). Developer and such purchaser and assignee ("Assignee") shall provide to AGENCY such reasonable proof as it may require that Assignee is the purchaser of such portions of the Property. Any assignment pursuant to this Section shall not be effective unless and until Developer and Assignee have executed an assignment agreement with AGENCY in a form reasonably acceptable to AGENCY, whereby Developer and Assignee agree, except as may be otherwise specifically provided therein, to the following: (1) that Assignee shall receive all or a portion of Developer's rights pursuant to this Agreement, including such credit as is determined to be applicable to the portion of the Property purchased by Assignee pursuant to Section 14.0 et seq. of this Agreement, and (2) that Assignee shall be bound by all applicable provisions of this Agreement.

15.2 Relationship Between the Parties. The Parties hereby mutually agree that this Agreement shall not operate to create the relationship of partnership, joint venture, or agency between or among AGENCY, WRCOG and Developer. Developer's contractors are exclusively and solely under the control and dominion of Developer. Nothing herein shall be deemed to make Developer or its contractors an agent or contractor of AGENCY. This Agreement shall be interpreted and administered in a manner consistent with the TUMF Administrative Plan in effect at the time this Agreement is executed.

15.3 Warranty as to Property Ownership; Authority to Enter Agreement. Developer hereby warrants that it owns fee title to the Property and that it has the legal capacity to enter into this Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority make this Agreement and bind each respective Party.

15.4 Prohibited Interests. Developer warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for Developer, to solicit or secure this Agreement. Developer also warrants that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for Developer, any fee, commission, percentage, brokerage fee, gift, or other consideration contingent upon the making of this Agreement. For breach of this warranty, AGENCY shall have the right to rescind this Agreement without liability.

15.5 Notices. All notices, demands, invoices, and written communications shall be in writing and delivered to the following addresses or such other addresses as the Parties may designate by written notice:

To AGENCY:

Western Riverside Council of Governments
3390 University Avenue, Suite 200
Riverside, CA 92501
Attention: Executive Director
Telephone: (951) 405-6700
Fax No. (951) 223-9720

To Developer: CRP LDF Palomino, LLC
Attn: Garrett Kuntz
1300 Dove Street, Suite #200
Newport Beach, CA 92660
Telephone: (949) 280-3995

Depending upon the method of transmittal, notice shall be deemed received as follows: by facsimile, as of the date and time sent; by messenger, as of the date delivered; and by U.S. Mail first class postage prepaid, as of 72 hours after deposit in the U.S. Mail.

15.6 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate, or convenient to attain the purposes of this Agreement.

15.7 Construction; References; Captions. It being agreed the Parties or their agents have participated in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days, or period for performance shall be deemed calendar days and not work days. All references to Developer include all personnel, employees, agents, and contractors of Developer, except as otherwise specified in this Agreement. All references to AGENCY include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Agreement.

15.8 Amendment; Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

15.9 Termination. This Agreement shall terminate 10 years after the Effective Date, unless extended in writing by the Parties. In addition, this Agreement shall terminate 5 years after the Effective Date in the event that the TUMF Improvements as specified in the Credit Agreement is not commenced within 5 years of the Effective Date.

15.9.1 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual right by custom, estoppel, or otherwise.

15.9.2 Binding Effect. Each and all of the covenants and conditions shall be binding on and shall inure to the benefit of the Parties, and their successors, heirs, personal representatives, or assigns. This section shall not be construed as an authorization for any Party to assign any right or obligation.

15.9.3 No Third-Party Beneficiaries. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.

15.9.4 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

15.9.5 Consent to Jurisdiction and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California. Any legal action or proceeding brought to interpret or enforce this Agreement, or which in any way arises out of the Parties' activities undertaken pursuant to this Agreement, shall be filed and prosecuted in the appropriate California State Court in the County of Riverside, California. Each Party waives the benefit of any provision of state or federal law providing for a change of venue to any other court or jurisdiction including, without limitation, a change of venue based on the fact that a governmental entity is a party to the action or proceeding, or that a federal right or question is involved or alleged to be involved in the action or proceeding. Without limiting the generality of the foregoing waiver, Developer expressly waives any right to have venue transferred pursuant to California Code of Civil Procedure Section 394.

15.9.6 Time is of the Essence. Time is of the essence in this Agreement, and the Parties agree to execute all documents and proceed with due diligence to complete all covenants and conditions.

15.9.7 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original and which collectively shall constitute one instrument.

15.9.8 Entire Agreement. This Agreement contains the entire agreement between AGENCY and Developer and supersedes any prior oral or written statements or agreements between AGENCY and Developer.

[SIGNATURES OF PARTIES ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

DEVELOPER:
CRP LDF Palomino, LLC

By: _____

Its: _____

ATTEST:

By: _____

Its: _____

WESTERN RIVERSIDE COUNCIL OF
GOVERNMENT:

By: _____

Its: Executive Director-_____

ATTEST:

By: _____

Its: _____

AGENCY:
City of Norco

By: _____

Its: _____

ATTEST:

By: _____

Its: _____

For Use Between Public Agency and Developer
“Master Agreement”

EXHIBIT "A"

LEGAL DESCRIPTION OF PROPERTY

Being a Subdivision of Portions of Lots 1 through 8 in Block 12 of Riverside Orange Heights Tract, per map recorded in Book 6, page 74 of Maps, a portion of Lot 17 of Corona Citrus Tract, per map recorded in Book 8, page 24 of Maps, Parcels 1 through 4 of Parcel Map No. 7092, recorded in Parcel Map Book 22, page 38, Parcels 1 through 3 of Parcel Map No. 7191, recorded in Parcel Map Book 23, pages 45-46, and Parcel 4 of Parcel Map No. 7836, recorded in Parcel Map Book 27, pages 30-31, all in the office of the Recorder of said County.

EXHIBIT A-1

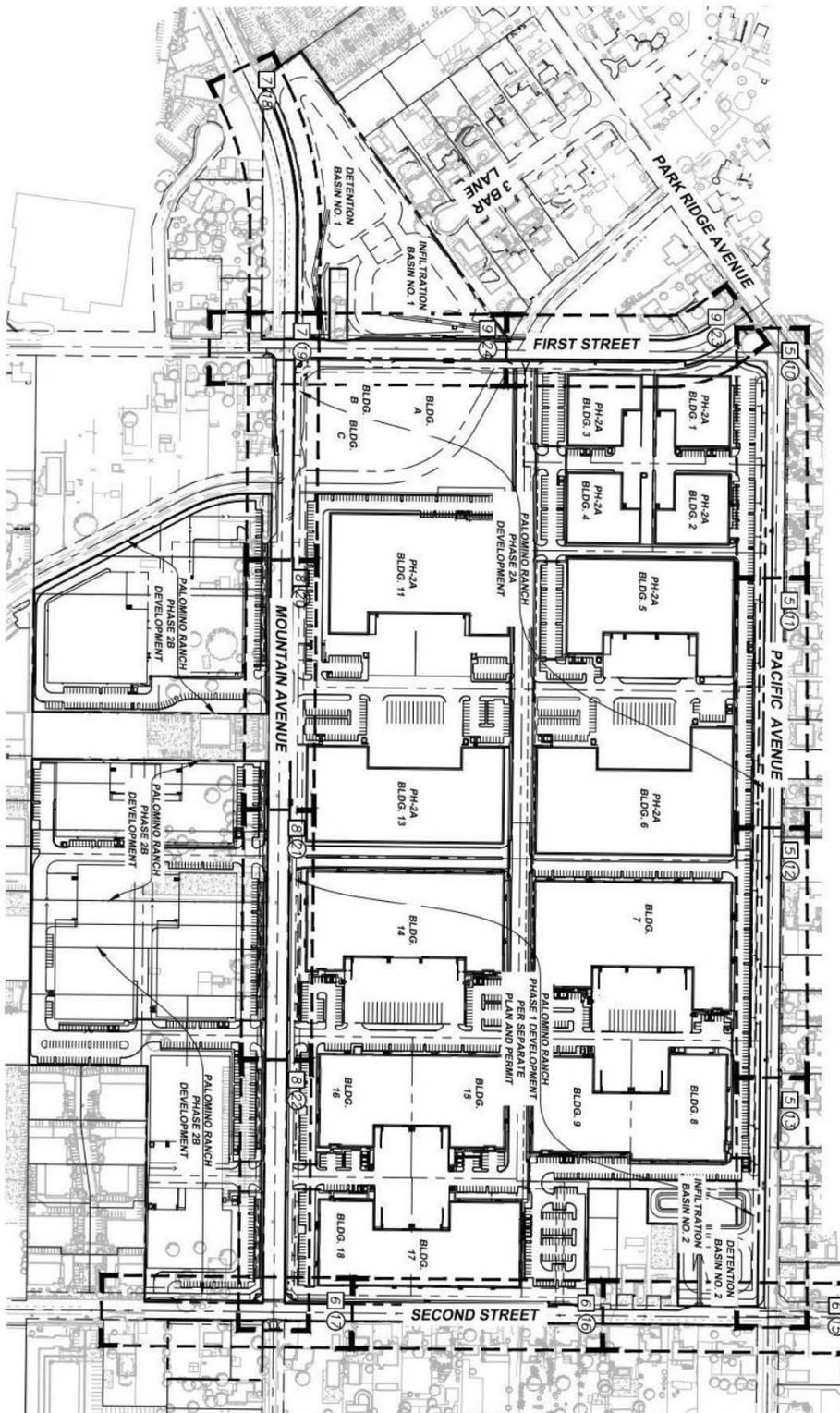


EXHIBIT A-2

PALOMINO BUSINESS PARK LOCATION MAP

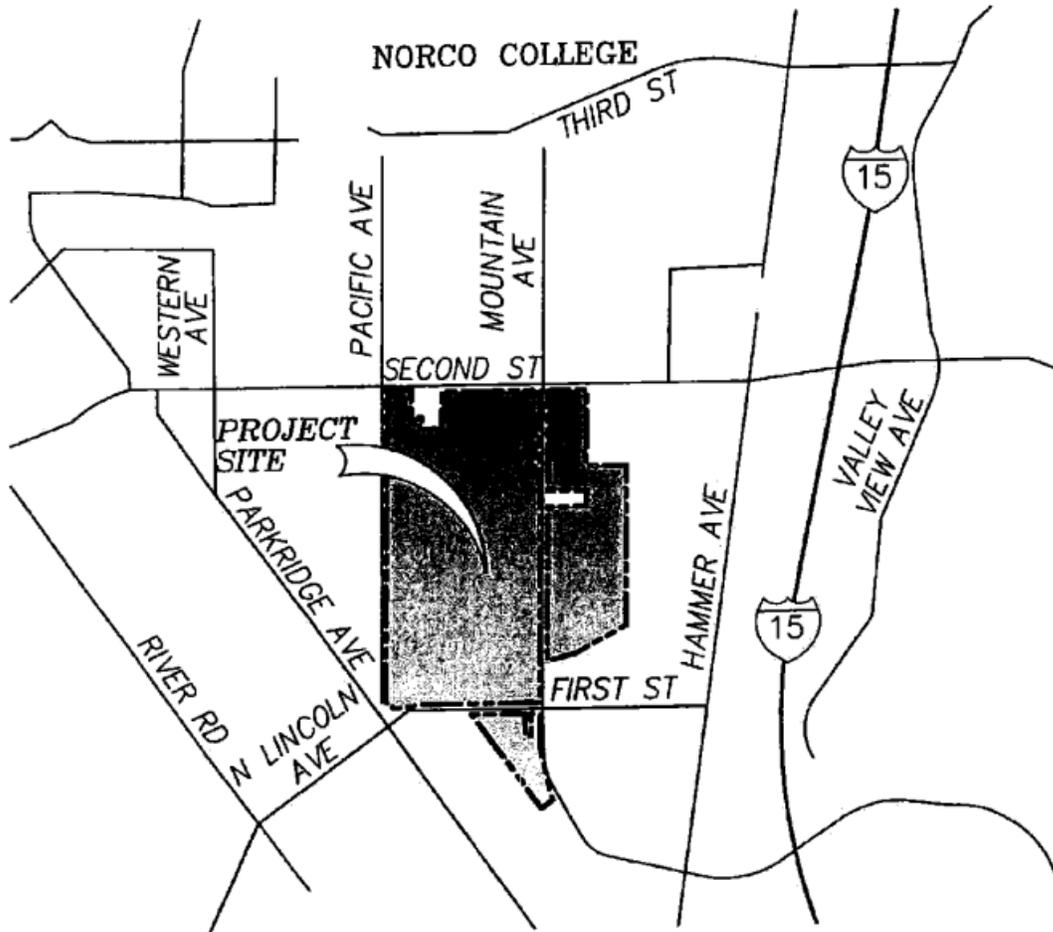


EXHIBIT A-3

EXHIBIT “B”

FORMS FOR SECURITY

[ATTACHED BEHIND THIS PAGE]

EXHIBIT B-1

BOND NO. _____
INITIAL PREMIUM: _____
SUBJECT TO RENEWAL

PERFORMANCE BOND

WHEREAS, the City of Norco (“AGENCY”) has executed an agreement with _____ (hereinafter “Developer”), requiring Developer to perform certain work consisting of but not limited to, furnishing all labor, materials, tools, equipment, services, and incidentals for the construction of street and transportation system improvements (hereinafter the “Work”);

WHEREAS, the Work to be performed by Developer is more particularly set forth in that certain TUMF Improvement and Credit/Reimbursement Agreement dated _____, (hereinafter the “Agreement”); and

WHEREAS, the Agreement is hereby referred to and incorporated herein by this reference; and

WHEREAS, Developer or its contractor is required by the Agreement to provide a good and sufficient bond for performance of the Agreement, and to guarantee and warranty the Work constructed thereunder.

NOW, THEREFORE, we the undersigned, _____, as Principal and _____, a corporation organized and existing under the laws of the State of _____ and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the AGENCY in the sum of _____ (\$_____), said sum being not less than one hundred percent (100%) of the total cost of the Work as set forth in the Agreement, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such, that if Developer and its contractors, or their heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, agreements, guarantees, and warranties in the Agreement and any alteration thereof made as therein provided, to be kept and performed at the time and in the manner therein specified and in all respects according to their intent and meaning, and to indemnify and save harmless AGENCY, its officers, employees, and agents, as stipulated in the Agreement, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As part of the obligation secured hereby, and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney’s fees, incurred by AGENCY in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or additions to the terms of the said Agreement or to the Work to be performed

EXHIBIT B-2

thereunder or the specification accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the Work.

IN WITNESS WHEREOF, we have hereto set our hands and seals this ____ day on _____, 20__.

Principal

By: _____
President

Surety

By: _____
Attorney-in-Fact

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE §1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF _____)

On _____, before me,
_____,
Date

Here Insert Name and Title of the Officer

personally appeared _____,
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title of Type of Document: _____ Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

Signer's Name: _____

Corporate Officer – Title(s): _____

Corporate Officer – Title(s): _____

Partner - Limited General

Partner - Limited General

Individual Attorney in Fact

Individual Attorney in Fact

Trustee Guardian or Conservator

Trustee Guardian or Conservator

EXHIBIT B-4

Other: _____

Signer is Representing: _____

Other: _____

Signer is Representing: _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ Secretary of the corporation named as principal in the attached bond, that _____ who signed the said bond on behalf of the principal was then _____ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed and attested for and in behalf of said corporation by authority of its governing Board.

(Corporate Seal)

Signature

Date

NOTE: A copy of the power of attorney to local representatives of the bonding company may be attached hereto.

BOND NO. _____
INITIAL PREMIUM: _____
SUBJECT TO RENEWAL

LABOR & MATERIAL BOND

WHEREAS, the City of Norco (“AGENCY”) has executed an agreement with _____ (hereinafter “Developer”), requiring Developer to perform certain work consisting of but not limited to, furnishing all labor, materials, tools, equipment, services, and incidentals for the construction of street and transportation system improvements (hereinafter “Work”);

WHEREAS, the Work to be performed by Developer is more particularly set forth in that certain Improvement and Credit / Reimbursement Agreement dated _____, (hereinafter the “Agreement”); and

WHEREAS, Developer or its contractor is required to furnish a bond in connection with the Agreement providing that if Developer or any of his or its contractors shall fail to pay for any materials, provisions, or other supplies, or terms used in, upon, for or about the performance of the Work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the provisions of 3248 of the California Civil Code, with respect to such work or labor, that the Surety on this bond will pay the same together with a reasonable attorney’s fee in case suit is brought on the bond.

NOW, THEREFORE, we the undersigned, _____, as Principal and _____, a corporation organized and existing under the laws of the State of _____ and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the AGENCY and to any and all material men, persons, companies or corporations furnishing materials, provisions, and other supplies used in, upon, for or about the performance of the said Work, and all persons, companies or corporations renting or hiring teams, or implements or machinery, for or contributing to said Work to be done, and all persons performing work or labor upon the same and all persons supplying both work and materials as aforesaid, the sum of _____ (\$_____), said sum being not less than 100% of the total amount payable by Developer under the terms of the Agreement, for which payment well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Developer or its contractors, or their heirs, executors, administrators, successors, or assigns, shall fail to pay for any materials, provisions, or other supplies or machinery used in, upon, for or about the performance of the Work contracted to be done, or for work or labor thereon of any kind, or fail to pay any of the persons named in California Civil Code Section 9100, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the contractor and his subcontractors pursuant to Section 13020 of the

EXHIBIT B-6

Unemployment Insurance Code with respect to such work and labor, and all other applicable laws of the State of California and rules and regulations of its agencies, then said Surety will pay the same in or to an amount not exceeding the sum specified herein.

In case legal action is required to enforce the provisions of this bond, the prevailing party shall be entitled to recover reasonable attorneys' fees in addition to court costs, necessary disbursements and other consequential damages. In addition to the provisions hereinabove, it is agreed that this bond will inure to the benefit of any and all persons, companies and corporations entitled to make claims under Sections 8024, 8400, 8402, 8404, 8430, 9100 of the California Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or additions to the terms of the Agreement or to the Work to be performed thereunder or the specification accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the Work.

IN WITNESS WHEREOF, we have hereto set our hands and seals this ____ day on _____, 20__.

Principal

By: _____
President

Surety

By: _____
Attorney-in-Fact

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE §1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
COUNTY OF _____)

On _____, before me,
_____,
Date

Here Insert Name and Title of the Officer

personally appeared _____,
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title of Type of Document: _____ Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

Signer's Name: _____

Corporate Officer – Title(s): _____

Corporate Officer – Title(s): _____

Partner - Limited General

Partner - Limited General

Individual Attorney in Fact

Individual Attorney in Fact

Trustee Guardian or Conservator

Trustee Guardian or Conservator

Other: _____

Other: _____

Signer is Representing: _____

Signer is Representing: _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ Secretary of the corporation named as principal in the attached bond, that _____ who signed the said bond on behalf of the principal was then _____ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed and attested for and in behalf of said corporation by authority of its governing Board.

(Corporate Seal)

Signature

Date

NOTE: A copy of the power of attorney to local representatives of the bonding company may be attached hereto.

EXHIBIT “C”

DOCUMENTATION TO BE PROVIDED TO AGENCY BY DEVELOPER FOR DETERMINATION OF VERIFIED COSTS

To assist AGENCY in determining the Verified Costs for a completed TUMF Improvement, Developer shall provide the following documents to AGENCY:

1. Plans, specifications and Developer’s civil engineer’s cost estimate;
2. If Developer is seeking Credit for such costs, documentation evidencing cost of any required environmental studies, preparation of designs, plans and specifications, required right of way acquisition, and other costs directly related to the development of the TUMF Improvement. Only actual, documented and reasonable costs directly related to the TUMF Improvement will be considered. Costs should be documented as specified below.
3. Costs claimed for right of way acquisition must be accompanied by an appraisal (no more than two years old at the time of acquisition) completed by an MAI appraiser, and documentation of transfer of such right of way to the AGENCY, or applicable public agency. The appraisal must be approved by the AGENCY as valid and acceptable.
4. List of bidders from whom bids were requested;
5. Construction schedules and progress reports;
6. Contracts, insurance certificates and change orders with each contractor, consultant, service provider or vendor;
7. Invoices received from all contractors, consultants, service providers and vendors;
8. Canceled checks for payments made to contractors, consultants, service providers and vendors (copy both front and back of canceled checks);
9. Spreadsheet showing total costs incurred in and related to the construction of each TUMF Improvement and the check number for each item of cost and invoice;
10. Final lien releases from each contractor and vendor; and
11. Such further documentation as may be reasonably required by AGENCY to evidence the completion of construction and the payment of each item of cost and invoice.

EXHIBIT C-1

EXHIBIT “D”

**REIMBURSEMENT AGREEMENT
TRANSPORTATION UNIFORM MITIGATION FEE PROGRAM**

THIS REIMBURSEMENT AGREEMENT (“Agreement”) is entered into this ___ day of _____, 20___, by and between the City of Norco, a California municipal corporation (“AGENCY”), the Western Riverside Council of Governments (“WRCOG”), a Joint Powers Agency and CRP LDF Palomino, LLC, a California Corporation with its principal place of business at 1300 Dove Street, Suite #200, Newport Beach, CA 92660 (“Developer”). AGENCY and Developer are sometimes hereinafter referred to individually as “Party” and collectively as “Parties”.

RECITALS

WHEREAS, AGENCY, WRCOG and Developer are parties to an agreement dated _____, 20___, entitled “Improvement and Credit Agreement - Transportation Uniform Mitigation Fee Program” (hereinafter “Credit Agreement”);

WHEREAS, Sections 14.1 through 14.3 of the Credit Agreement provide that Developer is obligated to pay AGENCY the TUMF Obligation, as defined therein, but shall receive credit to offset the TUMF Obligation if Developer constructs and AGENCY accepts the TUMF Improvements in accordance with the Credit Agreement;

WHEREAS, Section 14.5 of the Credit Agreement provides that if the dollar amount of the credit to which Developer is entitled under the Credit Agreement exceeds the dollar amount of the TUMF Obligation, Developer may apply to AGENCY and WRCOG for a reimbursement agreement for the amount by which the credit exceeds the TUMF Obligation;

WHEREAS, Section 14.5 additionally provides that a reimbursement agreement executed pursuant to the Credit Agreement (i) shall be executed on the form attached to the Credit Agreement, (ii) shall contain the terms and conditions set forth therein, (iii) shall be subject to all terms and conditions of the Credit Agreement, and (iv) shall be attached upon execution to the Credit Agreement and incorporated therein as a material part of the Credit Agreement as though fully set forth therein; and

WHEREAS, AGENCY and WRCOG have consented to execute a reimbursement agreement with Developer pursuant to the Credit Agreement, (insert appropriate reference for city or county), and the TUMF Administrative Plan adopted by WRCOG.

NOW, THEREFORE, for the purposes set forth herein, and for good and valuable consideration, the adequacy of which is hereby acknowledged, the Parties hereby agree as follows:

TERMS

1.0 Incorporation of Recitals. The Parties hereby affirm the facts set forth in the Recitals above and agree to the incorporation of the Recitals as though fully set forth herein.

2.0 Effectiveness. This Agreement shall not be effective unless and until the Credit Agreement is effective and in full force in accordance with its terms.

3.0 Definitions. Terms not otherwise expressly defined in this Agreement, shall have the meaning and intent set forth in the Credit Agreement.

4.0 Amount of Reimbursement. Subject to the terms, conditions, and limitations set forth in this Agreement, the Parties hereby agree that Developer is entitled to receive the dollar amount by which the Actual Credit exceeds the dollar amount of the TUMF Obligation as determined pursuant to the Credit Agreement, Ordinance No. 1044, and the TUMF Administrative Plan adopted by WRCOG (“Reimbursement”). The Reimbursement shall be subject to verification by WRCOG. AGENCY and Developer shall provide any and all documentation reasonably necessary for WRCOG to verify the amount of the Reimbursement. The Reimbursement shall be in an amount not exceeding [INSERT DOLLAR AMOUNT] (“Reimbursement Amount”). WRCOG shall, upon receipt and approval of information requested by WRCOG, shall be responsible for transmitting the Reimbursement Amount to the Developer. In no event shall the dollar amount of the Reimbursement exceed the difference between the dollar amount of all credit applied to offset the TUMF Obligation pursuant to Section 14.3, 14.4, and 14.5 of the Credit Agreement, and one hundred (100%) of the approved unit awarded, as such assumptions are identified and determined in the Nexus Study and the TUMF Administrative Plan adopted by WRCOG.

5.0 Payment of Reimbursement; Funding Contingency. The payment of the Reimbursement Amount shall be subject to the following conditions:

5.1 Developer shall have no right to receive payment of the Reimbursement unless and until (i) the TUMF Improvements are completed and accepted by AGENCY in accordance with the Credit Agreement, (ii) the TUMF Improvements are scheduled for funding pursuant to the five-year Transportation Improvement Program adopted annually by WRCOG, (iii) WRCOG has funds available and appropriated for payment of the Reimbursement amount.

5.2 Developer shall not be entitled to any interest or other cost adjustment for any delay between the time when the dollar amount of the Reimbursement is determined and the time when payment of the Reimbursement is made to Developer by WRCOG through AGENCY.

6.0 Affirmation of Credit Agreement. AGENCY and Developer represent and warrant to each other that there have been no written or oral modifications or amendments of the Credit Agreement, except by this Agreement. AGENCY and Developer ratify and reaffirm each and every one of their respective rights and obligations arising under the Credit Agreement. AGENCY and Developer represent and warrant that the Credit Agreement is currently an effective, valid, and binding obligation.

7.0 Incorporation Into Credit Agreement. Upon execution of this Agreement, an executed original of this Agreement shall be attached as Exhibit “D” to the Credit Agreement and shall be incorporated therein as a material part of the Credit Agreement as though fully set forth therein.

8.0 Terms of Credit Agreement Controlling. Each Party hereby affirms that all provisions of the Credit Agreement are in full force and effect and shall govern the actions of the Parties under this Agreement as though fully set forth herein and made specifically applicable hereto, including

without limitation, the following sections of the Credit Agreement: Sections 10.0 through 10.3, Section 12.0, Sections 13.0 through 13.7, Sections 14.0 through 14.6, and Sections 15.0 through 15.17.

[SIGNATURES OF PARTIES ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

CRP LDF Palomino, LLC
("Developer")

By: _____

Its: _____

ATTEST:

By: _____

Its: _____

City of Norco

By: _____

Its: _____

ATTEST:

By: _____

Its: _____

EXHIBIT “E”

TUMF CREDIT / REIMBURSEMENT ELIGIBILITY PROCESS

1. Prior to the construction of any TUMF Improvement, Developer shall follow the steps listed below:

- (a) Prepare a separate bid package for the TUMF Improvements.
- (b) The plans, cost estimate, specifications and contract document shall require all contractors to pay prevailing wages and to comply with applicable provisions of the Labor Code, Government Code, and Public Contract Code relating to Public Works Projects.
- (c) Bids shall be obtained and processed in accordance with the formal public works bidding requirements of the AGENCY.
- (d) The contract(s) for the construction of TUMF Improvements shall be awarded to the lowest responsible bidder(s) for the construction of such facilities in accordance with the AGENCY’s requirements and guidelines.
- (e) Contractor(s) shall be required to provide proof of insurance coverage throughout the duration of the construction.

2. Prior to the determination and application of any Credit pursuant to a TUMF Improvement and Credit Agreement executed between AGENCY and Developer ("Agreement"), Developer shall provide the AGENCY and WRCOG with the following:

- (a) Copies of all information listed under Item 1 above.
- (b) Surety Bond, Letter of Credit, or other form of security permitted under the Agreement and acceptable to the AGENCY and WRCOG, guaranteeing the construction of all applicable TUMF Improvements.

3. Prior to the AGENCY’s acceptance of any completed TUMF Improvement, and in order to initiate the construction cost verification process, the Developer shall comply with the requirements as set forth in Sections 7, 14.2 and 14.3 of the Agreement, and the following conditions shall also be satisfied:

- (a) Developer shall have completed the construction of all TUMF Improvements in accordance with the approved Plans and Specifications.
- (b) Developer shall have satisfied the AGENCY’s inspection punch list.
- (c) After final inspection and approval of the completed TUMF Improvements, the AGENCY shall have provided the Developer a final inspection release letter.

(d) AGENCY shall have filed a Notice of Completion with respect to the TUMF Improvements pursuant to Section 3093 of the Civil Code with the County Recorder's Office, and provided a copy of filed Notice of Completion to WRCOG.

(e) Developer shall have provided AGENCY a copy of the As-Built plans for the TUMF Improvements.

(f) Developer shall have provided AGENCY copies of all permits or agreements that may have been required by various resource/regulatory agencies for construction, operation and maintenance of any TUMF Improvements.

(g) Developer shall have submitted a documentation package to the AGENCY to determine the final cost of the TUMF Improvements, which shall include at a minimum, the following documents related to the TUMF Improvements:

(i) Plans, specifications, and Developer's Civil Engineer's cost estimates; or Engineer's Report showing the cost estimates.

(ii) If DEVELOPER is seeking Credit for such costs, documentation evidencing cost of any required environmental studies, preparation of designs, plans and specifications, required right of way acquisition, and other costs directly related to the development of the TUMF Improvements. Only actual, documented and reasonable costs directly related to the TUMF Improvements will be considered. Costs should be documented as specified below.

(iii) Costs claimed for right of way acquisition must be accompanied by an appraisal (no more than two years old at the time of acquisition) completed by an MAI appraiser, and documentation of transfer of such right of way to the AGENCY, or applicable public agency. The appraisal must be approved by the AGENCY as valid and acceptable.

(iv) Contracts/agreements, insurance certificates and change orders with each vendor or contractor.

(v) Invoices from all contractors, consultants, service providers and vendors.

(vi) Copies of cancelled checks, front and back, for payments made to contractors, consultants, service providers and vendors.

(vii) Final lien releases from each contractor and vendor (unconditional waiver and release).

(viii) Certified contract workers payroll for AGENCY verification of compliance with prevailing wages.

(ix) A total cost summary, in spreadsheet format (MS Excel is preferred) and on disk, showing a breakdown of the total costs incurred. The summary should include for each item claimed the check number, cost, invoice numbers, and name of payee. See

attached sample for details. [ATTACH SAMPLE, IF APPLICABLE; OTHERWISE DELETE
REFERENCE TO ATTACHED SAMPLE

EXHIBIT "F"

RECONCILIATION
EXAMPLES

All examples are based on a single family residential development project of 200 dwelling units:
200 SF dwelling units @ \$6,650 / dwelling unit = \$1,330,000 in fees (TUMF Obligation)

Example A: "TUMF BALANCE"

CREDIT			
TUMF Obligation:	\$1,330,000		
Estimated Credit: Bid (\$1,500,000) or unit Cost Assumption (\$1,600,000) whichever is less			<u>\$1,500,000</u>
Potential Reimbursement:	(\$170,000)		
 RECONCILIATION			
TUMF Obligation:	\$1,330,000		
Actual Credit:	<u>\$1,200,000</u>		
TUMF Balance (Payment to TUMF):		\$130,000	

Example B: "REIMBURSEMENT"

CREDIT			
TUMF Obligation:	\$1,330,000		
Estimated Credit: Bid (\$1,500,000) or unit Cost Assumption (\$1,600,000) whichever is less			<u>\$1,500,000</u>
Potential Reimbursement:	(\$170,000)		
 RECONCILIATION			
TUMF Obligation:	\$1,330,000		
Actual Credit:	<u>\$1,500,000</u>		
Reimbursement Agreement with Developer (Based on Priority Ranking):		(\$170,000)	

Example C: "TUMF OVERPAYMENT"

CREDIT			
TUMF Obligation:	\$1,330,000		
Estimated Credit: Bid (\$1,200,000) or unit Cost Assumption (\$1,500,000) whichever is less			<u>\$1,200,000</u>
Remaining TUMF Obligation:	\$130,000		
Prorated Fee: \$130,000 / 200 du =	\$650 / du		
 RECONCILIATION			
Actual Credit:	\$1,300,000		
TUMF payments from Developer (\$650 per unit x 200 units)		<u>\$130,000</u>	
Actual Credit plus TUMF Payment	\$1,430,000		
 TUMF Obligation: \$1,330,000			
Actual Credit plus TUMF Payment		<u>\$1,430,000</u>	
TUMF Overpayment (Refund to Developer):		(\$100,000)	

EXHIBIT "G"

CAPROCK PARTNERS
Tract No. 37681

Initial TUMF Credit Summary

List of eligible streets/facilities under the TUMF Program for subject plot plan:

First Street (Northwest TUMF Zone)

Initial Credit shall be equal to the lesser of the following:

TUMF Obligation (see next page for Details)	\$ 2,667,877
TUMF Unit Cost Assumption (see next page for Details)	\$ 762,574
Improvement Costs (Low Bid) (see below for details)	\$ 1,008,635

Improvement Costs Breakdown

Street Improvement Construction Costs First Street --ESTIMATE	\$ 674,333
Right of Way Cost : First Street	\$ 98,286
Planning, Engineering, Construction Management, Geotechnical Services (35%)	\$ 236,016
Improvement Costs Total	\$ 1,008,635

Initial TUMF Credit:

Initial Credit (Obligation, Low Bid or Unit Cost Assumption, whichever is less)	\$ 762,574
Unpaid Single Family Dwelling Units	1,473,965
Total Credit to be applied to unpaid single family units	\$ 762,574

TUMF Overpayment / Refund:

Estimated TUMF Obligation	\$ 2,667,877
Estimated Credit amount + Paid TUMF amount	\$ 762,574
Refund (Credit + paid TUMF amount that exceeds Obligation amount)	\$ -

TUMF Reimbursement:

Estimated TUMF Obligation	\$ 2,667,877
Estimated Cost (Lesser of Bid Amount or Unit Cost Assumptions)	\$ 762,574
Estimated TUMF Reimbursement (Cost exceeding Obligation amount)	\$ 0

CAPROCK PARTNERS
Tract No. 37681

TUMF OBLIGATION CALCULATION

Unit Type - PAID	Fee per SF	Units	Amount
Industrial	\$ 1.81	0	\$ -
	Paid Subtotal	0	\$ -

Unit Type - UNPAID	Fee per SF	TOTAL SF	Amount
Industrial	\$ 1.81	1,473,965	\$ 2,667,877
	Unpaid Subtotal	1,473,965	\$ 2,667,877
	Obligation Total	1,473,965	\$ 2,667,877

TUMF UNIT COST ASSUMPTION CALCULATION

(2016 Nexus Study Unit Cost Assumption)

WRCOG TUMF Network Road Segment applicable to Proposed Improvements First Street (Parkridge to Mountain)		Cost Item	Amount
Network Distance:	0.26 miles	Road Const	\$ 383,000
Existing Lanes:	2	ROW/Utilities	\$ 195,000
Increase in Lanes:	2	Planning (10%)	\$ 38,000
		Engring (25%)	\$ 96,000
		Conting (10%)	\$ 58,000
		Network Road Segment Cost Est	\$ 770,000
		Network Unit Cost per Lane mile	\$ 1,480,769
		Network Unit Cost per Lane foot	\$ 280

Road Improvement Cost Estimate (based on Network Unit Cost per Lane foot)			
Lane	Construction Limits (Sta. to Sta.)	Linear Feet	Amount
1	10+35.13 24+18.99	1,383.86	\$ 388,102
2	10+35.13 23+70.39	1,335.26	\$ 374,472
		TUMF Subtotal	\$ 762,574

TOTAL TUMF UNIT COST ASSUMPTION FOR ELIGIBLE IMPROVEMENTS	\$ 762,574
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EXHIBIT "G"

CAPROCK PARTNERS
Tract No. 37681

Initial TUMF Credit Summary

List of eligible streets/facilities under the TUMF Program for subject plot plan:
Second Street (Northwest TUMF Zone)

Initial Credit shall be equal to the lesser of the following:

TUMF Obligation (see next page for Details)	\$ 2,667,877
TUMF Unit Cost Assumption (see next page for Details)	\$ 888,923
Improvement Costs (Low Bid) (see below for details)	\$ 1,155,903

Improvement Costs Breakdown

Street Improvement Construction Costs Second Street --ESTIMATE	\$ 763,874
Right of Way Cost : Second Street	\$ 124,673
Planning, Engineering, Construction Management, Geotechnical Services (35%)	\$ 267,356
Improvement Costs Total	\$ 1,155,903

Initial TUMF Credit:

Initial Credit (Obligation, Low Bid or Unit Cost Assumption, whichever is less)	\$ 888,923
Unpaid Single Family Dwelling Units	1,473,965
Total Credit to be applied to unpaid single family units	\$ 888,923

TUMF Overpayment / Refund:

Estimated TUMF Obligation	\$ 2,667,877
Estimated Credit amount + Paid TUMF amount	\$ 888,923
Refund (Credit + paid TUMF amount that exceeds Obligation amount)	\$ -

TUMF Reimbursement:

Estimated TUMF Obligation	\$ 2,667,877
Estimated Cost (Lesser of Bid Amount or Unit Cost Assumptions)	\$ 888,923
Estimated TUMF Reimbursement (Cost exceeding Obligation amount)	\$ 0

CAPROCK PARTNERS
Tract No. 37681

TUMF OBLIGATION CALCULATION

Dwelling Unit Type - PAID	Fee per SF	Units	Amount
Single Family Residential Unit	\$ 1.81	0	\$ -
	Paid Subtotal	0	\$ -

Dwelling Unit Type - UNPAID	Fee per SF	TOTAL SF	Amount
Single Family Residential Unit (TR 30386)	\$ 1.81	1,473,965	\$ 2,667,877
	Unpaid Subtotal	1,473,965	\$ 2,667,877
	Obligation Total	1,473,965	\$ 2,667,877

TUMF UNIT COST ASSUMPTION CALCULATION

(2016 Nexus Study Unit Cost Assumption)

WRCOG TUMF Network Road Segment applicable to Proposed Improvements		Cost Item	Amount
Second Street (River to I15)			
Network Distance:	1.44 miles	Road Const	\$ 2,143,000
Existing Lanes:	2	ROW/Utilities	\$ 1,089,000
Increase in Lanes:	2	Planning (10%)	\$ 214,000
		Engring (25%)	\$ 536,000
		Conting (10%)	\$ 323,000
		Network Road Segment Cost Est	\$ 4,305,000
		Network Unit Cost per Lane mile	\$ 1,494,792
		Network Unit Cost per Lane foot	\$ 283
Road Improvement Cost Estimate (based on Network Unit Cost per Lane foot)			
Lane	Construction Limits (Sta. to Sta.)	Linear Feet	Amount
1	12+38.70 29+79.59	1,740.89	\$ 492,854
2	12+38.70 14+46.74 17+88.61 29+79.59	1,399.02	\$ 396,069
		TUMF Subtotal	\$ 888,923

TOTAL TUMF UNIT COST ASSUMPTION FOR ELIGIBLE IMPROVEMENTS	\$ 888,923
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Attachment

TUMF Reimbursement
Agreement – Rubidoux / SR-
60 Interchange (PLN & ENG)

**TRANSPORTATION UNIFORM MITIGATION FEE PROGRAM
AGREEMENT TO REIMBURSE TUMF FUNDS
RUBIDOUX / SR 60 INTERCHANGE
PA&ED AND PS&E**

THIS REIMBURSEMENT AGREEMENT (“Agreement”) is entered into as of this _____ day of _____, 2024, by and between the Western Riverside Council of Governments (“WRCOG”), a California joint powers authority and CITY OF JURUPA VALLEY, a California municipal corporation, (“AGENCY”). WRCOG and AGENCY are sometimes hereinafter referred to individually as “Party” and collectively as “Parties”.

RECITALS

A. WRCOG is the Administrator of the Transportation Uniform Mitigation Fee Program of Western Riverside County (“TUMF Program”).

B. WRCOG has identified and designated certain transportation improvement projects throughout Western Riverside County as projects of regional importance (“Qualifying Projects” or “Projects”). The Qualifying Projects are more specifically described in that certain WRCOG study titled “TUMF Nexus Study”, as may be amended from time to time. Qualifying Projects can have Regional or Zonal significance as further described in the TUMF Nexus Study.

C. The TUMF Program is funded by TUMF fees paid by new development in Western Riverside County (collectively, “TUMF Program Funds”). TUMF Program Funds are held in trust by WRCOG for the purpose of funding the Qualifying Projects.

D. The AGENCY proposes to implement a Qualifying Project, and it is the purpose of this Agreement to identify the project and to set forth the terms and conditions by which WRCOG will release TUMF Program Funds.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and subject to the conditions contained herein, the Parties hereby agree as follows:

1. Description of the Qualifying Project. This Agreement is intended to distribute TUMF Program Funds to the AGENCY for RUBIDOUX / SR 60 INTERCHANGE, (the “Project”), a Qualifying Project. The Work, including a timetable and a detailed scope of work, is more fully described in Exhibit “A” attached hereto and incorporated herein by reference and, pursuant to Section 20 below, is subject to modification if requested by the AGENCY and approved by WRCOG. The work shall be consistent with one or more of the defined WRCOG Call for Projects phases detailed herein as follows:

- 1) PA&ED – Project Approvals & Environmental Document
- 2) PS&E – Plans, Specifications and Estimates
- 3) R/W – Right of Way Acquisition and Utility Relocation
- 4) CON – Construction

2. WRCOG Funding Amount. WRCOG hereby agrees to distribute to AGENCY, on the terms and conditions set forth herein, a sum not to exceed **FOUR MILLION FIVE HUNDRED THOUSAND DOLLAR (\$4,500,000.00)**, to be used for reimbursing the AGENCY for eligible Project expenses as described in Section 3 herein (“Funding Amount”). The Parties acknowledge and agree that the Funding Amount may be less than the actual cost of the Project. Nevertheless, the Parties acknowledge and agree that WRCOG shall not be obligated to contribute TUMF Program Funds in excess of the maximum TUMF share identified in the TUMF Nexus Study (“Maximum TUMF Share”), as may be amended from time to time.

3. Project Costs Eligible for Advance/Reimbursement. The total Project costs (“Total Project Cost”) may include the following items, provided that such items are included in the scope of work attached hereto as Exhibit “A” (“Scope of Work”): (1) AGENCY and/or consultant costs associated with direct Project coordination and support; (2) funds expended in preparation of preliminary engineering studies; (3) funds expended for preparation of environmental review documentation for the Project; (4) all costs associated with right-of-way acquisition, including right-of-way engineering, appraisal, acquisition, legal costs for condemnation procedures if authorized by the AGENCY, and costs of reviewing appraisals and offers for property acquisition; (5) costs reasonably incurred if condemnation proceeds; (6) costs incurred in the preparation of plans, specifications, and estimates by AGENCY or consultants; (7) AGENCY costs associated with bidding, advertising and awarding of the Project contracts; (8) construction costs, including change orders to construction contract approved by the AGENCY; (9) construction management, field inspection and material testing costs; and (10) any AGENCY administrative cost to deliver the Project.

4. Ineligible Project Costs. The Total Project Cost shall not include the following items which shall be borne solely by the AGENCY without reimbursement: (1) any AGENCY administrative fees attributed to the reviewing and processing of the Project; and (2) expenses for items of work not included within the Scope of Work in Exhibit “A”.

5. Procedures for Distribution of TUMF Program Funds to AGENCY.

(a) Initial Payment by the AGENCY. The AGENCY shall be responsible for initial payment of all the Project costs as they are incurred. Following payment of such Project costs, the AGENCY shall submit invoices to WRCOG requesting reimbursement of eligible Project costs. Each invoice shall be accompanied by detailed contractor invoices, or other demands for payment addressed to the AGENCY, and documents evidencing the AGENCY’s payment of the invoices or demands for payment. Documents evidencing the AGENCY’S payment of the invoices shall be retained for four (4) years and shall be made available for review by WRCOG. The AGENCY shall submit invoices not more often than monthly and not less often than quarterly.

(b) Review and Reimbursement by WRCOG. Upon receipt of an invoice from the AGENCY, WRCOG may request additional documentation or explanation of the Project costs for which reimbursement is sought. Undisputed amounts shall be paid by WRCOG to the AGENCY within thirty (30) days. In the event that WRCOG disputes the eligibility of the AGENCY for reimbursement of all or a portion of an invoiced amount, the Parties shall meet

and confer in an attempt to resolve the dispute. If the meet and confer process is unsuccessful in resolving the dispute, the AGENCY may appeal WRCOG's decision as to the eligibility of one or more invoices to WRCOG's Executive Director. The WRCOG Executive Director shall provide his/her decision in writing. If the AGENCY disagrees with the Executive Director's decision, the AGENCY may appeal the decision of the Executive Director to the full WRCOG Executive Committee, provided the AGENCY submits its request for appeal to WRCOG within ten (10) days of the Executive Director's written decision. The decision of the WRCOG Executive Committee shall be final. Additional details concerning the procedure for the AGENCY's submittal of invoices to WRCOG and WRCOG's consideration and payment of submitted invoices are set forth in Exhibit "B", attached hereto and incorporated herein by reference.

(c) Funding Amount/Adjustment. If a post Project audit or review indicates that WRCOG has provided reimbursement to the AGENCY in an amount in excess of the Maximum TUMF Share of the Project, or has provided reimbursement of ineligible Project costs, the AGENCY shall reimburse WRCOG for the excess or ineligible payments within 30 days of notification by WRCOG.

6. Increases in Project Funding. The Funding Amount may, in WRCOG's sole discretion, be augmented with additional TUMF Program Funds if the TUMF Nexus Study is amended to increase the maximum eligible TUMF share for the Project. Any such increase in the Funding Amount must be approved in writing by WRCOG's Executive Director. In no case shall the amount of TUMF Program Funds allocated to the AGENCY exceed the then-current maximum eligible TUMF share for the Project. No such increased funding shall be expended to pay for any Project already completed. For purposes of this Agreement, the Project or any portion thereof shall be deemed complete upon its acceptance by WRCOG's Executive Director which shall be communicated to the AGENCY in writing.

7. No Funding for Temporary Improvements. Only segments or components of the construction that are intended to form part of or be integrated into the Project may be funded by TUMF Program Funds. No improvement which is temporary in nature, including but not limited to temporary roads, curbs, tapers or drainage facilities, shall be funded with TUMF Program Funds, except as needed for staged construction of the Project.

8. AGENCY's Funding Obligation to Complete the Project. In the event that the TUMF Program Funds allocated to the Project represent less than the total cost of the Project, the AGENCY shall provide such additional funds as may be required to complete the Project.

9. AGENCY's Obligation to Repay TUMF Program Funds to WRCOG; Exception For PA&ED Phase Work. Except as otherwise expressly excepted within this paragraph, in the event that: (i) the AGENCY, for any reason, determines not to proceed with or complete the Project; or (ii) the Project is not timely completed, subject to any extension of time granted by WRCOG pursuant to the terms of this Agreement; the AGENCY agrees that any TUMF Program Funds that were distributed to the AGENCY for the Project shall be repaid in full to WRCOG, and the Parties shall enter into good faith negotiations to establish a reasonable repayment schedule and repayment mechanism. If the Project involves work pursuant to a PA&ED phase,

AGENCY shall not be obligated to repay TUMF Program Funds to WRCOG relating solely to PA&ED phase work performed for the Project.

10. AGENCY's Local Match Contribution. The AGENCY shall provide at least (\$ _____)[**INSERT DOLLAR AMOUNT IN NUMBER FORM**]of funding toward the Work, as shown in Exhibit "A" and as called out in the AGENCY's Project Nomination Form submitted to WRCOG in response to its Call for Projects. [**IF NO LOCAL MATCH FUNDS ARE REQUIRED DELETE THE PRECEDING TEXT AND REPLACE IT WITH THE FOLLOWING:** "AGENCY local match funding is not required, as shown in Exhibit "A" and as called out in the AGENCY's Project Nomination Form submitted to WRCOG in response to its Call for Projects."]

11. Term/Notice of Completion. The term of this Agreement shall be from the date first herein above written until the earlier of the following: (i) the date WRCOG formally accepts the Project as complete, pursuant to Section 6; (ii) termination of this Agreement pursuant to Section 15; or (iii) the AGENCY has fully satisfied its obligations under this Agreement. All applicable indemnification provisions of this Agreement shall remain in effect following the termination of this Agreement.

12. Representatives of the Parties. WRCOG's Executive Director, or his or her designee, shall serve as WRCOG's representative and shall have the authority to act on behalf of WRCOG for all purposes under this Agreement. The AGENCY hereby designates [**INSERT NAME AND TITLE**], or his or her designee, as the AGENCY's representative to WRCOG. The AGENCY's representative shall have the authority to act on behalf of the AGENCY for all purposes under this Agreement and shall coordinate all activities of the Project under the AGENCY's responsibility. The AGENCY shall work closely and cooperate fully with WRCOG's representative and any other agencies which may have jurisdiction over or an interest in the Project.

13. Expenditure of Funds by AGENCY Prior to Execution of Agreement. Nothing in this Agreement shall be construed to prevent or preclude the AGENCY from expending funds on the Project prior to the execution of the Agreement, or from being reimbursed by WRCOG for such expenditures. However, the AGENCY understands and acknowledges that any expenditure of funds on the Project prior to the execution of the Agreement is made at the AGENCY's sole risk, and that some expenditures by the AGENCY may not be eligible for reimbursement under this Agreement.

14. Review of Services. The AGENCY shall allow WRCOG's Representative to inspect or review the progress of the Project at any reasonable time in order to determine whether the terms of this Agreement are being met.

15. Termination.
 (a) Notice. Either WRCOG or AGENCY may, by written notice to the other party, terminate this Agreement, in whole or in part, in response to a material breach hereof by the other Party, by giving written notice to the other party of such termination and specifying the effective date thereof. The written notice shall provide a 30 day period to cure any alleged

breach. During the 30 day cure period, the Parties shall discuss, in good faith, the manner in which the breach can be cured.

(b) Effect of Termination. In the event that the AGENCY terminates this Agreement, the AGENCY shall, within 180 days, repay to WRCOG any unexpended TUMF Program Funds provided to the AGENCY under this Agreement and shall complete any portion or segment of work for the Project for which TUMF Program Funds have been provided. In the event that WRCOG terminates this Agreement, WRCOG shall, within 90 days, distribute to the AGENCY TUMF Program Funds in an amount equal to the aggregate total of all unpaid invoices which have been received from the AGENCY regarding the Project at the time of the notice of termination; provided, however, that WRCOG shall be entitled to exercise its rights under Section 5(b), including but not limited to conducting a review of the invoices and requesting additional information. Upon such termination, the AGENCY shall, within 180 days, complete any portion or segment of work for the Project for which TUMF Program Funds have been provided. This Agreement shall terminate upon receipt by the non-terminating Party of the amounts due to it hereunder and upon completion of the segment or portion of Project work for which TUMF Program Funds have been provided.

(c) Cumulative Remedies. The rights and remedies of the Parties provided in this Section are in addition to any other rights and remedies provided by law or under this Agreement.

16. Prevailing Wages. The AGENCY and any other person or entity hired to perform services on the Project are alerted to the requirements of California Labor Code Sections 1770 et seq., which would require the payment of prevailing wages were the services or any portion thereof determined to be a public work, as defined therein. The AGENCY shall ensure compliance with these prevailing wage requirements by any person or entity hired to perform the Project. The AGENCY shall defend, indemnify, and hold harmless WRCOG, its officers, employees, consultants, and agents from any claim or liability, including without limitation attorneys, fees, arising from its failure or alleged failure to comply with California Labor Code Sections 1770 et seq.

17. Progress Reports. WRCOG may request the AGENCY to provide WRCOG with progress reports concerning the status of the Project.

18. Indemnification.

(a) AGENCY Responsibilities. In addition to the indemnification required under Section 16, the AGENCY agrees to indemnify and hold harmless WRCOG, its officers, agents, consultants, and employees from any and all claims, demands, costs or liability arising from or connected with all activities governed by this Agreement including all design and construction activities, due to negligent acts, errors or omissions or willful misconduct of the AGENCY or its subcontractors. The AGENCY will reimburse WRCOG for any expenditures, including reasonable attorneys' fees, incurred by WRCOG, in defending against claims ultimately determined to be due to negligent acts, errors or omissions or willful misconduct of the AGENCY.

(b) WRCOG Responsibilities. WRCOG agrees to indemnify and hold harmless the AGENCY, its officers, agents, consultants, and employees from any and all claims, demands, costs or liability arising from or connected with all activities governed by this Agreement including all design and construction activities, due to negligent acts, errors or omissions or willful misconduct of WRCOG or its sub-consultants. WRCOG will reimburse the AGENCY for any expenditures, including reasonable attorneys' fees, incurred by the AGENCY, in defending against claims ultimately determined to be due to negligent acts, errors or omissions or willful misconduct of WRCOG.

(c) Effect of Acceptance. The AGENCY shall be responsible for the professional quality, technical accuracy and the coordination of any services provided to complete the Project. WRCOG's review, acceptance or funding of any services performed by the AGENCY or any other person or entity under this Agreement shall not be construed to operate as a waiver of any rights WRCOG may hold under this Agreement or of any cause of action arising out of this Agreement. Further, the AGENCY shall be and remain liable to WRCOG, in accordance with applicable law, for all damages to WRCOG caused by the AGENCY's negligent performance of this Agreement or supervision of any services provided to complete the Project.

19. Insurance. The AGENCY shall require, at a minimum, all persons or entities hired to perform the Project to obtain, and require their subcontractors to obtain, insurance of the types and in the amounts described below and satisfactory to the AGENCY and WRCOG. Such insurance shall be maintained throughout the term of this Agreement, or until completion of the Project, whichever occurs last.

(a) Commercial General Liability Insurance. Occurrence version commercial general liability insurance or equivalent form with a combined single limit of not less than \$1,000,000.00 per occurrence. If such insurance contains a general aggregate limit, it shall apply separately to the Project or be no less than two times the occurrence limit. Such insurance shall:

(i) Name WRCOG and AGENCY, and their respective officials, officers, employees, agents, and consultants as insured with respect to performance of the services on the Project and shall contain no special limitations on the scope of coverage or the protection afforded to these insured;

(ii) Be primary with respect to any insurance or self-insurance programs covering WRCOG and AGENCY, and/or their respective officials, officers, employees, agents, and consultants; and

(iii) Contain standard separation of insured provisions.

(b) Business Automobile Liability Insurance. Business automobile liability insurance or equivalent form with a combined single limit of not less than \$1,000,000.00 per occurrence. Such insurance shall include coverage for owned, hired and non-owned automobiles.

(c) Professional Liability Insurance. Errors and omissions liability insurance with a limit of not less than \$1,000,000.00 Professional liability insurance shall only be required of design or engineering professionals.

(d) Workers' Compensation Insurance. Workers' compensation insurance with statutory limits and employers' liability insurance with limits of not less than \$1,000,000.00 each accident.

20. Project Amendments. Changes to the characteristics of the Project, including the deadline for Project completion, and any responsibilities of the AGENCY or WRCOG may be requested in writing by the AGENCY and are subject to the approval of WRCOG's Representative, which approval will not be unreasonably withheld, provided that extensions of time for completion of the Project shall be approved in the sole discretion of WRCOG's Representative. Nothing in this Agreement shall be construed to require or allow completion of the Project without full compliance with the California Environmental Quality Act (Public Resources Code Section 21000 *et seq.*; "CEQA") and the National Environmental Policy Act of 1969 (42 USC 4231 *et seq.*), if applicable, but the necessity of compliance with CEQA and/or NEPA shall not justify, excuse, or permit a delay in completion of the Project.

21. Conflict of Interest. For the term of this Agreement, no member, officer or employee of the AGENCY or WRCOG, during the term of his or her service with the AGENCY or WRCOG, as the case may be, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

22. Limited Scope of Duties. WRCOG's and the AGENCY's duties and obligations under this Agreement are limited to those described herein. WRCOG has no obligation with respect to the safety of any Project performed at a job site. In addition, WRCOG shall not be liable for any action of AGENCY or its contractors relating to the condemnation of property undertaken by AGENCY or construction related to the Project.

23. Books and Records. Each party shall maintain complete, accurate, and clearly identifiable records with respect to costs incurred for the Project under this Agreement. They shall make available for examination by the other party, its authorized agents, officers or employees any and all ledgers and books of account, invoices, vouchers, canceled checks, and other records or documents evidencing or related to the expenditures and disbursements charged to the other party pursuant to this Agreement. Further, each party shall furnish to the other party, its agents or employees such other evidence or information as they may require with respect to any such expense or disbursement charged by them. All such information shall be retained by the Parties for at least four (4) years following termination of this Agreement, and they shall have access to such information during the four-year period for the purposes of examination or audit.

24. Equal Opportunity Employment. The Parties represent that they are equal opportunity employers and they shall not discriminate against any employee or applicant of reemployment because of race, religion, color, national origin, ancestry, sex or age. Such non-

discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

25. Governing Law. This Agreement shall be governed by and construed with the laws of the State of California.

26. Attorneys' Fees. If either party commences an action against the other party arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorneys' fees and costs of suit.

27. Time of Essence. Time is of the essence for each and every provision of this Agreement.

28. Headings. Article and Section Headings, paragraph captions or marginal headings contained in this Agreement are for convenience only and shall have no effect in the construction or interpretation of any provision herein.

29. Public Acknowledgement. The AGENCY agrees that all public notices, news releases, information signs and other forms of communication shall indicate that the Project is being cooperatively funded by the AGENCY and WRCOG TUMF Program Funds.

30. No Joint Venture. This Agreement is for funding purposes only and nothing herein shall be construed to make WRCOG a party to the construction of the Project or to make it a partner or joint venture with the AGENCY for such purpose.

31. Compliance With the Law. The AGENCY shall comply with all applicable laws, rules and regulations governing the implementation of the Qualifying Project, including, where applicable, the rules and regulations pertaining to the participation of businesses owned or controlled by minorities and women promulgated by the Federal Highway Administration and the Federal Department of Transportation.

32. Notices. All notices hereunder and communications regarding interpretation of the terms of this Agreement or changes thereto shall be provided by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

If to AGENCY:	City of Jurupa Valley 8930 Limonite Avenue Jurupa Valley, CA. 92509 Attention: Paul Toor, Director of Public Works/ City Engineer Telephone: 951-332-6464 Facsimile: 951-332-6995 Email: ptoor@jurupavalley.org
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If to WRCOG: Western Riverside Council of Governments
3390 University Avenue; Suite 200
Riverside, California 92501
Attention: Christopher Gray, Deputy Executive Director
Telephone: (951) 405-6710
Facsimile: (951) 223-9720

Any notice so given shall be considered served on the other party three (3) days after deposit in the U.S. mail, first class postage prepaid, return receipt requested, and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred regardless of the method of service.

33. Integration; Amendment. This Agreement contains the entire agreement between the PARTIES. Any agreement or representation respecting matters addressed herein that are not expressly set forth in this Agreement is null and void. This Agreement may be amended only by mutual written agreement of the PARTIES.

34. Severability. If any term, provision, condition or covenant of this Agreement is held invalid or unenforceable, the remainder of this Agreement shall not be affected thereby.

35. Conflicting Provisions. In the event that provisions of any attached appendices or exhibits conflict in any way with the provisions set forth in this Agreement, the language, terms and conditions contained in this Agreement shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the Agreement.

36. Independent Contractors. Any person or entities retained by the AGENCY or any contractor shall be retained on an independent contractor basis and shall not be employees of WRCOG. Any personnel performing services on the Project shall at all times be under the exclusive direction and control of the AGENCY or contractor, whichever is applicable. The AGENCY or contractor shall pay all wages, salaries and other amounts due such personnel in connection with their performance of services on the Project and as required by law. The AGENCY or consultant shall be responsible for all reports and obligations respecting such personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance and workers' compensation insurance.

37. Effective Date. This Agreement shall not be effective until executed by both Parties. The failure of one party to execute this Agreement within forty-five (45) days of the other party executing this Agreement shall render any execution of this Agreement ineffective.

38. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives to be effective on the day and year first above-written.

**WESTERN RIVERSIDE COUNCIL
OF GOVERNMENTS**

CITY OF JURUPA VALLEY

By: _____ Date: _____
Dr. Kurt Wilson
Executive Director

By: _____ Date: _____
Rod B. Buttler
City Manager

Approved to Form:

By: _____ Date: _____
Steven C. DeBaun
General Counsel

By: _____ Date: _____
Peter M. Thorson
City Attorney

EXHIBIT “A”

SCOPE OF WORK

SCOPE OF WORK:

State Route 60 is a major East-West transportation route within Riverside County and an integral part of the freeway network system for the Southern California metropolitan area.

The City of Jurupa valley is proposing to reconstruct SR-60/Rubidoux Boulevard Interchange. This Project will reconfigure the existing interchange at Rubidoux Boulevard and State Route 60 and improve the traffic circulation as well as accommodating the future traffic congestion at build out in 2040.

The PA&ED and PS&E phases will include, but not limited to, Topographic survey, design of the new bridge replacing the old one, improving the on/off ramps, new signals, improving the ADA accessibility and circulation.

EXHIBIT "A-1"**ESTIMATE OF COST**

Phase	TUMF	LOCAL	TOTAL
PA&ED	\$2,000,000.00	0.0	\$2,000,000.00
PS&E	\$2,500,000.00	0.0	\$2,500,000.00
RIGHT OF WAY			
CONSTRUCTION			
TOTAL	\$ 4,500,000.00	0.0	\$4,500,000.00

EXHIBIT "A-2"
PROJECT SCHEDULE

TIMETABLE:

Phase	Estimated Completion Date	Estimated Cost	Comments
PA&ED	04/01/2026	\$2,000,000.00	
PS&E	09/01/2028	\$2,500,000.00	
RIGHT OF WAY			
CONSTRUCTION			
TOTAL		\$4,500,000.00	

Elements of Compensation

EXHIBIT “B”

PROCEDURES FOR SUBMITTAL, CONSIDERATION AND PAYMENT OF INVOICES

1. For professional services, WRCOG recommends that the AGENCY incorporate this Exhibit “B-1” into its contracts with any subcontractors to establish a standard method for preparation of invoices by contractors to the AGENCY and ultimately to WRCOG for reimbursement of AGENCY contractor costs.
2. Each month the AGENCY shall submit an invoice for eligible Project costs incurred during the preceding month. The original invoice shall be submitted to WRCOG’s Executive Director with a copy to WRCOG’s Project Coordinator. Each invoice shall be accompanied by a cover letter in a format substantially similar to that of Exhibit “B-2”.
3. For jurisdictions with large construction projects (with the total construction cost exceeding \$10 million) under construction at the same time, may with the approval of WRCOG submit invoices to WRCOG for payment at the same time they are received by the jurisdiction. WRCOG must receive the invoice by the 5th day of the month in order to process the invoice within 30 days. WRCOG will retain 10% of the invoice until all costs have been verified as eligible and will release the balance at regular intervals not more than quarterly and not less than semi-annually. If there is a discrepancy or ineligible costs that exceed 10% of the previous invoice WRCOG will deduct that amount from the next payment.
4. Each invoice shall include documentation from each contractor used by the AGENCY for the Project, listing labor costs, subcontractor costs, and other expenses. Each invoice shall also include a monthly progress report and spreadsheets showing the hours or amounts expended by each contractor or subcontractor for the month and for the entire Project to date. Samples of acceptable task level documentation and progress reports are attached as Exhibits “B-4” and “B-5”. All documentation from the Agency’s contractors should be accompanied by a cover letter in a format substantially similar to that of Exhibit “B-3”.
5. If the AGENCY is seeking reimbursement for direct expenses incurred by AGENCY staff for eligible Project costs, the AGENCY shall provide the same level of information for its labor and any expenses as required of its contractors pursuant to Exhibit “B” and its attachments.
6. Charges for each task and milestone listed in Exhibit “A” shall be listed separately in the invoice.
7. Each invoice shall include a certification signed by the AGENCY Representative or his or her designee which reads as follows:

“I hereby certify that the hours and salary rates submitted for reimbursement in this invoice are the actual hours and rates worked and paid to the contractors or subcontractors listed.

Signed _____

Title _____

Date _____

Invoice No. _____

8. WRCOG will pay the AGENCY within 30 days after receipt by WRCOG of an invoice. If WRCOG disputes any portion of an invoice, payment for that portion will be withheld, without interest, pending resolution of the dispute, but the uncontested balance will be paid.
9. The final payment under this Agreement will be made only after: (I) the AGENCY has obtained a Release and Certificate of Final Payment from each contractor or subcontractor used on the Project; (ii) the AGENCY has executed a Release and Certificate of Final Payment; and (iii) the AGENCY has provided copies of each such Release to WRCOG.

**EXHIBIT “B-1”
[Sample for Professional Services]**

For the satisfactory performance and completion of the Services under this Agreement, Agency will pay the Contractor compensation as set forth herein. The total compensation for this service shall not exceed (____INSERT WRITTEN DOLLAR AMOUNT____) (\$__INSERT NUMERICAL DOLLAR AMOUNT__) without written approval of Agency’s City Manager [or applicable position] (“Total Compensation”).

1. ELEMENTS OF COMPENSATION.

Compensation for the Services will be comprised of the following elements: 1.1 Direct Labor Costs; 1.2 Fixed Fee; and 1.3 Additional Direct Costs.

1.1 DIRECT LABOR COSTS.

Direct Labor costs shall be paid in an amount equal to the product of the Direct Salary Costs and the Multiplier which are defined as follows:

1.1.1 DIRECT SALARY COSTS

Direct Salary Costs are the base salaries and wages actually paid to the Contractor's personnel directly engaged in performance of the Services under the Agreement. (The range of hourly rates paid to the Contractor's personnel appears in Section 2 below.)

1.1.2 MULTIPLIER

The Multiplier to be applied to the Direct Salary Costs to determine the Direct Labor Costs is _____, and is the sum of the following components:

1.1.2.1 Direct Salary Costs _____

1.1.2.2 Payroll Additives _____

The Decimal Ratio of Payroll Additives to Direct Salary Costs. Payroll Additives include all employee benefits, allowances for vacation, sick leave, and holidays, and company portion of employee insurance and social and retirement benefits, all federal and state payroll taxes, premiums for insurance which are measured by payroll costs, and other contributions and benefits imposed by applicable laws and regulations.

1.1.2.3 Overhead Costs _____

The Decimal Ratio of Allowable Overhead Costs to the Contractor Firm's Total Direct Salary Costs. Allowable Overhead Costs include general, administrative and overhead costs of maintaining and operating established offices, and consistent with established firm policies, and as defined in the Federal Acquisitions Regulations, Part 31.2.

Total Multiplier _____
 (sum of 1.1.2.1, 1.1.2.2, and 1.1.2.3)

1.2 FIXED FEE.

1.2.1 The fixed fee is \$_____.

1.2.2 A pro-rata share of the Fixed Fee shall be applied to the total Direct Labor Costs expended for services each month, and shall be included on each monthly invoice.

1.3 ADDITIONAL DIRECT COSTS.

Additional Direct Costs directly identifiable to the performance of the services of this Agreement shall be reimbursed at the rates below, or at actual invoiced cost.

Rates for identified Additional Direct Costs are as follows:

<u>ITEM</u>	<u>REIMBURSEMENT RATE</u>
	<i>[__insert charges__]</i>
Per Diem	\$ /day
Car mileage	\$ /mile
Travel	\$ /trip
Computer Charges	\$ /hour
Photocopies	\$ /copy
Blueline	\$ /sheet
LD Telephone	\$ /call
Fax	\$ /sheet
Photographs	\$ /sheet

Travel by air and travel in excess of 100 miles from the Contractor's office nearest to Agency's office must have Agency's prior written approval to be reimbursed under this Agreement.

2. DIRECT SALARY RATES

Direct Salary Rates, which are the range of hourly rates to be used in determining Direct Salary Costs in Section 1.1.1 above, are given below and are subject to the following:

- 2.1 Direct Salary Rates shall be applicable to both straight time and overtime work, unless payment of a premium for overtime work is required by law, regulation or craft agreement, or is otherwise specified in this Agreement. In such event, the premium portion of Direct Salary Costs will not be subject to the Multiplier defined in Paragraph 1.1.2 above.
- 2.2 Direct Salary Rates shown herein are in effect for one year following the effective date of the Agreement. Thereafter, they may be adjusted annually to reflect the Contractor's adjustments to individual compensation. The Contractor shall notify Agency in writing prior to a change in the range of rates included herein, and prior to each subsequent change.

POSITION OR CLASSIFICATION RANGE OF HOURLY RATES

[sample]

Principal	\$.00 - \$.00/hour
Project Manager	\$.00 - \$.00/hour
Sr. Engineer/Planner	\$.00 - \$.00/hour
Project Engineer/Planner	\$.00 - \$.00/hour
Assoc. Engineer/Planner	\$.00 - \$.00/hour
Technician	\$.00 - \$.00/hour
Drafter/CADD Operator	\$.00 - \$.00/hour
Word Processor	\$.00 - \$.00/hour

- 2.3 The above rates are for the Contractor only. All rates for subcontractors to the Contractor will be in accordance with the Contractor's cost proposal.

3. INVOICING.

- 3.1 Each month the Contractor shall submit an invoice for Services performed during the preceding month. The original invoice shall be submitted to Agency's Executive Director with two (2) copies to Agency's Project Coordinator.
- 3.2 Charges shall be billed in accordance with the terms and rates included herein, unless otherwise agreed in writing by Agency's Representative.
- 3.3 Base Work and Extra Work shall be charged separately, and the charges for each task and Milestone listed in the Scope of Services, shall be listed separately. The charges for each individual assigned by the Contractor under this Agreement shall be listed separately on an attachment to the invoice.

- 3.4 A charge of \$500 or more for any one item of Additional Direct Costs shall be accompanied by substantiating documentation satisfactory to Agency such as invoices, telephone logs, etc.
- 3.5 Each copy of each invoice shall be accompanied by a Monthly Progress Report and spreadsheets showing hours expended by task for each month and total project to date.
- 3.6 If applicable, each invoice shall indicate payments to DBE subcontractors or supplies by dollar amount and as a percentage of the total invoice.
- 3.7 Each invoice shall include a certification signed by the Contractor's Representative or an officer of the firm which reads as follows:

I hereby certify that the hours and salary rates charged in this invoice are the actual hours and rates worked and paid to the employees listed.

Signed _____
Title _____
Date _____
Invoice No. _____

4. PAYMENT

- 4.1 Agency shall pay the Contractor within four to six weeks after receipt by Agency of an original invoice. Should Agency contest any portion of an invoice, that portion shall be held for resolution, without interest, but the uncontested balance shall be paid.
- 4.2 The final payment for Services under this Agreement will be made only after the Contractor has executed a Release and Certificate of Final Payment.

EXHIBIT B-2
Sample Cover Letter to WRCOG

Date
Western Riverside Council of Governments
3390 University Avenue; Suite 450
Riverside, California 92501
Attention: Deputy Executive Director
ATTN: Accounts Payable

Re: Project Title - Invoice #__

Enclosed for your review and payment approval is the AGENCY’s invoice for professional and technical services that was rendered by our contractors in connection with the 2002 Measure “A” Local Streets and Roads Funding per Agreement No. _____ effective (Month/Day/Year) . The required support documentation received from each contractor is included as backup to the invoice.

Invoice period covered is from Month/Date/Year to Month/Date/Year .

Total Authorized Agreement Amount:	\$0,000,000.00
Total Invoiced to Date:	\$0,000,000.00
Total Previously Invoiced:	\$0,000,000.00
Balance Remaining:	\$0,000,000.00

Amount due this Invoice:	\$0,000,000.00
---------------------------------	-----------------------

=====

I certify that the hours and salary rates charged in this invoice are the actual hours and rates worked and paid to the contractors listed.

By: _____
Name
Title

cc:

EXHIBIT B-3
Sample Letter from Contractor to AGENCY

Month/Date/Year

Western Riverside Council of Governments
 3390 University Avenue; Suite 200
 Riverside, California 92501
 Attention: Deputy Executive Director
 Attn: Accounts Payable

Invoice # _____

For **[type of services]** rendered by **[contractor name]** in connection with **[name of project]**
 This is per agreement No. XX-XX-XXX effective Month/Date/Year .

Invoice period covered is from Month/Date/Year to Month/Date/Year .

Total Base Contract Amount:	\$000,000.00
Authorized Extra Work (if Applicable)	\$000,000.00

TOTAL AUTHORIZED CONTRACT AMOUNT:	\$000,000.00
Total Invoice to Date:	\$000,000.00
Total Previously Billed:	\$000,000.00
Balance Remaining:	\$000,000.00
Amount Due this Invoice:	\$000,000.00
	=====

I certify that the hours and salary rates charged in this invoice are the actual hours and rates worked and paid to the employees listed,

By: _____
 Name
 Title

**EXHIBIT B-4
SAMPLE TASK SUMMARY SCHEDULE
(OPTIONAL)**

EXHIBIT B-5
Sample Progress Report

REPORTING PERIOD: Month/Date/Year to Month/Date/Year
PROGRESS REPORT: #1

A. Activities and Work Completed during Current Work Periods

TASK 01 – 100% PS&E SUBMITTAL

1. Responded to Segment 1 comments from Department of Transportation
2. Completed and submitted Segment 1 final PS&E

B. Current/Potential Problems Encountered & Corrective Action

Problems	Corrective Action
None	None

C. Work Planned Next Period

TASK 01 – 100% PS&E SUBMITTAL

1. Completing and to submit Traffic Signal and Electrical Design plans
2. Responding to review comments

Attachment

TUMF Reimbursement
Agreement – Amendment #2
– Third Street Grade
Separation (ROW)

**AMENDMENT NO. 2 TO TRANSPORTATION UNIFORM MITIGATION FEE
PROGRAM AGREEMENT
THIRD STREET GRADE SEPARATION
RIGHT-OF-WAY PHASE**

This Amendment No.1 to Transportation Uniform Mitigation Fee Program Agreement (“Amendment No. 1”) is entered into this 30th day of July, 2024, by and between the WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS (“WRCOG”) and THE CITY OF RIVERSIDE (“City”). WRCOG and the City are sometimes referred to individually as “Party” and collectively as “Parties.”

RECITALS

A. WRCOG and CITY have entered into an agreement titled “Transportation Uniform Mitigation Fee Program Agreement” that is dated **July 26th**, 2018 (“Agreement”). The Agreement provides the terms and conditions, scope of work, schedule and funding amount for the planning and engineering phases of the **Third Street Grade Separation Project** (hereinafter the “Project”).

B. The Parties desire to amend the Agreement by adding a right of way phase to the Agreement, so that the Agreement provides the terms and conditions, scope of work, schedule and funding amounts for the planning, engineering, and right of way phases of the Third Street Grade Separation (hereinafter, the "Project").

C. The Parties also desire to amend the Agreement by increasing the funding amount pursuant to Sections 6 and 33 of the Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and subject to the

conditions contained herein, the Parties hereby agree as follows:

1. Section I of the Agreement is hereby replaced in its entirety by the following:

“1. Description of the Qualifying Project. This Agreement is intended to distribute TUMF Program Funds to the City for Third Street Grade Separation, (the "Project"), a Qualifying Project. The Work, including a timetable and a detailed scope of work, is more fully described in Exhibit "A" attached hereto and incorporated herein by reference and, pursuant to Section 20 below, is subject to modification if requested by the City and approved by WRCOG. The work shall be consistent with one or more of the defined WRCOG Call for Projects phases detailed herein as follows

- 1) PA&ED- Project Approvals& Environmental Document
- 2) PS&E- Plans, Specifications and Estimates
- 3) ROW- Right of Way”

2. The Funding Amount contained in Section 2 of the Agreement is hereby increased by **Seven Million Two Hundred and Fifty Thousand Dollars (\$7,250,000)** from **Four Million Two Hundred and Fifty Thousand Dollars (\$4,250,000)** to an amount not to exceed **Eleven Million Two Hundred and Fifty Thousand Dollars (\$11,250,000)**.

3. The foregoing increase in the Funding Amount is within the Maximum TUMF Share.

4. Section 10 of the Agreement is hereby deleted in its entirety and replaced with the following provision:

“CITY’s Local Match Contribution. The CITY shall provide at least **Eighteen Million Seven Hundred and Fifty Thousand**

dollars (\$18,750,000) of funding toward the Work, as shown in Exhibit “A” and as called out in the CITY’s Project Nomination Form submitted to WRCOG in response to its Call for Projects.”

5. Exhibits “A”, “A-1”, and “A-2” of the Agreement are hereby replaced in their entirety by Exhibits “A”, “A-1”, and “A-2” of this Amendment No. 1, which are attached hereto and incorporated by reference.

6. The above-stated Recitals are hereby fully incorporated into this Amendment No. 1.

7. Except to the extent specifically modified or amended hereunder, all of the terms, covenants and conditions of the Agreement shall remain in full force and effect between the Parties hereto.

IN WITNESS WHEREOF, the Parties have caused this Amendment No. 1 to be executed by their duly authorized representatives to be effective on the day and year first written above.

WESTERN RIVERSIDE COUNCIL
OF GOVERNMENTS

CITY OF RIVERSIDE

By: _____
Dr. Kurt Wilson, Executive Director

By: _____
Mike Futrell, City Manager

Approved to Form:

Approved to Form:

By: _____
Steven C. DeBaun
General Counsel

By: _____
Phaedra Norton
City Attorney

Attest:

By: _____
Donesia Gause
City Clerk

EXHIBIT “A”**SCOPE OF SERVICES**

SCOPE OF WORK: The project will design and construct an underpass at the existing Third Street at-grade crossing of the Burlington Northern Santa Fe (BNSF) railroad in the City of Riverside. Third Street will be lowered from about Vine Street to Park Avenue and a bridge will be constructed to convey rail traffic. The project also requires the realignment of Commerce Street, construction of slopes, retaining walls, and storm water pump station as well as relocation of wet and dry utilities. Project design consists of the following phases:

- 1) Project Approval and Environmental Documents (PA&ED) phase – Complete preliminary engineering and obtain environmental clearance for the project;
- 2) Plans, Specifications, and Estimate (PS&E) phase - Prepare construction documents and advertise the project for bids
- 3) Right of Way phase - Determine Project's Right of Way impacts, prepare Legal descriptions and Plats, perform appraisals, acquire Temporary Construction Easements, and acquire part-take and full-take properties including Eminent Domain in order to advertise the project for bids and construct the proposed improvements.

EXHIBIT "A-1"**ESTIMATE OF COST**

Phase	TUMF	NON-TUMF	TOTAL
PA&ED	\$1,500,000	\$0	\$1,500,000
PS&E	\$2,500,000	\$0	\$2,500,000
RIGHT OF WAY	\$7,250,000	\$18,750,000	\$26,000,000
CONSTRUCTION	0	\$58,000,000	\$58,000,000
TOTAL	\$11,250,000	\$76,750,000	\$88,000,000

This Amendment is for the Right of Way Phase Only.

EXHIBIT "A-2"
PROJECT SCHEDULE

TIMETABLE:

Phase	Estimated Completion Date	Estimated Cost	Comments
PA&ED	12/2020	\$1,500,000	
PS&E	12/2022	\$2,500,000	
RIGHT OF WAY	07/2025	\$26,000,000	
CONSTRUCTION	05/2026	\$58,000,000	
TOTAL		\$88,000,000	

This Amendment is for the Right of Way Phase Only.



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Approval of the 2024 TUMF Southwest 5-Year Transportation Improvement Programs

Contact: Cameron Brown, Program Manager, cbrown@wrcog.us, (951) 405-6712

Date: September 9, 2024

Recommended Action(s):

1. Approve the 2024 TUMF Southwest Zone 5-Year Transportation Improvement Program.

Summary:

Staff and elected officials representing each jurisdiction within the TUMF Southwest Zone have met to discuss and approve funding allocations for individual projects in the TUMF Program. The result of these meetings is a 5-year, Zone-specific, Transportation Improvement Program (TIP), which must be approved by the WRCOG Executive Committee.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item to request approval of the 2024 TUMF Southwest Zone 5-year TIP. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #5 (Develop projects and programs that improve infrastructure and sustainable development in our subregion).

Discussion:

Background

WRCOG's 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. The WRCOG subregion is divided into five Zones with each jurisdiction a part of one Zone. The County of Riverside is a member of all TUMF Zones due to the unincorporated areas within each zone area. Representatives from the five TUMF Zones meet annually to allocate fee revenue to eligible infrastructure projects through a 5-year TIP. The TUMF Southwest Zone is represented by the Cities of Canyon Lake, Lake Elsinore, Murrieta, Temecula, Wildomar, and County of Riverside (District 2 & 3).

Present Situation

TUMF funds are programmed through a collaborative exercise involving each of WRCOG's member agencies which participate in the TUMF Program. The TUMF Southwest Zone Executive Committee has met and recommended approval of the TIP. The TIP has been vetted by WRCOG and member agency staff, and is being recommended for approval by the WRCOG Executive Committee.

The WRCOG Executive Committee is being asked to approve this TIP so that local agencies may enter into reimbursement agreements with WRCOG on the project funding allocated.

Prior Action(s):

August 15, 2024: The TUMF Southwest Zone Executive Committee recommended that the WRCOG Executive Committee approve the 2024 TUMF Southwest Zone 5-Year Transportation Improvement Program.

Financial Summary:

Transportation Department activities are included in the Agency's adopted Fiscal Year 2024/2025 Budget under the Transportation Department. TUMF revenue and expenditures are associated with Fund 220 for its programmatic costs and Fund 110 for its administrative costs.

Attachment(s):

[Attachment 1 - 2024 TUMF Southwest Zone 5-Year TIP](#)



Fiscal Year 2024/2025 Southwest Zone 5-Year Transportation Improvement Program

Fiscal Year		FY24-25	FY25-26	FY26-27	FY27-28	FY28-29	Current Programmed Phase Balance	Total Phase Payments/Expenditures	Reimbursement Agreement Values	Last Invoiced	Max Share (2021)	
Revised Forecast Revenues		\$5,500,000	\$ 5,665,000	\$ 5,834,950	\$ 6,009,999	\$ 6,190,298	\$ 66,332,608	\$ (30,339,210)				
Carryover Revenues (As of 4/2024)		\$28,886,762	\$ (15,203,175)	\$ (20,538,175)	\$ (26,995,897)	\$ (22,485,898)						
Available Revenues		\$34,386,762	\$ (9,538,175)	\$ (14,703,225)	\$ (20,985,898)	\$ (16,295,600)						
Programmed Expenditures		Phase*										
County of Riverside												
06-SW-RCY-1073	Clinton Keith Rd, I-215 to SR-79 (3.191 m. 4 to 6 lanes)	ROW	\$ (0)	\$ -	\$ -	\$ -	\$ -	\$ (0)	\$ (7,000,000)	\$ 7,000,000	12/9/2019	NA
		CON	\$1,250,170	\$ -	\$ -	\$ -	\$ -	\$1,250,170	\$ (8,749,830)	\$ 10,000,000		
20-SW-RCY-1195	Rancho California/Calle Contento - Roundabout	ROW	\$ 275,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 1,275,000	\$ -	\$ 275,000	Not Invoiced	Deducted from Rancho California (BtrfId Stg to Glen Oaks)
		CON	\$ -	\$ -	\$ 3,825,000	\$ -	\$ -	\$ 3,825,000	\$ -	\$ 2,225,000		
21-SW-RCY-1203	Grand Avenue (Ortega Hwy to Corydon Rd)	PLN	\$ 773,724	\$ -	\$ -	\$ -	\$ -	\$ 773,724	\$ -	\$ 774,000	Not Invoiced	\$ 31,290,000
23-SW-RCY-1204	Temescal Canyon Road (I-15 to Lake)	PLN	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ -	No Agreement	Not Invoiced	
24-SW-RCY-1312	Butterfield Stage Rd (MHS to Auld)	PLN	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ -	No Agreement	Not Invoiced	
City of Lake Elsinore												
05-SW-LEL-1060	SR-74/I-15 Interchange	PLN	\$ 735,756	\$ -	\$ -	\$ -	\$ -	\$ 735,756	\$ (1,898,495)	\$ 2,634,251	2/21/2023	\$ 19,099,000
		ENG	\$ 3,000,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 4,500,000	\$ -	\$ 3,000,000		
		ROW	\$ 643,535	\$ -	\$ -	\$ -	\$ -	\$ 643,535	\$ (1,356,465)	\$ 2,000,000		
		CON	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
07-SW-LEL-1115	Temescal Canyon Road Bridge (2 to 4 lanes)	PLN	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (264,517)	\$ 264,535	3/3/2020	\$ 2,448,000
		ENG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (287,685)	\$ 313,811		
		ROW	\$ 248,000	\$ -	\$ -	\$ -	\$ -	\$ 248,000	\$ -	\$ 248,000		
		CON	\$ -	\$ -	\$ 1,467,672	\$ -	\$ -	\$ 1,467,672	\$ -	\$ 1,467,672		
21-SW-LEL-1304	Nichols Rd/I-15 Interchange	PLN	\$ 2,321,173	\$ 1,250,000	\$ -	\$ -	\$ -	\$ 3,571,173	\$ (428,827)	\$ 4,000,000	2/29/2024	\$ 39,934,000
22-SW-LEL-1204	Franklin/I-15 Interchange	PLN	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	NA	\$ 15,763,000
		PSE	\$ 1,000,000	\$ 2,000,000	\$ 3,000,000	\$ -	\$ -	\$ 6,000,000	\$ -	\$ 6,000,000		
		ROW	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 1,500,000	\$ -	\$ 5,500,000	\$ -	\$ 5,500,000		
City of Murrieta												
16-SW-MUR-1188	Keller Road/I-215 Interchange	PLN	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	Not Invoiced	\$ 19,286,000
		ENG	\$ 1,250,000	\$ -	\$ -	\$ -	\$ -	\$ 1,250,000	\$ -	\$ 1,250,000		
		ROW	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
		CON	\$ -	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -	\$ 2,000,000	\$ -	\$ -		
22-SW-MUR-1191	Murrieta Hot Springs (Margarita to Winchester)	ROW	\$ 600,000	\$ -	\$ -	\$ -	\$ -	\$ 600,000	\$ -	\$ 600,000	Not Invoiced	\$ 3,021,000
		CON	\$ 2,100,000	\$ -	\$ -	\$ -	\$ -	\$ 2,100,000	\$ -	\$ 2,100,000		
24-SW-MUR-1313	Whitewood Rd (Clinton Keith Rd to Hunter Rd)	PLN	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	No Agreement	Not Invoiced	
		ENG	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		



Fiscal Year 2024/2025 Southwest Zone 5-Year Transportation Improvement Program

Fiscal Year			FY24-25	FY25-26	FY26-27	FY27-28	FY28-29	Current Programmed Phase Balance	Total Phase Payments/ Expenditures	Reimbursement Agreement Values	Last Invoiced	Max Share (2021)
Revised Forecast Revenues			\$5,500,000	\$ 5,665,000	\$ 5,834,950	\$ 6,009,999	\$ 6,190,298	\$ 66,332,608	\$ (30,339,210)			
Carryover Revenues (As of 4/2024)			\$28,886,762	\$ (15,203,175)	\$ (20,538,175)	\$ (26,995,897)	\$ (22,485,898)					
Available Revenues			\$34,386,762	\$ (9,538,175)	\$ (14,703,225)	\$ (20,985,898)	\$ (16,295,600)					
City of Temecula												
18-SW-TEM-1194	Western Bypass/Diaz Road (Rancho California to Cherry) 0-4 lanes, 2.14 miles	PLN/ENG	\$ 253,776	\$ -	\$ -	\$ -	\$ -	\$ 253,776	\$ (812,147)	\$ 1,065,923	11/10/2022	\$ 6,731,000
		CON	\$ 5,700,000	\$ -	\$ -	\$ -	\$ -	\$ 5,700,000	\$ -	\$ 4,500,000		
20-SW-TEM-1197	French Valley Phase III (Jefferson Ave to Ynez Rd)	ROW	\$ 1,698,595	\$ -	\$ -	\$ -	\$ -	\$ 1,698,595	\$ (1,301,405)	\$ 3,000,000	5/21/2023	\$ 12,760,000
City of Wildomar												
12-SW-WIL-1153	Clinton Keith Rd, I-15 to Copper Craft Dr (1.936 mi. 2 to 4 lanes)	PLN	\$ 745,028	\$ -	\$ -	\$ -	\$ -	\$ 745,028	\$ (519,112)	\$ 1,264,140	5/4/2022	\$ 4,858,000
		ENG	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
		ROW	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ -		
		CON	\$ 3,050,000	\$ -	\$ -	\$ -	\$ -	\$ 3,050,000	\$ -	\$ 3,048,860		
12-SW-WIL-1151	Bundy Canyon Road (Cherry Street to Sunset Rd) (4.524 mi. 2 to 4 lanes)	PLN	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (134,873)	\$ 82,247	1/19/2024	\$ 14,956,000
		ENG	\$ 1,527,834	\$ -	\$ -	\$ -	\$ -	\$ 1,527,834	\$ (961,919)	\$ 2,489,753		
		ROW	\$ 513,597	\$ -	\$ -	\$ -	\$ -	\$ 513,597	\$ (3,796,404)	\$ 4,310,000		
		CON	\$ 5,448,844	\$ -	\$ -	\$ -	\$ -	\$ 5,448,844	\$ (2,036,156)	\$ 7,485,000		
12-SW-WIL-1058	Palomar St, Mission Trail to Jefferson (3.568 mi. 2 to 4 lanes)	PLN	\$ 204,382	\$ -	\$ -	\$ -	\$ -	\$ 204,382	\$ (302,618)	\$ 507,000	12/5/2023	\$ 10,218,000
		ENG	\$ 218,494	\$ -	\$ -	\$ -	\$ -	\$ 218,494	\$ (281,506)	\$ 391,517		
		ROW	\$ 332,029	\$ -	\$ -	\$ -	\$ -	\$ 332,029	\$ (207,253)	\$ 422,000		
		CON	\$ 4,900,000	\$ -	\$ -	\$ -	\$ -	\$ 4,900,000	\$ -	\$ 1,941,000		
20-SW-WIL-1198	Bundy/I-15 Interchange	PLN	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000	\$ -	\$ 1,000,000	Not Invoiced	\$ 7,714,000
20-SW-WIL-1199	Wildomar Trail/I-15 Interchange	PLN	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000	\$ -	\$ 1,000,000	Not Invoiced	\$ 7,714,000
21-SW-WIL-1205	Bundy Canyon (Mission Trail to Orange (I-15))	PLN	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ -	No Agreement	Not Invoiced	\$ 8,178,000
		ENG	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -			
		ROW	\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ 350,000	\$ -			
		CON	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$ -			
Total Capital Programmed Expenditures			\$ 49,589,936	\$ 11,000,000	\$ 12,292,672	\$ 1,500,000	\$ -					
Total Programmed Balance Carryover*			\$ (15,203,175)	\$ (20,538,175)	\$ (26,995,897)	\$ (22,485,898)	\$ (16,295,600)					



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: I-REN Monthly Activities Update
Contact: Casey Dailey, Director of Energy & Environmental Programs, cdailey@wrcog.us, (951) 405-6720
Date: September 9, 2024

Recommended Action(s):

1. Receive and file.
-

Summary:

The Inland Regional Energy Network (I-REN) is a coalition of three councils of government: the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG), and the San Bernardino Council of Governments (SBCOG), encompassing Riverside and San Bernardino Counties, and all their respective jurisdictions within the region. These organizations have joined together to establish locally administered, designed, and delivered energy efficiency (EE) programs. This report will be provided each meeting to inform the Committee of I-REN's progress.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to provide regular updates on I-REN activities. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #6 (Develop and implement programs that support resilience for our region).

Discussion:

Background

In February 2021, I-REN applied for REN program administrator status to offer a portfolio of programs serving the Public, Codes & Standards, and Workforce Education & Training Sectors, with governance from WRCOG as the lead agency. In November 2021, I-REN was approved in Decision (D.) 21-11-013, Approval of Inland Regional Energy Network Energy Efficiency Business Plan, which funded I-REN to offer EE programs through program year 2027.

Present Situation

Public Sector (PS) Programs: I-REN will focus on two PS programs - the Technical Assistance and Strategic Energy Planning (TA) Program, and the Normalized Metered Energy Consumption (NMEC) Incentive Program. The TA Program helps agencies secure funding and financing to implement projects and supports through construction and project close-out. The NMEC Program (publicly known as Cash for Kilowatts) provides technical support such as eligibility screening and measurement & verification as well as incentives for meter-based energy savings. Combined with technical assistance and reinforcement of operations and management best practices, public agencies will experience maximized savings for their communities. Below are some of the notable activities for the Public Sector.

- I-REN was selected to present its unique incentive program, Cash for Kilowatts, during the poster board session at the week-long American Council of Energy Efficient Economy (ACEEE) Conference, which hosts nearly 1,000 participants from around the world every two years to discuss energy efficiency related topics, issues, and best practices. (See attachment).
- I-REN will host an I-REN-wide Public Sector Workshop on September 26, 2024, to discuss incentive offerings and provide agencies with Technical Assistance to identify potential projects and move projects forward with agencies ready to do so. Participants are to include Elected officials, City Managers, facilities managers, energy or sustainability staff, and any staff who are involved in energy efficiency retrofit projects. The workshop will have virtual options as well as 4 locations throughout the I-REN territory. Lunch will be provided to those who attend in person. The RSVP link can be found at [Public Sector Working Group RSVP](#).

Codes & Standards (C&S) Programs: The shared goal of I-REN's C&S Programs is to work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance. I-REN's programs will nurture the confidence, skills, and existing C&S knowledge of local building department staff, provide technical assistance to jurisdictions pursuing reach codes and local ordinances, and support building and construction industry actors to foster increased compliance. Below are some updates for the C&S Programs.

- I-REN will host a Codes & Standards Virtual Forum on September 18, 2024, which will have presentations from experts on Historic Building Retrofits, sharing their lessons learned and offer best practices.

Workforce Education & Training (WET) Programs: The goal of I-REN's WET cross-cutting sector activities is to ensure there is a trained workforce to support and realize EE savings goals across all market sectors. I-REN is committed to identifying the most effective and accessible ways to increase the number of skilled EE workers, especially those within underserved, hard-to-reach (HTR), tribal, and disadvantaged communities (DAC). Below are some updates for our WET programs.

- Workforce Education & Outreach RFP was released on August 6, 2024. The RFP will allow I-REN to contract with several on-call consultants and community based organizations to help with the education and outreach of I-REN workforce programs. The RFP was released through PlanetBids with a closing date of August 30, 2024.

I-REN Events / Activities Around the Region: In the coming reports, I-REN will include member agency updates and spotlights on successes from throughout the I-REN territory.

Table 1: Upcoming I-REN events/activities/sponsored events, etc.

Codes & Standards Fall Forum (virtual)	September 18, 2024, 9:00 a.m. - 11:00 a.m.	Online link here
I-REN Public Sector Workshop (virtual and in-person options)	September 26, 2024, 11:00 a.m. - 1:00 p.m.	RSVP HERE

Other Activities: [Sign up for I-REN updates](#) and learn more about all the programs, services and resources I-REN has to offer by visiting www.iren.gov or emailing info@iren.gov.

Prior Action(s):

None.

Financial Summary:

All costs associated with I-REN program activities are included in WRCOG's adopted Fiscal Year 2024/2025 Agency Budget under I-REN Program (Fund 180) in the Energy & Environmental Department.

Attachment(s):

[Attachment 1 - I-REN ACEEE Poster 2024](#)

Scaling Energy Efficiency in the Inland Empire:

An Innovative Incentive Strategy Designed *by* and *for* the Inland Empire



The Inland Regional Energy Network (I-REN) connects local governments, workers, and community partners with energy efficiency resources, education, and funding through no-cost programs. I-REN supports agencies served by Southern California Edison and/or SoCalGas within San Bernardino and Riverside Counties.

I-REN Sectors

- Public
- Workforce education & training
- Codes & standards

I-REN's Public Sector Goals

- Help public agencies:
- Build capacity and knowledge
 - Save energy and money
 - Address climate-related risks such as extreme heat
 - Improve their aging infrastructure

I-REN's Public Sector Services

Customized project management, technical assistance, strategic energy planning, facility benchmarking, funding assistance, and cash incentives for holistic energy efficiency projects



I-REN Timeline: From Launch to Design

2019

I-REN coalition formed

I-REN is a consortium of three councils of government.

2021

I-REN Business Plan approved by California Public Utilities Commission (CPUC)

Includes no-cost programs in three sectors: public, workforce education & training, and codes & standards.

2023

Region-wide orientations and surveys

I-REN conducted 18 orientations throughout the region. Feedback was collected from member agencies on program design and approved by the I-REN Executive Committee.

2024+

Project identification and implementation

Member agencies are working with I-REN to identify and implement holistic projects that will result in deep emissions reductions at critical community facilities.



How I-REN public agencies designed their own incentive program to address community needs

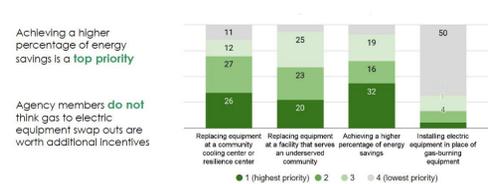
GOAL: Develop an incentive structure for the I-REN's normalized metered energy consumption (NMEC) program (publicly known as Cash for Kilowatts) that reflects the priorities and values of its member agencies.

Feedback

After I-REN program orientations, member agencies completed surveys with several questions related to funding and financing prioritization. Based on 81 survey responses, member agencies opted for monetary incentives to prioritize reducing overall energy consumption, replacing equipment at community cooling centers or resiliency centers, and achieving a higher percentage of energy savings.

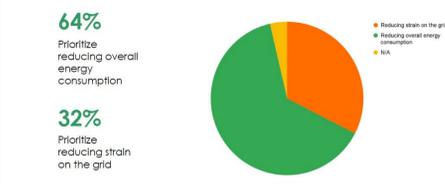
Incentives / Funds for EE Projects

Which of the following warrants additional incentives?



Incentives / Funds for EE Projects

What should monetary incentives prioritize?



Incentive Structure

Projects are incentivized based on claimable energy savings achieved. Tiered kWh incentive "kickers" are also available to encourage deep energy savings (over 15% total savings at the meter) and holistic projects. kWh incentives are doubled for projects that occur at a critical, cooling, or resiliency center.

Energy Savings	Base Incentive Rate	Total Savings Percentage*	Incentive Rate	Critical/Cooling/Resilience/Center Rate
kWh	\$0.50	Up to 15%	\$0.50/kWh	\$1.00/kWh
kW	\$200.00	16-30%	\$0.60/kWh	\$1.20/kWh
		31-50%	\$0.70/kWh	\$1.40/kWh
therms	\$1.00	Over 50%	\$1.00/kWh	\$2.00/kWh

*Total project savings will have to pass eligibility criteria per the NMEC Rulebook

I-REN was formed as a partnership based on CVAG, SBCOG, and WRCOG's shared belief in saving energy and increasing equity throughout San Bernardino and Riverside Counties.





Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Deferral of Judicial Foreclosures on Delinquent PACE Properties
Contact: Casey Dailey, Director of Energy & Environmental Programs, cdailey@wrcog.us, (951) 405-6720
Date: September 9, 2024

Recommended Action(s):

1. Adopt Resolution Number 27-24; A Resolution of the Executive Committee of the Western Riverside Council of Governments to defer foreclosure proceedings.
-

Summary:

WRCOG seeks approval to defer foreclosures on delinquent residential and commercial properties by assigning collection rights to a third party, First National Assets. On August 5, 2024, the Executive Committee approved an agreement allowing First National Assets to purchase these debts. As of August 12, 2024, 1.69% of PACE assessments for the 2023/2024 tax year, amounting to over \$2.5 million, are overdue.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to seek deferral on judicial foreclosure proceedings on delinquent PACE property owners. This aligns with Goal #3 of the Strategic Plan (Ensure fiscal solvency and stability of the Western Riverside Council of Governments).

Discussion:

Background

On September 14, 2015, the Executive Committee adopted a policy to review, on an annual basis, the quantity and amount of delinquencies and to determine the assignment of collection rights, or to begin the judicial foreclosure process. A delinquency occurs when a property owner fails to make timely payments on their property taxes, including the HERO Assessment installments, for the past tax year. This also includes any unpaid delinquent HERO Assessment installments along with any accrued penalties and interest.

Present Situation

PACE Delinquencies: Under WRCOG's Master Bond Indentures, it is stated that any property owner that is delinquent in his or her tax bill on October 1 of each year will be subject to WRCOG initiating a judicial foreclosure process. However, WRCOG may choose to defer judicial foreclosure if it has received or advanced funds to cover the delinquent amounts. Previous actions by the Executive Committee include:

- 2014/2015 Tax Year – deferred 44 of 9,125 parcels totaling \$97,687.67
- 2015/2016 Tax Year – deferred 155 of 21,811 parcels totaling \$401,909.87
- 2016/2017 Tax Year – deferred 237 of 38,367 parcels totaling \$697,431.96
- 2017/2018 Tax Year – deferred 386 of 51,395 parcels totaling \$1,126,270.20
- 2018/2019 Tax Year – deferred 630 of 52,844 parcels totaling \$1,790,780.64
- 2019/2020 Tax Year – deferred 822 of 43,120 parcels totaling \$2,095,416.37
- 2020/2021 Tax Year – deferred 510 of 39,387 parcels totaling \$1,460,205.69
- 2021/2022 Tax Year – deferred 385 of 29,374 parcels totaling \$1,151,487.92, plus 10 parcels from Tax Year 2020/2021 totaling \$2,424,360.06
- 2022/2023 Tax Year – deferred 394 of 22,401 parcels totaling \$1,218,874.96
- 2023/2024 Tax Year – deferred 381 of 20,045 residential and commercial parcels totaling \$2,470,172.75.

2023/2024 Tax Year Delinquencies: David Taussig & Associates (DTA), WRCOG's PACE Program Assessment Administrator, has issued a preliminary report detailing the delinquencies for the tax year (see Exhibit B in Attachment 1 of this Staff Report).

For the 2023/2024 Tax Year: WRCOG enrolled 19,962 residential PACE assessments on parcels totaling \$54,745,771.34. As of August 12, 2024, the total delinquency rate is 1.69%, or \$925,924.71. For comparison, at the same time last year, the delinquency rate for WRCOG residential PACE parcels was 1.63%. Additionally, WRCOG enrolled 83 commercial parcels under the Nuveen, Twain, and SAMAS Programs, totaling \$9,080,766.82.

Deferral of Judicial Foreclosure for Tax Year 2023/2024: WRCOG will assign its collection rights to a third party for 361 delinquent residential parcels totaling \$862,821.28 and 20 delinquent commercial parcels totaling \$1,607,351.47. The exception to this assignment is any delinquent assessments located in counties that operate under a Teeter Plan. In these cases, the county disburses 100% of the enrolled amount to WRCOG, regardless of whether the property owner has paid their taxes. Essentially, the county purchases the delinquency and is entitled to collect and retain any penalties and interest when the delinquent tax bill is eventually paid.

Deferral of Judicial Foreclosures: WRCOG is committed under certain provisions of its Master Indentures, related to its PACE Programs, to initiate and diligently pursue foreclosure actions in Superior Court by December 1 for any assessment liens that remain unpaid as of October 1 of that year. This process can be deferred if funds are advanced by WRCOG or a third party to cover the payments owed to bondholders.

In previous years, First National Assets (FNA) has purchased these delinquencies' receivables from WRCOG, enabling timely payments to bondholders each fiscal year. This arrangement allows WRCOG to request that the Executive Committee defer foreclosure since the funds have already been advanced to cover these delinquencies. The purchase of delinquency receivables serves two key purposes: first,

it ensures that no residential property owner faces judicial foreclosure due to non-payment of a PACE assessment; second, it guarantees that bondholders are paid in full and on time, thereby preventing any default on PACE bonds issued by WRCOG.

On August 5, 2024, the Executive Committee approved a Purchase and Sale Agreement for the Sale of Assessment Installment Receivables with FNA. Because there is a third-party entity which is purchasing the current delinquencies, staff is seeking adoption of Resolution Number 27-24, to defer judicial foreclosures on residential and commercial delinquencies (Attachment 1).

Prior Action(s):

August 5, 2024: The Executive Committee 1) adopted Resolution Number 24-24; A Resolution of the Executive Committee of the Western Riverside Council of Governments approving a Purchase and Sale Agreement for the sale of Assessment Installment Receivables, 2) authorized the Executive Director, or designee, to enter into a Purchase and Sale Agreement, substantially as to form, with First National Assets for the purchase of delinquent assessment receivables.

Financial Summary:

While the deferral of judicial foreclosures on delinquent PACE properties itself doesn't have a fiscal impact, WRCOG will receive a 7.5% fee as revenue as a result of the agreement with First National Assets, which will be booked under HERO Administration revenue. The exact amount is not known at this time; however an estimated amount of revenue of approximately \$100k was included in the FY 2023/2024 budget under the General Fund (Fund 110) under the HERO Program.

Attachment(s):

[Attachment 1 - Resolution Number 27-24 deferring judicial foreclosure](#)

RESOLUTION NUMBER 27-24

**A RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
DEFERRING FORECLOSURE PROCEEDINGS**

WHEREAS, the Western Riverside Council of Governments (“WRCOG”) has levied assessments under Chapter 29 of Part 3 of Division 7 of the California Streets and Highways Code (commencing with Section 5898.12 et seq.) (“Chapter 29”). Such assessments (“Assessments”) are payable in installments under the Improvement Bond Act of 1915, Division 10 of Part I (commencing with Section 8500) of the California Streets and Highways Code (“1915 Act”) on residential and commercial properties participating in the Energy Efficiency and Water Conservation Program for Western Riverside County and the California HERO Program established by WRCOG pursuant to Chapter 29 and the 1915 Act (collectively, the “WRCOG Program”), which are collected on the secured property tax roll of the County of Riverside; and

WHEREAS, WRCOG has issued bonds which are secured by the levy of Assessments pursuant to the Master Indentures (the “Master Indentures”) and the voluntary assessment contract listed on the attached Exhibit “A” and incorporated herein by reference ; and

WHEREAS, certain installments of such assessments are delinquent (the “Delinquent Assessments”) and are attached hereto as Exhibit “B” and incorporated herein by reference; and

WHEREAS, each Master Indenture requires that WRCOG proceed with judicial foreclosure or defer judicial foreclosure within 60 days from the delinquency determination; and

WHEREAS, WRCOG and FNA California, LLC, entered into that certain Purchase and Sale Agreement (the “Agreement”) pursuant to which FNA California, LLC, purchased certain rights WRCOG is entitled to receive arising from the collection of certain delinquent assessments for the tax years specified in Agreement and paid to WRCOG, amongst other things, an amount equal to the Delinquent Assessments; and

WHEREAS, WRCOG has applied amounts received from the Agreement to pay debt service on the Bonds in a timely manner; and

WHEREAS, as the debt service on the Bonds has been paid in a timely manner, WRCOG has determined that it is in the best interests of WRCOG at this time to defer the judicial foreclosures of the Delinquent Assessments.

NOW, THEREFORE, BE IT RESOLVED by the Executive Committee of the Western Riverside Council of Governments as follows:

Section 1. The above recitals are true and correct.

Section 2. The Executive Committee of the Western Riverside Council of Governments hereby approves deferring the judicial foreclosure of the Delinquent Assessments attached hereto as Exhibit "A" and incorporated herein by reference.

PASSED AND ADOPTED at a meeting of the Executive Committee of the Western Riverside Council of Governments held on September 9, 2024.

Rita Rogers, Chair
Executive Committee

Dr. Kurt Wilson, Secretary
Executive Committee

Approved as to form:

Best Best & Krieger, LLP
Bond Counsel

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

EXHIBIT "A"

LIST OF MASTER INDENTURES

- (a) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of September 1, 2013, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (Energy Efficiency and Water Conservation Program for Western Riverside County) (First Residential Property Tranche – Phase Three), as amended by the First Amendment to the Master Indenture dated as of February 1, 2014.
- (b) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of February 1, 2014, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (First Residential Property Tranche – Phase One)
- (c) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of August 1, 2014, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Second Residential Property Tranche – Phase One)
- (d) Amended and Restated Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of March 1, 2015, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Second Residential Property Tranche – Phase One)
- (e) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of March 1, 2015 relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Third Residential Property Tranche – Phase One)
- (f) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of July 1, 2015, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Fourth Residential Property Tranche – Phase One);
- (g) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of October 1, 2015, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Fifth Residential Property Tranche – Phase One)
- (h) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of January 1, 2016, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Sixth Residential Property Tranche – Phase One)
- (i) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as

- of May 1, 2016, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Seventh Residential Property Tranche – Phase One)
- (j) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of June 1, 2016, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Lifestyle Residential Property Tranche – Phase One)
 - (k) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of September 1, 2016, relating to the Western Riverside Council of Governments Limited Subordinate Obligation Improvement Bonds (WRCOG HERO Program) (First Residential Property Tranche – Phase One)
 - (l) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of September 1, 2016, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Eighth Residential Property Tranche – Phase One)
 - (m) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of January 1, 2017, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG Program and California HERO Program) (Ninth Residential Property Tranche – Phase One)
 - (n) Amended and Restated Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of March 1, 2017, relating to the Western Riverside Council of Governments Limited Subordinate Obligation Improvement Bonds (WRCOG HERO Program) (First Residential Property Tranche – Phase One)
 - (o) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of May 1, 2017, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG HERO Program) (Tenth Residential Property Tranche – Phase One)
 - (p) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of August 1, 2017, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG HERO Program) (Eleventh Residential Property Tranche – Phase One)
 - (q) Master Indenture by and between WRCOG and Wilmington Trust, National Association, as Successor Trustee to Deutsche Bank National Trust Company, as Trustee, dated as of January 1, 2018, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG HERO Program) (Twelfth Residential Property Tranche – Phase One)
 - (r) Master Indenture by and between WRCOG and The Bank of New York Mellon Trust Company, N.A., as Trustee, dated as of July 1, 2018, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG HERO Program) (Thirteenth Residential Property Tranche – Phase One)

- (s) Master Indenture by and between WRCOG and The Bank of New York Mellon Trust Company, N.A., as Trustee, dated as of September 1, 2019, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (WRCOG HERO Program) (Fourteenth Residential Property Tranche – Phase One)
- (t) Indenture of Trust by and between WRCOG and The Bank of New York Mellon Trust Company, N.A., as Trustee, dated as of February 1, 2020, relating to the Western Riverside Council of Governments Limited Obligation Refunding Bonds, Series 2020 (Commercial Program)
- (u) Indenture of Trust No. 2 by and between WRCOG and Wilmington Trust, National Association, dated as of December 18, 2019, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (Twain Commercial PACE Program) (First Commercial Property Tranche) Series No. 20191218-WR-TC-25
- (v) Indenture of Trust No. 3 by and between WRCOG and Wilmington Trust, National Association, dated as of April 22, 2021, relating to the Western Riverside Council of Governments Limited Obligation Improvement Bonds (Twain Commercial PACE Program) (First Commercial Property Tranche) Series No. 20210422-WR-TC-CUR-30
- (w) Master Indenture by and between WRCOG and The Bank of New York Mellon Trust Company, N.A., as Trustee, dated as of February 1, 2021 relating to the Greenworks Commercial PACE Program Limited Obligation Improvement Bonds, as supplemented by Supplemental Indenture No. 3 dated as of February 17, 2021
- (x) Agreement to Pay Assessment and Finance Improvements, dated as of September 30, 2021 by and between WRCOG and 2108 Pico Owner, LLC relating to 2108 ½ and 2114 Pico Blvd., Santa Monica, CA 90401

EXHIBIT "B"
DELINQUENT ASSESSMENTS

Owner Name	Sitius Address	Tax Parcel Number	Participant ID	Bond Series	Levy Amount	Paid Amount	Delinquent Installment		Delinquent Amount	Penalty [3]	Interest [4]	Total Delinquent	Total Assessed Value [1]	County	Notes
							1st	2nd							
David Kimura	18780 Madison Ave Castro Valley CA 94546	084C-0796-038-00	CA001101979	170922-CA-RA-HPR-R-10C	\$2,418.80	\$0.00	X	X	\$2,418.80	\$241.88	\$72.56	\$2,733.24	\$994,500.00	Alameda	
Nancy Barnum-Moreland	2500 Lancaster Ct Hayward CA 94542	425-0360-017-00	CA001102209	180112-CA-RA-HPR-R-20C	\$2,048.20	\$0.00	X	X	\$2,048.20	\$204.82	\$61.45	\$2,314.47	\$105,922.00	Alameda	
Crystal Graves	3211 SACRAMENTO ST BERKELEY CA 94702	052-1536-014-00	CA001102660	190308-CA-RA-HPR-R-25EF	\$832.92	\$0.00	X	X	\$832.92	\$83.29	\$24.99	\$941.20	\$263,304.00	Alameda	
Andrea Tang, Phuco Tang	9866 LAWLOR ST OAKLAND CA 94605	048-5606-028-00	CA001102833	191018-CA-RA-HPR-R-25F	\$2,092.86	\$1,046.43	X	X	\$1,046.43	\$104.64	\$31.39	\$1,182.46	\$446,028.00	Alameda	
Earnest Lockhart	10431 BYRON AVE OAKLAND CA 94603	047-5573-013-00	CA001102854	200214-CA-RA-HPR-R-25F	\$2,363.86	\$1,181.93	X	X	\$1,181.93	\$118.19	\$35.46	\$1,335.58	\$173,756.00	Alameda	
Robert Jackson, Tamara Jackson	16091 Overlook Ter Pioneer CA 95666	023-140-011-000	CA005109474	180216-CA-RA-HPR-R-10CD	\$2,519.70	\$0.00	X	X	\$2,519.70	\$251.97	\$75.59	\$2,847.26	\$213,601.00	Amador	
Joe Pearce	3647 Ashley Ave Oroville CA 95966	033-452-014-000	CA007109987	170428-CA-RA3-HPR-R-15C	\$1,377.16	\$0.00	X	X	\$1,377.16	\$137.72	\$41.31	\$1,556.19	\$150,714.00	Butte	
Damon Munn	1191 Mount Ida Rd Oroville CA 95966	079-330-011-000	CA007110366	190719-CA-RA-HPR-R-20F	\$1,114.16	\$557.08	X	X	\$557.08	\$55.71	\$16.71	\$629.50	\$198,292.00	Butte	
Barbara Giddens	1720 Lone Pine Rd Shingle Springs 95682	091-150-013-000	RED95798N-160315	160729-CA-RA-R-20C	\$2,087.46	\$0.00	X	X	\$2,087.46	\$208.75	\$62.62	\$2,358.83	\$259,149.00	El Dorado	
Karen Selby	935 Cumorah Ct Placerville CA 95667	089-050-071-000	CA017104945	170609-CA-RA2-HPRCA2-R-10C	\$2,983.10	\$1,491.55	X	X	\$1,491.55	\$149.16	\$44.75	\$1,685.46	\$376,537.00	El Dorado	
Parmala Bangar, Satnam Bangar	7444 N 4th St Fresno 93720	303-261-04	RFC92270N-141108	150406-BE-R-02-10	\$2,927.22	\$1,463.61	X	X	\$1,463.61	\$146.36	\$43.91	\$1,653.88	\$294,852.00	Fresno	
Sandy Johnson	1123 S 8th St Fresno 93702	470-202-22	RFC95147N-140519	150406-BE-R-04-20	\$1,169.50	\$0.00	X	X	\$1,169.50	\$116.95	\$35.09	\$1,321.54	\$39,105.00	Fresno	
James Ortega	1827 S Sierra Vista Ave Fresno 93702	471-244-07	RFC92213N-141112	150406-BE-R-04-20	\$1,630.38	\$0.00	X	X	\$1,630.38	\$163.04	\$48.91	\$1,842.33	\$52,254.00	Fresno	
Karen Connelly	5127 N Teilmann Ave Fresno 93711	417-180-24	RFC87062N-150701	151022-BE-WR-R-03-10C	\$2,318.26	\$0.00	X	X	\$2,318.26	\$231.83	\$69.55	\$2,619.64	\$267,641.00	Fresno	
Laurie Melton	1489 W Olson Ave Reedley 93654	365-203-04	RFC90221N-150325	151022-BE-WR-R-07-20C	\$2,190.08	\$0.00	X	X	\$2,190.08	\$219.01	\$65.70	\$2,474.79	\$170,317.00	Fresno	
Alysha Graham, Scott Moline, Twyla Moline	2614 Dewitt AVE Clovis 93612	499-131-11	RFC84203P-150915	160114-BE-WR-R-04-20C	\$2,617.72	\$0.00	X	X	\$2,617.72	\$261.77	\$78.53	\$2,958.02	\$303,547.00	Fresno	
Darrell Coufal	404 E Fedora AVE Fresno 93704	435-143-07	RFC82376N-151112	160512-BE-CA-RA2-R-07-15C	\$2,083.40	\$0.00	X	X	\$2,083.40	\$208.34	\$62.50	\$2,354.24	\$56,384.00	Fresno	
Gregorio Perez, Maria Perez	495 Pettit St Parlier 93648	355-222-20	RFC80105N-160211	160512-BE-CA-RA-R-03-15C	\$2,124.64	\$1,062.32	X	X	\$1,062.32	\$106.23	\$31.87	\$1,200.42	\$91,914.00	Fresno	
Mary Mehia	276 W Locust Ave Pinedale 93650	303-121-23	RFC83822N-150926	160512-BE-CA-RA-R-04-20C	\$1,254.78	\$0.00	X	X	\$1,254.78	\$125.48	\$37.64	\$1,417.90	\$67,671.00	Fresno	
Freddie Brewer	2824 Sussex Way Fresno 93726	436-122-18S	RFC82361N-151112	160512-BE-CA-RA-R-04-20C	\$1,861.40	\$0.00	X	X	\$1,861.40	\$186.14	\$55.84	\$2,103.38	\$119,984.00	Fresno	
Adam Sanchez	625 J St Sanger 93657	320-113-07	CA019109847	160617-CA-RA-R-15C	\$1,967.66	\$0.00	X	X	\$1,967.66	\$196.77	\$59.03	\$2,223.46	\$69,069.00	Fresno	
Harry Silva	1934 W Pontiac Way Fresno CA 93705	433-151-34	CA019110073	160708-CA-RA-R-15C	\$1,757.56	\$0.00	X	X	\$1,757.56	\$175.76	\$52.73	\$1,986.05	\$133,343.00	Fresno	
Horace Hill, Wanda Hill	5786 E Holland Ave Fresno 93727	499-205-09	CA019110962	160909-CA-RA-R-15C	\$2,408.90	\$0.00	X	X	\$2,408.90	\$240.89	\$72.27	\$2,722.06	\$43,870.00	Fresno	
Ernest Henry	2835 Gettysburg Ave Fresno 93726	427-194-11	CA019111106	160930-CA-RA-R-15C	\$1,819.86	\$0.00	X	X	\$1,819.86	\$181.99	\$54.60	\$2,056.45	\$68,565.00	Fresno	
Ernest Crutchfield	3027 Saginaw Way Fresno 93726	436-215-08	CA019111062	161007-CA-RA2-R-15C	\$2,392.44	\$0.00	X	X	\$2,392.44	\$239.24	\$71.77	\$2,703.45	\$109,106.00	Fresno	
Jacinto Dela Cruz, Mary Dela Cruz	7150 N Everest Ave Fresno 93722	504-123-05S	CA019109688	161007-CA-RA2-R-20C	\$1,901.68	\$0.00	X	X	\$1,901.68	\$190.17	\$57.05	\$2,148.90	\$93,914.00	Fresno	
Celedonio Arceo, Maria Arceo	375 W Palm Ave Reedley 93654	363-152-10	CA019111368	161014-CA-RA-R-10C	\$1,736.98	\$868.49	X	X	\$868.49	\$86.85	\$26.05	\$981.39	\$176,626.00	Fresno	
Lela Carter	6563 N Meridian AVE Fresno 93710	410-082-07	CA019111566	161202-CA-RA-R-15C	\$4,114.64	\$2,057.32	X	X	\$2,057.32	\$205.73	\$61.72	\$2,324.77	\$187,039.00	Fresno	
Rogelio Garcia	3544 Summit Way Riverdale 93656	053-450-10	CA019112149	161216-CA-RA-R-15C	\$1,944.48	\$972.24	X	X	\$972.24	\$97.22	\$29.17	\$1,098.63	\$170,807.00	Fresno	
Barbara McDowell	328 E Grove AVE Fresno 93706	479-151-02	CA019112423	161216-CA-RA-R-15C	\$1,721.36	\$0.00	X	X	\$1,721.36	\$172.14	\$51.64	\$1,945.14	\$170,000.00	Fresno	
Jessie Martin, Rosie Martin	2526 Martin Ave Fresno 93706	479-171-08	CA019110658	161216-CA-RA-R-20C	\$1,604.16	\$0.00	X	X	\$1,604.16	\$160.42	\$48.12	\$1,812.70	\$60,944.00	Fresno	
Lorene Vaillancour	467 W Keats Ave Fresno 93704	417-320-06	CA019111531	161223-CA-RA-R-25C	\$1,957.91	\$0.00	X	X	\$1,957.91	\$195.79	\$58.74	\$2,212.44	\$134,702.00	Fresno	
Carol Cederquist, Kenneth Cederquist	2307 Menlo Ave Clovis 93611	550-073-23	CA019112896	170113-CA-RA2-R-15C	\$2,797.08	\$0.00	X	X	\$2,797.08	\$279.71	\$83.91	\$3,160.70	\$244,425.00	Fresno	
Lynn Alves	2461 17th Ave Kingsburg 93631	394-112-05	CA019112802	170113-CA-RA2-R-25C	\$2,205.36	\$0.00	X	X	\$2,205.36	\$220.54	\$66.16	\$2,492.06	\$88,562.00	Fresno	
Augustine Martinez, Maria Martinez	417 W Palm Ave Reedley 93654	363-152-08	CA019113200	170210-CA-RA-R-10C	\$994.12	\$497.06	X	X	\$497.06	\$49.71	\$14.91	\$561.68	\$188,159.00	Fresno	
Ger Yang, Seethong Yang	358 E Kaviland Ave Fresno 93706	479-191-17	CA019113252	170217-CA-RA-R-15C	\$3,105.68	\$0.00	X	X	\$3,105.68	\$310.57	\$93.17	\$3,509.42	\$191,017.00	Fresno	
Lorene Vaillancour	467 W Keats Ave Fresno 93704	417-320-06	CA019112649	170217-CA-RA-R-25C	\$1,668.17	\$0.00	X	X	\$1,668.17	\$166.82	\$50.05	\$1,885.04	\$134,702.00	Fresno	
Ernest Becker	44 E Fountain Way Fresno 93704	435-291-05	CA019113545	170310-CA-RA3-R-25C	\$1,823.00	\$0.00	X	X	\$1,823.00	\$182.30	\$54.69	\$2,059.99	\$55,212.00	Fresno	
George Huerta	20946 S Del Rio St Laton CA 93242	057-182-09	CA019113656	170421-CA-RA-HPR-R-15C	\$820.68	\$0.00	X	X	\$820.68	\$82.07	\$24.62	\$927.37	\$55,967.00	Fresno	
James Rodriguez	1214 K St Sanger CA 93657	325-051-21	CA019114109	170512-CA-RA3-HPR-R-10C	\$2,922.56	\$0.00	X	X	\$2,922.56	\$292.26	\$87.68	\$3,302.50	\$64,756.00	Fresno	
Luis Torres, Maria Torres	709 E Washington Ave Reedley CA 93654	370-203-01	CA019112989	170519-CA-RA3-HPR-R-15C	\$2,128.12	\$0.00	X	X	\$2,128.12	\$212.81	\$63.84	\$2,404.77	\$68,567.00	Fresno	
Jose Zepeda, Ana Zepeda	3241 E Lowe Ave Fresno CA 93702	470-106-12	CA019115248	170629-CA-RA3-HPRCA4-R-15C	\$1,052.50	\$0.00	X	X	\$1,052.50	\$105.25	\$31.58	\$1,189.33	\$80,868.00	Fresno	
Theotis Crump	2016 S Sierra Vista AVE Fresno CA 93702	471-315-10	CA019114518	170629-CA-RA3-HPRCA4-R-25C	\$1,428.26	\$0.00	X	X	\$1,428.26	\$142.83	\$42.85	\$1,613.94	\$62,443.00	Fresno	
Andrew Brewer	1335 E Calwa AVE Fresno CA 93706	479-243-20	CA019115008	170629-CA-RA3-HPR-R-10C	\$1,619.36	\$0.00	X	X	\$1,619.36	\$161.94	\$48.58	\$1,829.88	\$35,487.00	Fresno	
Amanda Moran-Hines, Kevin Hines	5117 W Bluff Ave Fresno CA 93702	502-271-31S	CA019114832	170714-CA-RA3-HPRCA4-R-15C	\$8,989.52	\$0.00	X	X	\$8,989.52	\$898.95	\$269.69	\$10,158.16	\$295,744.00	Fresno	
Samuel Federico, Linda Federico	10618 N Maple Ave Fresno CA 93730	578-010-06	CA019115511	170908-CA-RA-HPR-R-15C	\$2,824.32	\$1,412.16	X	X	\$1,412.16	\$141.22	\$42.36	\$1,595.74	\$158,816.00	Fresno	
Maria Cuevas	1917 Cooper St Selma CA 93662	358-562-38	CA019115365	171006-CA-RA-HPR-R-15C	\$2,911.42	\$0.00	X	X	\$2,911.42	\$291.14	\$87.34	\$3,289.90	\$160,405.00	Fresno	
Samuel Federico, Linda Federico	10618 N Maple Ave Fresno CA 93730	578-010-06	CA019114523	171027-CA-RA-HPR-R-10C	\$3,008.00	\$1,504.00	X	X	\$1,504.00	\$150.40	\$45.12	\$1,699.52	\$158,816.00	Fresno	
Benjamin Aguilar, Marlise Aguilar	4215 Barcus Ave Fresno CA 93722	510-302-24	CA019116642	171117-CA-RA-HPR-R-20C	\$3,159.00	\$0.00	X	X	\$3,159.00	\$315.90	\$94.77	\$3,569.67	\$126,223.00	Fresno	
Samuel Federico, Linda Federico	10618 N Maple Ave Fresno CA 93730	578-010-06	CA019116832	180112-CA-RA-HPR-R-25C	\$3,941.12	\$1,970.56	X	X	\$1,970.56	\$197.06	\$59.12	\$2,226.74	\$158,816.00	Fresno	
Patrick McDonough	2305 E Brown Ave Fresno CA 93703	445-192-19	CA019117096	180126-CA-RA3-HPR-R-25CD	\$2,201.16	\$0.00	X	X	\$2,201.16	\$220.12	\$66.03	\$2,487.31	\$113,777.00	Fresno	
Linda Christner	959 Harvard Ave Clovis, CA 93612	497-103-04	CA019116594	180406-CA-RA-HPR-R-25CDE	\$2,470.16	\$0.00	X	X	\$2,470.16	\$247.02	\$74.10	\$2,791.28	\$83,737.00	Fresno	
Bobby Randleman, Katie Patterson-Wilson	2827 E St Selma CA 93662	389-071-07	CA019116842	180504-CA-RA-HPR-R-15CED	\$1,809.36	\$904.68	X	X	\$904.68	\$90.47	\$27.14	\$1,022.29	\$94,676.00	Fresno	
Harry Silva	1934 W Pontiac Way Fresno CA 93705	433-151-34	CA019116624	180614-CA-HLP-LEF-HPR-R-25AB-1	\$822.26	\$0.00	X	X	\$822.26	\$82.23	\$24.67	\$929.16	\$133,343.00	Fresno	
Arturo Rodriguez	172 Hoover St Coalinga CA 93210	071-151-06S	CA019117070	180824-CA-RA-HPR-R-25DE	\$1,233.72	\$0.00	X	X	\$1,233.72	\$123.37	\$37.01	\$1,394.10	\$93,289.00	Fresno	
Vanetta Hannah, Hanunah Shabazz	1136 E DOROTHY ST Fresno CA 93706	479-254-04	CA019117950	180928-CA-RA-HPR-R-10DE	\$2,004.04	\$1,002.02	X	X	\$1,002.02	\$100.20	\$30.06	\$1,132.28	\$68,597.00	Fresno	
Ivan Sigmond Ballesteros	1346 E PRINCETON AVE FRESNO CA 93704	443-261-05	CA019118778	190524-CA-RA-HPR-R-15EF	\$1,944.82	\$972.41	X	X	\$972.41	\$97.24	\$29.17	\$1,098.82	\$288,000.00	Fresno	
Jose Ramos, Maria Ramos	9415 S COLUSA AVE San Joaquin CA 93660	033-020-50	CA019118653	190524-CA-RA-HPR-R-25EF	\$2,670.04	\$0.00	X	X	\$2,670.04	\$267.00	\$80.10	\$3,017.14	\$121,107.00	Fresno	
Federico Ramirez	287 J ST MENDOTA CA 93640	013-313-08	CA019119365	200424-CA-RA-HPR-R-05F	\$2,927.30	\$0.00	X	X	\$2,927.30	\$292.73	\$87.82	\$3,307.85	\$60,200.00	Fresno	
Anna Shelton	515 W WELDON AVE FRESNO CA 93705	444-192-19	CA019119425	200714-CA-RA-HPR-R-15FG	\$2,851.92	\$0.00	X	X	\$2,851.92	\$285.19	\$85.56	\$3,222.67	\$104,581.00	Fresno	
Maria Raudates	805 Paseo De Los Virreyes St Calexico 92231	058-734-008-000	RIC95648N-150428	150713-BE-WR-R-03-10C	\$1,431.10	\$715.55	X	X	\$715.55	\$71.56	\$21.47	\$808.58	\$229,395.00	Imperial	
Raquel Villa	825 E 3rd St Calexico 92231	058-502-013-000	CA025108595	161114-CA-RA-R-10C	\$1,269.18	\$0.00	X	X	\$1,269.18	\$126.92	\$38.08	\$1,434.18	\$183,651.00	Imperial	
Maria Martinez	582 El Centro Ave El Centro 92243	044-421-023													

Owner Name	Sitius Address	Tax Parcel Number	Participant ID	Bond Series	Levy Amount	Paid Amount	Delinquent Installment		Delinquent Amount	Penalty [3]	Interest [4]	Total Delinquent	Total Assessed Value [1]	County	Notes
							1st	2nd							
Hilaria Quiocho, Ludger Quiocho, Richard Quiocho	1014 Valencia AVE Delano 93215	410-132-25-00-4	RKC78266A-160223	160527-CA-RA-R-20C	\$1,842.86	\$921.43		X	\$921.43	\$92.14	\$27.64	\$1,041.21	\$113,050.00	Kern	
Mary Gonzaga	2013 Sandy Ln Bakersfield 93306	130-104-03-00-4	CA029104289	160624-CA-RA2-R-15C	\$806.42	\$403.21		X	\$403.21	\$40.32	\$12.10	\$455.63	\$142,081.00	Kern	
Dietha Tenmento, William Smith	103 Garces Hwy Delano 93215	037-274-04-00-7	RKC77789P-160307	160805-CA-RA2-R-20C	\$1,961.26	\$0.00	X	X	\$1,961.26	\$196.13	\$58.84	\$2,216.23	\$41,749.00	Kern	
Isaias Manriquez, Stephanie Manriquez	1318 Sterling Rd Bakersfield 93306	134-367-06-00-8	CA029105495	161104-CA-RA-R-10C	\$4,202.30	\$2,101.15		X	\$2,101.15	\$210.12	\$63.03	\$2,374.30	\$120,209.00	Kern	
Ellen Bane	139 Spruce St Bakersfield 93304	008-212-03-00-0	CA029105864	170113-CA-RA2-R-20C	\$1,146.84	\$0.00	X	X	\$1,146.84	\$114.68	\$34.41	\$1,295.93	\$131,235.00	Kern	
Jack Weimer, Peggy Weimer	5305 Cameron CT Bakersfield CA 93309	355-071-02-00-1	CA029107712	170519-CA-RA3-HPR-R-15C	\$2,705.48	\$0.00	X	X	\$2,705.48	\$270.55	\$81.16	\$3,057.19	\$84,908.00	Kern	
Wesley Crawford, Shontelle Crawford	805 El Tor Dr Bakersfield CA 93304	011-421-03-00-8	CA029108274	170728-CA-RA3-HPR-R-10C	\$5,919.82	\$0.00	X	X	\$5,919.82	\$591.98	\$177.59	\$6,689.39	\$211,048.00	Kern	
Zenon Garza, Sulema Ramos	5405 Banning ST Bakersfield CA 93314	104-121-15-00-3	CA029108729	170929-CA-RA-HPR-R-15C	\$2,516.88	\$0.00	X	X	\$2,516.88	\$251.69	\$75.51	\$2,844.08	\$262,833.00	Kern	
Humberto Villarreal, Maria Villarreal	632 Langford Ave Arvin CA 93203	192-221-18-00-4	CA029108983	180209-CA-RA-HPR-R-15CD	\$2,060.36	\$0.00	X	X	\$2,060.36	\$206.04	\$61.81	\$2,328.21	\$71,960.00	Kern	
James Virden, Kelly Virden	243 E Spruce Ave Lemoore 93245	021-280-067-000	RKI95822C-150421	150713-BE-WR-R-07-20C	\$1,862.26	\$931.13		X	\$931.13	\$93.11	\$27.93	\$1,052.17	\$90,560.00	Kings	
Albert Bechtel, Carol Bechtel	474 W Spruce Ave Lemoore 93245	021-430-036-000	RKI95753N-150609	151022-BE-WR-R-07-20C	\$2,439.48	\$0.00	X	X	\$2,439.48	\$243.95	\$73.18	\$2,756.61	\$134,871.00	Kings	
Angelita Martinez, Jesse Martinez	625 Hill St Lemoore 93245	020-012-008-000	CA031108968	160603-CA-RA2-R-15C	\$2,038.86	\$1,019.43		X	\$1,019.43	\$101.94	\$30.58	\$1,151.95	\$72,105.00	Kings	
Pamela Oliveira	15900 18th Ave Lemoore 93245	024-110-034-000	CA031109040	160722-CA-RA-R-15C	\$1,455.70	\$0.00	X	X	\$1,455.70	\$145.57	\$43.67	\$1,644.94	\$102,168.00	Kings	
Pamela Oliveira	15900 18th Ave Lemoore 93245	024-110-034-000	CA031109048	160902-CA-RA-R-20C	\$653.70	\$0.00	X	X	\$653.70	\$65.37	\$19.61	\$738.68	\$102,168.00	Kings	
Daniel Hernandez	1710 Chase Ave Corcoran 93212	032-175-003-000	CA031109191	161114-CA-RA-R-10C	\$1,699.16	\$0.00	X	X	\$1,699.16	\$169.92	\$50.97	\$1,920.05	\$87,700.00	Kings	
Margaret Juarez	313 E Malone St Hanford CA 93230	010-113-005-000	CA031109253	161216-CA-RA-R-20C	\$2,087.13	\$0.00	X	X	\$2,087.13	\$208.71	\$62.61	\$2,358.45	\$110,842.00	Kings	
Manuel Lopez	2535 Plum Ln Hanford CA 93230	007-340-020-000	CA031109776	170915-CA-RA-HPR-R-15C	\$4,755.34	\$0.00	X	X	\$4,755.34	\$475.53	\$142.66	\$5,373.53	\$202,419.00	Kings	
Margaret Juarez	313 E Malone St Hanford CA 93230	010-113-005-000	CA031109730	180112-CA-RA-HPR-R-15C	\$2,360.47	\$0.00	X	X	\$2,360.47	\$236.05	\$70.81	\$2,667.33	\$110,842.00	Kings	
Lynn Turner	1419 Fitzgerald Ln Hanford CA 93230	010-320-008-000	CA031109992	180608-CA-RA-HPR-R-25CDE	\$1,317.18	\$658.59		X	\$658.59	\$65.86	\$19.76	\$744.21	\$88,302.00	Kings	
Ramon Gloria	2556 SHERMAN AVE CORCORAN CA 93212	034-143-059-000	CA031110292	200424-CA-RA-HPR-R-20F	\$1,060.26	\$0.00	X	X	\$1,060.26	\$106.03	\$31.81	\$1,198.10	\$133,620.00	Kings	
Erica England	37922 Janus Dr Palmdale 93350	3020-032-014	RLA94700N-140606	140711-CA-PB-R-15B	\$3,381.14	\$0.00	X	X	\$3,381.14	\$338.11	\$101.43	\$3,820.68	\$172,579.00	Los Angeles	
Armando Cabrera, Rose Cabrera	820 W Harding Way Montebello 90640	6345-005-019	RLA83573N-141213	150406-BE-R-02-10	\$4,953.00	\$0.00	X	X	\$4,953.00	\$495.30	\$148.59	\$5,596.89	\$66,268.00	Los Angeles	
Rosario Alcaraz, Santos Alcaraz	37504 Manchester St Palmdale 93352	3023-036-098	RLA89975N-140821	150406-BE-R-04-20	\$2,229.57	\$0.00	X	X	\$2,229.57	\$222.96	\$66.89	\$2,519.42	\$202,742.00	Los Angeles	
Angel Nieves, Angela Nieves	1010 Douglass Dr Pomona 91768	8360-008-001	RLA89570N-140828	150406-BE-R-04-20	\$2,162.23	\$0.00	X	X	\$2,162.23	\$216.22	\$64.87	\$2,443.32	\$128,610.00	Los Angeles	
Celida Garibaldo, Francisco Garibaldo	14143 Ballentine Pl Baldwin Park 91706	8544-011-009	RLA95654C-140527	150406-BE-R-04-20	\$1,847.31	\$0.00	X	X	\$1,847.31	\$184.73	\$55.42	\$2,087.46	\$412,277.00	Los Angeles	
Jana Bautista, Maria Bautista	1656 W Lancaster Blvd Lancaster 93534	3122-006-003	RLA80558N-150218	150713-BE-WR-R-04-10B	\$2,433.56	\$1,216.78		X	\$1,216.78	\$121.68	\$36.50	\$1,374.96	\$137,292.00	Los Angeles	
Jose Cabrera, Maria Cabrera	2218 Notre Dame Ave Pomona 91766	8329-008-022	RLA81464N-150131	150713-BE-WR-R-04-10B	\$4,531.50	\$0.00	X	X	\$4,531.50	\$453.15	\$135.95	\$5,120.60	\$512,513.00	Los Angeles	
Nora Morales	736 S 5th St Montebello 90640	6352-014-006	RLA77204N-150409	150713-BE-WR-R-05-15C	\$2,475.58	\$1,237.79		X	\$1,237.79	\$123.78	\$37.13	\$1,398.70	\$101,064.00	Los Angeles	
Andrew Glover	746 E Fernleaf Ave Pomona 91766	8333-027-019	RLA81422CB-150202	150713-BE-WR-R-05-15C	\$1,343.20	\$0.00	X	X	\$1,343.20	\$134.32	\$40.30	\$1,517.82	\$203,054.00	Los Angeles	
Aaron Ewing	45534 Sancroft Ave Lancaster 93535	3176-013-008	RLA81263N-150205	150713-BE-WR-R-08-20B	\$1,956.73	\$978.37		X	\$978.36	\$97.84	\$29.35	\$1,105.55	\$105,494.00	Los Angeles	
Andrew Glover	746 E Fernleaf Ave Pomona 91766	8333-027-019	RLA81422C-150202	150713-BE-WR-R-08-20B	\$2,164.52	\$0.00	X	X	\$2,164.52	\$216.45	\$64.94	\$2,445.91	\$203,054.00	Los Angeles	
Nicole Davis-Johnson	1340 W Orange Grove Ave Pomona 91768	8357-002-100	RLA80942C-150210	150713-BE-WR-R-08-20B	\$4,056.75	\$2,028.38		X	\$2,028.37	\$202.84	\$60.85	\$2,292.06	\$233,962.00	Los Angeles	
Van Khiev	3742 Strang Ave Rosemead 91770	8578-002-051	RLA80627C-150217	150713-BE-WR-R-08-20B	\$2,616.34	\$0.00	X	X	\$2,616.34	\$261.63	\$78.49	\$2,956.46	\$194,341.00	Los Angeles	
Catalina Barreras	4824 BRESEE AVE BALDWIN PARK CA 91706	8535-007-018	CA037165965	201009-CA-RA-HPR-R-15FG	\$8,517.97	\$0.00	X	X	\$8,517.97	\$851.80	\$255.54	\$9,625.31	\$47,281.00	Los Angeles	
Melinda Sawyer	1637 WATERS AVE POMONA CA 91766	8343-021-023	CA037166055	211007-CA-RPP-R-25	\$3,071.51	\$0.00	X	X	\$3,071.51	\$307.15	\$92.15	\$3,470.81	\$36,706.00	Los Angeles	
Richard Krogel	2411 Adelfa St La Grange CA 95329	020-010-002-000	CA043104165	180126-CA-RA3-HPR-R-15CD	\$1,131.26	\$0.00	X	X	\$1,131.26	\$113.13	\$33.94	\$1,278.33	\$122,527.00	Mariposa	2023 Assessed Value
Andres Ybarra, Virginia Olivas	319 W 22nd St Merced 95340	030-193-010-000	RMR95195A-150520	150713-BE-WR-R-07-20C	\$1,036.82	\$0.00	X	X	\$1,036.82	\$103.68	\$31.10	\$1,171.60	\$221,251.00	Merced	
Andres Ybarra, Virginia Olivas	319 W 22nd St Merced 95340	030-193-010-000	RMR95615C-141219	150713-BE-WR-R-08-20B	\$1,118.40	\$0.00	X	X	\$1,118.40	\$111.84	\$33.55	\$1,263.79	\$221,251.00	Merced	
Mark Green	2345 Lander Ave Stevinson 95374	055-177-012-000	RMR94994N-150707	160114-BE-WR-R-03-15C	\$2,328.46	\$0.00	X	X	\$2,328.46	\$232.85	\$69.85	\$2,631.16	\$241,657.00	Merced	
Julio Rojas-Reyes	627 Q St Merced 95341	032-183-036-000	CA047109097	161021-CA-RA-R-10C	\$1,738.02	\$869.01		X	\$869.01	\$86.90	\$26.07	\$981.98	\$49,039.00	Merced	
Dorothy Reynolds, Walter Reynolds	704 Northwood Dr Merced CA 95348	007-272-019-000	CA047109498	170707-CA-RA3-HPR-R-20C	\$2,411.28	\$0.00	X	X	\$2,411.28	\$241.13	\$72.34	\$2,724.75	\$90,279.00	Merced	
Guadalupe Jauregui	16634 Everton St Delhi 95315	010-032-009-000	CA047109871	170825-CA-RA-HPRCA4-R-15C	\$1,750.68	\$875.34		X	\$875.34	\$87.53	\$26.26	\$989.13	\$249,520.00	Merced	
Joseph Manzanedo	507 San Juan St Los Banos CA 93635	025-145-003-000	CA047110330	180126-CA-RA3-HPR-R-15CD	\$2,625.90	\$0.00	X	X	\$2,625.90	\$262.59	\$78.78	\$2,967.27	\$94,659.00	Merced	
Warren Patrick Shelly	1717 OLIVER ST DOS PALOS CA 93620	012-310-034-000	CA047110893	190809-CA-RA-HPR-R-20F	\$2,301.50	\$0.00	X	X	\$2,301.50	\$230.15	\$69.05	\$2,600.70	\$45,302.00	Merced	
Armando De Loa	2316 LOBO AVE MERCED CA 95348	057-263-005-000	CA047111113	201009-CA-RA-HPR-R-05FG	\$4,815.20	\$0.00	X	X	\$4,815.20	\$481.52	\$144.46	\$5,441.18	\$159,062.00	Merced	
Jorge Quintero, Elvia Quintero, Esteban Quintero, Leticia Quintero	934 W 25TH ST MERCED CA 95340	030-081-004-000	CA047111112	201130-CA-RA-HPR-R-15G	\$1,849.64	\$924.82		X	\$924.82	\$92.48	\$27.74	\$1,045.04	\$291,569.00	Merced	
Michael Mckee	130 W 26TH ST MERCED CA 95340	030-121-007-000	CA047111120	201130-CA-RA-HPR-R-25G	\$1,700.34	\$0.00	X	X	\$1,700.34	\$170.03	\$51.01	\$1,921.38	\$70,690.00	Merced	
Norman Venuti	8 N 4th St Salinas 93906	003-352-008-000	CA053108096	160819-CA-RA-R-20C	\$1,531.04	\$0.00	X	X	\$1,531.04	\$153.10	\$45.93	\$1,730.07	\$52,591.00	Monterey	
William Klauer	4 White Fir Ct Napa 94558	035-501-001-000	RNC95591N-150105	150406-BE-R-02-10	\$3,784.76	\$1,892.38		X	\$1,892.38	\$189.24	\$56.77	\$2,138.39	\$789,966.00	Napa	
Loc Mai	8861 Hazard Garden Grove 92844	097-322-44	ROC87179N-141110	150406-BE-R-02-10	\$5,173.73	\$0.00	X	X	\$5,173.73	\$517.37	\$155.21	\$5,846.31	\$424,105.00	Orange	
Banji Adereti, Funmi Adereti	866 N Hall Ln Placentia 92870	341-452-05	ROC85592C-141227	150406-BE-R-03-15	\$2,457.55	\$0.00	X	X	\$2,457.55	\$245.76	\$73.73	\$2,777.04	\$457,397.00	Orange	
Loren Carroll	3001 S Pacific Ave Santa Ana 92704	412-012-10	ROC88244N-141010	150406-BE-R-04-20	\$2,604.00	\$1,302.00		X	\$1,302.00	\$130.20	\$39.06	\$1,471.26	\$102,200.00	Orange	
Chris Bobadilla, Leo Bobadilla, Ofelia Bobadilla	11 Northwind Ct 41 Newport Beach 92663	933-381-78	ROC86471N-141201	150713-BE-WR-R-04-10B	\$2,039.87	\$1,019.94		X	\$1,019.93	\$101.99	\$30.60	\$1,152.52	\$474,561.00	Orange	
Dawn Hlavin	9852 Hibiscus Dr Garden Grove 92841	132-362-07	ROC76613C-150727	151022-BE-WR-R-03-10C	\$2,956.40	\$0.00	X	X	\$2,956.40	\$295.64	\$88.69	\$3,340.73	\$85,737.00	Orange	
Anthony Gallegos, Toni Gallegos	7705 E Bridgewood Dr Anaheim 92808	354-421-03	ROC82118A-150325	151022-BE-WR-R-05-15C	\$7,141.50	\$0.00	X	X	\$7,141.50	\$714.15	\$214.25	\$8,069.90	\$949,598.00	Orange	
Esther Maraga, Javier Maraga	150 Gwynwood Ave La Habra 90631	019-384-04	ROC81575N-150403	151022-BE-WR-R-07-20C	\$6,718.51	\$0.00	X	X	\$6,718.51	\$671.85	\$201.56	\$7,591.92	\$351,712.00	Orange	</

Owner Name	Situs Address	Tax Parcel Number	Participant ID	Bond Series	Levy Amount	Paid Amount	Delinquent Installment		Delinquent Amount	Penalty [3]	Interest [4]	Total Delinquent	Total Assessed Value [1]	County	Notes
							1st	2nd							
Mel Miller	3760 Marview Ct Riverside 92505	132-052-012	RWR55778A-131010	131108-WR-PB-R-15B	\$2,406.99	\$1,203.50		X	\$1,203.49	\$120.35	\$36.10	\$1,359.94	\$241,066.00	Riverside	
James Brown, Paula Brown	25301 Tradewinds Dr Menifee 92585	329-340-017	RWR54232N-131029	131206-WR-PB-R-20B	\$1,374.26	\$0.00	X	X	\$1,374.26	\$137.43	\$41.23	\$1,552.92	\$216,892.00	Riverside	
Alicia Russell	22910 Brompton St Moreno Valley 92553	291-541-033	RWR52732A-131119	131213-WR-PB-R-20B	\$1,280.56	\$640.28		X	\$640.28	\$64.03	\$19.21	\$723.52	\$184,406.00	Riverside	
Jose Salitre, Pamela Salitre	3904 Mennes Ave Riverside 92509	181-101-048	RWR63810N-130801	131220-WR-PB-R-20A	\$2,073.52	\$1,036.76		X	\$1,036.76	\$103.68	\$31.10	\$1,171.54	\$82,820.00	Riverside	
Elva Buchanan, Richard Buchanan	25865 Hemet St Hemet 92544	551-210-020	RWR53252C-131111	131227-WR-PB-R-15B	\$2,715.10	\$0.00	X	X	\$2,715.10	\$271.51	\$81.45	\$3,068.06	\$193,620.00	Riverside	
Rigoberto Montes	3435 Sparrow Cir Riverside 92503	132-090-050	RWR63052C-130808	140219-BE-R-06-10C	\$1,685.42	\$842.71		X	\$842.71	\$84.27	\$25.28	\$952.26	\$165,760.00	Riverside	
Dennis Moore	17624 Mackay AVE Lake Elsinore 92530	383-103-003	RWR65972N-130715	140219-BE-R-09-15C	\$2,759.80	\$0.00	X	X	\$2,759.80	\$275.98	\$82.79	\$3,118.57	\$183,302.00	Riverside	
James Snow, Stephanie Snow	2880 Northstar Cir Corona 92882	113-461-023	RWR93006N-120616	140219-BE-R-10-20A	\$5,091.36	\$0.00	X	X	\$5,091.36	\$509.14	\$152.74	\$5,753.24	\$585,687.00	Riverside	
Mel Miller	3760 Marview Ct Riverside 92505	132-052-012	RWR88068C-121015	140219-BE-R-10-20A	\$1,069.09	\$534.55		X	\$534.54	\$53.45	\$16.04	\$604.03	\$241,066.00	Riverside	
Elizabeth Torres, Jay Torres	8457 SYRACUSE Riverside 92508	284-121-002	RWR92426N-120705	140219-BE-R-10-20A	\$3,711.70	\$0.00	X	X	\$3,711.70	\$371.17	\$111.35	\$4,194.22	\$394,043.00	Riverside	
Vargo McClintock	27177 Pumpkin St Murrieta 92562	392-170-023	RWR94908N-120502	140219-BE-R-10-20A	\$2,041.44	\$1,020.72		X	\$1,020.72	\$102.07	\$30.62	\$1,153.41	\$366,107.00	Riverside	
Mel Miller	3760 Marview Ct Riverside 92505	132-052-012	RWR88068CB-121015	140219-BE-R-11-20B	\$1,166.64	\$583.32		X	\$583.32	\$58.33	\$17.50	\$659.15	\$241,066.00	Riverside	
David Vanvoorhis, Linda Vanvoorhis	3895 Roblyn St Riverside CA 92504	193-303-023	RWR86482C-121115	140219-BE-R-11-20B	\$1,724.24	\$0.00	X	X	\$1,724.24	\$172.42	\$51.73	\$1,948.39	\$161,736.00	Riverside	
Stasha Sill	22751 Cove View Canyon Lake 92587	354-041-003	RWR84404N-121228	140219-BE-R-11-20B	\$2,179.30	\$0.00	X	X	\$2,179.30	\$217.93	\$65.38	\$2,462.61	\$689,520.00	Riverside	
Clifford Bronson	341 Wales Ct SAN JACINTO 92583	434-442-027	RWR77096N-130403	140219-BE-R-11-20B	\$1,086.52	\$0.00	X	X	\$1,086.52	\$108.65	\$32.60	\$1,227.77	\$209,735.00	Riverside	
Agata Maher, Thomas Maher	29419 Masters Dr Murrieta 92563	908-341-004	RWR84976N-121215	140219-BE-R-11-20B	\$2,822.84	\$1,411.42		X	\$1,411.42	\$141.14	\$42.34	\$1,594.90	\$359,369.00	Riverside	
Craig Lair, Yolanda Lair	3618 Gary Pl Riverside 92501	206-182-011	RWR66194C-130712	140219-BE-R-12-20C	\$2,245.98	\$1,122.99		X	\$1,122.99	\$112.30	\$33.69	\$1,268.98	\$175,023.00	Riverside	
Alina Morse, Harold Edgar	16717 Weeping Willow Dr Riverside 92503	269-361-009	RWR73272C-130513	140219-BE-R-12-20C	\$4,282.50	\$0.00	X	X	\$4,282.50	\$428.25	\$128.48	\$4,839.23	\$577,179.00	Riverside	
Beverly Anderson	28750 Snead Dr Sun City 92586	337-374-002	RWR48216N-140131	140307-CA-PB-R-10B	\$4,444.14	\$0.00	X	X	\$4,444.14	\$444.41	\$133.32	\$5,021.87	\$199,187.00	Riverside	
Rose Marie Burrowes	16421 Wagon Wheel Dr Riverside 92506	245-460-013	RWR46217C-140221	140404-CA-PB-R-20B	\$814.40	\$0.00	X	X	\$814.40	\$81.44	\$24.43	\$920.27	\$129,258.00	Riverside	
Maria Calvert	5339 Paloma Rd Riverside 92509	178-113-026	RWR41321N-140403	140502-CA-PB-R-15B	\$2,533.48	\$0.00	X	X	\$2,533.48	\$253.35	\$76.00	\$2,862.83	\$18,077.00	Riverside	
Arcel Manning	25684 Shalu Ave Moreno Valley 92557	474-652-003	RWR52472C-131123	140523-CA-PB-R-20B	\$3,773.76	\$1,886.88		X	\$1,886.88	\$188.69	\$56.61	\$2,132.18	\$207,768.00	Riverside	
Adrian Gutierrez	7314 Evans St Riverside 92504	230-302-002	RWR45470N-140227	140606-CA-PB-R-20B	\$3,458.70	\$0.00	X	X	\$3,458.70	\$345.87	\$103.76	\$3,908.33	\$67,353.00	Riverside	
Arvin Raxter	21691 Wagon Rim Ct Wildomar 92595	366-380-011	RWR19004C-141006	150406-BE-R-03-15	\$3,403.76	\$0.00	X	X	\$3,403.76	\$340.38	\$102.11	\$3,846.25	\$236,968.00	Riverside	
Elizabeth Kraemer	620 Parkview Dr Lake Elsinore 92530	379-342-088	RWR25094C-140818	150406-BE-R-03-15	\$1,449.08	\$0.00	X	X	\$1,449.08	\$144.91	\$43.47	\$1,637.46	\$141,385.00	Riverside	
Sheila Risinger	23127 Spring Meadow Dr Murrieta 92562	904-451-011	RWR12428N-141219	150406-BE-R-03-15	\$2,980.88	\$0.00	X	X	\$2,980.88	\$298.09	\$89.43	\$3,368.40	\$289,372.00	Riverside	
Grace Geaga	13421 Shady Knoll Dr Eastvale 92880	164-291-012	RWR39923N-140416	150406-BE-R-04-20	\$3,976.58	\$0.00	X	X	\$3,976.58	\$397.66	\$119.30	\$4,493.54	\$516,032.00	Riverside	
Guadalupe Corrales	9623 Birmingham Ave Riverside 92509	167-301-005	RWR24734C-140821	150406-BE-R-04-20	\$1,783.72	\$891.86		X	\$891.86	\$89.19	\$26.76	\$1,007.81	\$330,783.00	Riverside	
Lindbergh Hale	5440 Peacock Ln Riverside 92505	168-203-010	RWR39893A-140416	150406-BE-R-04-20	\$843.28	\$421.64		X	\$421.64	\$42.16	\$12.65	\$476.45	\$105,898.00	Riverside	
Charles Murray	28280 Joan Dunn Ln Murrieta 92563	384-240-013	RWR46940P-140214	150406-BE-R-04-20	\$3,053.22	\$0.00	X	X	\$3,053.22	\$305.32	\$91.60	\$3,450.14	\$247,326.00	Riverside	
Frank Ngo	40661 Symeron Way Murrieta 92562	9461-163-007	RWR17498C-141021	150406-BE-R-04-20	\$2,359.30	\$1,179.65		X	\$1,179.65	\$117.97	\$35.39	\$1,333.01	\$366,546.00	Riverside	
James Wallace, Savannah Wallace	44972 Marge Pl Temecula 92592	960-241-002	RWR24584C-140822	150406-BE-R-04-20	\$3,196.94	\$1,598.47		X	\$1,598.47	\$159.85	\$47.95	\$1,806.27	\$228,867.00	Riverside	
Maricela Morales	32157 Michelle Dr Lake Elsinore 92530	379-445-006	RWR3183C-150409	150713-BE-WR-R-03-10C	\$2,020.76	\$1,010.38		X	\$1,010.38	\$101.04	\$30.31	\$1,141.73	\$221,461.00	Riverside	
Debbie Sanchez	4741 Foxborough Ct Riverside 92509	167-343-012	RWR4686N-150324	150713-BE-WR-R-05-15C	\$1,633.60	\$0.00	X	X	\$1,633.60	\$163.36	\$49.01	\$1,845.97	\$198,771.00	Riverside	
Jose Ayala, Lirda Ayala	23870 Lodge Dr Canyon Lake 92587	350-244-038	RWR3192N-150409	150713-BE-WR-R-05-15C	\$1,878.14	\$0.00	X	X	\$1,878.14	\$187.81	\$56.34	\$2,122.29	\$113,454.00	Riverside	
Estella Cervantes	85403 Valencia Ln Coachella 92236	778-300-024	REF95132N-150423	150713-BE-WR-R-05-15C	\$745.08	\$0.00	X	X	\$745.08	\$74.51	\$22.35	\$841.94	\$113,701.00	Riverside	
Jacqueline Hernandez	24810 Eugena Ave Moreno Valley 92553	482-201-005	RWR10916N-150114	150713-BE-WR-R-06-15B	\$2,996.50	\$0.00	X	X	\$2,996.50	\$299.65	\$89.90	\$3,386.05	\$65,714.00	Riverside	
Larry Jennings, Mary Jennings	15585 Nueces Ct Moreno Valley 92551	486-385-012	RWR6815N-150228	150713-BE-WR-R-07-20C	\$2,461.54	\$1,230.77		X	\$1,230.77	\$123.08	\$36.92	\$1,390.77	\$183,482.00	Riverside	
Romeo Mata, Socorro Mata	51911 Calle Torres Orduno Coachella 92236	768-242-008	REF94955N-150513	150713-BE-WR-R-07-20C	\$1,396.50	\$0.00	X	X	\$1,396.50	\$139.65	\$41.90	\$1,578.05	\$116,941.00	Riverside	
Susana Madrigal	3914 Grant St Corona 92879	115-273-026	RWR13805N-141201	150713-BE-WR-R-08-20B	\$5,686.16	\$0.00	X	X	\$5,686.16	\$568.62	\$170.58	\$6,425.36	\$289,735.00	Riverside	
Arturo Viveros	24652 Huntley Dr Moreno Valley 92557	475-352-024	RWR7124N-150224	150713-BE-WR-R-08-20B	\$2,427.62	\$0.00	X	X	\$2,427.62	\$242.76	\$72.83	\$2,743.21	\$449,000.00	Riverside	
Manuel Hurtado, Ricardo Hurtado	150 N Buena Vista Ave Corona 92882	118-260-009	RWR93575A-150612	151022-BE-WR-R-05-15C	\$2,647.80	\$0.00	X	X	\$2,647.80	\$264.78	\$79.43	\$2,992.01	\$35,691.00	Riverside	
Janet Hewey	10345 Victoria Ave Riverside 92503	138-260-011	RWR95549N-150511	151022-BE-WR-R-05-15C	\$2,032.16	\$0.00	X	X	\$2,032.16	\$203.22	\$60.96	\$2,296.34	\$380,157.00	Riverside	
Beatrice Carrasco, Sylvia Carrasco	25938 Fore Dr Hemet 92544	549-102-019	RWR89015N-150814	151022-BE-WR-R-05-15C	\$1,799.14	\$0.00	X	X	\$1,799.14	\$179.91	\$53.97	\$2,033.02	\$156,875.00	Riverside	
Dionne Camacho	64421 Diegel Ct Desert Hot Springs 92240	661-072-017	REF94532N-150613	151022-BE-WR-R-05-15C	\$2,087.78	\$1,043.89		X	\$1,043.89	\$104.39	\$31.32	\$1,179.60	\$272,685.00	Riverside	
Susan LeDuc	4175 Rees St Riverside 92504	227-112-013	RWR4671N-150324	151022-BE-WR-R-07-20C	\$2,550.00	\$0.00	X	X	\$2,550.00	\$255.00	\$76.50	\$2,881.50	\$122,067.00	Riverside	
Cheryl Gray, Lewis Gray	951 Indiangrass Dr Hemet 92545	444-451-002	RWR3366N-150407	151022-BE-WR-R-07-20C	\$4,108.96	\$0.00	X	X	\$4,108.96	\$410.90	\$123.27	\$4,643.13	\$328,263.00	Riverside	
Edmundo Valencia	21575 High St Perris 92570	318-270-078	RWR94377N-150531	160114-BE-WR-R-03-15C	\$1,277.70	\$0.00	X	X	\$1,277.70	\$127.77	\$38.33	\$1,443.80	\$102,967.00	Riverside	
Sheila Cabrat	30400 Lakeview Ave Nuevo 92567	426-450-015	RWR87043N-150909	160114-BE-WR-R-04-20C	\$5,103.78	\$0.00	X	X	\$5,103.78	\$510.38	\$153.11	\$5,767.27	\$354,033.00	Riverside	
Brian Swanson, Laree Swanson	263 Galiceno Dr San Jacinto 92582	436-334-001	CA065103942	160506-CA-RA-R-15C	\$2,025.90	\$0.00	X	X	\$2,025.90	\$202.59	\$60.78	\$2,289.27	\$159,438.00	Riverside	
Jocelyn Seigler, Steven Seigler	1230 Quivero Cir Corona 92879	123-340-005	RWR81503NB-151208	160512-BE-CA-RA2-R-07-15C	\$3,384.45	\$0.00	X	X	\$3,384.45	\$338.45	\$101.53	\$3,824.43	\$396,711.00	Riverside	
Lawrence Sebald, Victoria Sebald	3720 Jurupa Ave Riverside 92506	225-071-001	RWR79119N-160128	160512-BE-CA-RA2-R-08-20C	\$13.06	\$456.53		X	\$456.53	\$45.65	\$13.70	\$515.88	\$181,110.00	Riverside	
Donna McCarty	39450 Avenida Bizaro Murrieta 92562	930-260-005	RWR78965N-160201	160512-BE-CA-RA2-R-08-20C	\$1,925.28	\$962.64		X	\$962.64	\$96.26	\$28.88	\$1,087.78	\$703,848.00	Riverside	
Jocelyn Seigler, Steven Seigler	1230 Quivero Cir Corona 92879	123-340-005	RWR81503N-151208	160512-BE-CA-RA-R-03-15C	\$5,599.07	\$0.00	X	X	\$5,599.07	\$559.91	\$167.97	\$6,326.95	\$396,711.00	Riverside	
Sonia Cervantes, Teodoro Cervantes	26272 Amen St Hemet 92544	552-420-006	RWR86129N-150922	160512-BE-CA-RA-R-04-20C	\$3,922.40	\$1,961.20		X	\$1,961.20	\$196.12	\$58.84	\$2,216.16	\$424,233.00	Riverside	
Kimberly Escamilla	1073 S Hewitt St San Jacinto 92583	437-281-036	RWR77025A-160303	160513-CA-RA2-R-20C	\$1,216.68	\$0.00	X	X	\$1,216.68	\$121.67	\$36.50	\$1,374.85	\$206,190.00	Riverside	
Alicia Cendejas, Gabriel Cendejas	2168 1st St Norco 92860	126-271-001	CA065106171	160708-CA-RA-R-10C	\$3										

Owner Name	Situs Address	Tax Parcel Number	Participant ID	Bond Series	Levy Amount	Paid Amount	Delinquent Installment		Delinquent Amount	Penalty [3]	Interest [4]	Total Delinquent	Total Assessed Value [1]	County	Notes
							1st	2nd							
Josh Ackerman, Shannon Ackerman	68460 Hacienda Ave Desert Hot Springs CA 92240	644-162-003	CA065114243	170629-CA-RA3-HPR-R-25C	\$2,737.72	\$0.00	X	X	\$2,737.72	\$273.77	\$82.13	\$3,093.62	\$210,494.00	Riverside	
Randy Pryor, Tracy Pryor	80460 Moonshadow Dr Indio CA 92201	600-111-003	CA065119628	170714-CA-RA3-HPRCA2-R-15C	\$2,699.22	\$0.00	X	X	\$2,699.22	\$269.92	\$80.98	\$3,050.12	\$214,161.00	Riverside	
Lisa Fielding-Lopez	1117 Golden Tree Ct C Corona CA 92879	111-373-047	CA065119325	170728-CA-RA3-HPRCA2-R-15C	\$1,103.90	\$551.95		X	\$551.95	\$55.20	\$16.56	\$623.71	\$144,928.00	Riverside	
Patricia Sirvio	79429 Paseo Del Rey La Quinta CA 92253	604-440-004	CA065122285	170929-CA-RA-HPR-R-10C	\$2,094.89	\$0.00	X	X	\$2,094.89	\$209.49	\$62.85	\$2,367.23	\$481,910.00	Riverside	
Jeffrey Gutierrez, Jessica Longet	309 Country Club Blvd Lake Elsinore CA 92530	373-135-035	CA065118163	170929-CA-RA-HPR-R-15C	\$1,418.59	\$0.00	X	X	\$1,418.59	\$141.86	\$42.56	\$1,603.01	\$278,534.00	Riverside	
Evelia Sanchez	67209 Mission DR Cathedral City CA 92234	677-383-016	CA065117212	171006-CA-RA-HPR-R-20C	\$1,842.50	\$0.00	X	X	\$1,842.50	\$184.25	\$55.28	\$2,082.03	\$74,057.00	Riverside	
Betty Adragna	15026 Le Gays ST Lake Elsinore CA 92530	379-140-082	CA065122387	171103-CA-RA-HPR-R-25C	\$6,185.78	\$0.00	X	X	\$6,185.78	\$618.58	\$185.57	\$6,989.93	\$385,086.00	Riverside	
Karyn Johnson-Dorsey	1509 Johnson Rd Riverside CA 92506	252-113-009	CA065123322	171208-CA-RA-HPR-R-15C	\$1,180.62	\$0.00	X	X	\$1,180.62	\$118.06	\$35.42	\$1,334.10	\$596,058.00	Riverside	
Derrick Richardson, George Morgan, Amber Morgan	32331 Rock Rose Dr Lake Elsinore CA 92532	363-722-002	CA065121700	171208-CA-RA-HPR-R-25C	\$4,237.28	\$0.00	X	X	\$4,237.28	\$423.73	\$127.12	\$4,788.13	\$432,257.00	Riverside	
James Cornell, Nancy Cornell	46205 Sacatan CIR Indian Wells CA 92210	623-291-003	CA065117401	171221-CA-HLP-LEF-HPR-R-25A	\$3,802.72	\$1,901.36		X	\$1,901.36	\$190.14	\$57.04	\$2,148.54	\$922,934.00	Riverside	
Alvin Wiese, Patricia Wiese	45451 Cielito DR Indian Wells CA 92210	633-502-002	CA065118795	171221-CA-HLP-LEF-HPR-R-25A	\$3,248.84	\$0.00	X	X	\$3,248.84	\$324.88	\$97.47	\$3,671.19	\$1,125,400.00	Riverside	
Sandy Loeb	29775 Alicante Dr Romoland CA 92585	327-420-003	CA065122591	171222-CA-RA-HPR-R-25C	\$4,182.72	\$0.00	X	X	\$4,182.72	\$418.27	\$125.48	\$4,726.47	\$213,851.00	Riverside	
James Holston, Travis Holston, Terry Holston	26065 Musick RD Menifee CA 92584	360-160-010	CA065121647	180119-CA-RA-HPR-R-25C	\$4,444.88	\$2,222.44		X	\$2,222.44	\$222.24	\$66.67	\$2,511.35	\$255,556.00	Riverside	
Jo Ann Roettgen	25497 Chicago Ave Hemet CA 92544	549-070-022	CA065124362	180126-CA-RA3-HPR-R-15CD	\$1,649.82	\$0.00	X	X	\$1,649.82	\$164.98	\$49.49	\$1,864.29	\$228,348.00	Riverside	
Ruben Perez, Maria Perez	20973 Myron St Perris CA 92570	319-161-012	CA065124494	180202-CA-RA-HPR-R-10CD	\$2,449.26	\$0.00	X	X	\$2,449.26	\$244.93	\$73.48	\$2,767.67	\$105,608.00	Riverside	
Melissa Leahy, Vickie Rodriguez	33220 Schaper ST Lake Elsinore CA 92530	382-034-008	CA065124508	180202-CA-RA-HPR-R-15CD	\$2,141.62	\$0.00	X	X	\$2,141.62	\$214.16	\$64.25	\$2,420.03	\$186,271.00	Riverside	
Darcy Levesque	1106 S Driftwood Dr Palm Springs CA 92264	508-393-010	CA065124273	180202-CA-RA-HPR-R-25CD	\$5,062.86	\$0.00	X	X	\$5,062.86	\$506.29	\$151.89	\$5,721.04	\$860,137.00	Riverside	
Karyn Johnson-Dorsey	1509 Ransom Rd Riverside CA 92506	252-113-009	CA065123371	180216-CA-RA-HPR-R-15CD	\$1,853.18	\$0.00	X	X	\$1,853.18	\$185.32	\$55.60	\$2,094.10	\$596,058.00	Riverside	
David Vanvoorhis, Linda Vanvoorhis	3895 Roblyn St Riverside CA 92504	193-303-023	CA065124465	180309-CA-RA-HPR-R-25CD	\$2,124.38	\$0.00	X	X	\$2,124.38	\$212.44	\$63.73	\$2,400.55	\$161,736.00	Riverside	
Ezequiel Avalos, Nancy Pulido	7688 Hillside ST Corona CA 92881	277-042-022	CA065124827	180413-CA-RA-HPR-R-10CDE	\$1,922.04	\$961.02		X	\$961.02	\$96.10	\$28.83	\$1,085.95	\$220,506.00	Riverside	
Eluterio Torres	11355 Hubbard St Moreno Valley CA 92557	475-080-008	CA065124135	180427-CA-RA-HPR-R-25CDE	\$5,302.16	\$2,651.08		X	\$2,651.08	\$265.11	\$79.53	\$2,995.72	\$276,317.00	Riverside	
Richard Slater, Margaret Slater	29967 GULF STREAM DR Canyon Lake CA 92587	351-184-011	CA065126342	180622-CA-RA-HPR-R-25CDE	\$3,352.38	\$0.00	X	X	\$3,352.38	\$335.24	\$100.57	\$3,788.19	\$284,720.00	Riverside	
William Barthold	904 MONTCLAIR DR Banning CA 92220	535-213-032	CA065126887	180921-CA-RA-HPR-R-25DE	\$3,102.56	\$0.00	X	X	\$3,102.56	\$310.26	\$93.08	\$3,505.90	\$96,117.00	Riverside	
Ann Bitzko	24268 ROBIE CT Moreno Valley CA 92551	485-182-037	CA065128349	190111-CA-RA-HPR-R-15EF	\$1,930.36	\$965.18		X	\$965.18	\$96.52	\$28.96	\$1,090.66	\$104,481.00	Riverside	
Maria Munoz, Enrique Munoz	31251 LAS FLORES WAY Thousand Palms CA 92276	650-152-011	CA065128365	190118-CA-RA-HPR-R-25EF	\$3,358.18	\$1,679.09		X	\$1,679.09	\$167.91	\$50.37	\$1,897.37	\$126,000.00	Riverside	
Manuel Barbosa, Enriqueta Barbosa	11104 SPAULDING RD RIVERSIDE CA 92505	142-341-002	CA065130514	200714-CA-RA-HPR-R-10FG	\$1,425.94	\$712.97		X	\$712.97	\$71.30	\$21.39	\$805.66	\$225,176.00	Riverside	
Larry Wyatt	16721 LEIANA CT RIVERSIDE CA 92503	140-250-007	CA065130553	200814-CA-RA-HPR-R-15FG	\$1,543.74	\$771.87		X	\$771.87	\$77.19	\$23.16	\$872.22	\$472,675.00	Riverside	
Jesus Garcia, Reyna Garcia	24685 SUNNYRIDGE DR MORENO VALLEY CA 92557	475-351-005	CA065130794	200911-CA-RA-HPR-R-15FG	\$1,931.42	\$0.00	X	X	\$1,931.42	\$193.14	\$57.94	\$2,182.50	\$256,982.00	Riverside	
Fredy Rivera, Patricia Rivera	26761 Jade Tree Ter Moreno Valley CA 92555	487-561-039	CA065130976	201130-CA-RA-HPR-R-10G	\$4,110.34	\$2,055.17		X	\$2,055.17	\$205.52	\$61.66	\$2,322.35	\$533,201.00	Riverside	
Brian Bargabus	3501 Roselle ST Oceanside 92056	166-702-01-00	RSD90392N-140717	150406-BE-R-03-15	\$2,631.84	\$0.00	X	X	\$2,631.84	\$263.18	\$78.96	\$2,973.98	\$580,286.00	San Diego	
Fortunato Yambao, Janet Yambao	14232 Roselle Cir Valley Center 92082	189-330-08-00	RSD86654C-140820	150406-BE-R-04-20	\$5,576.32	\$2,788.16		X	\$2,788.16	\$278.82	\$83.64	\$3,150.62	\$673,013.00	San Diego	
John Park, Penelope Park	13442 Piping Rock Ln Et Cajon 92021	401-202-38-00	RSD82829C-140924	150406-BE-R-04-20	\$2,249.22	\$0.00	X	X	\$2,249.22	\$224.92	\$67.48	\$2,541.62	\$633,472.00	San Diego	
Faisal Beg, Zeelan Beg	7160 Skyline Dr San Diego 92114	581-290-10-00	RSD92159C-140702	150406-BE-R-04-20	\$1,166.36	\$583.18		X	\$583.18	\$58.32	\$17.50	\$659.00	\$324,482.00	San Diego	
Najiba Kouza, Shamoon Kouza	651 Singing Vista Way Et Cajon 92019	515-120-13-00	RSD65327C-150416	150713-BE-WR-R-03-10C	\$5,238.32	\$2,619.16		X	\$2,619.16	\$261.92	\$78.57	\$2,959.65	\$754,372.00	San Diego	
Cynthia Hancock	5947 Carmegie St San Diego 92122	670-222-08-00	RSD68924N-150311	150713-BE-WR-R-03-10C	\$1,845.14	\$0.00	X	X	\$1,845.14	\$184.51	\$55.35	\$2,085.00	\$95,522.00	San Diego	
Barbara Alto, Raymond Alto	620 Pitman St Escondido 92027	225-500-14-00	RSD74687N-141230	150713-BE-WR-R-08-20B	\$3,182.38	\$0.00	X	X	\$3,182.38	\$318.24	\$95.47	\$3,596.09	\$686,664.00	San Diego	
Carol Rodriguez, Joaquin Rodriguez	1120 Mullen Way Vista 92083	179-212-35-00	RSD57143N-150706	151022-BE-WR-R-03-10C	\$3,122.44	\$1,561.22		X	\$1,561.22	\$156.12	\$46.84	\$1,764.18	\$233,071.00	San Diego	
Maria Souto	4504 Dawson Ave San Diego 92115	466-631-12-00	RSD59630N-150615	151022-BE-WR-R-03-10C	\$1,032.48	\$516.24		X	\$516.24	\$51.62	\$15.49	\$583.35	\$86,455.00	San Diego	
Corrita Hughes	3185 L St San Diego 92102	545-302-13-00	RSD64004N-150430	151022-BE-WR-R-03-10C	\$3,765.50	\$0.00	X	X	\$3,765.50	\$376.55	\$112.97	\$4,255.02	\$121,826.00	San Diego	
Norman Greene, Roberta Greene	5484 Toyon Rd San Diego 92115	461-441-03-00	RSD69314N-150307	151022-BE-WR-R-04-10B	\$8,071.54	\$4,035.77		X	\$4,035.77	\$403.58	\$121.07	\$4,560.42	\$807,212.00	San Diego	
David Lance	16025 Vesper Rd Valley Center 92082	188-082-48-00	RSD57152A-150706	151022-BE-WR-R-07-20C	\$3,142.98	\$0.00	X	X	\$3,142.98	\$314.30	\$94.29	\$3,551.57	\$950,000.00	San Diego	
Mark Livingston, Michelle Livingston	4432 Marraco Dr San Diego 92115	473-091-07-00	RSD49484N-150909	151022-BE-WR-R-07-20C	\$2,984.00	\$0.00	X	X	\$2,984.00	\$298.40	\$89.52	\$3,371.92	\$292,605.00	San Diego	
Helen Pichler	8617 Louis Ln Santee 92071	384-390-15-00	RSD70049P-150228	151022-BE-WR-R-08-20B	\$4,165.56	\$2,082.78		X	\$2,082.78	\$208.28	\$62.48	\$2,353.54	\$40,714.00	San Diego	
Linda Stockdale	1243 Saxony Rd Encinitas 92024	254-353-14-00	RSD51149N-150827	160114-BE-WR-R-02-10C	\$1,676.71	\$0.00	X	X	\$1,676.71	\$167.67	\$50.30	\$1,894.68	\$599,079.00	San Diego	
Patricia Sanders	2470 Daily Dr Fallbrook 92028	101-552-09-00	RSD47438A-150925	160114-BE-WR-R-03-15C	\$2,932.22	\$1,466.11		X	\$1,466.11	\$146.61	\$43.98	\$2,224.43	\$300,000.00	San Diego	
Lavern Mustafaa	518 S 46th St San Diego 92113	547-572-21-00	RSD50033C-150904	160114-BE-WR-R-03-15C	\$3,490.18	\$0.00	X	X	\$3,490.18	\$349.02	\$104.71	\$3,943.91	\$32,546.00	San Diego	
Albert Ye, Pingping Tian	40745 Via Ranchillos Fallbrook CA 92028	102-180-91-00	RSD55208N-150723	160114-BE-WR-R-04-20C	\$2,636.42	\$0.00	X	X	\$2,636.42	\$263.64	\$79.09	\$2,979.15	\$1,346,400.00	San Diego	
Caridad Duran	2125 FOOTHILL DR Vista CA 92084	177-033-43-00	RSD43652A-151103	160114-BE-WR-R-04-20C	\$2,003.31	\$0.00	X	X	\$2,003.31	\$200.33	\$60.10	\$2,263.74	\$770,436.00	San Diego	
Lawson Johnson, Wilma Johnson	253 Rancho DR Chula Vista 91911	624-432-17-00	RSD39353A-160102	160512-BE-CA-RA2-R-07-15C	\$1,458.12	\$729.06		X	\$729.06	\$72.91	\$21.87	\$823.84	\$156,931.00	San Diego	
Linda Lutes	9221 Galston Dr Santee 92071	380-372-05-00	RSD44927P-151019	160512-BE-CA-RA2-R-08-20C	\$2,681.00	\$0.00	X	X	\$2,681.00	\$268.10	\$80.43	\$3,029.53	\$60,191.00	San Diego	
Marcia Stoddard	2039 Red Coach LN Encinitas 92024	257-200-01-16	RSD43895N-151030	160512-BE-CA-RA-R-02-10C	\$1,738.28	\$869.14		X	\$869.14	\$86.91	\$26.07	\$982.12	\$177,291.00	San Diego	
Amy Degroot, John Dagostino	5106 Crown St San Diego 92110	436-252-20-00	RSD37472N-160126	160512-BE-CA-RA-R-02-10C	\$4,151.02	\$0.00	X	X	\$4,151.02	\$415.10	\$124.53	\$4,690.65	\$100,735.00	San Diego	
David Gomes, Muriel Gomes	3432 Cherokee AVE San Diego CA 92104	447-703-13-00	RSD49232N-150911	160512-BE-CA-RA-R-02-10C	\$3,436.08	\$1,718.04		X	\$1,718.04	\$171.80	\$51.54	\$1,941.38	\$567,745.00	San Diego	
Alfredo Patron, Rosamelia Lopez	803 Corral Ct Bonita 91902	593-272-09-00	RSD41174N-151204	160512-BE-CA-RA-R-02-10C	\$2,540.48	\$0.00	X	X	\$2,540.48	\$254.05	\$76.21	\$2,870.74	\$1,108,056.00	San Diego	
Linda Stockdale	1243 Saxony Rd Encinitas 92024	254-353-14-00	RSD51149NB-150827	160512-BE-CA-RA-R-03-15C	\$5,771.63	\$0.00	X	X	\$5,771.63	\$577.16	\$173.15	\$6,521.94	\$599,079.00	San Diego	
Isabelle Dumont	9323 Darcy Ct Santee 92071	380-203-10-00	RSD44840A-151019	160512-BE-CA-RA-R-03-15C	\$3,195.02	\$1,597.51		X	\$1,597.51	\$159.75	\$47.93	\$1,805.19	\$86,917.00		

Owner Name	Sitius Address	Tax Parcel Number	Participant ID	Bond Series	Levy Amount	Paid Amount	Delinquent Installment		Delinquent Amount	Penalty [3]	Interest [4]	Total Delinquent	Total Assessed Value [1]	County	Notes
							1st	2nd							
Maxine Taylor	636 Goetschl St San Diego CA 92114	549-532-32-00	CA073117780	170721-CA-RA3-HPR-R-10C	\$2,958.69	\$0.00			\$2,958.69	\$295.87	\$88.76	\$3,343.32	\$270,904.00	San Diego	
Richard Shrigley, Heidi Shrigley	7604 Romeria St Carlsbad 92009	223-120-21-00	CA073117501	170825-CA-RA-HPRCA4-R-20C	\$2,559.62	\$1,279.81			\$1,279.81	\$127.98	\$38.39	\$1,446.18	\$462,497.00	San Diego	
David Gomes, Muriel Gomes	3432 Cherokee AVE San Diego CA 92104	447-703-13-00	CA073117866	170929-CA-RA-HPR-R-15C	\$1,311.82	\$655.91			\$655.91	\$65.59	\$19.68	\$741.18	\$567,745.00	San Diego	
Jose Alvarez, Lucia Carrillo	159 Heritage St Oceanside CA 92058	160-400-14-00	CA073119661	170929-CA-RA-HPR-R-20C	\$4,644.06	\$0.00	X	X	\$4,644.06	\$464.41	\$139.32	\$5,247.79	\$155,504.00	San Diego	
Alex Carrillo	378 Elm Ave Imperial Beach CA 91932	625-293-14-00	CA073118101	171006-CA-RA-HPR-R-10C	\$2,970.88	\$1,485.44			\$1,485.44	\$148.54	\$44.56	\$1,678.54	\$742,180.00	San Diego	
Anthony Dwinell, Diana Dwinell	24312 Manzanita DR Descanso CA 91916	405-290-25-00	CA073119834	171006-CA-RA-HPR-R-15C	\$2,159.35	\$0.00	X	X	\$2,159.35	\$215.94	\$64.78	\$2,440.07	\$406,586.00	San Diego	
Maxine Taylor	636 Goetschl St San Diego CA 92114	549-532-32-00	CA073119061	171013-CA-RA-HPR-R-10C	\$1,362.65	\$0.00	X	X	\$1,362.65	\$136.27	\$40.88	\$1,539.80	\$270,904.00	San Diego	
Frank Ciurleo, Mary Ciurleo	11197 Susita Ct San Diego CA 92129	313-224-11-00	CA073118983	171027-CA-RA-HPR-R-15C	\$1,791.59	\$895.80			\$895.79	\$89.58	\$26.87	\$1,012.24	\$722,393.00	San Diego	
Dawn Rogers, Daniel Anderson	1035 Colorado Ave Chula Vista CA 91911	618-090-20-00	CA073119080	171103-CA-RA-HPR-R-20C	\$6,131.48	\$0.00	X	X	\$6,131.48	\$613.15	\$183.94	\$6,928.57	\$318,587.00	San Diego	
Michelle Davis	183 Vance St Chula Vista CA 91910	569-231-04-00	CA073120377	171117-CA-RA-HPR-R-25C	\$3,167.06	\$1,583.53			\$1,583.53	\$158.35	\$47.51	\$1,789.39	\$649,070.00	San Diego	
Anthony Dwinell, Diana Dwinell	24312 Manzanita DR Descanso CA 91916	405-290-25-00	CA073119676	171201-CA-RA-HPR-R-15C	\$4,676.13	\$0.00	X	X	\$4,676.13	\$467.61	\$140.28	\$5,284.02	\$406,586.00	San Diego	
Maria Anderson	532 Blue Bonnet CT National City CA 91950	669-210-09-00	CA073119602	180119-CA-RA-HPR-R-20C	\$3,836.58	\$0.00	X	X	\$3,836.58	\$383.66	\$115.10	\$4,335.34	\$70,779.00	San Diego	
Frank Ciurleo, Mary Ciurleo	11197 Susita Ct San Diego CA 92129	313-224-11-00	CA073121293	180126-CA-RA3-HPR-R-10CD	\$1,980.17	\$990.09			\$990.08	\$99.01	\$29.70	\$1,118.79	\$722,393.00	San Diego	
John Palizban	30811 Mesa Crest RD Valley Center CA 92082	129-080-49-00	CA073121272	180202-CA-RA-HPR-R-20CD	\$5,408.26	\$2,704.13			\$2,704.13	\$270.41	\$81.12	\$3,055.66	\$553,097.00	San Diego	
Hisami Tippi	9469 CARLTON OAKS DR Santee CA 92071	381-472-27-00	CA073122986	180921-CA-RA-HPR-R-05DE	\$3,672.12	\$0.00	X	X	\$3,672.12	\$367.21	\$110.16	\$4,149.49	\$80,802.00	San Diego	
Caridad Duran	2125 FOOTHILL DR Vista CA 92084	177-033-43-00	CA073123773	190322-CA-RA-HPR-R-25EF	\$3,753.35	\$0.00	X	X	\$3,753.35	\$375.34	\$112.60	\$4,241.29	\$770,436.00	San Diego	
Melissa Collins	421 S Euclid Ave San Diego CA 92114	548-411-01-00	CA073125003	191101-CA-RA-HPR-R-25F	\$3,000.00	\$0.00	X	X	\$3,000.00	\$300.00	\$90.00	\$3,390.00	\$104,874.00	San Diego	
Lirije Hoti, Liridon Hoti	12153 VIA ANTIGUA EL CAJON CA 92019	502-272-08-00	CA073125186	200110-CA-RA-HPR-R-15F	\$1,818.48	\$909.24			\$909.24	\$90.92	\$27.28	\$1,027.44	\$606,967.00	San Diego	
Demetrious Harmon	5562 LAS ALTURAS TER SAN DIEGO CA 92114	548-312-11-00	CA073125848	201130-CA-RA-HPR-R-10G	\$2,511.08	\$0.00	X	X	\$2,511.08	\$251.11	\$75.33	\$2,837.52	\$56,336.00	San Diego	
Jesus Garza	2031 Lane St San Francisco CA 94124	5386 /033	CA075106844	180309-CA-RA-HPR-R-20CD	\$2,585.38	\$0.00	X	X	\$2,585.38	\$258.54	\$77.56	\$2,921.48	\$296,391.00	San Francisco	
Frank Stanich	311 Duncan Ave Stockton 95207	081-300-410-000	RSJ94427C-150305	150713-BE-WR-R-07-20C	\$2,217.60	\$0.00	X	X	\$2,217.60	\$221.76	\$66.53	\$2,505.89	\$128,816.00	San Joaquin	
Dana Maynor	130 E Mount Diablo AVE Tracy 95376	235-310-340-000	RSJ91289N-150827	151022-BE-WR-R-03-10C	\$1,759.62	\$879.81			\$879.81	\$87.98	\$26.39	\$994.18	\$264,985.00	San Joaquin	
Benjamin Niedert	9 B St Tracy 95376	235-085-050-000	CA077104365	160512-BE-CA-RA2-R-06-10C	\$3,812.10	\$0.00	X	X	\$3,812.10	\$381.21	\$114.36	\$4,307.67	\$117,582.00	San Joaquin	
Gloria Corral, Manuel Corral	153 N Powers AVE Manteca 95336	223-250-370-000	CA077104515	160603-CA-RA2-R-10C	\$225.00	\$112.50			\$112.50	\$11.25	\$3.38	\$127.13	\$367,100.00	San Joaquin	
Frank Rojas, Rachel Rojas	804 Filbert St Stockton 95205	143-080-410-000	CA077104714	160617-CA-RA-R-15C	\$810.66	\$405.33			\$405.33	\$40.53	\$12.16	\$458.02	\$92,450.00	San Joaquin	
Jamal Mansour	2804 Hawkins Ct Tracy 95377	238-450-540-000	CA077104812	160909-CA-RA-R-10C	\$1,237.54	\$0.00	X	X	\$1,237.54	\$123.75	\$37.13	\$1,398.42	\$413,963.00	San Joaquin	
Wanda Hunt	1037 Wetherbee Ave Manteca 95337	241-055-130-000	CA077106100	161114-CA-RA-R-15C	\$998.34	\$499.17			\$499.17	\$49.92	\$14.98	\$564.07	\$177,156.00	San Joaquin	
Aldreena Hendrix, Elijah Hendrix, Ilnanya Gilmore	756 Prairie Dunes DR Lathrop CA 95330	196-090-670-000	CA077105663	161114-CA-RA-R-25C	\$1,854.36	\$0.00	X	X	\$1,854.36	\$185.44	\$55.63	\$2,095.43	\$289,738.00	San Joaquin	
Alejandro Valencia-Yepez, Maria Valencia	1817 Germain LN Stockton 95206	166-100-220-000	CA077105000	161118-CA-RA2-R-10C	\$1,966.92	\$0.00	X	X	\$1,966.92	\$196.69	\$59.01	\$2,222.62	\$240,355.00	San Joaquin	
Alejandro Valencia-Yepez, Maria Valencia	1817 Germain LN Stockton 95206	166-100-220-000	CA077105460	161118-CA-RA2-R-20C	\$1,853.44	\$0.00	X	X	\$1,853.44	\$185.34	\$55.60	\$2,094.38	\$240,355.00	San Joaquin	
Florentino Melendrez	17 N Washington St Lodi 95240	043-073-050-000	CA077106358	170210-CA-RA-R-10C	\$3,263.60	\$0.00	X	X	\$3,263.60	\$326.36	\$97.91	\$3,687.87	\$127,626.00	San Joaquin	
Evelyn Wilson	2228 E Washington St Stockton CA 95205	153-201-040-000	CA077106572	170526-CA-RA2-HPR-R-10C	\$2,091.70	\$0.00	X	X	\$2,091.70	\$209.17	\$62.75	\$2,363.62	\$102,079.00	San Joaquin	
Albert Crispin, Julie Crispin	1659 S Olive Ave Stockton CA 95215	173-110-130-000	CA077107618	170714-CA-RA3-HPRCA2-R-15C	\$2,151.76	\$1,075.88			\$1,075.88	\$107.59	\$32.28	\$1,215.75	\$244,109.00	San Joaquin	
Angela Spano	6513 El Capitan CIR Stockton CA 95210	094-320-550-000	CA077108121	170728-CA-RA3-HPRCA2-R-10C	\$1,861.32	\$930.66			\$930.66	\$93.07	\$27.92	\$1,051.65	\$249,519.00	San Joaquin	
Aldreena Hendrix, Elijah Hendrix, Ilnanya Gilmore	756 Prairie Dunes DR Lathrop CA 95330	196-090-670-000	CA077107946	170811-CA-RA-HPR-R-25C	\$1,968.82	\$0.00	X	X	\$1,968.82	\$196.88	\$59.06	\$2,224.76	\$289,738.00	San Joaquin	
Karen Yescas	401 N Hewitt Rd Linden CA 95236	093-030-320-000	CA077108218	171027-CA-RA-HPR-R-25C	\$3,945.10	\$0.00	X	X	\$3,945.10	\$394.51	\$118.35	\$4,457.96	\$216,047.00	San Joaquin	
Kathryn Borges	207 Granada Way Tracy CA 95376	214-310-020-000	CA077109417	180112-CA-RA-HPR-R-15C	\$1,623.40	\$0.00	X	X	\$1,623.40	\$162.34	\$48.70	\$1,834.44	\$136,549.00	San Joaquin	
Angeles Paunon	8346 Neubourg Dr Stockton CA 95210	090-210-330-000	CA077109555	180126-CA-RA3-HPR-R-20CD	\$3,346.66	\$1,673.33			\$1,673.33	\$167.33	\$50.20	\$1,890.86	\$109,883.00	San Joaquin	
Henry Armento	847 Nottingham Dr Manteca CA 95336	216-030-060-000	CA077109875	180420-CA-RA-HPR-R-25CDE	\$1,270.54	\$0.00	X	X	\$1,270.54	\$127.05	\$38.12	\$1,435.71	\$182,811.00	San Joaquin	
Carolyn Dishman, Billy Dishman	223 S Locust AVE Ripon CA 95366	259-274-110-000	CA077109850	180504-CA-RA-HPR-R-25CDE	\$2,053.78	\$1,026.89			\$1,026.89	\$102.69	\$30.81	\$1,160.39	\$288,431.00	San Joaquin	
Alberto Perales	911 Lloyd ST Lodi CA 95240	047-430-490-000	CA077109807	180525-CA-RA-HPR-R-15CDE	\$756.97	\$0.00	X	X	\$756.97	\$75.70	\$22.71	\$855.38	\$63,081.00	San Joaquin	
Alberto Perales	911 Lloyd ST Lodi CA 95240	047-430-490-000	CA077110095	180525-CA-RA-HPR-R-15CDE	\$1,114.75	\$0.00	X	X	\$1,114.75	\$111.48	\$33.44	\$1,259.67	\$63,081.00	San Joaquin	
Mary Miller	201 N Oro Ave Stockton CA 95215	143-340-170-000	CA077109241	180614-CA-HLP-LEF-HPR-R-25AB-1	\$1,166.66	\$583.33			\$583.33	\$58.33	\$17.50	\$659.16	\$105,987.00	San Joaquin	
Georgianna Castro	10480 S Priest RD French Camp CA 95231	193-290-130-000	CA077109491	180713-CA-RA-HPR-R-20DCE	\$2,177.72	\$0.00	X	X	\$2,177.72	\$217.77	\$65.33	\$2,460.82	\$219,111.00	San Joaquin	
Ofevia Bautista	1509 W HAZELTON AVE Stockton CA 95203	145-170-050-000	CA077110686	180907-CA-RA-HPR-R-25DE	\$2,688.34	\$1,344.17			\$1,344.17	\$134.42	\$40.33	\$1,518.92	\$138,863.00	San Joaquin	
Imelda Valdivia	2942 WAUSA WAY STOCKTON CA 95206	179-350-600-000	CA077110831	181005-CA-RA-HPR-R-25E	\$1,132.08	\$566.04			\$566.04	\$56.60	\$16.98	\$639.62	\$276,456.00	San Joaquin	
Robert Gibson, Veronica Gibson	7120 SHARKON LN Stockton CA 95210	094-240-220-000	CA077110881	190125-CA-RA-HPR-R-25FE	\$1,963.46	\$981.73			\$981.73	\$98.17	\$29.45	\$1,109.35	\$295,800.00	San Joaquin	
Vicente Lopez, Maria De Haro	21 ARGILLITE AVE Lathrop CA 95330	196-710-270-000	CA077111487	190802-CA-RA-HPR-R-10EF	\$3,161.74	\$1,580.87			\$1,580.87	\$158.09	\$47.43	\$1,786.39	\$610,800.00	San Joaquin	
Lydia Fisher	436 BLOSSOM DR RIPON CA 95366	259-550-510-000	CA077112085	200619-CA-RA-HPR-R-15FG	\$1,582.64	\$0.00	X	X	\$1,582.64	\$158.26	\$47.48	\$1,788.38	\$243,733.00	San Joaquin	
Ellamarie Fortenbach	225 Wellington Dr San Carlos 94070	049-321-190	RSM95522N-151116	160512-BE-CA-RA2-R-07-15C	\$4,698.75	\$2,349.38			\$2,349.37	\$234.94	\$70.48	\$2,654.79	\$1,140,072.00	San Mateo	
Ellamarie Fortenbach	225 Wellington Dr San Carlos 94070	049-321-190	CA081104008	160520-CA-RA-R-20C	\$2,020.32	\$1,010.16			\$1,010.16	\$101.02	\$30.30	\$1,141.48	\$1,140,072.00	San Mateo	
Ellamarie Fortenbach	225 Wellington Dr San Carlos 94070	049-321-190	CA081104043	161209-CA-RA2-R-20C	\$4,059.23	\$2,029.62			\$2,029.61	\$202.96	\$60.89	\$2,293.46	\$1,140,072.00	San Mateo	
Jixin Tan	134 Marbly Ave Daly City CA 94015	091-455-180	CA081104422	171020-CA-RA-HPR-R-25C	\$782.67	\$391.34			\$391.33	\$39.13	\$11.74	\$442.20	\$910,257.00	San Mateo	
Shami Ahuja	3150 High Meadow Ln San Jose 95135	660-06-067	RSC92003C-160208	160512-BE-CA-RA-R-02-10C	\$3,131.92	\$1,565.96			\$1,565.96	\$156.60	\$46.98	\$1,769.54	\$1,371,212.00	Santa Clara	
Sharlene Lopez	1402 WILLOWTREE CT San Jose CA 95118	445-01-095	CA085103433	181130-CA-RA-HPR-R-25E	\$1,492.60	\$0.00	X	X	\$1,492.60	\$149.26	\$44.78	\$1,686.64	\$96,423.00	Santa Clara	
Lae Khanthavong	16795 China Gulch Dr Anderson CA 96007	205-740-012-000	CA089101490	180504-CA-RA-HPR-R-20CED	\$4,446.96	\$0.00	X	X	\$4,446.96	\$444.70	\$133.41	\$5,025.07	\$544,307.00	Shasta	
Robert Carter, Virginia Carter	34 Tarman Dr Cloverdale 95425	0													

Owner Name	Situs Address	Tax Parcel Number	Participant ID	Bond Series	Levy Amount	Paid Amount	Delinquent Installment		Delinquent Amount	Penalty [3]	Interest [4]	Total Delinquent	Total Assessed Value [1]	County	Notes
							1st	2nd							
Robert Myers	1747 Sonora Ave Tulare CA 93274	177-293-004-000	CA107108847	180614-CA-HLP-LEF-HPR-R-25AB-1	\$1,310.04	\$0.00	X	X	\$1,310.04	\$131.00	\$39.30	\$1,480.34	\$122,288.00	Tulare	
Jackie Winter	780 GERRY LN PORTERVILLE CA 93257	247-250-035-000	CA107109634	181026-CA-RA-HPR-R-25E	\$1,645.90	\$822.95		X	\$822.95	\$82.30	\$24.69	\$929.94	\$64,538.00	Tulare	
Dallas Joseph Reedom	12909 AVENUE 80 PIXLEY CA 93256	316-040-007-000	CA107110074	200221-CA-RA-HPR-R-25F	\$1,230.64	\$0.00	X	X	\$1,230.64	\$123.06	\$36.92	\$1,390.62	\$67,233.00	Tulare	
Arlene Hill	766 Wishard AVE Simi Valley 93065	636-0-133-025	RVT94508N-150812	160512-BE-CA-RA-R-04-20C	\$2,842.04	\$1,421.02		X	\$1,421.02	\$142.10	\$42.63	\$1,605.75	\$94,402.00	Ventura	
Joan Gurney, Rex Gurney	2206 Jonesboro Ave Simi Valley 93063	650-0-063-125	CA111101176	160610-CA-RA-R-10C	\$6,501.57	\$0.00	X	X	\$6,501.57	\$650.16	\$195.05	\$7,346.78	\$348,996.00	Ventura	
Joan Gurney, Rex Gurney	2206 Jonesboro Ave Simi Valley 93063	650-0-063-125	CA111101441	160909-CA-RA-R-20C	\$2,643.94	\$0.00	X	X	\$2,643.94	\$264.39	\$79.32	\$2,987.65	\$348,996.00	Ventura	
Edward Vinitzky	858 Calle Portilla Camarillo CA 93010	158-0-222-055	CA111102478	170331-CA-RA3-R-25C	\$5,353.63	\$2,676.82		X	\$2,676.81	\$267.68	\$80.30	\$3,024.79	\$475,793.00	Ventura	
Sara Pyle	1043 W Iris St Oxnard CA 93033	203-0-242-245	CA111103555	180302-CA-RA-HPR-R-25CD	\$1,181.54	\$0.00	X	X	\$1,181.54	\$118.15	\$35.45	\$1,335.14	\$56,364.00	Ventura	
Roscoe Turner	1262 S VENTURA RD OXNARD CA 93033	203-0-012-075	CA111104245	200327-CA-RA-HPR-R-25F	\$2,855.59	\$1,427.80		X	\$1,427.79	\$142.78	\$42.83	\$1,613.40	\$77,548.00	Ventura	
Joel Banks	1196 Broken Spur Way Plumas Lake CA 95961	016-560-032-000	CA115108021	171215-CA-RA-HPR-R-20C	\$1,650.94	\$0.00	X	X	\$1,650.94	\$165.09	\$49.53	\$1,865.56	\$172,389.00	Yuba	
Richard Baker, Cherie Baker	1747 MCCARTHY AVE OLIVEHURST CA 95961	013-680-004-000	CA115108185	180824-CA-RA-HPR-R-25DE	\$2,544.48	\$0.00	X	X	\$2,544.48	\$254.45	\$76.33	\$2,875.26	\$158,174.00	Yuba	
Total WRCOG-HERO Residential Delinquencies:									\$862,821.28	\$86,282.30	\$25,884.61	\$974,988.19			
Samas Commercial Assessments															
Anita Pendurthi, Ravindra Prasad Pendurthi	4097 TRAIL CREEK DR RIVERSIDE CA 92505	142-090-042	20140308-01	200225-WR-C-R-1	\$31,005.76	\$0.00	X	X	\$31,005.76	\$3,100.58	\$930.17	\$35,036.51	\$4,177,206.00	Riverside	
World Harvest Church Corporation	630 W Latham Avenue Hemet 92543	443-181-034	20151113-01	200225-WR-C-R-1	\$6,931.54	\$3,465.77		X	\$3,465.77	\$346.58	\$103.97	\$3,916.32	\$3,701,282.00	Riverside	
Total WRCOG-Samas Delinquencies:									\$34,471.53	\$3,447.16	\$1,034.14	\$38,952.83			
Greenworks Commercial Assessments															
2108 Pico Owner LLC	2114 Pico Blvd Santa Monica, CA 90405	4273-004-003	8806-2	240517-GWL-8806-W	\$33,209.11	\$0.00	X	X	\$33,209.11	\$3,320.91	\$996.27	\$37,526.29	\$3,941,917.00	Los Angeles	
Black Mitchell G, Black Deanne G	4889 Grange Rd Santa Rosa, CA 95404	049-160-097-000	4503	210217-GWL-4503-W	\$6,832.62	\$0.00	X	X	\$6,832.62	\$683.26	\$204.98	\$7,720.86	2,033,264	Sonoma	
Total WRCOG-Greenworks Delinquencies:									\$40,041.73	\$4,004.17	\$1,201.25	\$45,247.15			
Twain Commercial Assessments															
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-002	Truax-1	20191218-WR-TC-25	\$14,843.40	\$0.00	X	X	\$14,843.40	\$1,484.34	\$445.30	\$16,773.04	\$635,187.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-003	Truax-2	20191218-WR-TC-25	\$7,621.86	\$0.00	X	X	\$7,621.86	\$762.19	\$228.66	\$8,612.71	\$317,003.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-004	Truax-3	20191218-WR-TC-25	\$22,064.98	\$0.00	X	X	\$22,064.98	\$2,206.50	\$661.95	\$24,933.43	\$952,783.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-015	Truax-4	20191218-WR-TC-25	\$14,843.40	\$0.00	X	X	\$14,843.40	\$1,484.34	\$445.30	\$16,773.04	\$635,188.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-018	Truax-5	20191218-WR-TC-25	\$14,843.40	\$0.00	X	X	\$14,843.40	\$1,484.34	\$445.30	\$16,773.04	\$635,188.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-023	Truax-6	20191218-WR-TC-25	\$23,869.84	\$0.00	X	X	\$23,869.84	\$2,386.98	\$716.10	\$26,972.92	\$1,032,181.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-024	Truax-7	20191218-WR-TC-25	\$16,648.28	\$0.00	X	X	\$16,648.28	\$1,664.83	\$499.45	\$18,812.56	\$714,586.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-043-025	Truax-8	20191218-WR-TC-25	\$10,330.20	\$0.00	X	X	\$10,330.20	\$1,033.02	\$309.91	\$11,673.13	\$436,691.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-044-017	Truax-9	20191218-WR-TC-25	\$17,735.96	\$0.00	X	X	\$17,735.96	\$1,773.60	\$532.08	\$20,041.64	\$952,783.00	Riverside	
Temecula Hotel Partners Old Town LLC	41934 3rd St, 41935 3rd St and 286909-28696 Front St Temecula Ca 92590	922-044-020	Truax-10	20191218-WR-TC-25	\$11,957.54	\$0.00	X	X	\$11,957.54	\$1,195.75	\$358.73	\$13,512.02	\$635,188.00	Riverside	
Landwin DMV LLC	1540 Manley Dr San Gabriel, CA 91776	5360-019-075	Curio-1	20210422-WR-TC-CUR-30	\$459,359.79	\$229,679.90		X	\$229,679.89	\$22,967.99	\$6,890.40	\$259,538.28	\$75,491,087.00	Los Angeles	Original Parcel number was 5360-019-002
Landwin DMV LLC	1540 Manley Dr San Gabriel, CA 91776	5360-019-075	Curio-2	20210422-WR-TC-CUR-30	\$459,359.79	\$229,679.90		X	\$229,679.89	\$22,967.99	\$6,890.40	\$259,538.28	\$75,491,087.00	Los Angeles	Original Parcel number was 5360-019-018
Landwin DMV LLC	1540 Manley Dr San Gabriel, CA 91776	5360-019-075	Curio-3	20210422-WR-TC-CUR-30	\$459,359.79	\$229,679.90		X	\$229,679.89	\$22,967.99	\$6,890.40	\$259,538.28	\$75,491,087.00	Los Angeles	Original Parcel number was 5360-019-019
Landwin DMV LLC	101 W Valley Blvd San Gabriel, CA 91776	5360-019-075	Curio-4	20210422-WR-TC-CUR-30	\$459,359.79	\$229,679.90		X	\$229,679.89	\$22,967.99	\$6,890.40	\$259,538.28	\$75,491,087.00	Los Angeles	Original Parcel number was 5360-019-020
Landwin DMV LLC	111 W Valley Blvd San Gabriel, CA 91776	5360-019-075	Curio-5	20210422-WR-TC-CUR-30	\$459,359.79	\$229,679.90		X	\$229,679.89	\$22,967.99	\$6,890.40	\$259,538.28	\$75,491,087.00	Los Angeles	Original Parcel number was 5360-019-023
Landwin DMV LLC	1549 S Del Mar Ave San Gabriel, CA 91776	5360-019-075	Curio-6	20210422-WR-TC-CUR-30	\$459,359.81	\$229,679.91		X	\$229,679.90	\$22,967.99	\$6,890.40	\$259,538.29	\$75,491,087.00	Los Angeles	Original Parcel number was 5360-019-024
Total WRCOG-Twain Delinquencies:									\$1,532,838.21	\$153,283.83	\$45,985.18	\$1,732,107.22			

[1] Assessed values based on 2024 data for all counties except Mariposa as that data is not available as of 8/10/2024

[2] Delinquency data as of 8/10/2024.

[3] Penalty based on 10% of the delinquent assessment.

[4] Interest calculated based on 1.5% of the delinquent assessment per month from July 1, 2024 through August 31, 2024.

[5] Includes parcels in historically Teeter counties that may be removed from the final file.



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Amendment to the Appendix of the WRCOG Conflict of Interest Code

Contact: Janis Leonard, Administrative Services Manager, jleonard@wrcog.us, (951) 405-6702

Date: September 9, 2024

Recommended Action(s):

1. Adopt WRCOG Resolution Number 26-24; A Resolution of the Executive Committee of the Western Riverside Council of Governments Amending the Conflict of Interest Code Pursuant to the Political Reform Act of 1974.

Summary:

The Political Reform Act (the "Act") requires all state and local agencies to adopt and maintain a Conflict of Interest Code establishing the rules for disclosure of personal assets and the prohibition from making or participating in making governmental decisions that may affect any personal assets. The Conflict of Interest Code must specifically designate all agency positions, except those listed in Government Code section 87200, that make or participate in the making of decisions and assign specific types of personal assets to be disclosed that may be affected by the exercise of powers and duties of that position.

The Act further requires that an agency regularly review and update its Code as necessary when directed by the code-reviewing body or when change is necessitated by changed circumstances (Sections 87306 and 87306.5).

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to request approval of an amendment to the Conflict of Interest Code. This item aligns with WRCOG's 2022-2027 Strategic Plan Goal #3 (Ensure fiscal solvency and stability of the Western Riverside Council of Governments).

Discussion:

Background

Pursuant to the Act, WRCOG adopted a Conflict of Interest Code, in which the complete Code was last updated and approved by the Riverside County Board of Supervisors in 2021. Review of the Code

shows that it must be amended to include revised titles of existing positions, delete titles of positions that have been abolished and/or positions that no longer make or participate in making governmental decisions, and clarify real property disclosure.

At the direction of the Executive Committee in 2022, WRCOG solicited a Classification and Compensation Study to analyze WRCOG's staff classifications and compensation levels to ensure that classifications were consistent with similar agencies and compensation was in line with the market median. Koff & Associates was selected to conduct the Study. After performing the Study, amongst other matters, Koff & Associates recommended changes to some existing staff titles and the addition of classifications.

Present Situation

WRCOG is required to update its Code every other even-numbered year; there were no changes made in 2022. As a result of changes to titles and the addition of classifications as an outcome of the Study by Koff & Associates, new job descriptions were drafted and ultimately finalized in June 2023, thereby triggering an amendment to the list of Designated Positions.

Attached is a redline version of the proposed amended Code showing the revisions being made to the Conflict of Interest Code.

Prior Action(s):

August 14, 2024: The Administration & Finance Committee recommended that the Executive Committee adopt Resolution Number 26-24; A Resolution of the Executive Committee of the Western Riverside Council of Governments Amending the Conflict of Interest Code Pursuant to the Political Reform Act of 1974.

Financial Summary:

The actions of this item create no fiscal impact.

Attachment(s):

[Attachment 1 - Notice of Intention to amend Conflict of Interest Code](#)

[Attachment 2 - Legislative version of Conflict of Interest Code](#)

[Attachment 3 - Final version of Conflict of Interest Code](#)

[Attachment 4 - Resolution Number 26-24 Amending Conflict of Interest Code](#)

Attachment

Notice of Intention to amend Conflict
of Interest Code

NOTICE OF INTENTION TO AMEND THE CONFLICT OF INTEREST CODE OF THE WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

NOTICE IS HEREBY GIVEN that the Executive Committee of the Western Riverside Council of Governments (“WRCOG”) intends to amend WRCOG’s Conflict of Interest Code (the “Code”) pursuant to Government Code section 87306.

The Appendix of the Code designates those employees, members, officers, and consultants who make or participate in the making of decisions and are subject to the disclosure requirements of WRCOG’s Code. WRCOG’s proposed amendment includes revision of titles of existing positions and delete titles of positions that have been abolished and/or positions that no longer make or participate in making governmental decisions and clarify real property disclosure.

The proposed amended Code will be considered by the Executive Committee on September 9, 2024, at 2:00 p.m. at the Riverside County Administrative Center – Board Hearing Room, 4080 Lemon Street, Riverside, California. Any interested person may be present and comment at the public meeting or may submit written comments concerning the proposed amendment. Any comments or inquiries should be directed to the attention of Janis Leonard, Administrative Services Manager, Western Riverside Council of Governments, 3390 University Ave., Suite 200, Riverside, CA 92501-3315; (951) 405-6702. Written comments must be submitted no later than September 9, 2024, at 2:00 p.m.

The proposed amended Code may be reviewed at, and copies obtained from, the office of the Administrative Services Manager, during regular business hours.

Attachment

Legislative version of Conflict of
Interest Code

CONFLICT OF INTEREST CODE

OF THE

WESTERN RIVERSIDE

COUNCIL OF GOVERNMENTS

CONFLICT OF INTEREST CODE
OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
(Amended September 9, 2024)

The Political Reform Act, (Gov. Code § 81000, et seq.), requires state and local government agencies to adopt and promulgate conflict of interest codes. The Fair Political Practices Commission has adopted a regulation (2 Cal. Code of Regs. § 18730), that contains the terms of a standard conflict of interest code which can be incorporated by reference in an agency’s code. After public notice and hearing Section 18730 may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act. Therefore, the terms of 2 California Code of Regulations section 18730 and any amendments to it duly adopted by the Fair Political Practices Commission are hereby incorporated by reference. This incorporation page, Regulation 18730 and the attached Appendix designating positions and establishing disclosure categories, shall constitute the Conflict of Interest Code of the **Western Riverside Council of Governments (“WRCOG”)**.

All officials and designated positions required to submit a statement of economic interests shall file their statements with the **Administrative Services Manager** as WRCOG’s Filing Officer. The **Administrative Services Manager** shall make and retain a copy of all statements filed by Members of the Executive Committee, the Executive Director and the Treasurer, and forward the originals of such statements to the Clerk of the Board of Supervisors. The **Administrative Services Manager** shall retain the originals of the statements of all other officials and designated positions and make all retained statements available for public inspection and reproduction during regular business hours. (Gov. Code Section 81008.)

APPENDIX
CONFLICT OF INTEREST CODE
OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

(Amended September 9, 2024)

PART “A”

OFFICIALS WHO MANAGE PUBLIC INVESTMENTS

WRCOG Officials who manage public investments, as defined by 2 Cal. Code of Regs. § 18700.3(b), are NOT subject to WRCOG’s Code, but must file disclosure statements under Government Code Section 87200 et seq. [Regs. § 18730(b)(3)] These positions are listed here for informational purposes only.

It has been determined that the positions listed below are officials who manage public investments¹:

Executive Committee Members, including ex-officio non-voting members
Executive Director
Treasurer
Chief Financial Officer
Investment Consultant

¹ Individuals holding one of the above-listed positions may contact the Fair Political Practices Commission for assistance or written advice regarding their filing obligations if they believe that their position has been categorized incorrectly. The Fair Political Practices Commission makes the final determination whether a position is covered by § 87200.

DESIGNATED POSITIONS
GOVERNED BY THE CONFLICT OF INTEREST CODE

<u>DESIGNATED POSITIONS'</u> <u>TITLE OR FUNCTION</u>	<u>DISCLOSURE CATEGORIES</u> <u>ASSIGNED</u>
[Position reclassified to Program Specialist]	
Administrative Services Director	5
Administrative Services Manager	5
Deputy Executive Director	1, 2
Director (ALL)) [Positions Consolidated]	4
[Positions Consolidated]	
[Positions Consolidated]	
[Positions Consolidated]	
General Counsel	1, 2
Program Manager (ALL) [Positions Consolidated]	4
) [Positions Consolidated]	
Analyst (ALL)	5
Program Specialist (ALL)	5

MEMBERS OF BOARDS, COMMITTEES AND COMMISSIONS

<u>DESIGNATED POSITIONS' TITLE OR FUNCTION</u>	<u>DISCLOSURE CATEGORIES ASSIGNED</u>
Finance Directors Committee	1, 2
Planning Directors Committee	2, 3, 5
Public Works Committee	2, 3, 5
Solid Waste Committee	2, 5
Technical Advisory Committee	1, 2

Consultants and New Positions²

² Individuals serving as a consultant as defined in FPPC Reg 18700.3(a) or in a new position created since this Code was last approved that makes or participates in the making of decisions must file under the broadest disclosure set forth in this Code subject to the following limitation:

The Executive Director may determine that, due to the range of duties or contractual obligations, it is more appropriate to assign a limited disclosure requirement. A clear explanation of the duties and a statement of the extent of the disclosure requirements must be in a written document. (Gov. Code Sec. 82019; FPPC Regulations 18219 and 18734.). The Executive Director's determination is a public record and shall be retained for public inspection in the same manner and location as this Conflict of Interest Code. (Gov. Code Sec. 81008.)

PART “B”

DISCLOSURE CATEGORIES

The disclosure categories listed below identify the types of economic interests that the designate position must disclose for each disclosure category to which the designated is assigned.³ “Investment” means financial interest in any business entity (including a consulting business or other independent contracting business) and are reportable if they are either located in or doing business in the jurisdiction, are planning to do business in the jurisdiction, or have done business during the previous two years in the jurisdiction of WRCOG.

Category 1: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that are located in, do business in or that own real property in the jurisdiction of WRCOG.

Category 2: All interests in real property which is located in whole or in part within, or not more than two (2) miles outside, the jurisdiction of WRCOG, including any leasehold, beneficial or ownership interest or option to acquire property.

Category 3: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that are engaged in land development, construction or the acquisition or sale of real property in within the jurisdiction of WRCOG.

Category 4: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that provide services, products, materials, machinery, vehicles or equipment of a type purchased or leased by WRCOG.

Category 5: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that provide services, products, materials, machinery, vehicles or equipment of a type purchased or leased by the designated position’s department, unit or division.

³ This Conflict of Interest Code does not require the reporting of gifts from outside this agency’s jurisdiction if the source does not have some connection with or bearing upon the functions or duties of the position. (Reg. 18730.1)

Attachment

Final version of Conflict of Interest
Code

CONFLICT OF INTEREST CODE
OF THE
WESTERN RIVERSIDE
COUNCIL OF GOVERNMENTS

CONFLICT OF INTEREST CODE
OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

(Amended September 9, 2024)

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APPENDIX
CONFLICT OF INTEREST CODE
OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

(Amended September 9, 2024)

PART “A”

OFFICIALS WHO MANAGE PUBLIC INVESTMENTS

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Investment Consultant

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DESIGNATED POSITIONS
GOVERNED BY THE CONFLICT OF INTEREST CODE

<u>DESIGNATED POSITIONS'</u> <u>TITLE OR FUNCTION</u>	<u>DISCLOSURE CATEGORIES</u> <u>ASSIGNED</u>
Administrative Services Director	5
Administrative Services Manager	5
Deputy Executive Director	1, 2
Director (ALL)	4
General Counsel	1, 2
Program Manager (ALL)	4
Analyst (ALL)	5
Program Specialist (ALL)	5

MEMBERS OF BOARDS, COMMITTEES AND COMMISSIONS

<u>DESIGNATED POSITIONS' TITLE OR FUNCTION</u>	<u>DISCLOSURE CATEGORIES</u> <u>ASSIGNED</u>
Finance Directors Committee	1, 2
Planning Directors Committee	2, 3, 5
Public Works Committee	2, 3, 5
Solid Waste Committee	2, 5
Technical Advisory Committee	1, 2
<u>Consultants and New Positions²</u>	

²Individuals serving as a consultant as defined in FPPC Reg 18700.3(a) or in a new position created since this Code was last approved that makes or participates in the making of decisions must file under the broadest disclosure set forth in this Code subject to the following limitation:

The Executive Director may determine that, due to the range of duties or contractual obligations, it is more appropriate to assign a limited disclosure requirement. A clear explanation of the duties and a statement of the extent of the disclosure requirements must be in a written document. (Gov. Code Sec. 82019; FPPC Regulations 18219 and 18734.). The Executive Director's determination is a public record and shall be retained for public inspection in the same manner and location as this Conflict of Interest Code. (Gov. Code Sec. 81008.)

PART “B”

DISCLOSURE CATEGORIES

The disclosure categories listed below identify the types of economic interests that the designate position must disclose for each disclosure category to which the designated is assigned.³ “Investment” means financial interest in any business entity (including a consulting business or other independent contracting business) and are reportable if they are either located in or doing business in the jurisdiction, are planning to do business in the jurisdiction, or have done business during the previous two years in the jurisdiction of WRCOG.

Category 1: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that are located in, do business in or that own real property in the jurisdiction of WRCOG.

Category 2: All interests in real property which is located in whole or in part within, or not more than two (2) miles outside, the jurisdiction of WRCOG, including any leasehold, beneficial or ownership interest or option to acquire property.

Category 3: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that are engaged in land development, construction or the acquisition or sale of real property in within the jurisdiction of WRCOG.

Category 4: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that provide services, products, materials, machinery, vehicles or equipment of a type purchased or leased by WRCOG.

Category 5: All investments and business positions in business entities, and sources of income, including gifts, loans and travel payments, that provide services, products, materials, machinery, vehicles or equipment of a type purchased or leased by the designated position’s department, unit or division.

³This Conflict of Interest Code does not require the reporting of gifts from outside this agency’s jurisdiction if the source does not have some connection with or bearing upon the functions or duties of the position. (Reg. 18730.1)

Attachment

Resolution Number 26-24; A
Resolution of the Executive
Committee of the Western Riverside
Council of Governments amending
the Conflict of Interest Code pursuant
to the Political Reform Act of 1974

RESOLUTION NUMBER 26-24

**A RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
AMENDING THE CONFLICT OF INTEREST CODE PURSUANT TO
THE POLITICAL REFORM ACT OF 1974**

WHEREAS, the Western Riverside Council of Governments ("WRCOG") is a joint powers authority consisting of the County of Riverside and 18 cities, the Eastern Municipal Water District, the Western Municipal Water District, and the Riverside County Superintendent of Schools, situated in Western Riverside County; and

WHEREAS, the State of California enacted the Political Reform Act of 1974, Government Code Section 81000 et seq. (the "Act"), which contains provisions relating to conflicts of interest which potentially affect all officers, employees and consultants of the Western Riverside Council of Governments ("WRCOG") and requires all public agencies to adopt and promulgate a Conflict of Interest Code; and

WHEREAS, the Executive Committee adopted a Conflict of Interest Code (the "Code") for WRCOG which was amended on November 1, 2021, in compliance with the Act; and

WHEREAS, subsequent changed circumstances within WRCOG have made it advisable and necessary pursuant to Sections 87306 and 87307 of the Act to amend and update WRCOG's Code; and

WHEREAS, the potential penalties for violation of the provisions of the Act are substantial and may include criminal and civil liability, as well as equitable relief which could result in WRCOG being restrained or prevented from acting in cases where the provisions of the Act may have been violated; and

WHEREAS, notice of the time and place of a public meeting on, and of consideration by the Executive Committee, the proposed amended Code was provided each affected designated position and publicly posted for review at the Western Riverside Council of Governments offices, 3390 University Ave., Suite 200, Riverside, California; and

WHEREAS, a public meeting was held upon the proposed amended Code at a regular meeting of the Executive Committee of WRCOG on September 9, 2024, at which all present were given an opportunity to be heard on the proposed amended Code.

NOW THEREFORE, BE IT RESOLVED by the Executive Committee of the Western Riverside Council of Governments as follows:

Section 1. The Executive Committee does hereby adopt the proposed amended Conflict of Interest Code, a copy of which is attached hereto and shall be on file with the Administrative Services Manager and available to the public for inspection and copying during regular business hours.

Section 2. The said amended Code shall be submitted to the Board of Supervisors of the County of Riverside for approval.

Section 3. The said amended Code shall become effective immediately upon approval by the Riverside County Board of Supervisors.

PASSED AND ADOPTED by the Executive Committee of the Western Riverside Council of Governments on September 9, 2024.

Rita Rogers, Chair
WRCOG Executive Committee

Dr. Kurt Wilson, Secretary
WRCOG Executive Committee

Approved as to form:

Steven DeBaun
WRCOG Legal Counsel

AYES: _____ NAYS: _____ ABSENT: _____ ABSTAIN: _____



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Overview of the TUMF Nexus Study - Final Draft
Contact: Chris Gray, Deputy Executive Director, cgray@wrcog.us, (951) 405-6710
Date: September 9, 2024

Recommended Action(s):

1. Approve the TUMF Nexus Study.
2. Approve the recommended Fee Schedule with an effective date of April 1, 2025.

Summary:

The TUMF Nexus Study draws a connection between the needs of the Program and the TUMF Program Fee Schedule. The Nexus Study identifies projects requiring mitigation from new development, determines anticipated project costs, and assesses fees to fund these projects. Analysis through transportation modeling work has determined a list of projects eligible for mitigation. Staff released the draft for a 30-day review / comment period. These comments have been addressed by WRCOG staff and responses have been provided to everyone who provided comments. The final draft is now being presented for approval.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to present the final draft of the TUMF Nexus Study. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #5 (Develop projects and programs that improve infrastructure and sustainable development in our subregion).

Discussion:

Background

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

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

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

Present Situation

The draft Nexus Study satisfies the needs of the Mitigation Fee Act (AB 1600) which governs imposing development impact fees in California. The draft Nexus Study confirms the following, as per AB 1600 rules:

1. Establish a nexus or reasonable relationship between the development impact fee's use and the type of project for which the fee is required.
2. The fee must not exceed the project's proportional "fair share" of the proposed improvement and cannot be used to correct current problems or to make improvements for existing development.

This draft Nexus Study describes the various assumptions, data inputs, and analysis leading to the determination of each major variable in the TUMF calculation, and ultimately leads to the determination of the TUMF Schedule of Fees and the maximum "fair share" fee for each of the various use types defined in the TUMF Program. These two primary outputs are included in the draft Nexus Study and represent the two main components of the Nexus Study. The final Nexus Study is provided as Attachment 1 to this Staff Report.

The first output of the draft Nexus Study is the TUMF Network Cost Estimates (Table 4.4 of Attachment 1). This list includes all the infrastructure projects included in the TUMF Program. These infrastructure projects include road widening, interchanges, bridges, grade separations, transit projects, and ITS projects. Each project in this list is on the TUMF Regional System of Highways and Arterials (Network), and will have potential TUMF funding. Eligible projects would include those that, due to congestion, have a need to be mitigated. This mitigation could be adding a lane to a road, widening a bridge, or improving an interchange. The Nexus Study also determines how much of the mitigation need is being caused by traffic from new development. From these calculations a total eligible funding figure is presented on each project, also known as a 'maximum TUMF share.' This figure represents the maximum amount of TUMF funding that the local agency can request to be allocated towards one of its projects.

The second output of the Nexus Study is the TUMF Fee Schedule. The total cost to mitigate the TUMF Network is divided among the different types of developments in proportion to their expected traffic impacts. TUMF groups the various land use categories to simplify the administration of the Program. The main uses are Single-family Residential, Multi-family Residential, Service, Retail, and Industrial. The Fee Schedule represents the maximum fee permissible under California law for the purposes of the TUMF Program.

Consistent with the requirements of AB 602, WRCOG will be implementing a tiered approach to calculate and collect fees for single-family units based on the size of the unit itself. This tiered approach will use the final adopted Single-Family fee as a basis for these tiers. For example, a smaller home will pay a fee

which is less than the standard Single-Family fee while a larger home will be a higher fee. The exact values of these tiers will not be known until the Single-Family fee is finalized. The actual process by which these tiers are implemented is shown in the TUMF Fee Calculation Handbook, which is one of the main TUMF governance documents. The TUMF Fee Calculation Handbook, along with other TUMF governance documents, will be updated prior to the implementation of any increase in TUMF.

Public Comment: The public comment period for the Draft Nexus Study opened on May 13, 2024; informational meetings were held on May 21, 2024, and June 4, 2024. The comment period closed on June 10, 2024, though WRCOG has continued to accept comments after the closing of the comment period.

A total of 13 letters were received with 42 separate comments. Comments were received from:

- City of Corona
- City of Eastvale
- City of Lake Elsinore
- City of Moreno Valley
- City of Perris
- City of Riverside
- City of San Jacinto
- Habitat for Humanity
- Riverside County, Transportation Land Use Management Agency
- Southern California Building Industry Association (BIA)
- Mr. McCarthy (City of Riverside resident)
- Ms. Dooley (City of Jurupa Valley resident)
- Ms. Marshal (City of Jurupa Valley resident)

All parties who commented were provided with a written response during the week of July 29, 2024. Some key comments that were received included:

- Specific questions on the inclusion or exclusion of specific projects - The majority of the questions we received from our member agencies were in relation to the amount of funding for projects in the jurisdiction in question. Where appropriate, adjustments were made to the roadway network in response to these comments.
- Comments regarding the negative impacts of warehouses - Several residents commented that warehouses have negative impacts related to noise, air quality, road maintenance and other related items. WRCOG responded that many of these impacts are outside of the TUMF Program jurisdiction and those comments are best addressed to their local agency.
- Impact of SB 743 - Several commenters questioned whether the TUMF program could continue to fund roadway projects after the implementation of SB 743, which requires projects to evaluate their impacts to the environment using VMT as a metric. WRCOG noted that SB 743 is applicable to CEQA documents only, and has no impact on fee programs such as TUMF.
- One commenter asked that we reduce TUMF fees on affordable housing project. WRCOG's response was that these projects are currently exempt from TUMF and therefore any changes in the TUMF fees would not impact these types of projects.

All of the comments and WRCOG's responses are provided in Attachment 2 to this Staff Report.

Next Steps

The Executive Committee is being asked to take two separate actions. The first action will be to approve the Nexus Study. The second action will be to set the Fee Schedule for each land use type.

Traditionally, setting the fee schedule also requires determining a date at which the new fees become effective. Attachment 3 provides the recommended Fee Schedule with a recommended effective date of April 1, 2025.

The Public Works Committee, Administration & Finance Committee, and Technical Advisory Committee (TAC) have all recommended that the Executive Committee approve the Nexus Study and implement the Fee Schedule with one change. The members of the TAC voted to adopt the Fee Schedule as proposed by staff with the exception of the retail fee, which they recommended to be frozen at the current rate \$7.72.

If the Executive Committee adopts the Nexus Study and Updated Fee Schedule, the following actions will be required to implement the updated fees:

- WRCOG staff and BBK must develop an updated draft TUMF Ordinance and distribute this document to each WRCOG member agency staff and its legal counsel for review. This process generally takes 1 - 2 months.
- Member agency staff are then responsible for scheduling action by their elected body to formally adopt this ordinance. This adoption process must follow the requirements of state law and generally takes 2 - 3 months. Staff anticipates that any formal action by member agencies would occur in mid- to late-November or December. For consistency purposes, staff asks that each elected governing board (City Council / Board of Supervisors) from TUMF participating agencies adopt the ordinance with an effective date several months later than the action to allow a transition period between the old fee and new fee.
- WRCOG staff will also be working to update administrative and technical documents such as the TUMF Administrative Plan, the TUMF Fee Calculation Handbook, and the TUMF Fee Calculator, as well as the online TUMF Payment Portal. As noted above, the adjustment to the Single-Family fee based on the size of individual units will be implemented through the TUMF Fee Calculation Handbook. These updates will require approval by WRCOG Committees, occurring in Q1 2025.

Assuming all of this work proceeds on schedule, new fees will become effective on consistent dates amongst all member agencies. At this time, WRCOG is recommending that the updated Fee Schedule become effective April 1, 2025. This period of time allows for all of the necessary technical, administrative, and legal steps necessary and also provides an opportunity for extensive outreach with the development community to ensure that this transition to the new fee schedule is as orderly as possible.

Prior Action(s):

August 15, 2024: The Technical Advisory Committee recommended that the Executive Committee adopt the TUMF Nexus Study and the recommended Fee Schedule but freeze the retail fee at its current level.

August 14, 2024: The Administration & Finance Committee recommended that the Executive

Committee adopt the TUMF Nexus Study and the recommended Fee Schedule.

August 8, 2024: The Public Works Directors recommended that the Executive Committee adopt the TUMF Nexus Study and the recommended Fee Schedule.

August 8, 2024: The Planning Directors received and filed.

May 6, 2024: The Executive Committee released the draft Nexus Study for a 30-day review and comment period.

April 18, 2024: The Technical Advisory Committee received and filed.

April 11, 2024: The Public Works Committee recommended that the Executive Committee release the draft Nexus Study for a 30-day review and comment period.

April 11, 2024: The Planning Directors Committee's recommended that the Executive Committee release the draft Study for a 30-day review and comment period.

April 10, 2024: The Administration & Finance Committee recommended that the Executive Committee release the draft Study for a 30-day review and comment period.

February 15, 2024: The Technical Advisory Committee received and filed.

February 14, 2024: The Administration & Finance Committee received and filed.

February 8, 2024: The Public Works Committee received and filed.

December 14, 2023: The Public Works Committee received and filed.

October 12, 2023: The Public Works Committee received and filed.

August 10, 2023: The Public Works Committee received and filed.

June 8, 2023: The Public Works Committee received and filed.

April 13, 2023: The Public Works Committee approved the updated TUMF Nexus Study Roadway Network.

July 11, 2022: The Executive Committee received and filed.

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

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

October 4, 2021: The Executive Committee gave direction to 1) begin work on a TUMF Nexus Study update; 2) update the TUMF Administrative Plan to expand the TUMF-eligible project list to include Intelligent Transportation Systems projects; 3) work with the Riverside County Transportation

Commission and Riverside Transit Agency to evaluate options to mitigate VMT impacts from new development outside of the TUMF Nexus Study update; and 4) begin work on an update of the Analysis of Development Impact Fees in Western Riverside County.

Financial Summary:

Funding for TUMF activities is included in the Fiscal Year 2024/2025 budget under the TUMF Program (1148) in the General Fund (110). 4% of all TUMF collections are allocated for administrative purposes.

Attachment(s):

[Attachment 1 - TUMF Nexus Study Final Draft](#)

[Attachment 2 - WRCOG Responses to Public Comments](#)

[Attachment 3 - Recommended Fee Schedule](#)

Attachment

TUMF Nexus Study - Final
Draft



TRANSPORTATION UNIFORM MITIGATION FEE NEXUS STUDY 2024 UPDATE

FINAL REPORT

Prepared for the Western Riverside Council of Governments

In Cooperation with

The City of Banning
The City of Beaumont
The City of Calimesa
The City of Canyon Lake
The City of Corona
The City of Eastvale
The City of Hemet
The City of Jurupa Valley
The City of Lake Elsinore
The City of Menifee
The City of Moreno Valley
The City of Murrieta
The City of Norco
The City of Perris
The City of Riverside
The City of San Jacinto
The City of Temecula
The City of Wildomar
The County of Riverside
Eastern Municipal Water District
March Joint Powers Authority
Riverside County Superintendent of Schools
Riverside Transit Agency
Western Water

Prepared by GHD

FINAL DRAFT July 25, 2024



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ES.0 EXECUTIVE SUMMARY

ES.1 Introduction and Purpose of the Nexus Study

Western Riverside County includes 18 incorporated cities and the unincorporated county covering an area of approximately 2,100 square miles. Through the mid 2000's, this portion of Riverside County was growing at a pace exceeding the capacity of existing financial resources to meet increasing demand for transportation infrastructure. Although the economic recession of the late 2000's, and the associated crises in the mortgage and housing industries, slowed this rate of growth, the regional economy has recovered and the projected rate of development in Western Riverside County remains high. Similarly, the impact of the COVID-19 pandemic on travel demand in the region has also passed, with travel demands, especially for the highway network, surpassing pre-pandemic levels. Continued high growth in households and jobs in Western Riverside County could significantly increase congestion and degrade mobility if substantial investments are not made in transportation infrastructure. This challenge is especially critical for arterial roadways of regional significance, since traditional sources of transportation funding (such as the gasoline tax and local general funds) will not be nearly sufficient to fund the needed improvements.

In February 1999, the cities of Temecula, Murrieta and Lake Elsinore, the Western Riverside Council of Governments (WRCOG), the Riverside County Transportation Commission (RCTC) and the Building Industry Association (BIA) met to discuss the concept of a Transportation Uniform Mitigation Fee (TUMF) for southwest Riverside County. In August 2000, the concept was expanded to include the entire WRCOG sub-region.

Continued high growth in households and jobs in Western Riverside County could significantly increase congestion and degrade mobility if substantial investments are not made in transportation infrastructure. This challenge is especially critical for arterial roadways of regional significance, since traditional sources of transportation funding (such as the gasoline tax and local general funds) will not be nearly sufficient to fund the needed improvements. While the TUMF cannot fund all necessary transportation system improvements, it is intended to address a current transportation funding shortfall by establishing a new revenue source that ensures future new development will contribute toward addressing its indirect cumulative traffic impacts on regional transportation infrastructure. Funding accumulated through the TUMF Program will be used to construct transportation improvements such as new arterial highway lanes, reconfigured freeway interchanges, railroad grade separations and new regional express bus services that will be needed to accommodate future travel demand in Western Riverside County. By levying a fee on new developments in the region, local agencies will be establishing a mechanism by which developers and in turn new county residents and employees will effectively contribute their "fair share" toward sustaining the regional transportation system.

This TUMF Draft Nexus Study is intended to satisfy the requirements of California Government Code Chapter 5 Section 66000-66008 Fees for Development Projects (also

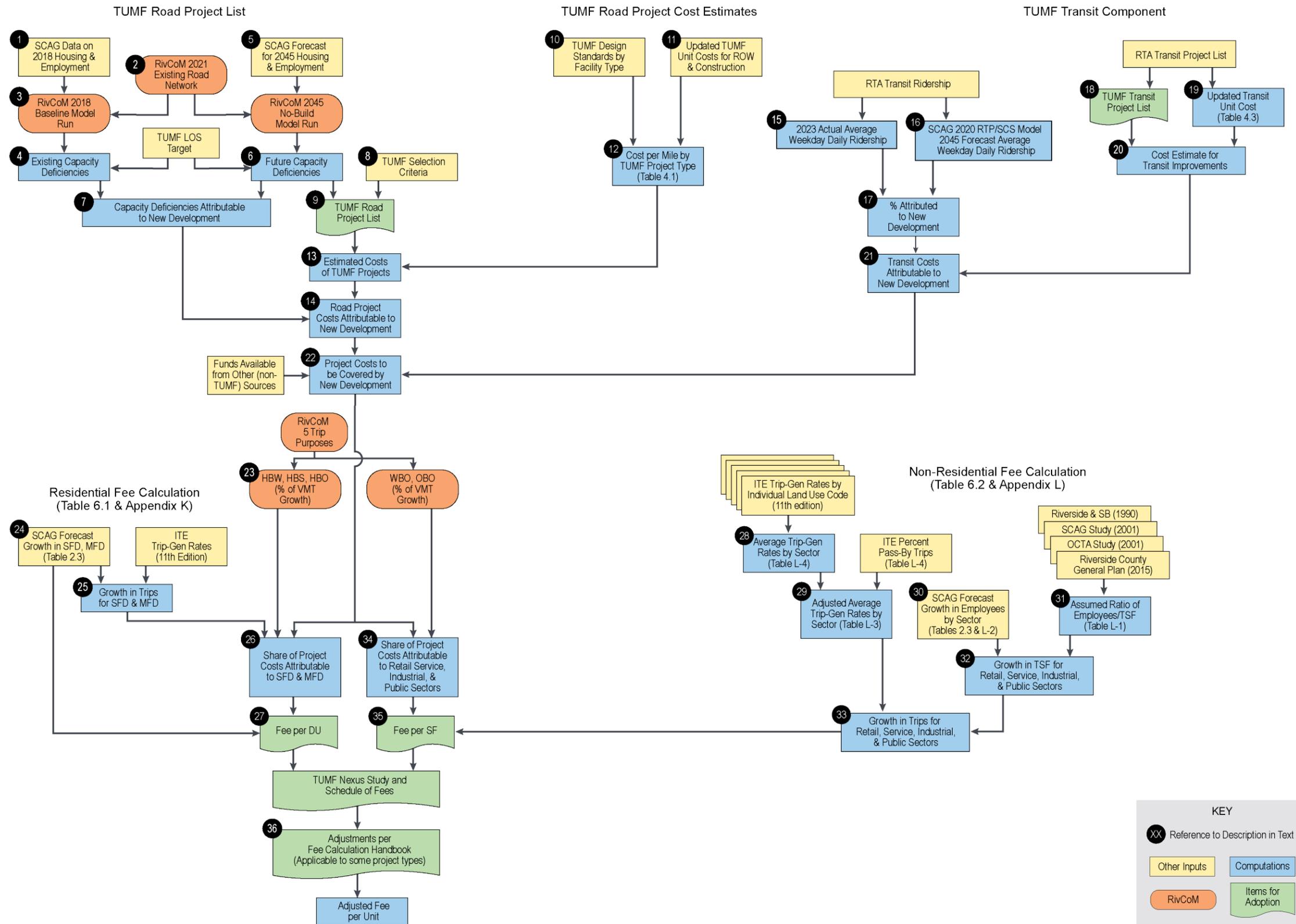
known as California Assembly Bill 1600 (AB 1600) or the Mitigation Fee Act) which governs imposing development impact fees in California. The initial WRCOG TUMF Nexus Study was completed in October 2002 and adopted by the WRCOG Executive Committee in November 2002. The results of the first review of the Program were documented in the TUMF Nexus Study 2005 Update adopted by the WRCOG Executive Committee on February 6, 2006. A second comprehensive review of the TUMF Program was adopted by the WRCOG Executive Committee on October 5, 2009. A third comprehensive review of the TUMF Program was conducted following the adoption of the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) on April 7, 2016. The WRCOG TUMF Nexus Study 2016 Update Report was adopted by the WRCOG Executive Committee on July 10, 2017.

On September 3, 2020, SCAG adopted Connect SoCal; The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments (2020 RTP/SCS). The adoption of the 2020 RTP/SCS confirmed new growth forecasts for the region that provide a foundational element for updating the TUMF program and the associated nexus determination prompting WRCOG to initiate the current program update. These forecasts are also integrated into the Riverside County Transportation Analysis Model (RivCoM) used to forecast the cumulative regional traffic impacts of new development on the arterial highway network in Western Riverside County.

The overall process for establishing the TUMF nexus is illustrated in Figure ES.1. Each technical step is denoted with a number on the flow chart with the numbers correlating to the detailed description of each step provided in Section 1.3 of the Nexus Study Report. The flow chart also incorporates color coding of the steps to indicate those steps that involved the application of RivCoM, steps that utilized other input data, steps that are computations of various inputs, and steps that required specific actions of the various WRCOG committees to confirm major variables. Where appropriate, the flow chart also includes specific cross references to the sections or tables included in the Nexus Study document that correlate to the particular step.

This version of the WRCOG TUMF Nexus Study Report documents the results of the fourth comprehensive review of the TUMF Program. This version of the document also incorporates revisions in response to comments received during the formal review of the earlier Draft TUMF Nexus Study 2024 Update. The findings of this report were ultimately adopted by the WRCOG Executive Committee on **TBD**.

Figure ES.1 - Flowchart of Key Steps in the TUMF Nexus Study Process



ES.2 Future Growth

In preparation for the 2020 RTP/SCS, SCAG undertook robust stakeholder engagement, including participation by WRCOG, Riverside County and the various cities in Western Riverside County, to develop regional demographic forecasts. Using input from regional stakeholders regarding anticipated patterns and rates of development, SCAG compiled and disseminated the forecasts that were ultimately adopted in 2020. The SCAG forecasts adopted for the 2020 RTP/SCS were subsequently used as the basis for RivCoM and are used as the basis for this TUMF Nexus Study Update.

A major distinction between data used for the TUMF Nexus Study 2016 Update and the SCAG 2020 RTP/SCS data used for this 2024 Update is the change in the base year from 2012 to 2018, as well as the change in the horizon year from 2040 to 2045. This shift in the base year and horizon year demographic assumptions of the program carries through all aspects of the nexus analysis, including the travel demand forecasting, network review and fee calculation.

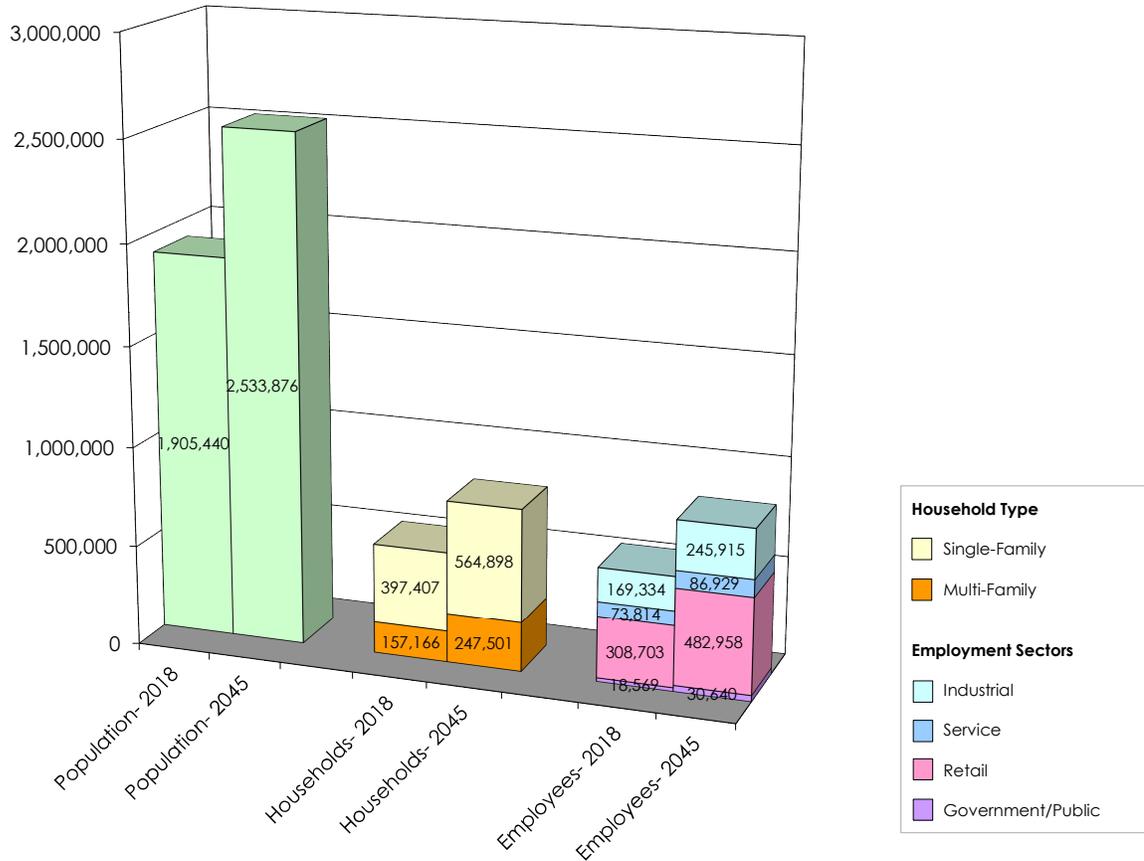
The population of Western Riverside County is projected to increase by 33% in the period between 2018 and 2045. During the same period, employment in Western Riverside County is anticipated to grow by 48%. **Figure ES.2** illustrates the forecast growth in population, household and employment for Western Riverside County.

ES.3 Need for the TUMF

The WRCOG TUMF study area was extracted from the greater RivCoM model network for the purpose of calculating measures for Western Riverside County only. Peak period performance measures for the TUMF study area included total vehicle miles of travel (VMT), total vehicle hours of travel (VHT), total combined vehicle hours of delay (VHD), and total VMT experiencing unacceptable level of service (LOS E).

As a result of the new development and associated growth in population and employment in Western Riverside County, additional pressure will be placed on the transportation infrastructure, particularly the arterial roadways, with the peak period VMT on the TUMF Network estimated to increase by 38% between 2018 and 2045. By 2045, 37% of the total VMT on the TUMF Network is forecast to be traveling on facilities experiencing peak period LOS E or worse. Without improvements to the arterial highway system, the total vehicle hours of delay (VHD) experienced by area motorists on the TUMF Network will increase over 5.0% per year. The need to improve these roadways and relieve future congestion is therefore directly linked to the future development which generates the travel demand.

Figure ES.2 - Population, Households and Employment in Western Riverside County (2018 to 2045)



As population and employment in Western Riverside County grows because of new development, demand for regional transit services in the region is also expected to grow. Weekday system ridership for RTA bus transit services is approximately 16,575 riders per day in Western Riverside County in 2023. By 2045, bus transit services are forecast to serve approximately 57,282 riders per weekday. This represents an average increase of 1,850 weekday riders each year. Based on this rate of ridership growth, weekday ridership is estimated to increase by 40,707 riders per weekday between 2018 and 2045.

The idea behind a uniform mitigation fee is to have new development throughout the region contribute equally to paying the cost of improving the transportation facilities that serve these longer-distance trips between communities. Thus, the fee should be used to improve transportation facilities that serve trips between communities within the region (primarily arterial roadways) as well as the infrastructure for public transportation. The fee should be assessed proportionately on new residential and non-residential development based on the relative impact of each use on the transportation system.

ES.4 The TUMF Network

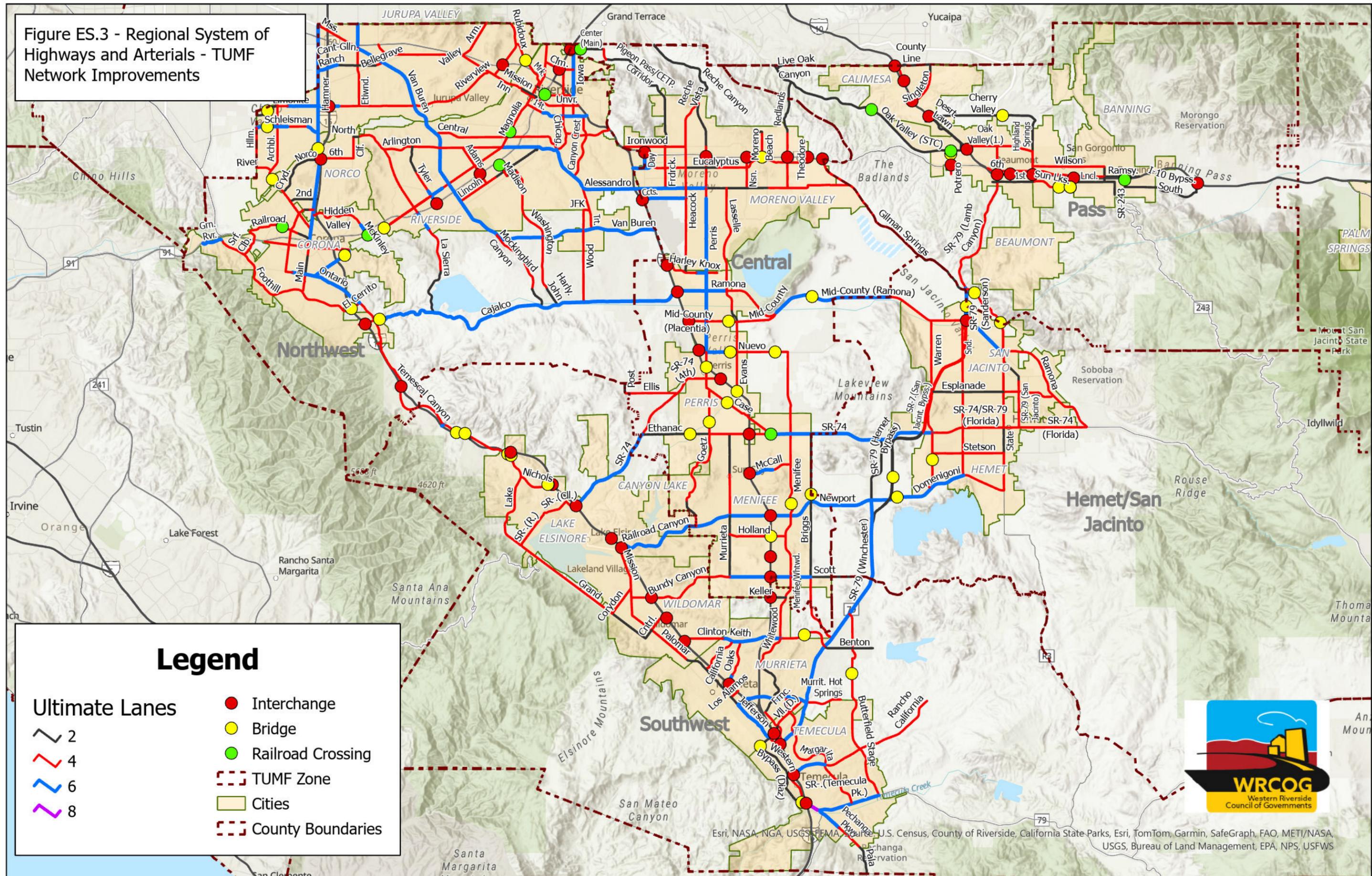
The Regional System of Highways and Arterials (also referred to as the TUMF Network) is the system of roadways that serve inter-community trips within Western Riverside County and therefore are eligible for improvement funding with TUMF funds. Transportation facilities in Western Riverside County that generally satisfied these guidelines were initially identified, and a skeletal regional transportation framework evolved from facilities where several guidelines were observed. Representatives of all WRCOG constituent jurisdictions reviewed this framework in the context of current local transportation plans to define the TUMF Network, which was subsequently endorsed by the WRCOG Public Works Committee, WRCOG Technical Advisory Committee, TUMF Policy Committee and the WRCOG Executive Committee.

The TUMF Network was reviewed as part of the 2024 Nexus Update to ensure facilities generally still met the previously described performance guidelines, and/or that the scope and magnitude of specific improvements to the TUMF Network were roughly proportional to the impacts needing to be mitigated. This review process resulted in the removal of various facilities from the TUMF Network, as well as various changes in the scope and magnitude of specific improvements to the TUMF Network.

Figure ES.3 illustrates the TUMF improvements to the Regional System of Highways and Arterials.

The total cost of improving the TUMF system is \$5.28 billion. Accounting for obligated funds and unfunded existing needs, the estimated maximum eligible value of the TUMF Program is \$4.24 billion. The maximum eligible value of the TUMF Program includes approximately \$3.87 billion in eligible arterial highway and street related improvements and \$154.8 million in eligible transit related improvements. An additional \$53.9 million is also eligible as part of the TUMF Program to mitigate the impact of eligible TUMF related arterial highway and street projects on critical native species and wildlife habitat, while \$161.2 million is provided to cover the costs incurred by WRCOG to administer the TUMF Program.

Figure ES.3 - Regional System of Highways and Arterials - TUMF Network Improvements



Legend

- | | |
|--|--|
| <p>Ultimate Lanes</p> <ul style="list-style-type: none"> 2 4 6 8 | <ul style="list-style-type: none"> Interchange Bridge Railroad Crossing TUMF Zone Cities County Boundaries |
|--|--|



Esri, NASA, NGA, USGS, FEMA, Google, U.S. Census, County of Riverside, California State Parks, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS

ES.5 TUMF Nexus Analysis

There is a reasonable relationship between the future growth and the need for improvements to the TUMF system. These factors include:

- Western Riverside County is expected to continue growing as a result of future new development.
- Continuing new growth will result in increasing congestion on arterial roadways.
- The future arterial roadway congestion is directly attributable to the cumulative regional transportation impacts of future development in Western Riverside County.
- Capacity improvements to the transportation system will be needed to mitigate the cumulative regional impacts of new development.
- Roads on the TUMF network are the facilities that merit improvement through this fee program.
- Improvements to the public transportation system will be needed to provide adequate mobility for transit-dependent travelers and to provide an alternative to automobile travel.

The split of fee revenues between the backbone and secondary highway networks is related to the proportion of highway vehicle travel that is relatively local (between adjacent communities) and longer distance (between more distant communities but still within Western Riverside County). To estimate a rational fee split between the respective networks, the future travel forecast estimates were aggregated to a matrix of peak period trips between zones. The overall result is that 51.1% of the regional travel is attributable to the backbone network and 48.9% is assigned to the secondary network.

In order to establish the approximate proportionality of the future traffic impacts associated with new residential development and new non-residential development, peak period growth in VMT between 2018 and 2045 was derived from RivCoM and aggregated by trip purpose. It was concluded that home-based person trips represent 77.7% of the total future person trips, and the non-home-based person trips represent 22.3% of the total future person trips.

ES.6 Fair-Share Fee Calculation

The balance of the unfunded TUMF system improvement needs is \$4.24 billion which is the maximum value attributable to the mitigation of the cumulative regional transportation impacts of future new development in the WRCOG region and will be captured through the TUMF Program. By levying the uniform fee directly on future new developments (and indirectly on new residents and new employees to Western Riverside County), these transportation system users are assigned their “fair share” of the

costs to address the cumulative impacts of additional traffic they will generate on the regional transportation system.

Of the \$4.24 billion in unfunded future improvement needs, 77.7% (\$3.30 billion) will be assigned to future new residential development and 22.3% (\$946.5 million) will be assigned to future new non-residential development.

ES.7 Conclusions

Based on the results of the Nexus Study evaluation, it can be demonstrated that there is reasonable relationship between the cumulative regional transportation impacts of new land development projects in Western Riverside County and the need to mitigate these transportation impacts using funds levied through the proposed TUMF Program. Factors that reflect this reasonable relationship include:

- Western Riverside County is expected to continue growing as a result of future new development.
- Continuing new growth will result in increasing congestion on arterial roadways;
- The future arterial roadway congestion is directly attributable to the cumulative regional transportation impacts of future development in Western Riverside County;
- Capacity improvements to the transportation system will be needed to mitigate the cumulative impacts of new development;
- Roads on the TUMF network are the facilities that merit improvement through this fee program;
- Improvements to the public transportation system will be needed to provide adequate mobility for transit-dependent travelers and to provide an alternative to automotive travel.

The Nexus Study evaluation has established a proportional “fair share” of the improvement cost attributable to new development based on the impacts of existing development and the availability of obligated funding through traditional sources. The fair share fee allocable to future new residential and non-residential development in Western Riverside County is summarized for differing use types in **Table ES.1**.

Table ES.1 - Transportation Uniform Mitigation Fee for Western Riverside County				
Land Use Type	Units	Development Change	Fee Per Unit	Total Revenue (\$ million)
Single Family Residential	DU	167,491	\$15,476	\$2,592.0
Multi Family Residential	DU	90,335	\$7,816	\$706.1
Industrial	SF GFA	61,489,565	\$2.33	\$143.1
Retail	SF GFA	6,557,500	\$11.21	\$73.5
Service	SF GFA	66,735,957	\$9.76	\$651.1
Government/Public	SF GFA	3,420,665	\$23.07	\$78.9
MAXIMUM TUMF VALUE				\$2,961.0

1.0 INTRODUCTION AND PURPOSE OF THE NEXUS STUDY

1.1 Background

Western Riverside County includes 18 incorporated cities and the unincorporated county covering an area of approximately 2,100 square miles. Through the mid 2000's, this portion of Riverside County was growing at a pace exceeding the capacity of existing financial resources to meet increasing demand for transportation infrastructure. Although the economic recession of the late 2000's, and the associated crises in the mortgage and housing industries, slowed this rate of growth, the regional economy has recovered and the projected rate of development in Western Riverside County remains high. Similarly, the impact of the COVID-19 pandemic on travel demand in the region has also passed, with travel demands, especially for the highway network, surpassing pre-pandemic levels.

Continued high growth in households and jobs in Western Riverside County could significantly increase congestion and degrade mobility if substantial investments are not made in transportation infrastructure. This challenge is especially critical for arterial roadways of regional significance, since traditional sources of transportation funding (such as the gasoline tax and local general funds) will not be nearly sufficient to fund the needed improvements. Development exactions only provide improvements near the development site, and the broad-based county-level funding sources (i.e., Riverside County's half-cent sales tax known as Measure A) designate only a small portion of their revenues for arterial roadway improvements.

In anticipation of the continued future growth projected in Riverside County, several county-wide planning processes were initiated in 1999. These planning processes include the Riverside County General Plan Update, the Community Environmental Transportation Acceptability Process (CETAP) and the Multi-Species Habitat Conservation Plan (MSHCP). Related to these planning processes is the need to fund the mitigation of the cumulative regional transportation impacts of future new development.

Regional arterial highways in Western Riverside County are forecast to carry significant traffic volumes by 2045. While some localized fee programs exist to mitigate the local impacts of new development on the transportation system in specific areas, and while these programs are effective locally, they are insufficient in their ability to meet the regional demand for transportation infrastructure. Former Riverside County Supervisor Buster recognized the need to establish a comprehensive funding source to mitigate the cumulative regional transportation impacts of new development on regional arterial highways. The need to establish a comprehensive funding source for arterial highway improvements has evolved into the development of the Transportation Uniform Mitigation Fee (TUMF) for Western Riverside County.

In February 1999, the cities of Temecula, Murrieta and Lake Elsinore, the Western Riverside Council of Governments (WRCOG), the Riverside County Transportation Commission (RCTC) and the Building Industry Association (BIA) met to discuss the

concept of a TUMF. The intent of this effort was to have the southwest area of Western Riverside County act as a demonstration for the development of policies and a process for a regional TUMF Program before applying the concept countywide. From February 1999 to September 2000, the Southwest Area Transportation Infrastructure System Funding Year 2020 (SATISFY 2020) Program progressed with policy development, the identification of transportation improvements, traffic modeling, cost estimates, fee scenarios and a draft Implementation Agreement.

In May 2000, Riverside County Supervisor Tavaglione initiated discussions in the northwest area of Western Riverside County to determine the level of interest in developing a TUMF for that area of the county. Interest in the development of a northwest area fee program was high. In August 2000, the WRCOG Executive Committee took action to build upon the work completed in the southwest area for the SATISFY 2020 program and to develop a single consolidated mitigation fee program for all of Western Riverside County. This action was predicated on the desire to establish a single uniform mitigation fee program to mitigate the cumulative regional impacts of new development on the regional arterial highway system, rather than multiple discrete and disparate fee programs with varying policies, fees and improvement projects. A TUMF Policy Committee comprising regional elected officials was formed to recommend and set policies for staff to develop the TUMF Program and provide overall guidance to all other staff committees.

While the TUMF cannot fund all necessary transportation system improvements, it is intended to address a current transportation funding shortfall by establishing a new revenue source that ensures future new development will contribute toward addressing its indirect cumulative traffic impacts on regional transportation infrastructure. Funding accumulated through the TUMF Program will be used to construct transportation improvements such as new arterial highway lanes, reconfigured freeway interchanges, railroad grade separations and new regional express bus services that will be needed to accommodate future travel demand in Western Riverside County. By levying a fee on new developments in the region, local agencies will be establishing a mechanism by which developers and in turn new county residents and employees will effectively contribute their “fair share” toward sustaining the regional transportation system.

This TUMF Nexus Study is intended to satisfy the requirements of California Government Code Chapter 5 Section 66000-66008 Fees for Development Projects (also known as California Assembly Bill 1600 (AB 1600) or the Mitigation Fee Act), which governs imposing development impact fees in California. The Mitigation Fee Act requires that all local agencies in California, including cities, counties, and special districts follow two basic rules when instituting impact fees. These rules are as follows:

- 1) Establish a nexus or reasonable relationship between the development impact fee's use and the type of project for which the fee is required.
- 2) The fee must not exceed the project's proportional “fair share” of the proposed improvement and cannot be used to correct current problems or to make improvements for existing development.

1.2 TUMF Nexus Study History

The TUMF Program is implemented through the auspices of WRCOG. As the council of governments for Western Riverside County, WRCOG provides a forum for representatives from 18 cities, the Riverside County Board of Supervisors, the Eastern Municipal Water District, Western Water, the Riverside County Superintendent of Schools, the March Joint Powers Authority and the Riverside Transit Agency to collaborate on issues that affect the entire subregion, such as air quality, solid waste, transportation and the environment. WRCOG strives to "respect local control, provide regional perspective, and make a difference" to elevate the quality of life throughout the subregion. A current list of the standing WRCOG committees and committee membership that oversee the TUMF program is included in **Appendix A**.

The initial WRCOG TUMF Nexus Study was completed in October 2002 and adopted by the WRCOG Executive Committee in November 2002. Its purpose was to establish the nexus or reasonable relationship between new land development projects in Western Riverside County and the proposed development impact fee that would be used to improve regional transportation facilities. It also identified the proportional "fair share" of the improvement cost attributable to new development.

Consistent with the provisions of the Mitigation Fee Act, the WRCOG Executive Committee has established that the TUMF Nexus Study will be subject of a comprehensive review of the underlying program assumptions at least every five years to confirm the Nexus. Acknowledging the unprecedented and unique nature of the TUMF Program, the Executive Committee determined that the first comprehensive review of the Program should be initiated within two years of initial adoption of the Program primarily to validate the findings and recommendations of the study and to correct any program oversights. The results of the first review of the Program were documented in the TUMF Nexus Study 2005 Update adopted by the WRCOG Executive Committee on February 6, 2006. A second comprehensive review of the TUMF Program was conducted in 2008 and 2009 in part to address the impacts of the economic recession on the rate of development within the region and on transportation project costs. The findings of the 2009 review of the program were adopted by the WRCOG Executive Committee on October 5, 2009.

A third comprehensive review of the TUMF Program was conducted in 2014 and 2015 leading to a Draft Nexus Study document being distributed for review in August 2015. The WRCOG Executive Committee subsequently considered comments related to the Draft Nexus Study 2015 Update at the meeting held on September 14, 2015, where it was resolved to "delay finalizing the Nexus Study for the TUMF Program Update until the 2016 Southern California Association of Governments' 2016 Regional Transportation Plan / Sustainable Communities Strategy growth forecast is available for inclusion in the Nexus Study". The Southern California Association of Governments (SCAG) adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) on April 7, 2016, enabling WRCOG staff to proceed with finalizing the update of the TUMF Nexus Study. The WRCOG TUMF Nexus Study 2016 Update Report was ultimately adopted by the WRCOG Executive Committee on July 10, 2017.

On September 3, 2020, SCAG adopted Connect SoCal; The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments (2020 RTP/SCS). As stated in the plan document “Connect SoCal embodies a collective vision for the region's future, through the horizon year of 2045. It is developed with input from a wide range of constituents and stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura, including public agencies, community organizations, elected officials, tribal governments, the business community and the public. Connect SoCal is an important planning document for the region, allowing public agencies who implement transportation projects to do so in a coordinated manner, while qualifying for federal and state funding.”

The adoption of the 2020 RTP/SCS confirmed new growth forecasts for the region that were used as the basis to develop the Connect SoCal plan. These forecasts also provide a foundational element for updating the TUMF program and the associated nexus determination prompting WRCOG to initiate the current program update. The 2020 RTP/SCS growth forecasts are used directly in the fee calculation as the basis for determining the anticipated growth in households and employment in the region through the program horizon year of 2045. These forecasts are also integrated into the Riverside County Transportation Analysis Model (RivCoM) used to forecast the cumulative regional traffic impacts of new development on the arterial highway network in Western Riverside County.

Completed in 2021 to succeed the Riverside County Traffic Analysis Model (RIVTAM), RivCoM provides a valuable tool for supporting a variety of transportation planning activities in Riverside County, including the update of the TUMF Nexus Study. RivCoM was developed under the leadership of WRCOG in conjunction with regional partners with the intent to provide jurisdictions in Riverside County with a traffic forecasting tool that, while consistent with the SCAG regional travel demand model, provides a more appropriate level of detail to support transportation planning at the County or City level.

RivCoM is a critical tool for quantifying the cumulative regional traffic impacts of new development as part of the TUMF Nexus Study Update. Utilizing the 2020 RTP/SCS growth forecasts, RivCoM is used to quantify changes in travel demand and traffic conditions on the regional highway network, with a specific focus on the TUMF Network. RivCoM outputs are used to analyze project eligibility and quantify the fair share of traffic growth that is attributable to new development as inputs to determining the fee. The adoption of the Connect SoCal plan and the availability of RivCoM to serve as a critical tool for quantifying network impacts for the TUMF Nexus Study Update were key factors driving the schedule for this update of the fee.

To ensure new development continues to contribute a fair share of the cost to mitigate its cumulative regional transportation impacts in the period between the comprehensive review of program assumptions completed at least every five years, the WRCOG Executive Committee has also established that the TUMF Schedule of Fees will be reviewed annually, and adjusted, as needed, on July 1st to reflect current costs. The revised schedule of fees will typically be recalculated in February of each year based

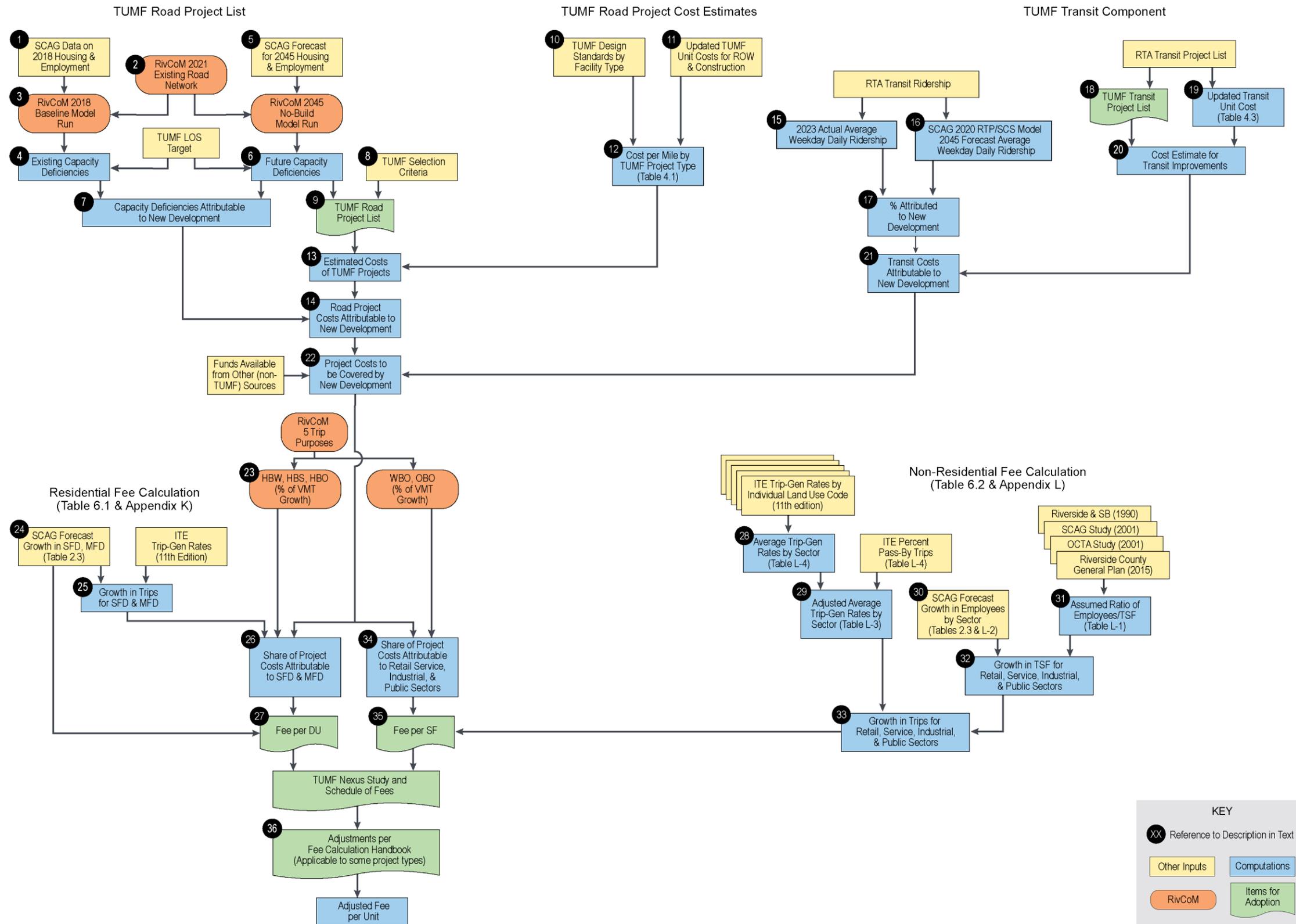
on the percentage increase or decrease in the Engineering News Record (ENR) Construction Cost Index (CCI) for the twelve (12) month period from January of the prior year to January of the current year, and the percentage increase or decrease in the National Association of Realtors (NAR) Median Sales Price of Existing Single Family Homes in the Riverside/San Bernardino Metropolitan Statistical Area for the twelve (12) month period from the 3rd Quarter of the second year prior to the 3rd Quarter of the prior year (to coincide with the publication of the most recently updated index). If approved by the Executive Committee, the resultant percentage change for each of the indices will be applied to the unit cost assumptions for roadway and bus transit costs, and land acquisition costs, respectively, to reflect the combined effects of changes in eligible project costs on the resultant per unit fee for each defined land use category. The most recent annual cost adjustment to the TUMF Schedule of Fees was adopted by the WRCOG Executive Committee on July 12, 2021.

1.3 TUMF Nexus Study Process

In coordination with WRCOG, city and county representatives and other interested parties have reviewed the underlying assumptions of the Nexus Study as part of this comprehensive program review. In particular, the most recent socioeconomic forecasts developed by SCAG as the basis for the 2020 RTP/SCS were incorporated. This use of the most recent SCAG forecasts resulted in a shift of the program base year from 2012 to 2018, as well as a shift in the program horizon year from 2040 to 2045. Furthermore, the TUMF Network was re-examined in detail based on travel demand forecasts derived from the most recent version of the Riverside County Model (RivCoM) to more accurately reflect future project needs to address the cumulative regional impacts of new development in Western Riverside County as well as eliminating those projects having been completed prior to the commencement of the Nexus review in 2021.

The subsequent chapters of this Nexus Study document describe the various assumptions, data inputs and analysis leading to the determination of each major variable in the TUMF calculation, and ultimately leading to the determination of the TUMF Schedule of Fees that indicates the maximum "fair share" fee for each of the various use types defined in the TUMF program. The overall process for establishing the TUMF nexus is summarized in this section, including the flow chart in **Figure 1.1** that illustrates the various technical steps in this fee calculation process. Each technical step that was followed to determine the TUMF Schedule of Fees and establish the program nexus is summarized below, with the numbers denoted on the flow chart correlating to the steps described. The flow chart also incorporates color coding of the steps to indicate those steps that involved the application of RivCoM, steps that utilized other input data, steps that are computations of various inputs, and steps that required specific actions of the various WRCOG committees to confirm major variables. Where appropriate, the flow chart also includes specific cross references to the sections or tables included in this Nexus Study document that correlate to the particular step.

Figure 1.1 - Flowchart of Key Steps in the TUMF Nexus Study Process



2.3.1. Establish the TUMF Network Project List

The roadway network in Western Riverside County must be evaluated to determine how new development activity will impact the performance of the network, and how the resultant traffic impacts can be mitigated by completing various roadway improvements. The following steps integrate the latest SCAG socio-economic forecasts into RivCoM as the basis for determining future roadway deficiencies and identifying the list of eligible improvements to address these future deficiencies. The rational and methodology for accomplishing these steps is further explained in **Chapters 2 and 3** of this report, with the resultant TUMF Network described in **Chapter 4**.

- 1) The SCAG 2020 RTP/SCS was developed using housing and employment data for 2018 as its base year. This adopted dataset was integrated into RivCoM providing a critical analytic tool to support the Nexus Study Update.
- 2) The RivCoM model¹ has datasets available that represent the capacity of the different facilities in the road network for several different study years. For this nexus update, the RivCoM 2018 base network that was developed following the adoption of the SCAG 2020 RTP was selected as the one most closely resembling current conditions. This network was subsequently reviewed and updated, including a detailed review by WRCOG staff and participating jurisdictions, to identify projects that were completed on the arterial network in the period between 2016 and December 2021. The arterial network was then recoded to reflect the changes to the TUMF Network to create a 2021 Existing Network as the base network for analysis. A second version of the base network was also developed adding only those facilities that had been identified on the 2016 TUMF network that did not currently exist and therefore were not represented by a link(s) in RivCoM. The Supplemental 2021 Existing Network was utilized as the basis for assessing only those projects that did not currently exist on the TUMF Network.
- 3) RivCoM was run using the 2018 socio-economic data (SED) and the 2021 Existing Networks to produce the baseline volumes on the roads in the TUMF Network.
- 4) The baseline volume-to-capacity (V/C) ratio was then determined. The target LOS for TUMF facilities is “D”, meaning that facilities with LOS “E” or “F”, i.e. those with a V/C ratio of 0.9 or higher, are deemed to have inadequate capacity. The result of this step is a list of roads that have existing capacity deficiencies.

¹ The macro-level traffic forecasting was conducted using the Riverside County Transportation Analysis Model (RivCoM). RivCoM is consistent of SCAG’s six-county model with additional detail (traffic analysis zones and local roads) added within Riverside County. It was developed for use in traffic studies in Riverside County as a replacement for the Riverside County Transportation and Analysis Model (RivTAM) integrating an updated modeling platform to improve run time and reliability, as well as a more focused model area, more detailed network and zone structure, and post processors to satisfy more recent legislative requirements. RivCoM has both the geographic scope needed to analyze all TUMF facilities and conformity with regional planning assumptions. There is a memorandum of understanding among the jurisdictions of Riverside County that encourages the use of the RivCoM model for use in regional traffic studies.

- 5) The SCAG 2020 RTP/SCS was developed using housing and employment data for 2045 as its forecast horizon year. This adopted dataset was also used as the future base year for the TUMF update calculation.
- 6) RivCoM was run using the 2021 Existing Networks with the land use assumptions for 2045. These “Future No-Build” scenarios was used to determine where deficiencies would occur in the roadway system if development occurred as expected but no roadway improvements were implemented.
- 7) Comparing the existing capacity deficiencies with the future deficiencies showed where new deficiencies would occur that are entirely attributable to growth in households and employment. Comparing the existing and future traffic volume to capacity ratio on the roads that are currently deficient shows the portion of the future deficiency that is attributable to growth.
- 8) It is generally acknowledged that the TUMF program cannot and should not attempt to fund every roadway improvement needed in Western Riverside County. WRCOG has adopted a set of selection criteria that was used to choose which roadway improvements would be eligible for TUMF funding.
- 9) The selection criteria were applied to the forecast deficiencies to identify projects for the TUMF Project List. The project list was subsequently reviewed to confirm the eligibility of proposed projects, including projects previously included in the TUMF program, as well as additional projects requested for inclusion as part of the current update. The project list was then subsequently updated to reflect those projects considered eligible for TUMF funding as part of the 2024 Nexus Study Update.

2.3.2. Determine the TUMF Network Project Costs

The estimated costs of proposed improvements on the TUMF Network are calculated based on the prices of construction materials, labor and land values for the various eligible project types included as part of the TUMF program. The approach and outcomes of the following steps is described in **Chapter 4** of this report.

- 10) The TUMF program has design standards covering the road project components that are eligible for TUMF funding. This ensures that projects in jurisdictions with different design standards are treated equally².
- 11) Current cost values for labor and materials such as cement, asphalt, reinforcing steel, etc., as derived from Caltrans cost database, RCTC and other sources, were tabulated and updated to December 2023. Additionally, the ROW cost components per square foot for various land use types were also updated based on current property valuations in Riverside County as researched by Overland, Pacific and Cutler.

² A jurisdiction may choose to design to a higher standard, but if it does so, TUMF will only fund up to the equivalent of what costs would have been had the TUMF design standards been followed.

- 12) The cost values for the contributing labor, materials and land components were applied to estimated quantities of these components for the various roadway project types that are eligible under TUMF to generate aggregate unit cost values for each project type (road costs per lane-mile, typical costs per arterial-freeway interchange, bridge costs per linear foot, etc.).
- 13) The unit costs from the previous step were then applied to the project list to estimate the costs of the improvements on the TUMF project list.
- 14) The percentage of each project that was attributable to new development was then applied to the costs of TUMF road projects to find the total road project cost that is attributable to new development.

2.3.3. Determine the TUMF Transit Component

A portion of the TUMF funding is made available for transit services that provide an alternative to car travel for medium-to-long distance intra-regional trips. The eligible transit projects and their associated costs are determined using the following steps, with additional explanation provided in **Chapter 4** of this report.

- 15) Actual average weekday daily ridership for Riverside Transit Agency (RTA) transit bus services was tabulated for 2023.
- 16) Forecast average weekday daily ridership for RTA bus transit services was retrieved from the SCAG 2020 RTP/SCS Model for horizon year 2045.
- 17) The growth in ridership between 2023 and 2045 was compared to determine the portion of 2045 average weekday daily ridership that is attributable to existing passengers and the portion attributable to new growth.
- 18) A proposed transit project list was provided by RTA staff and was reviewed to confirm the validity of the project list to establish a final recommended transit project list to be included as part of the program. The result was the TUMF Transit Project List.
- 19) RTA provided information on current costs for the listed transit infrastructure.
- 20) The cost information was then used to determine the cost of the items on the TUMF Transit Project List.
- 21) The percent attribution from Step 17 was applied to the project cost estimates from the previous step to determine the cost of transit improvements that are attributable to new development.
- 22) The costs for road and transit projects that are attributable to new development are then combined along with information on other (non-TUMF) funds to determine the total cost for TUMF projects that is to be cover by new development through the imposition of the fees. The available alternate funding sources were reviewed as part of the Nexus update, specifically including the completion of a detailed review of available federal, state and local funding sources administered by RCTC.

2.3.4. Computing the Fee for Residential Developments

Having determined the total project costs to be covered by new development under the TUMF program, it is necessary to divide these costs among different types of developments roughly in proportion to their expected traffic impacts. The following steps describes the process for determining the proportion attributable to new residential development. The approach for accomplishing these steps along with the findings of this analysis are described in detail in **Chapter 5** and **Chapter 6** of this report.

- 23) California legislation encourages the use of vehicle miles of travel (VMT) as the primary indicator of traffic impacts because it combines the number of vehicle trips and the average length of those trips to reflect the proportional impact to the roadway network. As a result, the methodology for determining the relative distribution of traffic impacts between residential and non-residential uses for the purposes of TUMF utilizes a VMT based approach. The RivCoM 2021 Existing Network and 2045 No-Build model runs were examined to determine the VMT of various trip types that would take place in Western Riverside County (excluding through trips). The results were compared to determine the growth in VMT for each trip type. Per WRCOG policy (based on National Cooperative Highway Research Program (NCHRP) recommended practice) trips originating in or destined for a home are attributed to residential development while trips where neither the origin nor the destination are a home are attributed to non-residential development.
- 24) The SCAG 2020 RTP/SCS socio-economic forecasts were used to estimate the number of single-family and multi-family dwelling units that will be developed during the 2018 to 2045 period.
- 25) The Institute of Transportation Engineers' (ITE's) trip generation rates, which come from surveys of existing sites for various development types, were then used to estimate the daily number of trips that will be generated by future single- and multi-family developments that will occur in the region from 2018 to 2045.
- 26) The cost to be covered by residential development was divided into the portion attributable to new single-family dwellings and portion attributable to new multi-family development to calculate the cost share for each use.
- 27) The cost share for single-family dwellings and multi-family dwellings was divided by the number of dwellings of each type to determine the fee level required from each new dwelling unit to cover their fair share of the cost to mitigate the impacts of new developments.

2.3.5. Computing the Fee for Non-Residential Developments

A process similar to that used for residential units was used to determine the fee level for non-residential development. However, the determination of fees for non-residential development involves additional steps due to the additional complexity of accounting for a greater variety of development types within each use category. **Chapter 5** and **Chapter 6** of this report provide additional explanation regarding the methodology for accomplishing these steps along with the results of this analysis.

- 28) Like many impact fee programs, TUMF groups similar development projects together into general use categories to simplify the administration of the program. TUMF groups the various land use categories found in ITE's Trip Generation Manual into four non-residential categories (industrial, retail, service, and government/public sector) based on the North American Industry Classification System (NAICS), which is also used by the U.S. Census Bureau and SCAG for demographic classifications and is the basis for such classifications in the SCAG Regional Travel Demand Model as well as and the RivCoM model. The ITE trip generation rates for all uses were reviewed for accuracy updated to reflect the most current ITE published rates. The median value for the trip-generation rates for all uses within each category was used in the nexus study to represent the trip-generation characteristics for the category.
- 29) The trip-generation rates of retail and service uses were adjusted to take into account the share of pass-by trips these uses generate. Pass by trip rates for various retail and service uses were derived from the ITE Trip Generation Manual to determine the median value of all uses as the basis for the adjustment. The ITE pass by trip rates for all uses were reviewed for accuracy and updated to reflect the most current ITE published rates.
- 30) The SCAG 2020 RTP/SCS socio economic forecasts included non-residential employment for 2018 and 2045. These forecasts were used to estimate the growth in employment in each of the four non-residential uses.
- 31) The SCAG employment forecasts are denominated in jobs while development applications are typically denominated in square feet of floorspace. The ratio of floorspace per employee was determined as a median value derived from four studies, including a comprehensive study San Bernardino and Riverside Counties conducted in 1990, an OCTA study conducted in 2001, a SCAG study (including a specific focus on Riverside County) conducted in 2001, and the Riverside County General Plan adopted in 2015.
- 32) The forecast growth in employees was multiplied by the floorspace per employee to produce a forecast of the floorspace that will be developed for each of the four non-residential use types.
- 33) The trip-generation rate for each of the four uses was multiplied by the forecast of new floorspace to estimate the number of trips generated by each use.
- 34) The amount of project costs to be covered by non-residential development was split between the four non-residential uses to determine the TUMF cost share for each.
- 35) The TUMF cost share for each of the four non-residential uses was divided by the forecast growth in floorspace to determine the fee level required from each new square foot of non-residential development to cover their fair share of the cost to mitigate the impacts of new developments.
- 36) WRCOG has adopted a TUMF Fee Calculation Handbook that allows for fee adjustments to be made to account for unusual circumstances for certain types of residential and non-residential development (fuel filling stations, golf courses, high-cube warehouses, wineries, electric charging stations, etc.) These

adjustments are intended to calculate a fairer proportional fee based on the unique trip generation characteristics of these development types.

The outcome of this process is a schedule of fees for the various use categories identified as part of the TUMF program. The study conclusions including the Schedule of Fees is presented in **Chapter 7** of this report. The schedule of fees represents the **maximum** fee permissible under California law for the purposes of the TUMF program. The WRCOG Executive Committee has the option to adopt lower fees, however, in doing so each use category subject to a lower fee would not be contributing a fair share of the cost of their impacts. This would in turn create a funding gap for the program that would necessitate identifying additional project funding from some other source to ensure the cumulative regional impacts of new development are being mitigated fully in accordance with the program.

2.0 FUTURE GROWTH

2.1 Recent Historical Trend

Western Riverside County experienced robust growth in the period from the late 1990's to the mid 2000's. The results of Census 2000 indicate that in the year 2000, Western Riverside County had a population of 1.187 million representing a 30% increase (or 2.7% average annual increase) from the 1990 population of 912,000. Total employment in Western Riverside County in 2000 was estimated by the SCAG to be 381,000 representing a 46% increase (or 3.9% average annual increase) over the 1990 employment of 261,000.

Despite the impacts of the Great Recession and the associated residential mortgage and foreclosure crisis, and more recently with the shifting of population during and following the COVID-19 pandemic, Western Riverside County has continued to grow due to the availability of relatively affordable residential and commercial property, and a generally well-educated workforce. By 2010, the population of the region had grown to 1.742 million, a further 47% growth in population from 2000. Similarly, total employment in the region had also grown from 2000 to 2010 with 434,000 employees estimated to be working in Western Riverside County. This represents a 12% increase from the 381,000 employees working in the region in 2000.

2.2 Available Demographic Data

A variety of alternate demographic information that quantifies future population, household and employment growth is available for Western Riverside County. For earlier versions of the TUMF Nexus Study, the primary available source of consolidated demographic information for Western Riverside County was provided by SCAG. SCAG is the largest of nearly 700 Councils of Government (COG) in the United States and functions as the Metropolitan Planning Organization (MPO) for six counties in Southern California including Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. SCAG is mandated by the federal government to research and plan for issues of regional significance including transportation and growth management. As part of these responsibilities, SCAG maintains a comprehensive database of regional socioeconomic data and develops demographic projections and travel demand forecasts for Southern California.

In preparation for the 2020 RTP/SCS, SCAG undertook robust stakeholder engagement, including participation by WRCOG, Riverside County and the various cities in Western Riverside County, to develop regional demographic forecasts. Using input from regional stakeholders regarding anticipated patterns and rates of development, SCAG compiled and disseminated the forecasts that were ultimately adopted in 2020, including those specific to Western Riverside County. The SCAG forecasts adopted for the 2020 RTP/SCS were subsequently used as the basis for RivCoM and are used as the basis for this TUMF Nexus Study Update.

2.3 Demographic Assumptions Used for the Nexus Study Analysis

A major distinction between data used for the TUMF Nexus Study 2016 Update and the SCAG 2020 RTP/SCS data used for this 2024 Update is the change in the base year from 2012 to 2018, as well as the change in the horizon year from 2040 to 2045. This shift in the base year and horizon year demographic assumptions of the program carries through all aspects of the nexus analysis, including the travel demand forecasting, network review and fee calculation.

The SCAG 2020 RTP/SCS data were compared to the 2016 RTP/SCS data used in the TUMF Nexus Study 2016 Update. As can be seen in **Table 2.1** and **Figure 2.1**, the 2018 data reflects an increase in population and single-family households, and a very slight decline in multi-family households. Employment grew substantially overall, with significant growth in industrial employment, largely attributable to the rapid expansion of warehousing and logistics facilities in Western Riverside County. In contrast, there was a notable decline in government and public sector employment in the region from 2012 to 2018

Table 2.1 - Base Year Socioeconomic Estimates for Western Riverside County

SED Type	2016 Update (2012)	2024 Update (2018)	Change	Percent
Total Population	1,773,935	1,905,440	131,505	7%
Total Households	525,149	554,573	29,424	6%
Single-Family	366,588	397,407	30,819	8%
Multi-Family	158,561	157,166	-1,395	-1%
Total Employment	460,787	570,420	109,633	24%
Industrial	120,736	169,334	48,598	40%
Retail	65,888	73,814	7,926	12%
Service	253,372	308,703	55,331	22%
Government/Public Sector	20,791	18,569	-2,222	-11%

Source: SCAG 2016 RTP/SCS; SCAG 2020 RTP/SCS

Figure 2.1 – Base Year Socioeconomic Estimates for Western Riverside County

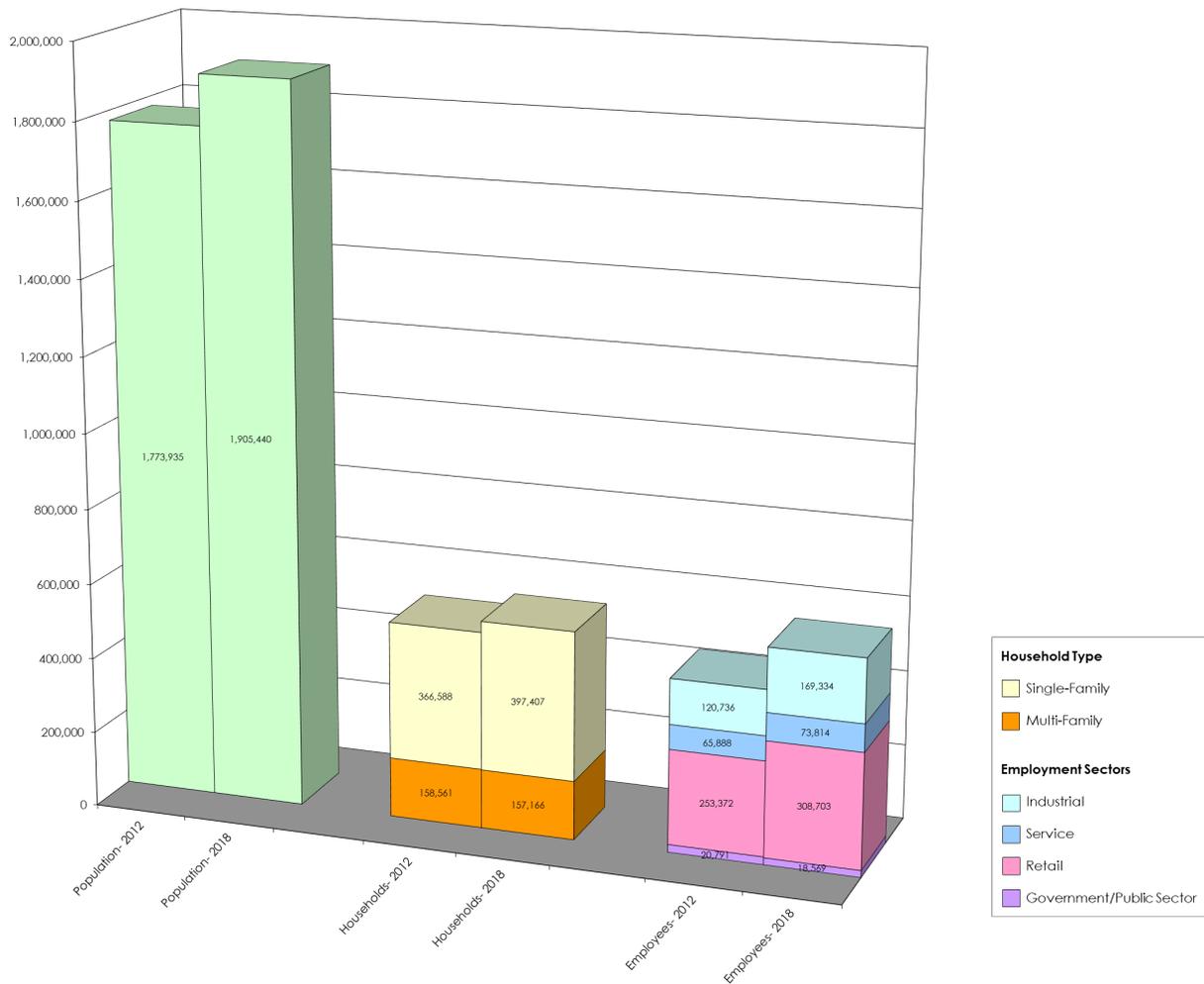


Table 2.2 and **Figure 2.2** compare the socioeconomic forecasts for the program horizon year of 2045 used in the TUMF Nexus Study 2016 Update and 2045 for this study. The most recent forecasts reflect an increase in the horizon year population and households, and a decrease in overall employment in Western Riverside County. The change in employment was not, however, consistent across sectors. The retail employment forecast has decreased approximately 15% from 2040 to 2045, while the industrial employment forecast has increased over 20%. This shift is consistent with the emergence of e-commerce as an alternative to traditional “brick and mortar” retail.

Table 2.2 - Horizon Year Socioeconomic Estimates for Western Riverside County

SED Type	2016 Update (2040)	2024 Update (2045)	Change	Percent
Total Population	2,429,633	2,533,876	104,243	4%
Total Households	775,231	812,399	37,168	5%
Single-Family	539,631	564,898	25,267	5%
Multi-Family	235,600	247,501	11,901	5%
Total Employment	861,455	846,442	-15,013	-2%
TUMF Industrial	201,328	245,915	44,587	22%
TUMF Retail	101,729	86,929	-14,800	-15%
TUMF Service	528,092	482,958	-45,134	-9%
TUMF Government/Public Sector	30,306	30,640	334	1%

Source: SCAG 2016 RTP/SCS; SCAG 2020 RTP/SCS

Figure 2.2 - Horizon Year Socioeconomic Estimates for Western Riverside County

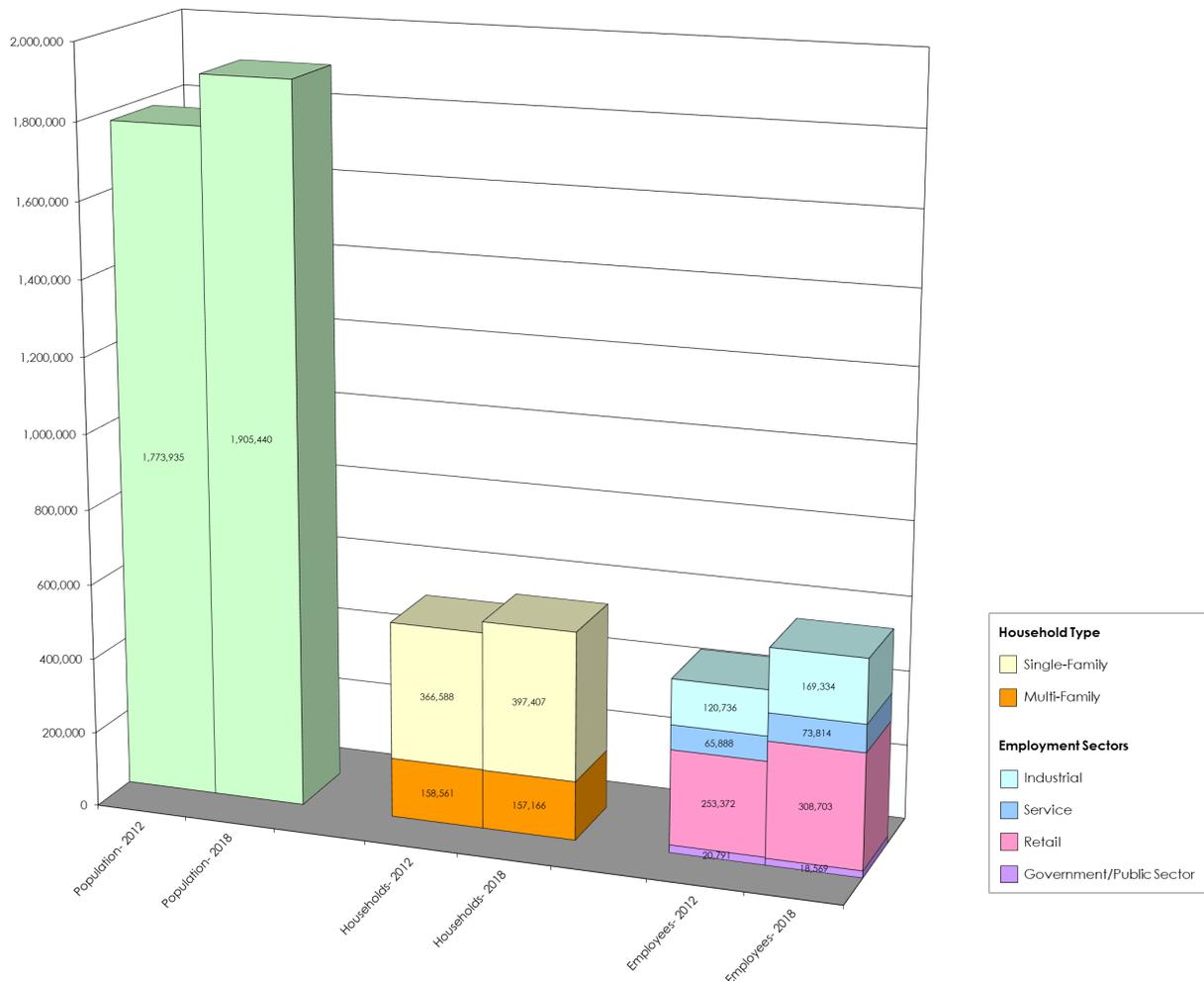


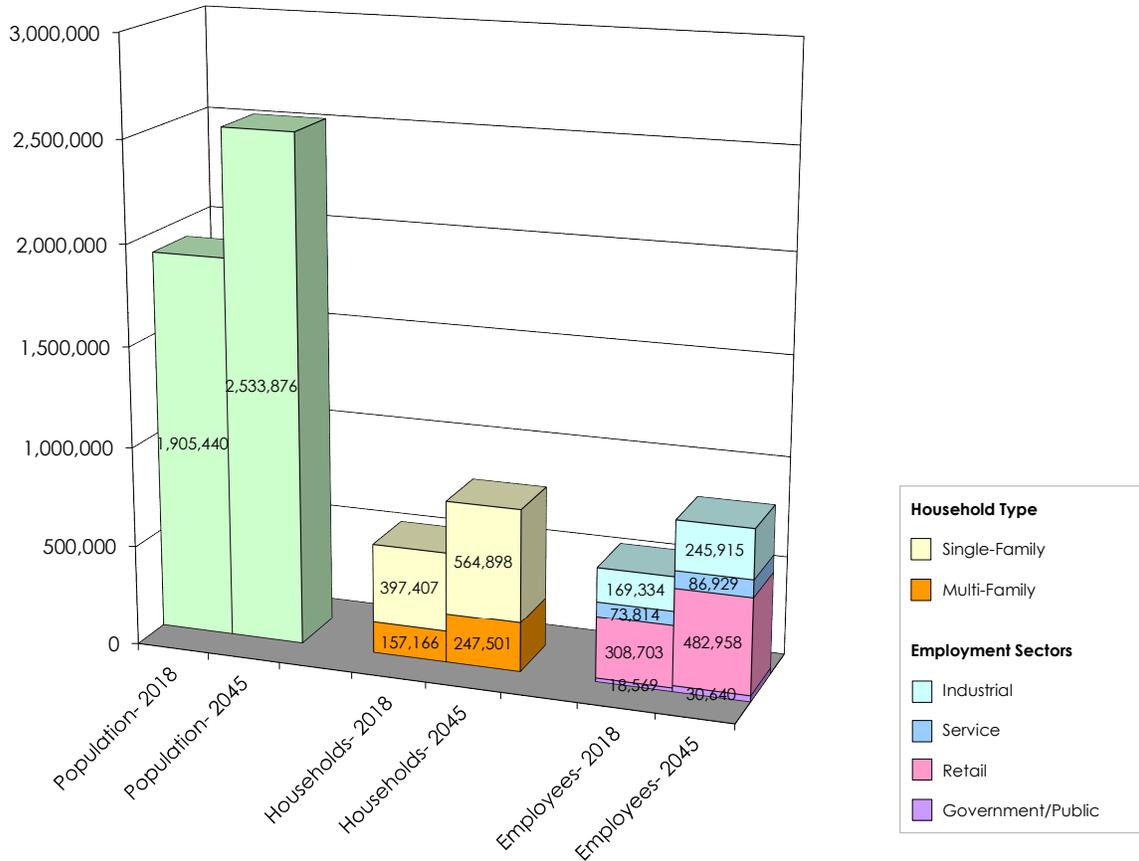
Table 2.3 and **Figure 2.3** summarize the socioeconomic data obtained from SCAG and used as the basis for completing this Nexus Study analysis. The SCAG employment data for 2018 and 2045 was provided for thirteen employment sectors consistent with the California Employment Development Department (EDD) Major Groups including: Farming, Natural Resources and Mining; Construction; Manufacturing; Wholesale Trade; Retail Trade; Transportation, Warehousing and Utilities; Information; Financial Activities; Professional and Business Service; Education and Health Service; Leisure and Hospitality; Other Service; and Government. For the purposes of the Nexus Study, the EDD Major Groups were aggregated to Industrial (Farming, Natural Resources and Mining; Construction; Manufacturing; Wholesale Trade; Transportation, Warehousing and Utilities), Retail (Retail Trade), Service (Information; Financial Activities; Professional and Business Service; Education and Health Service; Leisure and Hospitality; Other Service) and Government/Public Sector (Government). These four aggregated sector types were used as the basis for calculating the fee as described in **Section 6.2. Appendix B** provides a table detailing the EDD Major Groups and corresponding North American Industry Classification System (NAICS) Categories that are included in each non-residential sector type.

Table 2.3 - Population, Households and Employment in Western Riverside County (2018 to 2045)

SED Type	2018	2045	Change	Percent
Total Population	1,905,440	2,533,876	628,436	33%
Total Households	554,573	812,399	257,826	46%
Single-Family	397,407	564,898	167,491	42%
Multi-Family	157,166	247,501	90,335	57%
Total Employment	570,420	846,442	276,022	48%
TUMF Industrial	169,334	245,915	76,581	45%
TUMF Retail	73,814	86,929	13,115	18%
TUMF Service	308,703	482,958	174,255	56%
TUMF Government/Public Sector	18,569	30,640	12,071	65%

Source: SCAG 2020 RTP/SCS

Figure 2.3 - Population, Households and Employment in Western Riverside County (2018 to 2045)



The combined effects of the changes in the base year and horizon year socioeconomic data are modest reductions in the total growth in population and single-family households, but a notable increase in multi-family households. The change in total employment is reduced by 31%, with the most significant reduction in employment growth in the retail sector (-63%), while the industrial sector saw only a slight reduction in total employment growth compared to the 2016 Nexus Update (5%). The Government/public sector employment growth has increased by 27% from the 2016 Nexus Study to the 2024 Nexus Study, although the total number of jobs increased is relatively small as a share of the total employment. **Table 2.4** and **Figure 2.4** provide a comparison of the changes in population, households and employment between the 2016 Nexus Update and the 2024 Nexus Update. The table and figure clearly illustrate the reduction in the rate of growth in Western Riverside County largely attributable to the effects of the economic recession. This reduced rate of growth in the region will serve as the basis for reevaluating the level of impact of new development on the transportation system in the next section, as well as providing the basis for the determination of the fair share fee for each land use type.

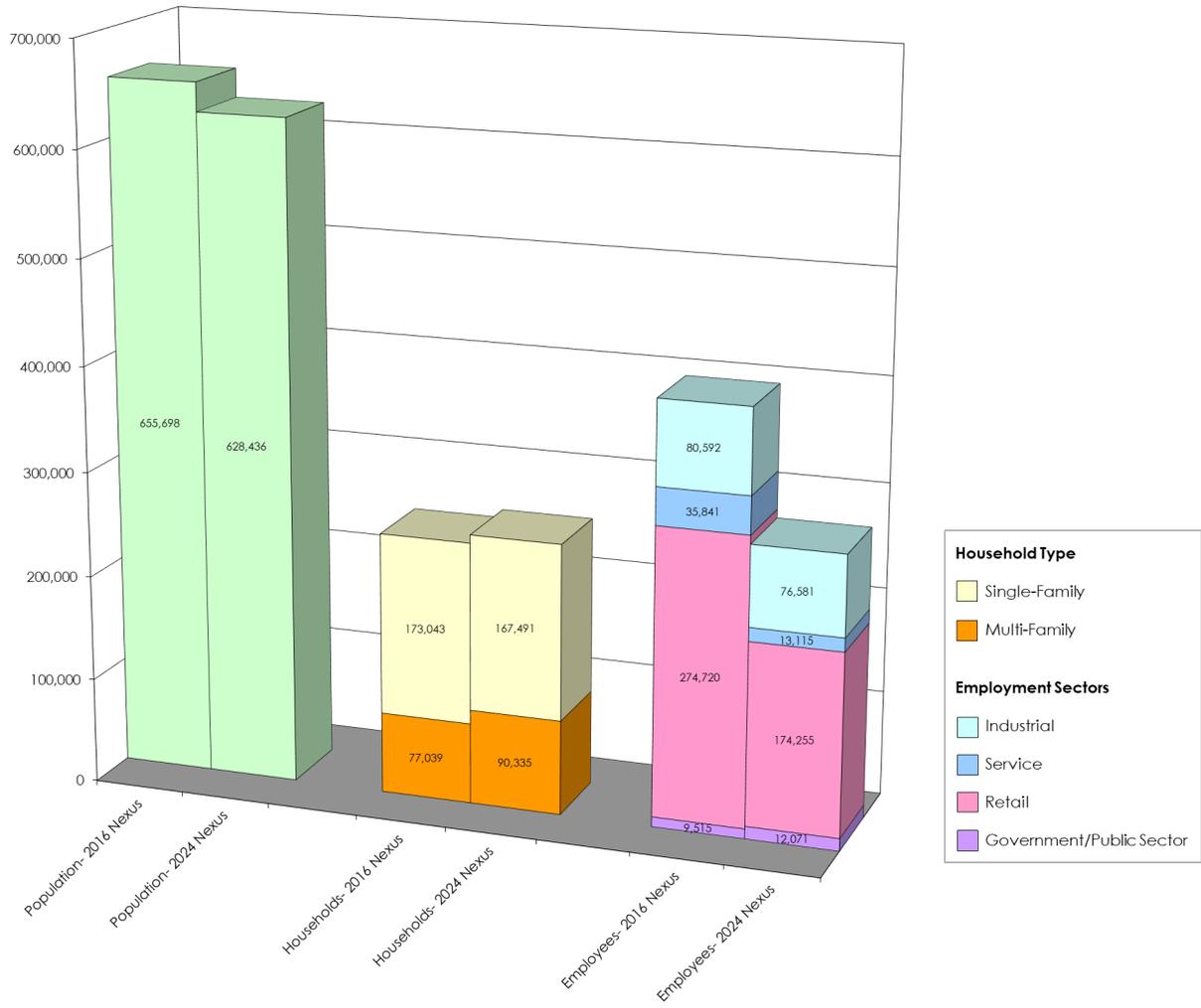
transportation system in the next section, as well as providing the basis for the determination of the fair share fee for each land use type.

**Table 2.4 - Population, Households and Employment in Western Riverside County
(Existing to Future Change Comparison)**

SED Type	2016 Update (2012-2040)	2024 Update (2018-2045)	Difference	Percent
Total Population	655,698	628,436	-27,262	-4%
Total Households	250,082	257,826	7,744	3%
Single-Family	173,043	167,491	-5,552	-3%
Multi-Family	77,039	90,335	13,296	17%
Total Employment	400,668	276,022	-124,646	-31%
TUMF Industrial	80,592	76,581	-4,011	-5%
TUMF Retail	35,841	13,115	-22,726	-63%
TUMF Service	274,720	174,255	-100,465	-37%
TUMF Government/Public Sector	9,515	12,071	2,556	27%

Source: SCAG 2016 RTP/SCS; SCAG 2020 RTP/SCS

**Figure 2.4 - Population, Households and Employment in Western Riverside County
(Existing to Future Change Comparison)**



3.0 NEED FOR THE TUMF

All new developments have some effect on the transportation infrastructure in a community, city or county due to an increase in travel demand. Increasing usage of the transportation facilities leads to more traffic, progressively increasing VMT, traffic congestion and decreasing the level of service (LOS)³. To meet the increased travel demand and keep traffic flowing, improvements to transportation facilities become necessary to sustain pre-development traffic conditions.

The projected growth in Western Riverside County (33% growth in population and 48% growth in employment in 27 years) and the related growth in VMT can be expected to increase congestion and degrade mobility if substantial investments are not made in the transportation infrastructure. This challenge is especially critical for arterial highways and roadways that carry a significant number of the trips between cities, since traditional sources of transportation improvement funding (such as the gasoline tax and local general funds) will not be nearly sufficient to fund the improvements needed to serve new development. Development exactions generally provide only a fraction of the improvements with those being confined to the area immediately adjacent to the respective development, and the broad-based county-level funding sources (i.e., Riverside County's half-cent sales tax known as Measure A) designate only a small portion of their revenues for arterial roadway improvements.

This section documents the existing and future congestion levels that demonstrate the need for future improvements to the transportation system to specifically mitigate the cumulative regional transportation impacts of new development. It then describes the TUMF concept that has been developed to fund future new developments' fair share of needed improvements.

The forecast of future congestion levels is derived from Year 2045 No-Build travel demand forecasts for Western Riverside County developed using RivCoM. The Year 2045 No-Build scenario evaluates the effects of 2045 population, employment and resultant traffic generation on the 2021 existing arterial highway network.

3.1 Future Highway Congestion Levels

To support the evaluation of the cumulative regional impacts of new development on the existing arterial highway system in Western Riverside County, existing (2018) and future (2045) SED were modeled on the existing (2021) arterial highway network using RivCoM. To quantify traffic growth impacts, various traffic measures of effectiveness were calculated for the AM and PM peak periods for each of the two scenarios. The

³ The [Highway Capacity Manual 6th Edition – A Guide for Multimodal Mobility Analysis](#) (Transportation Research Board, National Academy of Sciences, Washington, D.C., 2016, Volume 1 – Concepts, pp 5-3) describes LOS as a “quantitative stratification of performance measure or measures representing quality of service....HCM defines six levels of service, ranging from A to F, for each service measure or combination of measures. LOS A represents the best operating conditions from the traveler's perspective and LOS F the worst.”

WRCOG TUMF study area was extracted from the greater regional model network for the purpose of calculating measures for Western Riverside County only. Peak period performance measures for the Western Riverside County TUMF study area included total VMT, total vehicle hours of travel (VHT), total combined vehicle hours of delay (VHD), and total VMT experiencing unacceptable level of service (LOS E). These results were tabulated in **Table 3.1**. Plots of the Network Extents are attached in **Appendix C**.

Total Arterial VMT, VHT, VHD and LOS E Threshold VMT were calculated to include all principal arterials, minor arterials and major connectors, respectively. Regional values for each threshold were calculated for a total of all facilities including arterials, freeways, freeway ramps and High-Occupancy Vehicle (HOV) lanes.

Table 3.1 - Regional Highway System Measures of Performance (2018 Existing to 2045 No-Build)

Measure of Performance*	Peak Periods (Total)			
	2018 Existing	2045 No-Build	% Change	% Annual
VMT - Total ALL FACILITIES	23,284,724	29,897,254	28%	0.9%
VMT - FREEWAYS	13,514,522	15,490,284	15%	0.5%
VMT - ALL ARTERIALS	9,770,202	14,406,970	47%	1.4%
TOTAL - TUMF ARTERIAL VMT	6,216,985	8,597,200	38%	1.2%
VHT - TOTAL ALL FACILITIES	541,350	915,439	69%	2.0%
VHT - FREEWAYS	263,792	399,128	51%	1.5%
VHT - ALL ARTERIALS	277,558	516,311	86%	2.3%
TOTAL TUMF ARTERIAL VHT	174,455	320,869	84%	2.3%
VHD - TOTAL ALL FACILITIES	108,900	338,056	210%	4.3%
VHD - FREEWAYS	66,156	170,649	158%	3.6%
VHD - ALL ARTERIALS	42,745	167,407	292%	5.2%
TOTAL TUMF ARTERIAL VHD	33,249	124,863	276%	5.0%
VMT LOS E - TOTAL ALL FACILITIES	5,605,070	13,369,483	139%	3.3%
VMT LOS E - FREEWAYS	4,725,471	9,316,891	97%	2.5%
VMT LOS E & F - ALL ARTERIALS	879,599	4,052,592	361%	5.8%
TOTAL TUMF ARTERIAL VMT w/ LOS E or worse	765,782	3,184,133	316%	5.4%
% of TUMF ARTERIAL VMT w/ LOS E or worse	12%	37%		

* Based on RivCoM 2018 base network and SCAG 2020 RTP/SCS SED with updated 2021 arterial network as existing in December 2021

NOTES:

Volume is adjusted by PCE factor

VMT = vehicle miles of travel (the total combined distance that all vehicles travel on the system)

VHT = vehicle hours of travel (the total combined time that all vehicles are traveling on the system)

VHD = vehicle hours of delay (the total combined time that all vehicles have been delayed on the system based on the difference between forecast travel time and free-flow (ideal) travel time)

LOS = level of service (based on forecast volume to capacity ratios).

LOS E or Worse was determined by V/C ratio that exceeds 0.9 thresholds as indicated in the Riverside County General Plan.

The following formulas were used to calculate the respective values:

$VMT = \text{Link Distance} * \text{Total Daily Volume}$

$VHT = \text{Average Loaded (Congested) Link Travel Time} * \text{Total Daily Volume}$

$VHD = VHT - (\text{Free-flow (Uncongested) Link Travel Time} * \text{Total Daily Volume})$

$VMT \text{ LOS E or F} = VMT \text{ (on links where Daily V/C exceeded 0.90)}$

Note: Volume to capacity (v/c) ratio thresholds for LOS E are based on the Transportation Research Board 2010 Edition of the Highway Capacity Manual (HCM 2010) LOS Maximum V/C Criteria for Multilane Highways with 45 mph Free Flow Speed (Exhibit 14-5, Chapter 14, Page 14-5).

The calculated values were compared to assess the total change between 2018 Existing and 2045 No-Build scenarios, and the average annual change between 2018 Existing and 2044 No-Build. As can be seen from the RivCoM outputs summarized in **Table 3.1**, the additional traffic generated by new development will cause peak period VMT on the arterial highway network to increase by approximately 47% by the year 2045 (approximately 1.4% per year). In the absence of additional improvements to the transportation network in Western Riverside County, the growth in VMT will cause congestion on the highway system to increase almost exponentially, with the most significant increase in congestion observed on the arterial highway system that includes the TUMF Network. Many facilities will experience a significant increase in vehicle delay and deterioration in LOS to unacceptable levels because of new development and the associated growth in traffic. According to the Highway Capacity Manual 6th Edition – A Guide for Multimodal Mobility Analysis (Transportation Research Board, National Academy of Sciences, Washington, D.C., 2016), “LOS E describes operation at or near capacity. Operations...at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering...or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic stream....the physical and psychological comfort afforded drivers is poor.”

The Congestion Management Program for Riverside County (CMP) published by the Riverside County Transportation Commission (RCTC) in 2011 designates LOS E as the “traffic standards must be set no lower than LOS E for any segment or intersection along the CMP System of Highways and Roadways” in Riverside County. “The intent of the CMP is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related impacts, and improve air quality.”⁴ The CMP provides a mechanism for monitoring congestion on the highway system and, where congestion is observed, establishes procedures for developing a deficiency plan to address improvement needs. The reactive nature of the CMP to identify and remediate existing congestion differs from the proactive nature of the TUMF program to anticipate and provide for future traffic needs. For this reason, the TUMF

⁴ Congestion Management Program for Riverside County – Executive Summary (Riverside County Transportation Commission, 2011) Page ES-3, ES-1

program follows the guidance of the Highway Capacity Manual in establishing LOS E as the threshold for unacceptable level of service, and subsequently as the basis for measuring system performance and accounting for existing needs. This approach ensures a more conservative accounting of existing system needs as part of the determination of the “fair share” of mitigating the cumulative regional impacts of future new development on the transportation system.

The continuing need for a mitigation fee on new development is shown by the adverse impact that new development will have on Western Riverside County’s transportation infrastructure, and particularly the arterial highway network. As a result of the new development and associated growth in population and employment in Western Riverside County, additional pressure will be placed on the transportation infrastructure with the total peak period VMT on the Western Riverside County Regional System of Highways and Arterials (RSHA; also referred to as the TUMF Network) estimated to increase by approximately 38% or 1.2% compounded annually.

As shown in **Table 3.1**, the peak period VMT on arterial facilities within the TUMF Network experiencing LOS E or worse will increase by approximately 316% or 5.4% compounded annually in Western Riverside County in the period between 2018 and 2045. By 2045, 37% of the total VMT on the TUMF arterial highway system is forecast to be traveling on facilities experiencing daily LOS E or worse. Without improvements to the TUMF arterial highway system, the total vehicle hours of delay (VHD) experienced by area motorists on TUMF arterial highways during the peak periods will increase by approximately 5.0% per year. The combined influences of increased travel demand and worsened LOS that manifest themselves in severe congestion and delay highlighting the continuing need to complete substantial capacity expansion on the TUMF arterial highway system to mitigate the cumulative regional impact of increased travel demand resulting from new development.

The RivCoM outputs summarized in **Table 3.1** clearly demonstrate that the travel demands generated by future new development in the region will lead to increasing levels of traffic congestion, especially on the arterial roadways. The need to improve these roadways to accommodate the anticipated growth in VMT and relieve future congestion is therefore directly linked to the future development which generates the additional travel demand.

3.2 Future Transit Utilization Levels

In addition to the roadway network, public transportation will play a role in serving future travel demand in the region. Transit represents a critical component of the transportation system by providing an alternative mode choice for those not wanting to use an automobile, and particularly for those who do not readily have access to an automobile. As population and employment in Western Riverside County grows because of new development, demand for regional transit services in the region is also expected to grow.

While some future transit trips will be accommodated by inter-regional transit services such as Metrolink, a substantial number of the trips within Western Riverside County will be served by bus transit services and for this reason the provision of regional bus transit service is considered integral to addressing the cumulative regional transportation impacts of new developments. Regional bus transit services within Western Riverside County are primarily provided by RTA.

In 2023, RTA reported average weekday daily ridership of 16,575 on their network of buses⁵. The SCAG 2020 RTP/SCS forecasts for RTA average weekday daily ridership in 2045 is 57,282. These values were used to represent the existing and future transit trips consistent with the analysis of highway trips described in **Section 3.1**. The existing and future transit ridership were compared to assess the impact of new development on transit demand. Average weekday daily ridership would be expected to grow by 40,707 between 2023 and 2045, or an average increase of 1,850 weekday daily riders each year. Average weekday daily system ridership is summarized in **Appendix D**.

The future growth in demand for public transit services is reflective of the cumulative regional impacts of new development, and the associated increase in demand for all types of transportation infrastructure and services to accommodate this growth. Furthermore, bus transit ridership is expected to grow as the improved services being planned and implemented by RTA attract new riders and encourages existing riders to use transit more often as an alternative to driving. Attracting additional riders to bus transit services contributes to the mitigation of the cumulative regional transportation impacts of new development by reducing the number of trips that need to be served on the highway system. The need to provide additional bus transit services within Western Riverside County to satisfy this future demand is therefore directly linked to the future development that generates the demand.

3.3 The TUMF Concept

A sizable percentage of trip-making for any given local community extends beyond the bounds of the individual community as residents pursue employment, education, shopping and entertainment opportunities elsewhere. As new development occurs within a particular local community, this dispersal of trips of all purposes by new residents and the new business that serve them generates additional travel demand and contributes to the need for transportation improvements within their community and in the other communities of Western Riverside County. The idea behind a uniform mitigation fee is to have new development throughout the region contribute uniformly to paying the fair share cost of improving the transportation facilities that serve these trips between communities. Thus, the fee is intended to be used primarily to improve

⁵ RTA, like most public transportation agencies, have seen significant short-term declines in transit ridership resulting from changes in travel demands, mode choice and trip distribution following the COVID-19 pandemic. RTA's 2016 actual average weekday daily ridership was 30,700. Post COVID-19, the RTA actual average weekday daily ridership in 2023 was 16,575, a decline of almost 50% of pre-pandemic ridership levels. These levels would be expected to continue to recover toward pre-pandemic levels as potential riders resume more regular work schedules, and apprehension toward the use of transit services for public health reasons wane.

transportation facilities that serve trips between communities within the region (in particular, arterial roadways and regional bus transit services).

Some roadways serve trips between adjacent communities, while some also serve trips between more distant communities within the region. The differing roadway functions led to the concept of using a portion of the fee revenues for a backbone system of arterial roadways that serve the longer-distance trips (i.e. using TUMF revenues from the entire region), while using a second portion of the fee revenues for a secondary system of arterials that serve inter-community trips within a specific subregion or zone (i.e. using TUMF revenues from the communities most directly served by these roads – to some extent, a return-to-source of that portion of the funds). Reflecting the importance of public transit to provide an alternative to highway travel as part of a balanced regional transportation strategy, a third portion of fee revenues was reserved for improvements to regional bus transit services (i.e. using TUMF revenues from the entire region).

Much, but not all, of the new trip-making in each area is generated by residential development (i.e. when people move into new homes, they create new trips on the transportation system as they travel to work, school, shopping or entertainment). Some of the new trips are generated simply by activities associated with new businesses (i.e. new businesses will create new trips through the delivery of goods and services, etc.). Apart from commute trips by residents coming to and from work, and the trips of residents coming to and from new businesses to get goods and services, the travel demands of new businesses are not considered to be directly attributable to residential development. The consideration of different sources of new travel demand is therefore reflected in the concept of assessing both residential and non-residential development for their related transportation impacts.

In summary, the TUMF concept includes the following:

- A uniform fee that is levied on new development throughout Western Riverside County.
- The fee is assessed roughly proportionately on new residential and non-residential development based on the relative impact of each new use on the transportation system.
- A portion of the fee is used to fund capacity improvements on a backbone system of arterial roadways that serve longer-distance trips within the region; a portion of the fee is returned to the subregion or zone in which it was generated to fund capacity improvements on a secondary system of arterial roadways that link the communities in that area; and a portion of the fee is used to fund improvements to regional bus transit services that serve trips between the communities within the region.

4.0 THE TUMF NETWORK

4.1 Identification of the TUMF Roadway Network

An integral element of the initial Nexus Study was the designation of the Western Riverside County Regional System of Highways and Arterials. This network of regionally significant highways represents those arterial and collector highway and roadway facilities that primarily support inter-community trips in Western Riverside County and supplement the regional freeway system. As a result, this system also represents the extents of the network of highways and roadways that would be eligible for TUMF funded improvements. The TUMF Network does **not** include the freeways of Western Riverside County as these facilities primarily serve longer distance inter-regional trips and a significant number of pass-through trips that have no origin or destination in Western Riverside County⁶.

The TUMF Network is the system of roadways that serve inter-community trips within Western Riverside County and therefore are eligible for improvement funding with TUMF funds. The RSHA for Western Riverside County was identified based on several transportation network and performance guidelines as follows:

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 exceeding 20,000 vehicles per day in the future horizon year.
4. Facilities with forecast volume to capacity ratio of 0.90 (LOS E) or greater in the future horizon year.
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).

Appendix E includes exhibits illustrating the various performance measures assessed during the definition of the RSHA.

Transportation facilities in Western Riverside County that generally satisfied these guidelines were initially identified, and a skeletal regional transportation framework evolved from facilities where several guidelines were observed. Representatives of all WRCOG constituent jurisdictions reviewed this framework in the context of current local transportation plans to define the TUMF Network, which was subsequently endorsed by

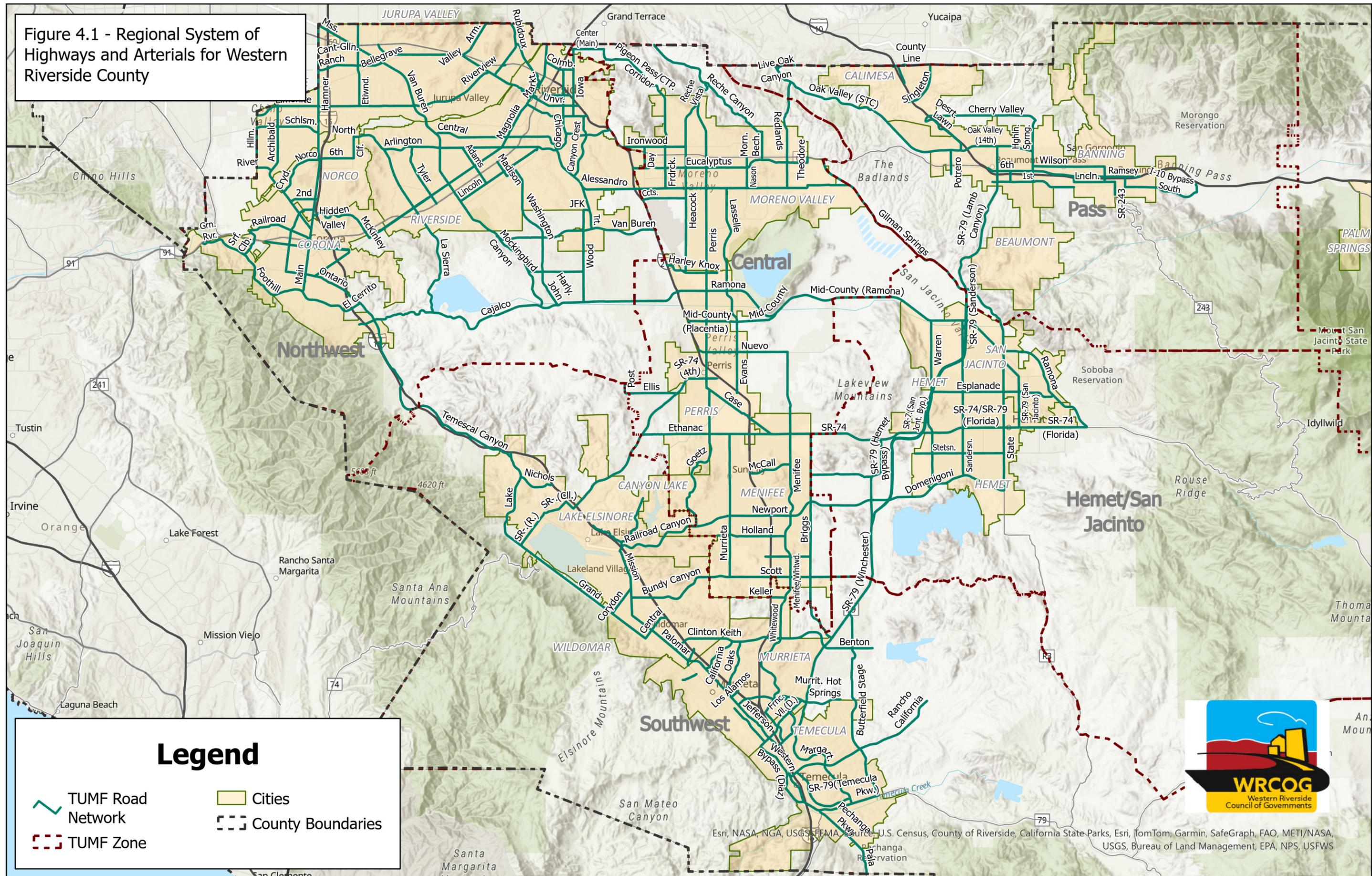
⁶ Since pass-through trips have no origin or destination in Western Riverside County, new development within Western Riverside County cannot be considered responsible for mitigating the impacts of pass-through trips. The impact of pass-through trips and the associated cost to mitigate the impact of pass-through trips (and other inter-regional freeway trips) is addressed in the Riverside County Transportation Commission (RCTC) Western Riverside County Freeway Strategic Plan, Phase II – Detailed Evaluation and Impact Fee Nexus Determination, Final Report dated May 31, 2008.

the WRCOG Public Works Committee, WRCOG Technical Advisory Committee, TUMF Policy Committee and the WRCOG Executive Committee.

The RSHA is illustrated in **Figure 4.1**. As stated previously, the RSHA represents those regional significant highway facilities that primarily serve inter-community trips in Western Riverside County and therefore also represents the extents of the network of highways and roadways that would be eligible for TUMF funded improvements.

The TUMF Network was reviewed as part of the 2024 Nexus Update to ensure facilities generally still met the previously described performance guidelines, and/or that the scope and magnitude of specific improvements to the TUMF Network were roughly proportional to the impacts needing to be mitigated. This review process resulted in the removal of various facilities from the TUMF Network, as well as various changes in the scope and magnitude of specific improvements to the TUMF Network. The resulting TUMF Network used as the basis for this Nexus Update is discussed in **Section 4.3** of this report.

Figure 4.1 - Regional System of Highways and Arterials for Western Riverside County



Legend

-  TUMF Road Network
-  Cities
-  TUMF Zone
-  County Boundaries



Esri, NASA, NGA, USGS, FEMA, Source: U.S. Census, County of Riverside, California State Parks, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS

4.2 Backbone Network and Secondary Network

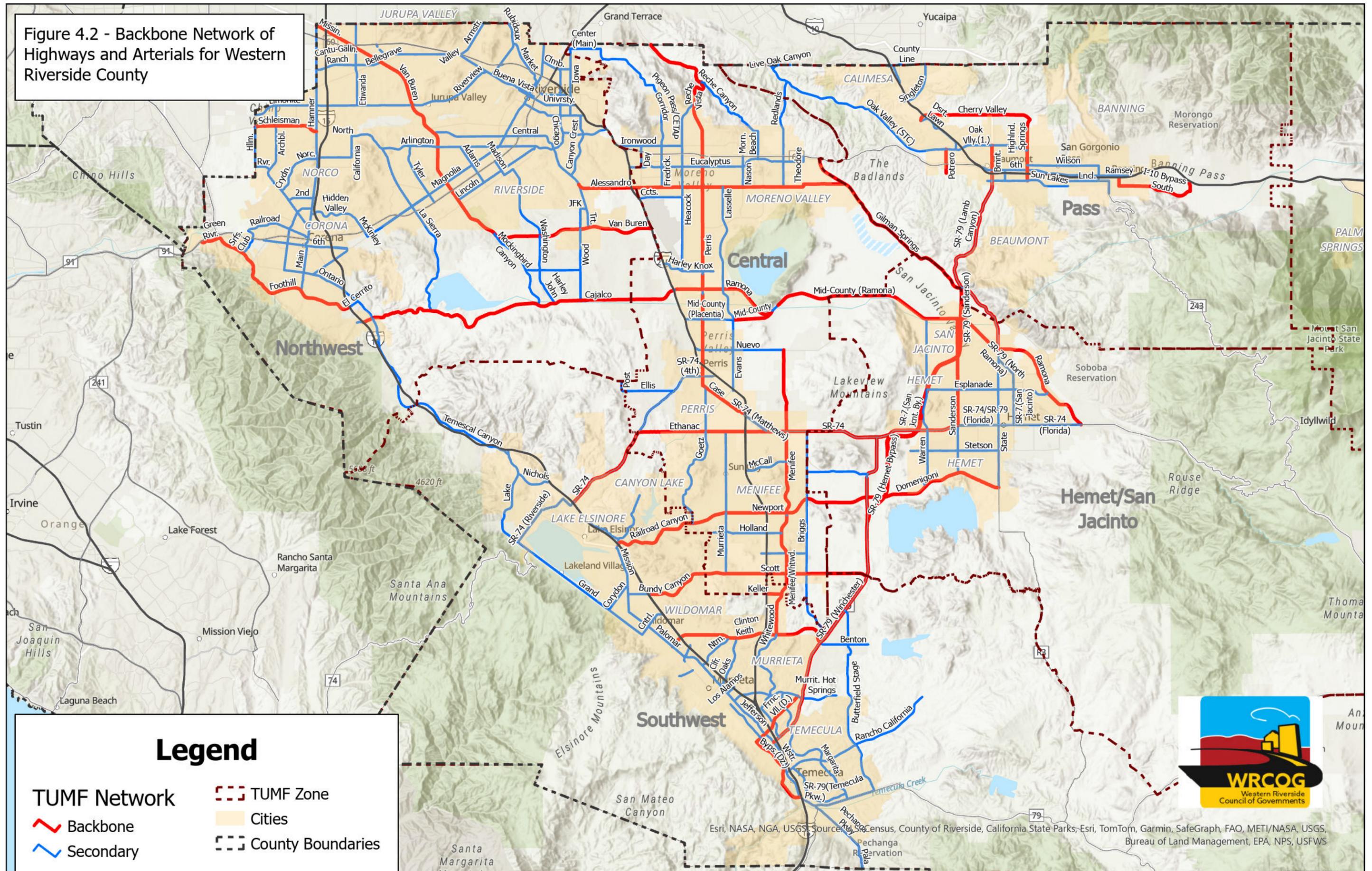
As indicated previously, the TUMF roadway network was refined to distinguish between facilities of “Regional Significance” and facilities of “Zonal Significance.” Facilities of Regional Significance were identified as those that typically are proposed to have a minimum of six lanes at general plan build-out⁷, extend across and/or between multiple Area Planning Districts⁸, and are forecast to carry at least 25,000 vehicles per day in 2045. The Facilities of Regional Significance have been identified as the “backbone” highway network for Western Riverside County. A portion of the TUMF fee is specifically designated for improvement projects on the backbone system. The backbone network is illustrated in **Figure 4.2**.

Facilities of Zonal Significance (the “secondary” network) represent the balance of the RSHA for Western Riverside County. These facilities are typically within one zone and carry comparatively lesser traffic volumes than the backbone highway network, although they are considered significant for circulation within the respective zone. A portion of the TUMF is specifically designated for improvement projects on the secondary network within the zone in which it is collected. The WRCOG APD or zones are illustrated in **Figure 4.3**.

⁷ Although facilities were identified based on the minimum number of lanes anticipated at general plan buildout, in some cases it was determined that there was not sufficient demand for all additional lanes on some facilities until beyond the current timeframe of the TUMF Program (2045). As a result, only a portion of the additional lanes on these facilities have currently been identified for funding with TUMF revenues, reflecting the cumulative impact of new development through the current duration of the TUMF Program.

⁸ Area Planning Districts (APD) are the five aggregations of communities used for regional planning functions within the WRCOG area. Area Planning Districts are interchangeably referred to as TUMF Zones.

Figure 4.2 - Backbone Network of Highways and Arterials for Western Riverside County



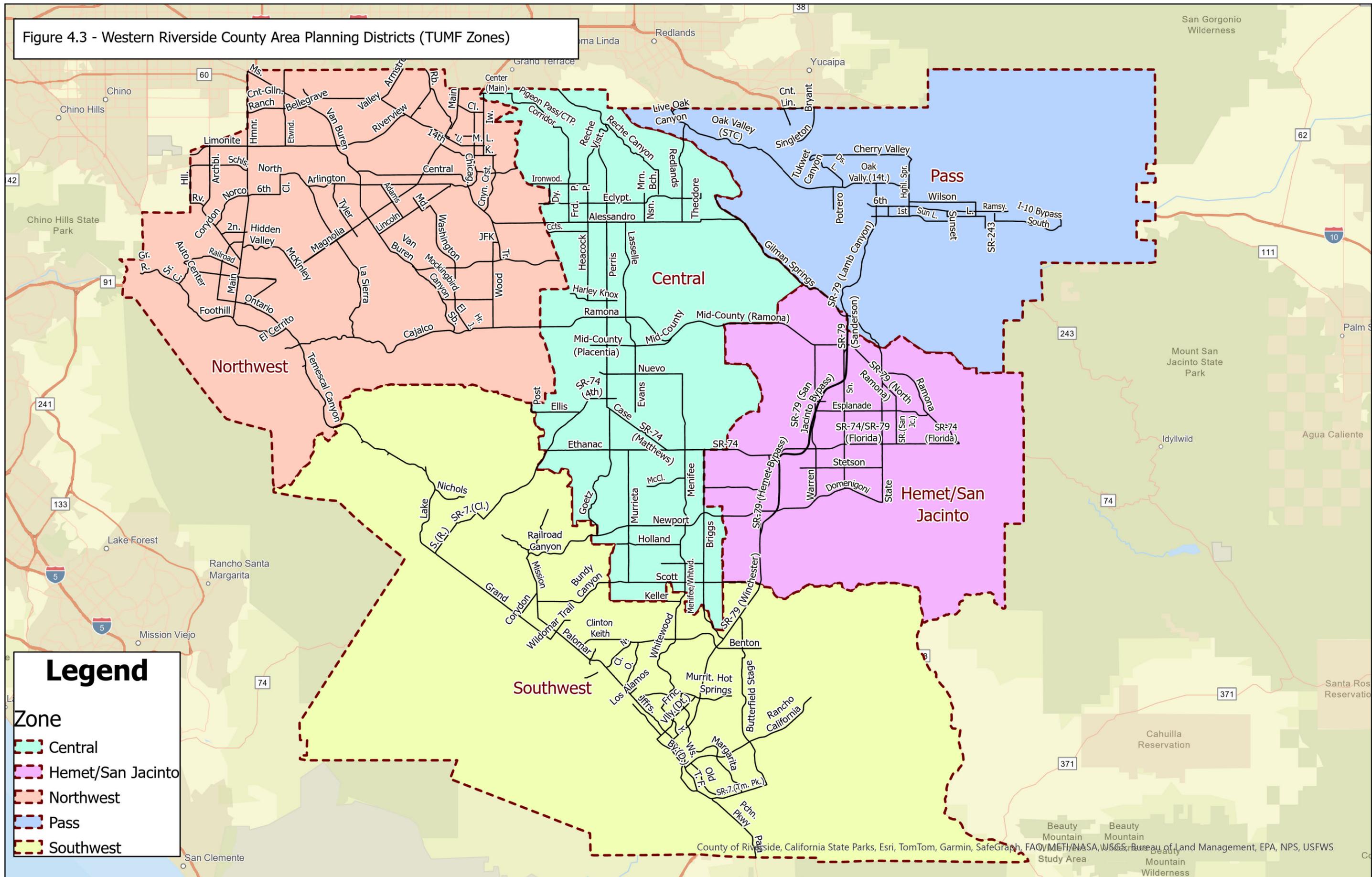
Legend

- Backbone
- Secondary
- TUMF Zone
- Cities
- County Boundaries



Esri, NASA, NGA, USGS, Source: Census, County of Riverside, California State Parks, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS

Figure 4.3 - Western Riverside County Area Planning Districts (TUMF Zones)



Legend

Zone

- Central
- Hemet/San Jacinto
- Northwest
- Pass
- Southwest

County of Riverside, California State Parks, Esri, TomTom, Garmin, SafeGraph, FAO, METI, NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS

4.3 Future Roadway Transportation Needs

To calculate a “fair share” fee for new development, it is necessary to estimate the cost of improvements on the TUMF system that will be needed to mitigate the cumulative regional impacts of future transportation demands created by new development. Estimates of the cost to improve the network to mitigate the cumulative impacts of new development were originally developed based on unit costs prepared for the Coachella Valley Association of Governments (CVAG) Regional Arterial Cost Estimate (RACE)⁹, and the WRCOG Southwest District SATISFY 2020 Summary of Cost Estimates¹⁰ (TKC/WRCOG 2000). The RACE cost estimates were developed based on a summary of actual construction costs for projects constructed in Riverside County in 1998.

The initial unit cost estimates for the TUMF (based on inflated RACE cost estimates) were reviewed in the context of the SATISFY 2020 Draft Cost Estimates and were consolidated to provide typical improvement costs for each eligible improvement type. The refinement of unit costs was completed to simplify the process of estimating the cost to improve the entire TUMF network. Based on RACE and SATISFY 2020, consolidated cost estimates included typical per mile or lump sum costs for each of the improvement types eligible under the TUMF Program. The resultant revised unit cost estimates were used as the basis for estimating the cost to complete the necessary improvements to the TUMF network to mitigate the cumulative regional transportation impacts of new development.

Variations in the consolidated cost estimates for specific improvement types were provided to reflect differences in topography and land use across the region. Unit costs for roadway construction were originally varied to account for variations in construction cost (in particular, roadway excavation and embankment cost) associated with construction on level (code 1) rolling (code 2) and mountainous (code 3) terrain, respectively. Right-of-way acquisition costs which originally included consideration for land acquisition, documentation and legal fees, relocation and demolition costs, condemnation compensation requirements, utility relocation, and environmental mitigation costs were also varied to account for variations in right-of-way costs associated with urban (developed commercial/residential mixed uses – code 1), suburban (developed residential uses – code 2) and rural (undeveloped uses – code 3) land uses, respectively. Lump sum costs for interchange improvements were originally varied to account for variations in cost associated with new complex, new standard (or fully reconstructed), or major (or partially reconstructed) or minor (individual ramp improvements) interchange improvements.

As part of the 2024 TUMF Nexus Update, the original unit cost categories were revised to generate entirely new unit cost values based on the most recent available construction cost, labor cost and land acquisition cost values for comparable projects within Riverside County. The recalculation of the TUMF unit cost components was completed

⁹ Parsons Brinckerhoff/Coachella Valley Association of Governments, 1999, Regional Arterial Cost Estimate (RACE)

¹⁰ TKC/Western Riverside Council of Governments, 2000, SATISFY 2020 Summary of Cost Estimates

as part of the 2024 Nexus Update to reflect the effects of significant changes in materials, labor and land acquisition costs including the influences of supply chain disruptions during and following the COVID-19 pandemic, and the elevated rates of inflation prevailing in the past few years. **Appendix F** provides a detailed outline of the assumptions and methodology leading to the revised TUMF unit cost assumptions developed as part of the 2024 Nexus Update. A new category was also added to the cost assumptions to facilitate the use of intelligent transportation systems (ITS) to enhance traffic flows in arterial corridors that require mitigation but cannot accommodate construction of additional lane capacity.

Section 8.5.1 of the Riverside County Integrated Project (RCIP) Multiple Species Habitat Conservation Plan (MSHCP) adopted by the Riverside County Board of Supervisors on June 17, 2003, states that “each new transportation project will contribute to Plan implementation. Historically, these projects have budgeted 3% - 5% of their construction costs to mitigate environmental impacts.” This expectation is reiterated in the Western Riverside County Multiple Species Habitat Conservation Plan Nexus Fee Study Update (Economic & Planning Systems, Inc., October 2020) Section 6 which indicates that “about 44% of the revenue for the program” is expected to be derived from non-fee sources, including “the Measure A sales tax which is authorized through 2039 and other transportation funding sources such as the Transportation Uniform Mitigation Fees (TUMF).” Consistent with the MSHCP Nexus Report, an amount equal to 5% of the construction cost for new TUMF network lanes, bridges and railroad grade separations will be specifically included as part of TUMF Program with revenues to be provided to the Western Riverside County Regional Conservation Authority (RCA) for the acquisition of land identified in the MSHCP. The relevant sections of the MSHCP document and the most recent MSHCP Nexus Report are included in **Appendix F**.

Table 4.1 summarizes the unit cost estimate assumptions used to develop the TUMF network cost estimate as part of the current Nexus Update. **Table 4.1** also includes a comparison of the original TUMF unit cost assumptions and the 2016 Nexus Study unit cost assumptions that demonstrates the significant increases in unit costs observed during recent years. In most cases the unit cost assumptions have more than doubled from those used for the 2016 Nexus Study. Cost estimates are provided in current year values as indicated.

To estimate the cost of improving the regional network to provide for traffic growth from new development, the network characteristics and performance guidelines (outlined in **Section 4.1**) were initially used as a basis for determining the needed improvements. The initial list of improvements was then compared with local General Plan Circulation Elements to ensure that the TUMF network included planned arterial roadways of regional significance. A consolidated list of proposed improvements and the unit cost assumptions were then used to establish an initial estimate of the cost to improve the network to mitigate for future traffic growth associated with new development. This initial list of proposed improvements has since been revised and updated as part of each subsequent Nexus Update to reflect the completion of projects, changing levels of development and associated changes in travel demand and transportation system impacts to be mitigated as part of the TUMF program.

Table 4.1 - Unit Costs for Arterial Highway and Street Construction

Component Type	Original Cost Assumptions as published October 18, 2002	Cost Assumptions per 2016 Nexus Study July 10, 2017	Cost Assumptions per 2024 Nexus Update	Description
Terrain 1	\$550,000	\$692,000	\$1,132,000	Construction cost per lane mile - level terrain
Terrain 2	\$850,000	\$878,000	\$1,740,000	Construction cost per lane mile - rolling terrain
Terrain 3	\$1,150,000	\$1,064,000	\$2,350,000	Construction cost per lane mile - mountainous terrain
Landuse 1	\$900,000	\$2,509,000	\$7,830,000	ROW cost factor per lane mile - urban areas
Landuse 2	\$420,000	\$2,263,000	\$5,440,000	ROW cost factor per lane mile - suburban areas
Landuse 3	\$240,000	\$287,000	\$490,000	ROW cost factor per lane mile - rural areas
Interchange 1	n/a	\$50,032,000	\$84,190,000	Complex new interchange/interchange modification cost
Interchange 2	\$20,000,000	\$25,558,000	\$43,490,000	New interchange/interchange modification total cost
Interchange 3	\$10,000,000	\$12,343,000	\$22,550,000	Major interchange improvement total cost
Bridge 1	\$2,000	\$3,180	\$4,800	Bridge total cost per lane per linear foot
RRXing 1	\$4,500,000	\$6,376,000	\$18,200,000	New Rail Grade Crossing per lane
RRXing 2	\$2,250,000	\$2,733,000	\$6,900,000	Existing Rail Grade Crossing per lane
ITS 1			\$686,400	Infrastructure for ITS of roadway segments per route mile
Planning	10%	10%	10%	Planning, preliminary engineering and environmental assessment costs based on construction cost only
Engineering	25%	25%	25%	Project study report, design, permitting and construction oversight costs based on construction cost only
Contingency	10%	10%	10%	Contingency costs based on total segment cost
Administration		4%	4%	TUMF program administration based on total TUMF eligible network cost
MSHCP		5%	5%	TUMF component of MSHCP based on total TUMF eligible construction cost

As indicated in **Table 2.4** and **Figure 2.4**, the anticipated rate of forecasted growth in Western Riverside County has been reduced by 4% for population, 3% for single-family residential and 31% for employment. This reduced rate of forecasted socioeconomic growth has a commensurate impact on the forecasted daily traffic in the region as demonstrated by the 2016 Nexus Study VMT compared to the 2024 Nexus Update VMT in **Table 4.2**. As shown in the table, the forecast peak period VMT on the TUMF arterial network in the year 2045 as the basis for the 2024 Nexus Update is more than 5% less than the comparable peak period VMT for 2040 used for the 2016 Nexus Study.

Table 4.2 – Forecasted Daily Traffic in Western Riverside County

Measure of Performance	2024 Nexus Update		2016 Nexus Study	
	Peak Period		Peak Period	
	2018 Existing	2045 No-Build	2012 Existing	2040 No-Build
VMT - Total ALL FACILITIES	23,284,724	29,897,254	19,532,437	29,277,587
VMT - FREEWAYS	13,514,522	15,490,284	11,019,155	14,487,570
VMT - ALL ARTERIALS	9,770,202	14,406,970	8,513,282	14,790,016
TOTAL - TUMF ARTERIAL VMT	6,216,985	8,597,200	5,585,202	9,089,495

Source: RivCoM 2018 base network and SCAG 2020 RTP/SCS SED with updated 2021 arterial network as existing in December 2021; RivTAM 2012 network and SCAG 2016 RTP/SCS SED with updated 2015 arterial network completed by WSP, September 2016

As a result of the reduced forecast traffic growth in the region, it is anticipated that the cumulative regional impacts of new development on the arterial highway and transit systems in the region is also reduced necessitating a reduction in the projects identified on the TUMF Network to mitigate the impacts of new development. As part of the 2024 Nexus Update, the list of proposed improvements included in the initial Nexus Study and validated during the subsequent Nexus updates was reviewed for accuracy and, where necessary, amended to remove or modify projects that have changed in need to mitigate impacts based on changes in the patterns of growth and travel demand within the region. Projects completed since the adoption of the 2016 Nexus Update were also removed from the network to reflect the fact that mitigation at these locations is no longer required. The specific network changes were screened by the WRCOG Public Works Committee for consistency with TUMF network guidelines including travel demand and traffic performance.

Based on the findings of the network screening, elements of specific projects were revised to reflect necessary network corrections and modifications to project assumptions. A matrix summarizing the disposition of the requests received as part of the 2024 TUMF Nexus Update was developed and is included in **Appendix G**.

Eligible arterial highway and street improvement types to mitigate the cumulative regional transportation impacts of new development on Network facilities include:

1. Construction of additional Network roadway lanes
2. Construction of new Network roadway segments
3. Expansion of existing Network bridge structures
4. Construction of new Network bridge structures
5. Expansion of existing Network interchanges with freeways
6. Construction of new Network interchanges with freeways
7. Grade separation of existing Network at-grade railroad crossings
8. Installation of ITS along Network roadway segments

All eligible improvement types, except for ITS, provide additional capacity to Network facilities to accommodate future traffic growth generated by new development in Western Riverside County. ITS provides the ability to improve traffic flows along corridors

where capacity expansion is not possible. Following the comprehensive update of the TUMF Program, the estimated total cost to improve the RSHA for Western Riverside County is \$4.84 billion with this cost including all arterial highway and street planning, engineering, design, right-of-way acquisition and capital construction costs, but not including transit, MSHCP or program administration costs that will be subsequently described. It should be noted that the full cost to improve the TUMF Network cannot be entirely attributed to new development and must be adjusted to account for the previous obligation of other funds to complete necessary improvements and unfunded existing needs. **Sections 4.5** and **4.6** describe the adjustments to the total TUMF Network improvement need to account for existing needs and obligated funds.

In addition to the arterial highway and street improvement costs indicated above, the TUMF Nexus Update included specific consideration for the TUMF Program obligation to the MSHCP program to mitigate the impact of TUMF network improvements on species and habitat within Western Riverside County. The TUMF obligation to MSHCP was calculated at a rate of 5% of the total construction (capital) cost of new lane segments, bridges and railroad grade separations on the TUMF Network. The total obligation to the MSHCP as indicated in the TUMF Network cost fee table is approximately \$64.6 million, although the total obligation specific to the TUMF program is reduced to account for MSHCP obligations associated with improvements addressing existing needs and therefore excluded from TUMF.

The TUMF 2024 Nexus Update similarly includes specific consideration of the costs associated with WRCOG administration of the TUMF Program. The average cost for WRCOG to administer the TUMF Program was calculated at a rate of 4% of the total eligible cost of new lane segments (including interchanges, bridges and railroad grade separations) on the TUMF Network and new transit services. Administration costs incurred by WRCOG include direct salary, fringe benefit and overhead costs for WRCOG staff assigned to administer the program and support participating jurisdictions, and costs for consultant, legal and auditing services to support the implementation of the TUMF program. The total cost for WRCOG administration of the TUMF Program as indicated in the TUMF Network cost fee table is approximately \$161.2 million.

The detailed TUMF network cost calculations are provided in **Section 4.7**, including each of the individual segments and cost components considered as part of the TUMF Program, and the maximum eligible TUMF share for each segment following adjustments for obligated funding and unfunded existing needs as described in subsequent sections.

4.4 Public Transportation Component of the TUMF System

In addition to the roadway network, public transportation plays a key role in serving future travel demand in the region. Public transportation serving inter-community trips is generally provided in the form of public bus transit services and in particular express bus or other high frequency services between strategically located community transit centers. In Western Riverside County, these bus transit services are typically provided by

RTA. Transit needs to serve future regional travel in Western Riverside County via bus transit include vehicle acquisitions, transit centers, express bus stop upgrades, maintenance facilities and other associated capital improvements to develop express bus or other high frequency inter-community transit bus services within the region. Metrolink commuter rail service improvements were not included in the TUMF Program as they typically serve longer inter-regional commute trips equivalent to freeway trips on the inter-regional highway system.

The network of regionally significant bus transit services represents those express bus and other high frequency transit bus services that primarily support inter-community trips in Western Riverside County and supplement the regional highway system and inter-regional commuter rail services. As a result, this portion of the bus transit system also represents the extents of the network of bus services that would be eligible for TUMF funded improvements.

The TUMF Bus Transit Network is the system of bus services that serve inter-community trips within Western Riverside County and therefore are eligible for improvement funding with TUMF funds. The Bus Transit Network for Western Riverside County was identified based on several transit network and performance guidelines as follows:

1. Bus transit routes (or corridors comprised of multiple overlapping routes) proposed to have a frequency of greater than three buses per direction during peak hours at ultimate build out.
2. Routes or corridors that serve multiple jurisdictions and/or provide connectivity between communities, both within and adjoining western Riverside County.
3. Routes or corridors with forecast weekday bus ridership in excess of 1,000 person trips per day by 2040.
4. Routes or corridors that are proposed to provide timed interconnections with at least four other routes or corridors at ultimate build out.
5. Routes or corridors that utilize the majority of travel along the TUMF RSHA.
6. Routes or corridors that provide direct access to areas of forecast population and employment growth, major commercial, industrial, institutional, recreational or tourist activity centers, and multi-modal transportation facilities (such as airports, railway terminals and transit centers).

Express bus routes and other high-frequency bus transit routes and corridors in Western Riverside County that generally satisfied the respective guidelines were identified by RTA. Updated cost estimates for improving the infrastructure serving public transportation, including construction of transit centers and transfer facilities, express bus stop upgrades, and capital improvements needed to develop express bus and other high frequency bus transit service within the region were also provided by RTA. The updated transit unit cost data provided by RTA are shown in **Table 4.3**.

Table 4.3 - Unit Costs for Transit Capital Expenditures

Component Type*	Original Cost Assumptions as published October 18, 2002	Cost Assumptions per 2016 Nexus Study July 10, 2017	Cost Assumptions per 2024 Nexus Update	Description
Transit Center 1		\$6,000,000	\$7,465,000	Relocation/expansion of existing Regional Transit Center with up to 14 bus bays and park and ride
Transit Center 2	\$6,000,000	\$9,000,000	\$11,195,000	New Regional Transit Center with up to 14 bus bays and park and ride
Transfer Facility		\$1,000,000	\$1,245,000	Multiple route transfer hub
O & M Facility		\$50,000,000	\$62,186,000	Regional Operations and Maintenance Facility
Green Technology			\$100,000	ZEB technology enhancements
Bus Stop	\$10,000	\$40,000	\$50,000	Bus Stop Amenities Upgrade on TUMF Network
BRT Service Capital	\$540,000	\$60,000	\$75,000	BRT/Limited Stop Service Capital (per stop**)
Vehicle Fleet 1***			\$160,000	Small Sized Bus/Van Contract Operated
Vehicle Fleet 2		\$155,000	\$300,000	Medium Sized Bus Contract Operated
Vehicle Fleet 3	\$325,125	\$585,000	\$1,271,000	Large Sized Bus Directly Operated
COA Study		\$950,000	\$1,150,000	Comprehensive Operational Analysis Study component of Nexus Study Update

* Transit Cost Component Types were restructured as part of the 2016 Nexus Update in accordance with the RTA Comprehensive Operational Analysis (January 2015)

** BRT Service Capital Cost Assumption was based on a per mile unit prior to the 2016 Nexus Update. 2016 Nexus Update uses a per stop unit cost for BRT Service Capital

*** Vehicle Fleet component was restructured as part of the 2024 Nexus Update with the inclusion of Small Sized Bus/Van Contract Operated as Vehicle Fleet 1 and subsequent renumbering of Vehicle Fleet 2 and 3, respectively

The estimated total cost for future RTA bus transit services to accommodate forecast transit demand is approximately \$217.9 million with this cost including all planning, engineering, design and capital improvement costs. Detailed transit component cost estimates are included in **Section 4.7**. The full cost to improve RTA bus transit services cannot be entirely attributed to new development and must be adjusted to account for existing needs. **Section 4.6** describes the adjustments to the total transit cost to account for existing needs.

4.5 Existing Obligated Funding

For some of the facilities identified in the TUMF network, existing obligated funding has previously been secured through traditional funding sources to complete necessary improvements. Since funding has been obligated to provide for the completion of needed improvements to the TUMF system, the funded cost of these improvements will not be recaptured from future developments through the TUMF Program. As a result, the TUMF network cost was adjusted accordingly to reflect the availability of obligated funds.

To determine the availability of obligated funds, WRCOG staff, in conjunction with RCTC staff, completed a review of the current Federal Transportation improvement Program (FTIP) to identify TUMF eligible projects that were also programmed to receive funding from alternate sources. A table summarizing the obligated funds for segments of the TUMF network is included in **Appendix H**. A total of \$382.9 million in obligated funding was identified for improvements to the TUMF system. The estimated total TUMF network project cost was subsequently reduced by this amount.

4.6 Unfunded Existing Improvement Needs

A review of the existing traffic conditions on the TUMF network (as presented in **Table 3.1**) indicates that some segments of the roadways on the TUMF system currently experience congestion and operate at unacceptable levels of service. In addition, demand for inter-community transit service already exists and future utilization of proposed inter-community transit services will partially satisfy this existing demand. The need to improve these portions of the system is generated, at least in part, by existing demand, rather than solely the cumulative regional impacts of future new development, so future new development cannot be assessed for the equivalent cost share of improvements providing for this existing need.

To account for existing need in the TUMF Network, the cost for facilities identified as currently experiencing LOS E or F was adjusted. This was done by identifying the portion of any segment of the TUMF Network with a volume to capacity (v/c) ratio of greater than 0.9 (the threshold for LOS E) in the RivCoM 2018 Existing scenario and extracting the share of the overall facility cost to improve that portion. This cost adjustment provides for the mitigation of incremental traffic growth on those TUMF segments with an existing high level of congestion. The following approach was applied to account for incremental traffic growth associated with new development as part of the existing need methodology:

1. Facilities with an existing need were identified by reviewing the RivCoM 2018 Existing scenario assigned traffic on the 2021 existing network and delineating

those facilities included on the TUMF Cost Fee Summary Table that have an average directional v/c exceeding 0.90¹¹.

- a. Weighted directional v/c values were used to determine existing need for network segments, which was calculated by:
 - i. Determining the length for the portion of each segment (model link), and calculating the ratio of link length to the overall segment length
 - ii. Generating the average directional v/c for each link, for both directions in AM and PM periods, and multiplying by link/segment length ratio
 - iii. Determining the maximum peak-period peak-direction v/c for each link, representing the highest directional v/c in either AM or PM
 - iv. Calculating weighted average v/c for each TUMF segment, based on the sum of all weighted max v/c values of each link within a segment
 - b. A similar method was used to determine existing need for spot improvements including interchanges, railroad crossings and bridges. However, no weighting was used in the calculation of existing need for spot improvements. For these facilities, the peak-period peak-direction v/c values (highest directional v/c in either AM or PM) were utilized in the existing need calculation. This was based on the individual link within a network segment where a bridge or railroad crossing is located, or on- and off-ramps in the case of interchanges.
2. Initial costs of addressing the existing need were calculated by estimating the share of a particular roadway segments "new lane" cost, or individual spot improvement cost (including all associated ROW and soft costs).
 3. Incremental growth in v/c was determined by comparing the average directional existing year v/c for the TUMF facilities (delineated under step one) with the horizon year v/c for the corresponding segments and spot improvements calculated based on the RivCoM 2045 No-Build scenario assigned traffic on the 2021 existing network using the same methodology as the existing year v/c.

¹¹ The RivCoM 2021 Existing Network used for the TUMF Nexus Study analyses reflects the RivCoM 2018 base year network augmented to include highways facilities on the TUMF Network as they existed in December 2021. A second version of the base network was also developed adding only those facilities that had been identified on the 2016 TUMF Nexus study 2040 Build scenario that did not currently exist in December 2021 and therefore were not represented by a link(s) in the RivCoM base network. The Supplemental 2021 Existing Network was utilized as the basis for determining existing and future v/c for only those projects that did not currently exist on the 2021 TUMF Network.

4. The proportion of the incremental growth attributable to new development was determined by dividing the result of step three with the total 2045 No-Build scenario v/c exceeding LOS E.
5. For those segments experiencing a net increase in v/c over the base year, TUMF will 'discount' the cost of existing need improvements by the proportion of the incremental v/c growth through 2045 No-Build compared to the 2018 Baseline v/c (up to a maximum of 100%).

The unfunded cost of existing highway improvement needs (including the related MSHCP obligation) totals \$582.6 million. **Appendix H** includes a detailed breakdown of the existing highway improvement needs on the TUMF network, including the associated unfunded improvement cost estimate for each segment and spot improvement experiencing unacceptable LOS.

For transit service improvements, the cost to provide for existing demand was determined by multiplying the total transit component cost by the share of future transit trips representing existing demand. The cost of existing transit service improvement needs is \$63.0 million representing 28.9% of the TUMF transit component. **Appendix H** includes tables reflecting the calculation of the existing transit need share and the existing transit need cost.

4.7 Maximum TUMF Eligible Cost

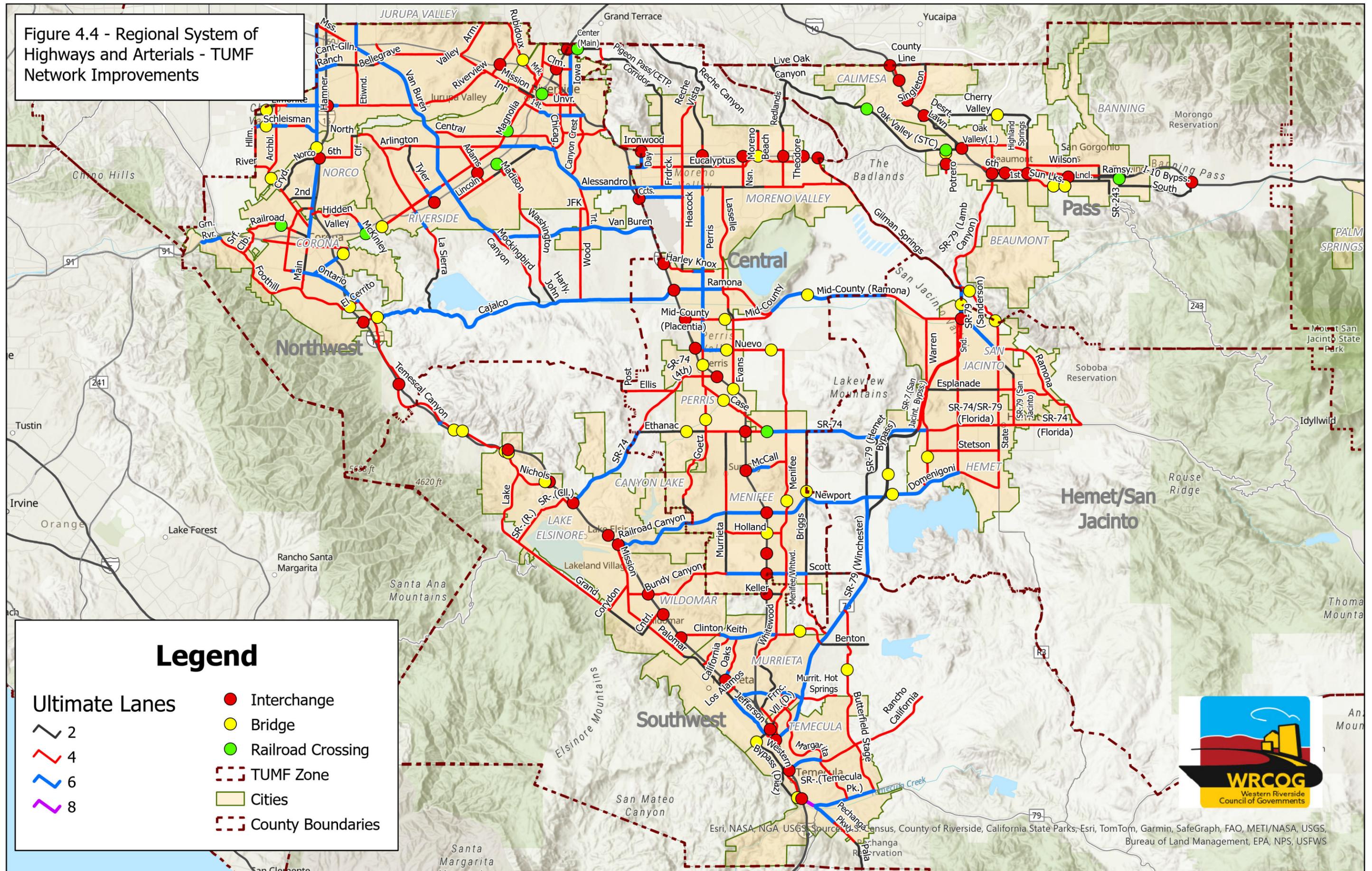
A total of \$382.9 million in obligated funding was identified for improvements to the TUMF system. Since these improvements are already funded with other available revenue sources, the funded portion of these projects cannot also be funded with TUMF revenues. Furthermore, the total cost of the unfunded existing improvement need is \$646.9 million. These improvements are needed to mitigate existing transportation deficiencies and therefore their costs cannot be assigned to new development through TUMF.

Based on the estimated costs described in **Sections 4.3** and **4.4**, the total value to complete the identified TUMF network and transit improvements, and administer the program is \$5.28 billion. Having accounted for obligated funds and unfunded existing needs as described in **Sections 4.5** and **4.6**, respectively, the estimated maximum eligible value of the TUMF Program is \$4.24 billion. The maximum eligible value of the TUMF Program includes approximately \$3.87 billion in eligible arterial highway and street related improvements and \$154.8 million in eligible transit related improvements. An additional \$53.9 million is eligible as part of the TUMF Program to mitigate the impact of eligible TUMF related arterial highway and street projects on critical native species and wildlife habitat, while \$161.2 million is provided to cover the costs incurred by WRCOG to administer the TUMF Program.

Figure 4.4 illustrates the various improvements to the RSHA included as part of the TUMF network cost calculation. **Table 4.4** summarizes the TUMF network cost calculations for each of the individual segments. This table also identifies the maximum eligible TUMF share for each segment having accounted for obligated funding and unfunded

existing need. A detailed breakdown of the individual cost components and values for the various TUMF Network segments is included in **Appendix H. Table 4.5** outlines the detailed transit component cost estimates. It should be noted that the detailed cost tables (and fee levels) are subject to regular review and updating by WRCOG and therefore WRCOG should be contacted directly to obtain the most recently adopted version of these tables (and to confirm the corresponding fee level).

Figure 4.4 - Regional System of Highways and Arterials - TUMF Network Improvements



Legend

- | | |
|----------------|-----------------------|
| Ultimate Lanes | ● Interchange |
| 2 | ● Bridge |
| 4 | ● Railroad Crossing |
| 6 | --- TUMF Zone |
| 8 | ■ Cities |
| | --- County Boundaries |



Esri, NASA, NGA, USGS, Source: Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS

Table 4.4 - TUMF Network Cost Estimates

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE
Central			Menifee	Ethanac	Goetz	Murrieta	\$0	\$0
Central			Menifee	Ethanac	I-215	I-215	\$0	\$0
Central			Menifee	Ethanac	I-215	interchange	\$32,698,000	\$32,698,000
Central			Menifee	Ethanac	Sherman	Matthews	\$2,674,000	\$2,674,000
Central			Menifee	Ethanac	BNSF San Jacinto Branch	railroad crossing	\$105,560,000	\$105,560,000
Central			Menifee	Menifee	SR-74 (Pinacate)	Simpson	\$1,307,000	\$1,307,000
Central			Menifee	Menifee	Salt Creek	bridge	\$4,384,000	\$4,384,000
Central			Menifee	Menifee	Simpson	Aldergate	\$0	\$0
Central			Menifee	Menifee	Aldergate	Newport	\$0	\$0
Central			Menifee	Menifee	Newport	Holland	\$0	\$0
Central			Menifee	Menifee	Holland	Garbani	\$0	\$0
Central			Menifee	Menifee	Garbani	Scott	\$4,353,000	\$4,353,000
Central			Menifee	Menifee/Whitewood	Scott	Murrieta City Limit	\$0	\$0
Central			Menifee	Newport	Goetz	Murrieta	\$0	\$0
Central			Menifee	Newport	Murrieta	I-215	\$1,130,000	\$1,130,000
Central			Menifee	Newport	I-215	Menifee	\$0	\$0
Central			Menifee	Newport	Menifee	Lindenberger	\$0	\$0
Central			Menifee	Newport	Lindenberger	SR-79 (Winchester)	\$0	\$0
Central			Menifee	Scott	I-215	Briggs	\$8,635,000	\$8,635,000
Central			Menifee	Scott	I-215	interchange	\$0	\$0
Central			Menifee	Scott	Sunset	Murrieta	\$4,388,000	\$4,388,000
Central			Menifee	Scott	Murrieta	I-215	\$16,949,000	\$12,949,000
Central			Menifee	SR-74	Matthews	Briggs	\$8,254,000	\$8,254,000
Central			Moreno Valley	Alessandro	I-215	Perris	\$13,420,000	\$13,420,000
Central			Moreno Valley	Alessandro	Perris	Nason	\$0	\$0
Central			Moreno Valley	Alessandro	Nason	Moreno Beach	\$0	\$0
Central			Moreno Valley	Alessandro	Moreno Beach	Gilman Springs	\$18,019,000	\$18,019,000
Central			Moreno Valley	Gilman Springs	SR-60	Alessandro	\$7,291,000	\$7,291,000
Central			Moreno Valley	Gilman Springs	SR-60	interchange	\$0	\$0
Central			Moreno Valley	Perris	Reche Vista	Ironwood	\$0	\$0
Central			Moreno Valley	Perris	Ironwood	Sunnymead	\$0	\$0
Central			Moreno Valley	Perris	SR-60	interchange	\$32,698,000	\$11,192,000
Central			Moreno Valley	Perris	Sunnymead	Cactus	\$0	\$0
Central			Moreno Valley	Perris	Cactus	Harley Knox	\$0	\$0
Central			Moreno Valley	Reche Vista	Country	Heacock	\$7,486,000	\$3,799,000
Central			Perris	11th/Case	Perris	Goetz	\$4,582,000	\$4,582,000
Central			Perris	Case	Goetz	I-215	\$20,876,000	\$20,876,000
Central			Perris	Case	San Jacinto River	bridge	\$1,740,000	\$1,235,000
Central			Perris	Ethanac	Goetz	Goetz	\$6,056,000	\$6,056,000
Central			Perris	Ethanac	San Jacinto River	bridge	\$5,568,000	\$5,568,000
Central			Perris	Ethanac	I-215	Sherman	\$5,316,000	\$5,316,000
Central			Perris	Goetz	Case	Ethanac	\$1,507,000	\$999,000
Central			Perris	Goetz	San Jacinto River	bridge	\$5,568,000	\$3,398,000
Central			Perris	Mid-County (Placentia)	I-215	Perris	\$15,655,000	\$15,655,000
Central			Perris	Mid-County (Placentia)	I-215	interchange	\$0	\$0
Central			Perris	Mid-County (Placentia)	Perris	Evans	\$22,985,000	\$22,985,000
Central			Perris	Mid-County (Placentia)	Perris Valley Storm Channel	bridge	\$8,352,000	\$8,352,000
Central			Perris	Perris	Harley Knox	Ramona	\$0	\$0
Central			Perris	Perris	Ramona	Citrus	\$7,063,000	\$7,063,000
Central			Perris	Perris	Citrus	Nuevo	\$0	\$0
Central			Perris	Perris	Nuevo	11th	\$6,927,000	\$6,927,000
Central			Perris	Perris	I-215 overcrossing	bridge	\$0	\$0
Central			Perris	Ramona	I-215	Perris	\$5,039,000	\$5,039,000
Central			Perris	Ramona	I-215	interchange	\$32,698,000	\$7,725,000
Central			Perris	Ramona	Perris	Evans	\$0	\$0
Central			Perris	Ramona	Evans	Mid-County (2,800 ft E of Rider)	\$0	\$0
Central			Perris	SR-74 (4th)	Ellis	I-215	\$0	\$0
Central			Unincorporated	Ethanac	SR-74	Keystone	\$4,666,000	\$4,666,000
Central			Unincorporated	Gilman Springs	Alessandro	Bridge Road	\$30,601,000	\$30,601,000
Central			Unincorporated	Menifee	Nuevo	SR-74 (Pinacate)	\$16,684,000	\$16,684,000
Central			Unincorporated	Mid-County	Evans	Ramona (2,800 ft E of Rider)	\$12,156,000	\$12,156,000
Central			Unincorporated	Mid-County (Ramona)	Ramona (2,800 ft E of Rider)	Pico Avenue	\$0	\$0
Central			Unincorporated	Mid-County (Ramona)	Pico Avenue	Bridge Road	\$47,769,000	\$47,769,000
Central			Unincorporated	Mid-County (Ramona)	San Jacinto River	bridge	\$36,192,000	\$36,192,000
Central			Unincorporated	Reche Canyon	San Bernardino County	Reche Vista	\$0	\$0
Central			Unincorporated	Reche Vista	Reche Canyon	Country	\$0	\$0
Central			Unincorporated	Scott	Briggs	SR-79 (Winchester)	\$0	\$0
Central			Unincorporated	SR-74	Ethanac	Ellis	\$0	\$0
Northwest			Corona	Cajalco	I-15	Temescal Canyon	\$0	\$0
Northwest			Corona	Cajalco	I-15	interchange	\$0	\$0
Northwest			Corona	Foothill	Paseo Grande	Lincoln	\$0	\$0
Northwest			Corona	Foothill	Wardlow Wash	bridge	\$0	\$0
Northwest			Corona	Foothill	Lincoln	California	\$0	\$0
Northwest			Corona	Foothill	California	I-15	\$0	\$0
Northwest			Corona	Green River	SR-91	Dominguez Ranch	\$0	\$0
Northwest			Corona	Green River	Dominguez Ranch	Palisades	\$0	\$0
Northwest			Corona	Green River	Palisades	Paseo Grande	\$0	\$0
Northwest			Eastvale	Schleisman	San Bernardino County	600' e/o Cucamonga Creek	\$648,000	\$648,000
Northwest			Eastvale	Schleisman	Cucamonga Creek	bridge	\$0	\$0
Northwest			Eastvale	Schleisman	600' e/o Cucamonga Creek	Harrison	\$866,000	\$866,000
Northwest			Eastvale	Schleisman	Harrison	Sumner	\$488,000	\$488,000
Northwest			Eastvale	Schleisman	Sumner	Scholar	\$7,625,000	\$7,625,000
Northwest			Eastvale	Schleisman	Scholar	A Street	\$119,000	\$119,000
Northwest			Eastvale	Schleisman	A Street	Hammer	\$209,000	\$209,000

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE
Northwest	Jurupa Valley	Van Buren	SR-60	Bellegrave			\$23,928,000	\$10,461,000
Northwest	Jurupa Valley	Van Buren	Bellegrave	Santa Ana River			\$60,900,000	\$0
Northwest	Riverside	Alessandro	Arlington	Trautwein			\$2,410,000	\$2,410,000
Northwest	Riverside	Arlington	La Sierra	Magnolia			\$0	\$0
Northwest	Riverside	Arlington	Magnolia	Alessandro			\$46,465,000	\$46,465,000
Northwest	Riverside	Van Buren	Santa Ana River	SR-91			\$5,230,000	\$4,392,000
Northwest	Riverside	Van Buren	SR-91	Mockingbird Canyon			\$39,493,000	\$21,292,000
Northwest	Riverside	Van Buren	Wood	Trautwein			\$0	\$0
Northwest	Riverside	Van Buren	Trautwein	Orange Terrace			\$7,574,000	\$7,574,000
Northwest	Unincorporated	Alessandro	Trautwein	Vista Grande			\$0	\$0
Northwest	Unincorporated	Alessandro	Vista Grande	I-215			\$0	\$0
Northwest	Unincorporated	Cajalco	El Sobrante	Harley John			\$10,580,000	\$9,817,000
Northwest	Unincorporated	Cajalco	Harley John	Harvil			\$166,492,000	\$166,492,000
Northwest	Unincorporated	Cajalco	Harvil	I-215			\$1,238,000	\$1,238,000
Northwest	Unincorporated	Cajalco	Temescal Canyon	La Sierra			\$49,596,000	\$35,953,000
Northwest	Unincorporated	Cajalco	Temescal Wash	bridge			\$4,872,000	\$1,907,000
Northwest	Unincorporated	Cajalco	La Sierra	El Sobrante			\$96,453,000	\$96,453,000
Northwest	Unincorporated	Van Buren	Mockingbird Canyon	Wood			\$67,429,000	\$67,429,000
Northwest	Unincorporated	Van Buren	Orange Terrace	I-215			\$0	\$0
Pass	Banning	Highland Springs	Wilson (8th)	Sun Lakes			\$0	\$0
Pass	Banning	Highland Springs	I-10	interchange			\$63,061,000	\$32,516,000
Pass	Banning	Highland Springs	Oak Valley (14th)	Wilson (8th)			\$0	\$0
Pass	Banning	Highland Springs	Cherry Valley	Oak Valley (14th)			\$0	\$0
Pass	Banning	I-10 Bypass South	I-10	Morongo Trail (Apache Trail)			\$50,110,000	\$50,110,000
Pass	Banning	I-10 Bypass South	I-10	interchange			\$63,061,000	\$63,061,000
Pass	Banning	I-10 Bypass South	San Gorgonio	bridge			\$4,176,000	\$4,176,000
Pass	Banning	I-10 Bypass South	UP/Hargrave	railroad crossing			\$52,780,000	\$52,780,000
Pass	Beaumont	Beaumont	Oak Valley (14th)	I-10			\$0	\$0
Pass	Beaumont	Patrero	Oak Valley (San Timoteo Canyon)	SR-60			\$1,100,000	\$1,100,000
Pass	Beaumont	Patrero	SR-60	interchange			\$63,061,000	\$29,561,000
Pass	Beaumont	Patrero	UP	railroad crossing			\$40,020,000	\$40,020,000
Pass	Beaumont	Patrero	Noble Creek	bridge			\$0	\$0
Pass	Beaumont	Patrero	SR-60	4th			\$0	\$0
Pass	Beaumont	SR-79 (Beaumont)	I-10	California			\$0	\$0
Pass	Beaumont	SR-79 (Beaumont)	I-10	interchange			\$63,061,000	\$7,408,000
Pass	Calimesa	Cherry Valley	I-10	interchange			\$63,061,000	\$59,773,000
Pass	Calimesa	Cherry Valley	Roberts St	Roberts Rd			\$3,053,000	\$3,053,000
Pass	Unincorporated	Cherry Valley	Bellflower	Noble			\$6,411,000	\$6,411,000
Pass	Unincorporated	Cherry Valley	Highland Springs	Bellflower			\$0	\$0
Pass	Unincorporated	Cherry Valley	Noble	Roberts St			\$0	\$0
Pass	Unincorporated	Cherry Valley	San Timoteo Wash	bridge			\$0	\$0
Pass	Unincorporated	SR-79 (Lamb Canyon)	California	Gilman Springs			\$0	\$0
San Jacinto	Hemet	Domenigoni	Warren	Sanderson			\$7,726,000	\$7,726,000
San Jacinto	Hemet	Domenigoni	Sanderson	State			\$0	\$0
San Jacinto	Hemet	SR-74	Winchester	Warren			\$35,208,000	\$35,208,000
San Jacinto	San Jacinto	Mid-County (Ramona)	Warren	Sanderson			\$0	\$0
San Jacinto	San Jacinto	Mid-County (Ramona)	Sanderson/SR-79 (Hemet Bypass)	interchange			\$0	\$0
San Jacinto	San Jacinto	Ramona	Sanderson	State			\$0	\$0
San Jacinto	San Jacinto	Ramona	State	Main			\$0	\$0
San Jacinto	San Jacinto	Ramona	Main	Cedar			\$31,518,000	\$26,928,000
San Jacinto	San Jacinto	Ramona	Cedar	SR-74			\$0	\$0
San Jacinto	Unincorporated	Domenigoni	SR-79 (Winchester)	Warren			\$13,508,000	\$13,508,000
San Jacinto	Unincorporated	Domenigoni	San Diego Aqueduct	bridge			\$4,176,000	\$4,176,000
San Jacinto	Unincorporated	Gilman Springs	Bridge	Sanderson			\$0	\$0
San Jacinto	Unincorporated	Mid-County (Ramona)	Bridge	Warren			\$9,221,000	\$9,221,000
San Jacinto	Unincorporated	SR-74	Briggs	SR-79 (Winchester)			\$15,417,000	\$15,417,000
San Jacinto	Unincorporated	SR-79 (Hemet Bypass)	SR-74 (Florida)	Domenigoni			\$13,901,000	\$13,901,000
San Jacinto	Unincorporated	SR-79 (Hemet Bypass)	San Diego Aqueduct	bridge			\$4,176,000	\$4,176,000
San Jacinto	Unincorporated	SR-79 (Hemet Bypass)	Domenigoni	Winchester			\$6,542,000	\$6,542,000
San Jacinto	Unincorporated	SR-79 (San Jacinto Bypass)	Mid-County (Ramona)	SR-74 (Florida)			\$56,690,000	\$56,690,000
San Jacinto	Unincorporated	SR-79 (Sanderson)	Gilman Springs	Ramona			\$6,899,000	\$2,555,000
San Jacinto	Unincorporated	SR-79 (Sanderson)	San Jacinto River	bridge			\$19,488,000	\$7,651,000
San Jacinto	Unincorporated	SR-79 (Winchester)	Domenigoni	Keller			\$65,022,000	\$65,022,000

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE
Southwest	Canyon Lake		Goetz	Railroad Canyon	Newport		\$0	\$0
Southwest	Canyon Lake		Railroad Canyon	Canyon Hills	Goetz		\$0	\$0
Southwest	Lake Elsinore		Railroad Canyon	I-15	Canyon Hills		\$0	\$0
Southwest	Lake Elsinore		Railroad Canyon	I-15	interchange		\$0	\$0
Southwest	Lake Elsinore		SR-74	I-15	interchange		\$63,061,000	\$24,162,000
Southwest	Murrieta		Clinton Keith	Copper Craft	Toulon		\$0	\$0
Southwest	Murrieta		Clinton Keith	Toulon	I-215		\$2,076,000	\$2,076,000
Southwest	Murrieta		Clinton Keith	I-215	Whitewood		\$0	\$0
Southwest	Murrieta		French Valley (Date)	Murrieta Hot Springs	Winchester Creek		\$7,321,000	\$7,321,000
Southwest	Murrieta		French Valley (Date)	Winchester Creek	Margarita		\$0	\$0
Southwest	Murrieta		Whitewood	Menifee City Limit	Keller		\$0	\$0
Southwest	Murrieta		Whitewood	Keller	Clinton Keith		\$0	\$0
Southwest	Temecula		French Valley (Cherry)	Jefferson	Diaz		\$3,929,000	\$3,929,000
Southwest	Temecula		French Valley (Cherry)	Murrieta Creek	bridge		\$5,846,000	\$5,846,000
Southwest	Temecula		French Valley (Date)	Margarita	Ynez		\$0	\$0
Southwest	Temecula		French Valley (Date)	Ynez	Jefferson		\$5,010,000	\$5,010,000
Southwest	Temecula		French Valley (Date)	I-15	interchange		\$122,076,000	\$122,076,000
Southwest	Temecula		SR-79 (Winchester)	Murrieta Hot Springs	Jefferson		\$2,697,000	\$2,697,000
Southwest	Temecula		SR-79 (Winchester)	I-15	interchange		\$0	\$0
Southwest	Temecula		Western Bypass (Diaz)	Cherry	Rancho California		\$2,285,000	\$2,285,000
Southwest	Temecula		Western Bypass (Vincent Moroga)	Rancho California	SR-79 (Front)		\$23,629,000	\$23,629,000
Southwest	Temecula		Western Bypass (Vincent Moroga)	I-15	interchange		\$0	\$0
Southwest	Temecula		Western Bypass (Vincent Moroga)	Murrieta Creek	bridge		\$4,176,000	\$4,176,000
Southwest	Unincorporated		Benton	SR-79	Eastern Bypass		\$0	\$0
Southwest	Unincorporated		Clinton Keith	Whitewood	SR-79		\$5,539,000	\$5,539,000
Southwest	Unincorporated		Clinton Keith	Warm Springs Creek	bridge		\$0	\$0
Southwest	Unincorporated		SR-74	I-15	Ethanac		\$27,699,000	\$26,347,000
Southwest	Unincorporated		SR-79 (Winchester)	Keller	Thompson		\$34,213,000	\$34,213,000
Southwest	Unincorporated		SR-79 (Winchester)	Thompson	La Alba		\$27,699,000	\$27,699,000
Southwest	Unincorporated		SR-79 (Winchester)	La Alba	Hunter		\$7,854,000	\$3,042,000
Southwest	Unincorporated		SR-79 (Winchester)	Hunter	Murrieta Hot Springs		\$595,000	\$442,000
Southwest	Wildomar		Bundy Canyon	I-15	Monte Vista		\$1,362,000	\$1,362,000
Southwest	Wildomar		Bundy Canyon	Monte Vista	Sunset		\$24,818,000	\$24,818,000
Southwest	Wildomar		Bundy Canyon	I-15	interchange		\$32,698,000	\$24,613,000
Southwest	Wildomar		Clinton Keith	Palomar	I-15		\$0	\$0
Southwest	Wildomar		Clinton Keith	I-15	Copper Craft		\$5,030,000	\$0
Subtotal							\$2,331,921,000	\$1,961,707,000

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE
Central			Menifee	Briggs	Newport	Scott	\$0	\$0
Central			Menifee	Briggs	SR-74 (Pinacate)	Simpson	\$2,991,000	\$2,991,000
Central			Menifee	Briggs	Simpson	Old Newport	\$5,430,000	\$5,430,000
Central			Menifee	Briggs	Salt Creek	bridge	\$8,352,000	\$8,352,000
Central			Menifee	Garbani	I-215	interchange	\$63,061,000	\$42,483,000
Central			Menifee	Goetz	Juanita	Lesser Lane	\$11,378,000	\$11,378,000
Central			Menifee	Goetz	Newport	Juanita	\$0	\$0
Central			Menifee	Holland	Murrieta	Bradley	\$15,708,000	\$15,708,000
Central			Menifee	Holland	Bradley	Haun	\$11,439,000	\$11,439,000
Central			Menifee	Holland	Haun	Antelope	\$9,456,000	\$9,456,000
Central			Menifee	Holland	I-215 overcrossing	bridge	\$9,744,000	\$9,744,000
Central			Menifee	Holland	Antelope	Menifee	\$3,844,000	\$3,844,000
Central			Menifee	McCall	I-215	Aspel	\$5,354,000	\$5,354,000
Central			Menifee	McCall	I-215	interchange	\$0	\$0
Central			Menifee	McCall	Aspel	Menifee	\$2,288,000	\$2,288,000
Central			Menifee	Murrieta	Ethanac	McCall	\$0	\$0
Central			Menifee	Murrieta	McCall	Newport	\$7,967,000	\$7,967,000
Central			Menifee	Murrieta	Newport	Bundy Canyon	\$0	\$0
Central			Moreno Valley	Cactus	I-215	Heacock	\$5,617,000	\$5,617,000
Central			Moreno Valley	Cactus	I-215	interchange	\$0	\$0
Central			Moreno Valley	Day	Ironwood	SR-60	\$0	\$0
Central			Moreno Valley	Day	SR-60	interchange	\$0	\$0
Central			Moreno Valley	Day	SR-60	Eucalyptus	\$0	\$0
Central			Moreno Valley	Eucalyptus	I-215	Towngate	\$8,843,000	\$8,843,000
Central			Moreno Valley	Eucalyptus	Towngate	Frederick	\$0	\$0
Central			Moreno Valley	Eucalyptus	Frederick	Heacock	\$0	\$0
Central			Moreno Valley	Eucalyptus	Heacock	Kitching	\$0	\$0
Central			Moreno Valley	Eucalyptus	Kitching	Moreno Beach	\$0	\$0
Central			Moreno Valley	Eucalyptus	Moreno Beach	Theodore	\$0	\$0
Central			Moreno Valley	Frederick	SR-60	Alessandro	\$0	\$0
Central			Moreno Valley	Heacock	Cactus	San Michele	\$0	\$0
Central			Moreno Valley	Heacock	Reche Vista	Cactus	\$0	\$0
Central			Moreno Valley	Heacock	San Michele	Harley Knox	\$0	\$0
Central			Moreno Valley	Ironwood	SR-60	Day	\$0	\$0
Central			Moreno Valley	Ironwood	Day	Heacock	\$0	\$0
Central			Moreno Valley	Lasselle	Alessandro	John F Kennedy	\$0	\$0
Central			Moreno Valley	Lasselle	John F Kennedy	Oleander	\$0	\$0
Central			Moreno Valley	Moreno Beach	Reche Canyon	SR-60	\$18,797,000	\$18,797,000
Central			Moreno Valley	Moreno Beach	SR-60 overcrossing	bridge	\$0	\$0
Central			Moreno Valley	Nason	SR-60	Alessandro	\$0	\$0
Central			Moreno Valley	Pigeon Pass	Ironwood	SR-60	\$0	\$0
Central			Moreno Valley	Pigeon Pass/CETAP Corridor	Hidden Springs	Ironwood	\$0	\$0
Central			Moreno Valley	Reche Canyon	Moreno Valley City Limit	Locust	\$0	\$0
Central			Moreno Valley	Redlands	Locust	Alessandro	\$39,789,000	\$39,789,000
Central			Moreno Valley	Redlands	SR-60	interchange	\$32,698,000	\$32,698,000
Central			Moreno Valley	Theodore	SR-60	Eucalyptus	\$3,966,000	\$3,966,000
Central			Moreno Valley	Theodore	SR-60	interchange	\$32,698,000	\$32,698,000
Central			Perris	Ellis	Goetz	Evans	\$9,526,000	\$9,526,000
Central			Perris	Evans	Oleander	Ramona	\$0	\$0
Central			Perris	Evans	Ramona	Morgan	\$0	\$0
Central			Perris	Evans	Morgan	Rider	\$0	\$0
Central			Perris	Evans	Rider	Placentia	\$0	\$0
Central			Perris	Evans	Placentia	Nuevo	\$6,492,000	\$6,492,000
Central			Perris	Evans	Nuevo	Ellis	\$17,705,000	\$17,705,000
Central			Perris	Evans	San Jacinto River	bridge	\$11,136,000	\$11,136,000
Central			Perris	Evans	I-215	bridge	\$8,352,000	\$8,352,000
Central			Perris	Goetz	Lesser	Ethanac	\$7,845,000	\$7,845,000
Central			Perris	Harley Knox	I-215	Indian	\$0	\$0
Central			Perris	Harley Knox	I-215	interchange	\$0	\$0
Central			Perris	Harley Knox	Indian	Perris	\$0	\$0
Central			Perris	Harley Knox	Perris	Redlands	\$0	\$0
Central			Perris	Nuevo	I-215	Murrieta	\$16,971,000	\$16,971,000
Central			Perris	Nuevo	I-215	interchange	\$32,698,000	\$19,736,000
Central			Perris	Nuevo	Murrieta	Dunlap	\$4,367,000	\$4,367,000
Central			Perris	Nuevo	Perris Valley Storm Channel	bridge	\$0	\$0
Central			Perris	SR-74 (Matthews)	I-215	Ethanac	\$0	\$0
Central			Perris	SR-74 (Matthews)	I-215	interchange	\$32,698,000	\$21,835,000
Central			Unincorporated	Center (Main)	I-215	Mt Vernon	\$0	\$0
Central			Unincorporated	Center (Main)	I-215	interchange	\$32,698,000	\$11,912,000
Central			Unincorporated	Center (Main)	BNSF	railroad crossing	\$20,010,000	\$20,010,000
Central			Unincorporated	Ellis	Post	SR-74	\$11,550,000	\$11,550,000
Central			Unincorporated	Mount Vernon/CETAP Corridor	Center	Pigeon Pass	\$2,582,000	\$2,582,000
Central			Unincorporated	Nuevo	Dunlap	Menifee	\$8,737,000	\$2,505,000
Central			Unincorporated	Nuevo	San Jacinto River	bridge	\$5,568,000	\$5,568,000
Central			Unincorporated	Pigeon Pass/CETAP Corridor	Hidden Springs	Mount Vernon	\$8,106,000	\$8,106,000
Central			Unincorporated	Post	Santa Rosa Mine	Ellis	\$0	\$0
Central			Unincorporated	Reche Canyon	Reche Vista	Moreno Valley City Limit	\$0	\$0
Central			Unincorporated	Redlands	San Timoteo Canyon	Locust	\$0	\$0

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE
Northwest	Corona		6th	SR-91	Magnolia		\$0	\$0
Northwest	Corona		Auto Center	Railroad	SR-91		\$0	\$0
Northwest	Corona		Cajalco	Bedford Canyon	I-15		\$0	\$0
Northwest	Corona		Hidden Valley	Norco Hills	McKinley		\$0	\$0
Northwest	Corona		Lincoln	Parkridge	Ontario		\$0	\$0
Northwest	Corona		Magnolia	6th	Sherborn		\$7,054,000	\$6,419,000
Northwest	Corona		Magnolia	Temescal Creek	bridge		\$4,176,000	\$3,580,000
Northwest	Corona		Magnolia	Sherborn	Rimpau		\$0	\$0
Northwest	Corona		Magnolia	Rimpau	Ontario		\$0	\$0
Northwest	Corona		Main	Grand	Ontario		\$0	\$0
Northwest	Corona		Main	Ontario	Foothill		\$0	\$0
Northwest	Corona		Main	Hidden Valley	Parkridge		\$5,314,000	\$4,389,000
Northwest	Corona		Main	Parkridge	SR-91		\$0	\$0
Northwest	Corona		Main	SR-91	S. Grand		\$0	\$0
Northwest	Corona		McKinley	Hidden Valley	Promenade		\$0	\$0
Northwest	Corona		McKinley	Promenade	SR-91		\$0	\$0
Northwest	Corona		McKinley	SR-91	Magnolia		\$0	\$0
Northwest	Corona		McKinley	Arlington Channel	bridge		\$0	\$0
Northwest	Corona		McKinley	BNSF	railroad crossing		\$105,560,000	\$0
Northwest	Corona		Ontario	I-15	El Cerrito		\$13,451,000	\$13,451,000
Northwest	Corona		Ontario	Lincoln	Buena Vista		\$0	\$0
Northwest	Corona		Ontario	Buena Vista	Main		\$0	\$0
Northwest	Corona		Ontario	Main	Kellogg		\$0	\$0
Northwest	Corona		Ontario	Kellogg	Fullerton		\$0	\$0
Northwest	Corona		Ontario	Fullerton	Rimpau		\$0	\$0
Northwest	Corona		Ontario	Rimpau	I-15		\$0	\$0
Northwest	Corona		Railroad	Auto Club	Buena Vista		\$0	\$0
Northwest	Corona		Railroad	BNSF	railroad crossing		\$40,020,000	\$40,020,000
Northwest	Corona		Railroad	Buena Vista	Main (at Grand)		\$0	\$0
Northwest	Corona		River	Corydon	Main		\$0	\$0
Northwest	Corona		Serfas Club	SR-91	Green River		\$0	\$0
Northwest	Eastvale		Archibald	Remington	River		\$3,382,000	\$3,382,000
Northwest	Eastvale		Hamner	Mission	Bellevue		\$0	\$0
Northwest	Eastvale		Hamner	Bellevue	Amberhill		\$199,000	\$199,000
Northwest	Eastvale		Hamner	Amberhill	Limonite		\$2,787,000	\$2,787,000
Northwest	Eastvale		Hamner	Limonite	Schleisman		\$991,000	\$991,000
Northwest	Eastvale		Hamner	Schleisman	Santa Ana River		\$5,533,000	\$3,675,000
Northwest	Eastvale		Hellman	Schleisman	Walters		\$419,000	\$419,000
Northwest	Eastvale		Hellman	Walters	River		\$21,503,000	\$21,503,000
Northwest	Eastvale		Hellman	Cucamonga Creek	bridge		\$3,828,000	\$3,828,000
Northwest	Eastvale		Limonite	I-15	Eastvale Gateway		\$289,000	\$289,000
Northwest	Eastvale		Limonite	I-15	interchange		\$0	\$0
Northwest	Eastvale		Limonite	Eastvale Gateway	Hamner		\$255,000	\$255,000
Northwest	Eastvale		Limonite	Hamner	Sumner		\$1,094,000	\$1,094,000
Northwest	Eastvale		Limonite	Sumner	Harrison		\$497,000	\$497,000
Northwest	Eastvale		Limonite	Harrison	Archibald		\$0	\$0
Northwest	Eastvale		Limonite	Archibald	Hellman (Keller SBD Co.)		\$2,208,000	\$2,208,000
Northwest	Eastvale		Limonite	Cucamonga Creek	bridge		\$13,920,000	\$0
Northwest	Eastvale		River	Hellman	Archibald		\$5,948,000	\$5,948,000
Northwest	Jurupa Valley		Armstrong	San Bernardino County	Valley		\$6,192,000	\$6,192,000
Northwest	Jurupa Valley		Bellevue	Cantu-Galleano Ranch	Van Buren		\$464,000	\$464,000
Northwest	Jurupa Valley		Cantu-Galleano Ranch	Bellevue	Bellevue		\$793,000	\$793,000
Northwest	Jurupa Valley		Etiwanda	Philadelphia	SR-60		\$1,515,000	\$989,000
Northwest	Jurupa Valley		Etiwanda	SR-60	Limonite		\$0	\$0
Northwest	Jurupa Valley		Etiwanda	I-15	Wineville		\$0	\$0
Northwest	Jurupa Valley		Limonite	Wineville	Etiwanda		\$0	\$0
Northwest	Jurupa Valley		Limonite	Etiwanda	Van Buren		\$2,981,000	\$2,981,000
Northwest	Jurupa Valley		Limonite	Van Buren	Clay		\$0	\$0
Northwest	Jurupa Valley		Limonite	Clay	Riverview		\$0	\$0
Northwest	Jurupa Valley		Market	Rubidoux	Santa Ana River		\$5,181,000	\$0
Northwest	Jurupa Valley		Market	Santa Ana River	bridge		\$13,920,000	\$6,204,000
Northwest	Jurupa Valley		Mission	Milliken	SR-60		\$0	\$0
Northwest	Jurupa Valley		Mission	SR-60	Santa Ana River		\$0	\$0
Northwest	Jurupa Valley		Riverview	Limonite	Mission		\$0	\$0
Northwest	Jurupa Valley		Rubidoux	Pine	Mission		\$0	\$0
Northwest	Jurupa Valley		Rubidoux	SR-60	interchange		\$32,698,000	\$9,051,000
Northwest	Jurupa Valley		Valley	Armstrong	Mission		\$0	\$0
Northwest	Norco		1st	Parkridge	Mountain		\$0	\$0
Northwest	Norco		1st	Mountain	Hamner		\$0	\$0
Northwest	Norco		2nd	River	I-15		\$0	\$0
Northwest	Norco		6th	Hamner	California		\$0	\$0
Northwest	Norco		6th	I-15	interchange		\$32,698,000	\$3,489,000
Northwest	Norco		Arlington	Crestview	Fairhaven		\$4,342,000	\$4,342,000
Northwest	Norco		California	Arlington	6th		\$15,237,000	\$12,525,000
Northwest	Norco		Corydon	River	5th		\$0	\$0
Northwest	Norco		Hamner	Santa Ana River	bridge		\$33,408,000	\$11,455,000
Northwest	Norco		Hamner	Santa Ana River	Hidden Valley		\$49,591,000	\$49,591,000
Northwest	Norco		Hidden Valley	I-15	Norco Hills		\$0	\$0
Northwest	Norco		Hidden Valley	Hamner	I-15		\$0	\$0
Northwest	Norco		Norco	Corydon	Hamner		\$0	\$0
Northwest	Norco		Norco	North	Crestview		\$0	\$0
Northwest	Norco		River	Archibald	Corydon		\$1,743,000	\$1,109,000

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTO	TOTAL COST	MAXIMUM TUMF SHARE
Northwest	Riverside			14th	Market	Martin Luther King	\$0	\$0
Northwest	Riverside			1st	Market	Main	\$0	\$0
Northwest	Riverside			3rd	SR-91	I-215	\$1,941,000	\$1,941,000
Northwest	Riverside			3rd	BNSF	railroad crossing	\$105,560,000	\$30,560,000
Northwest	Riverside			Adams	Arlington	SR-91	\$0	\$0
Northwest	Riverside			Adams	SR-91	Lincoln	\$0	\$0
Northwest	Riverside			Adams	SR-91	interchange	\$32,698,000	\$3,262,000
Northwest	Riverside			Arlington	Fairhaven	La Sierra	\$0	\$0
Northwest	Riverside			Buena Vista	Santa Ana River	Redwood	\$0	\$0
Northwest	Riverside			Canyon Crest	Martin Luther King	Central	\$0	\$0
Northwest	Riverside			Canyon Crest	Central	Country Club	\$0	\$0
Northwest	Riverside			Canyon Crest	Country Club	Via Vista	\$4,996,000	\$1,593,000
Northwest	Riverside			Canyon Crest	Via Vista	Alessandro	\$0	\$0
Northwest	Riverside			Central	Chicago	I-215/SR-60	\$0	\$0
Northwest	Riverside			Central	SR-91	Magnolia	\$0	\$0
Northwest	Riverside			Central	Alessandro	SR-91	\$0	\$0
Northwest	Riverside			Central	Van Buren	Magnolia	\$0	\$0
Northwest	Riverside			Chicago	Alessandro	Spruce	\$0	\$0
Northwest	Riverside			Chicago	Spruce	Columbia	\$0	\$0
Northwest	Riverside			Columbia	Main	Iowa	\$0	\$0
Northwest	Riverside			Columbia	I-215	interchange	\$32,698,000	\$9,050,000
Northwest	Riverside			Iowa	Center	3rd	\$30,272,000	\$30,272,000
Northwest	Riverside			Iowa	3rd	University	\$0	\$0
Northwest	Riverside			Iowa	University	Martin Luther King	\$0	\$0
Northwest	Riverside			JFK	Trautwein	Wood	\$1,880,000	\$1,880,000
Northwest	Riverside			La Sierra	Arlington	SR-91	\$0	\$0
Northwest	Riverside			La Sierra	SR-91	Indiana	\$192,000	\$192,000
Northwest	Riverside			La Sierra	Indiana	Victoria	\$778,000	\$778,000
Northwest	Riverside			Lemon (NB One way)	Mission Inn	University	\$0	\$0
Northwest	Riverside			Lincoln	Van Buren	Jefferson	\$0	\$0
Northwest	Riverside			Lincoln	Jefferson	Washington	\$0	\$0
Northwest	Riverside			Lincoln	Washington	Victoria	\$0	\$0
Northwest	Riverside			Madison	SR-91	Victoria	\$853,000	\$853,000
Northwest	Riverside			Madison	BNSF	railroad crossing	\$20,010,000	\$20,010,000
Northwest	Riverside			Magnolia	BNSF Railroad	Tyler	\$0	\$0
Northwest	Riverside			Magnolia	BNSF	railroad crossing	\$0	\$0
Northwest	Riverside			Magnolia	Tyler	Harrison	\$0	\$0
Northwest	Riverside			Magnolia	Harrison	14th	\$0	\$0
Northwest	Riverside			Main	1st	San Bernardino County	\$0	\$0
Northwest	Riverside			Market	14th	Santa Ana River	\$9,491,000	\$9,491,000
Northwest	Riverside			Martin Luther King	14th	I-215/SR-60	\$24,031,000	\$24,031,000
Northwest	Riverside			Mission Inn	Redwood	Lemon	\$0	\$0
Northwest	Riverside			Redwood (SB One way)	Mission Inn	University	\$0	\$0
Northwest	Riverside			Trautwein	Alessandro	Van Buren	\$0	\$0
Northwest	Riverside			Tyler	SR-91	Magnolia	\$0	\$0
Northwest	Riverside			Tyler	interchange	interchange	\$63,061,000	\$21,814,000
Northwest	Riverside			Tyler	Magnolia	Hole	\$0	\$0
Northwest	Riverside			Tyler	Hole	Wells	\$0	\$0
Northwest	Riverside			Tyler	Wells	Arlington	\$0	\$0
Northwest	Riverside			University	Redwood	SR-91	\$859,000	\$859,000
Northwest	Riverside			University	SR-91	I-215/SR-60	\$2,067,000	\$2,067,000
Northwest	Riverside			Victoria	Lincoln	Arlington	\$0	\$0
Northwest	Riverside			Victoria	Madison	Washington	\$0	\$0
Northwest	Riverside			Washington	Victoria	Hermosa	\$27,018,000	\$27,018,000
Northwest	Riverside			Wood	JFK	Van Buren	\$3,053,000	\$3,053,000
Northwest	Riverside			Wood	Van Buren	Bergamont	\$0	\$0
Northwest	Riverside			Wood	Bergamont	Krameria	\$0	\$0
Northwest	Unincorporated			Cantu-Galleano Ranch	Hammer	Wineville	\$0	\$0
Northwest	Unincorporated			Dos Lagos (Weirick)	Temescal Canyon	I-15	\$0	\$0
Northwest	Unincorporated			El Cerrito	I-15	Ontario	\$0	\$0
Northwest	Unincorporated			El Sobrante	Mockingbird Canyon	Cajalco	\$0	\$0
Northwest	Unincorporated			Harley John	Washington	Scottsdale	\$0	\$0
Northwest	Unincorporated			Harley John	Scottsdale	Cajalco	\$0	\$0
Northwest	Unincorporated			La Sierra	Victoria	El Sobrante	\$0	\$0
Northwest	Unincorporated			La Sierra	El Sobrante	Cajalco	\$0	\$0
Northwest	Unincorporated			Mockingbird Canyon	Van Buren	El Sobrante	\$20,871,000	\$20,871,000
Northwest	Unincorporated			Temescal Canyon	El Cerrito	Tuscany	\$3,168,000	\$0
Northwest	Unincorporated			Temescal Canyon	Tuscany	Dos Lagos	\$0	\$0
Northwest	Unincorporated			Temescal Canyon	Dos Lagos	Leroy	\$0	\$0
Northwest	Unincorporated			Temescal Canyon	Leroy	Dawson Canyon	\$0	\$0
Northwest	Unincorporated			Temescal Canyon	Dawson Canyon	I-15	\$0	\$0
Northwest	Unincorporated			Temescal Canyon	I-15	interchange	\$32,698,000	\$32,698,000
Northwest	Unincorporated			Temescal Canyon	I-15	Park Canyon	\$14,329,000	\$14,329,000
Northwest	Unincorporated			Temescal Canyon	Park Canyon	Indian Truck Trail	\$0	\$0
Northwest	Unincorporated			Washington	Hermosa	Harley John	\$12,787,000	\$12,787,000
Northwest	Unincorporated			Wood	Krameria	Cajalco	\$12,537,000	\$12,537,000

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE
Pass	Banning			8th	Wilson	I-10	\$0	\$0
Pass	Banning			Lincoln	Sunset	SR-243	\$0	\$0
Pass	Banning			Ramsey	I-10	8th	\$0	\$0
Pass	Banning			Ramsey	8th	Highland Springs	\$0	\$0
Pass	Banning			SR-243	I-10	Wesley	\$0	\$0
Pass	Banning			Sun Lakes	Highland Home	Sunset	\$30,502,000	\$30,502,000
Pass	Banning			Sun Lakes	Smith Creek	bridge	\$8,352,000	\$8,352,000
Pass	Banning			Sun Lakes	Montgomery Creek	bridge	\$5,568,000	\$5,568,000
Pass	Banning			Sun Lakes	Highland Springs	Highland Home	\$0	\$0
Pass	Banning			Sunset	Ramsey	Lincoln	\$0	\$0
Pass	Banning			Sunset	I-10	interchange	\$32,698,000	\$32,698,000
Pass	Banning			Wilson	Highland Home	8th	\$0	\$0
Pass	Banning			Wilson	Highland Springs	Highland Home	\$0	\$0
Pass	Beaumont			1st	Viele	Pennsylvania	\$0	\$0
Pass	Beaumont			1st	Pennsylvania	Highland Springs	\$0	\$0
Pass	Beaumont			6th	I-10	Highland Springs	\$0	\$0
Pass	Beaumont			Desert Lawn	Champions	Oak Valley (STC)	\$0	\$0
Pass	Beaumont			Oak Valley (14th)	Highland Springs	Pennsylvania	\$0	\$0
Pass	Beaumont			Oak Valley (14th)	Pennsylvania	Oak View	\$0	\$0
Pass	Beaumont			Oak Valley (14th)	Oak View	I-10	\$0	\$0
Pass	Beaumont			Oak Valley (14th)	I-10	interchange	\$63,061,000	\$62,401,000
Pass	Beaumont			Oak Valley (STC)	UP Railroad	Tukwet Canyon	\$0	\$0
Pass	Beaumont			Oak Valley (STC)	Tukwet Canyon	I-10	\$0	\$0
Pass	Beaumont			Pennsylvania	6th	1st	\$6,588,000	\$6,588,000
Pass	Beaumont			Pennsylvania	I-10	interchange	\$0	\$0
Pass	Calimesa			Bryant	County Line	Avenue L	\$0	\$0
Pass	Calimesa			Calimesa	County Line	I-10	\$0	\$0
Pass	Calimesa			Calimesa	I-10	interchange	\$63,061,000	\$63,061,000
Pass	Calimesa			County Line	7th	Bryant	\$0	\$0
Pass	Calimesa			County Line	I-10	interchange	\$32,698,000	\$32,698,000
Pass	Calimesa			Desert Lawn	Palmer	Champions	\$0	\$0
Pass	Calimesa			Singleton	Avenue L	Condit	\$0	\$0
Pass	Calimesa			Singleton	Condit	Roberts	\$12,972,000	\$12,972,000
Pass	Calimesa			Singleton	I-10	interchange	\$63,061,000	\$0
Pass	Calimesa			Tukwet Canyon	Palmer	Roberts Rd	\$0	\$0
Pass	Unincorporated			Live Oak Canyon	Oak Valley (STC)	San Bernardino County	\$0	\$0
Pass	Unincorporated			San Timoteo Canyon	San Bernardino County	UP Railroad	\$0	\$0
Pass	Unincorporated			San Timoteo Canyon	UP Railroad	railroad crossing	\$52,780,000	\$52,780,000
San Jacinto	Hemet			Sanderson	Acacia	Menlo	\$0	\$0
San Jacinto	Hemet			Sanderson	Domenigoni	Stetson	\$0	\$0
San Jacinto	Hemet			Sanderson	RR Crossing	Acacia	\$0	\$0
San Jacinto	Hemet			Sanderson	Stetson	RR Crossing	\$0	\$0
San Jacinto	Hemet			Sanderson	Menlo	Esplanade	\$0	\$0
San Jacinto	Hemet			SR-74 (Florida)	Warren	Cawston	\$0	\$0
San Jacinto	Hemet			SR-74 (Florida)	Columbia	Ramona	\$0	\$0
San Jacinto	Hemet			SR-74/SR-79 (Florida)	Cawston	Columbia	\$0	\$0
San Jacinto	Hemet			State	Domenigoni	Chambers	\$0	\$0
San Jacinto	Hemet			State	Chambers	Stetson	\$0	\$0
San Jacinto	Hemet			State	Florida	Esplanade	\$0	\$0
San Jacinto	Hemet			State	Stetson	Florida	\$0	\$0
San Jacinto	Hemet			Stetson	Cawston	State	\$0	\$0
San Jacinto	Hemet			Stetson	Warren	Cawston	\$4,357,000	\$4,357,000
San Jacinto	Hemet			Warren	Esplanade	Domenigoni	\$19,926,000	\$19,926,000
San Jacinto	Hemet			Warren	Salt Creek	bridge	\$4,176,000	\$4,176,000
San Jacinto	San Jacinto			Esplanade	Mountain	State	\$0	\$0
San Jacinto	San Jacinto			Esplanade	State	Warren	\$0	\$0
San Jacinto	San Jacinto			Sanderson	Ramona	Esplanade	\$0	\$0
San Jacinto	San Jacinto			SR-79 (North Ramona)	State	San Jacinto	\$0	\$0
San Jacinto	San Jacinto			SR-79 (San Jacinto)	North Ramona Blvd	7th	\$0	\$0
San Jacinto	San Jacinto			SR-79 (San Jacinto)	7th	SR-74	\$0	\$0
San Jacinto	San Jacinto			State	Ramona	Esplanade	\$0	\$0
San Jacinto	San Jacinto			State	Gilman Springs	Quandt Ranch	\$3,317,000	\$3,317,000
San Jacinto	San Jacinto			State	San Jacinto River	bridge	\$0	\$0
San Jacinto	San Jacinto			State	Quandt Ranch	Ramona	\$0	\$0
San Jacinto	San Jacinto			Warren	Ramona	Esplanade	\$13,469,000	\$13,469,000
San Jacinto	Unincorporated			Gilman Springs	Sanderson	State	\$11,097,000	\$11,097,000
San Jacinto	Unincorporated			Gilman Springs	Massacre Canyon Wash	bridge	\$1,392,000	\$1,392,000
San Jacinto	Unincorporated			SR-79 (Winchester)	SR-74 (Florida)	Domenigoni	\$0	\$0

Table 4.4 - TUMF Network Cost Estimates (continued)

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE
Southwest	Lake Elsinore			Carydon	Mission	Grand	\$3,336,000	\$3,336,000
Southwest	Lake Elsinore			Diamond	Mission	I-15	\$0	\$0
Southwest	Lake Elsinore			Franklin (Integral to Railroad Canyon Interchange)	I-15	interchange	\$32,698,000	\$32,698,000
Southwest	Lake Elsinore			Grand	Lincoln	Toff	\$0	\$0
Southwest	Lake Elsinore			Grand	Toff	SR-74 (Riverside)	\$3,512,000	\$3,512,000
Southwest	Lake Elsinore			Lake	I-15	Lincoln	\$39,817,000	\$32,726,000
Southwest	Lake Elsinore			Lake	I-15	interchange	\$32,698,000	\$15,771,000
Southwest	Lake Elsinore			Lake	Temescal Wash	bridge	\$2,506,000	\$1,150,000
Southwest	Lake Elsinore			Mission	Railroad Canyon	Bundy Canyon	\$0	\$0
Southwest	Lake Elsinore			Nichols	I-15	Lake	\$7,850,000	\$7,850,000
Southwest	Lake Elsinore			Nichols	Temescal Wash	bridge	\$4,176,000	\$4,176,000
Southwest	Lake Elsinore			Nichols	I-15	interchange	\$63,061,000	\$63,061,000
Southwest	Lake Elsinore			SR-74 (Collier/Riverside)	I-15	Lakeshore	\$24,303,000	\$24,303,000
Southwest	Lake Elsinore			SR-74 (Grand)	Riverside	SR-74 (Ortega)	\$9,733,000	\$3,691,000
Southwest	Lake Elsinore			SR-74 (Riverside)	Lakeshore	Grand	\$20,175,000	\$20,175,000
Southwest	Lake Elsinore			Temescal Canyon	I-15	Lake	\$7,411,000	\$7,411,000
Southwest	Lake Elsinore			Temescal Canyon	Temescal Wash	bridge	\$3,480,000	\$3,480,000
Southwest	Murrieta			California Oaks	Jefferson	I-15	\$0	\$0
Southwest	Murrieta			California Oaks	I-15	Jackson	\$0	\$0
Southwest	Murrieta			California Oaks	Jackson	Clinton Keith	\$0	\$0
Southwest	Murrieta			Jackson	Whitewood	Ynez	\$0	\$0
Southwest	Murrieta			Jefferson	Palomar	Nutmeg	\$1,562,000	\$1,562,000
Southwest	Murrieta			Jefferson	Nutmeg	Murrieta Hot Springs	\$0	\$0
Southwest	Murrieta			Jefferson	Murrieta Hot Springs	Cherry	\$30,634,000	\$30,634,000
Southwest	Murrieta			Keller	I-215	Whitewood	\$0	\$0
Southwest	Murrieta			Keller	I-215	interchange	\$0	\$0
Southwest	Murrieta			Los Alamos	Jefferson	I-215	\$0	\$0
Southwest	Murrieta			Murrieta Hot Springs	Jefferson	I-215	\$0	\$0
Southwest	Murrieta			Murrieta Hot Springs	I-215	Margarita	\$0	\$0
Southwest	Murrieta			Murrieta Hot Springs	Margarita	SR-79 (Winchester)	\$4,057,000	\$3,899,000
Southwest	Murrieta			Nutmeg	Jefferson	Clinton Keith	\$0	\$0
Southwest	Murrieta			Whitewood	Clinton Keith	Los Alamos	\$2,708,000	\$2,708,000
Southwest	Murrieta			Whitewood	Los Alamos	Murrieta Hot Springs	\$0	\$0
Southwest	Murrieta			Whitewood	Murrieta Hot Springs	Jackson	\$4,629,000	\$4,629,000
Southwest	Murrieta			Ynez	Jackson	SR-79 (Winchester)	\$0	\$0
Southwest	Temecula			Butterfield Stage	Murrieta Hot Springs	Calle Chapos	\$816,000	\$816,000
Southwest	Temecula			Butterfield Stage	Calle Chapos	La Serena	\$696,000	\$696,000
Southwest	Temecula			Butterfield Stage	La Serena	Rancho California	\$904,000	\$904,000
Southwest	Temecula			Butterfield Stage	Rancho California	Pauba	\$846,000	\$846,000
Southwest	Temecula			Butterfield Stage	Pauba	SR-79 (Temecula Pkwy)	\$725,000	\$725,000
Southwest	Temecula			Jefferson	Cherry	Rancho California	\$2,285,000	\$2,285,000
Southwest	Temecula			Margarita	Murrieta Hot Springs	SR-79 (Temecula Pkwy)	\$7,644,000	\$7,644,000
Southwest	Temecula			Old Town Front	Rancho California	I-15/SR-79 (Temecula Pkwy)	\$0	\$0
Southwest	Temecula			Pechanga Pkwy	SR-79 (Temecula Pkwy)	Via Gilberto	\$0	\$0
Southwest	Temecula			Pechanga Pkwy	Via Gilberto	Pechanga Pkwy	\$0	\$0
Southwest	Temecula			Rancho California	Jefferson	Margarita	\$18,254,000	\$18,181,000
Southwest	Temecula			Rancho California	I-15	interchange	\$32,698,000	\$0
Southwest	Temecula			Rancho California	Margarita	Butterfield Stage	\$0	\$0
Southwest	Temecula			SR-79 (Temecula Pkwy)	I-15	Pechanga Pkwy	\$0	\$0
Southwest	Temecula			SR-79 (Temecula Pkwy)	Pechanga Pkwy	Butterfield Stage	\$3,065,000	\$3,065,000
Southwest	Unincorporated			Briggs	Scott	SR-79 (Winchester)	\$6,509,000	\$6,509,000
Southwest	Unincorporated			Butterfield Stage	Tucalota Creek	bridge	\$0	\$0
Southwest	Unincorporated			Butterfield Stage (Pourroy)	Auld	Murrieta Hot Springs	\$23,076,000	\$23,076,000
Southwest	Unincorporated			Grand	Ortega	Carydon	\$68,025,000	\$68,025,000
Southwest	Unincorporated			Horsethief Canyon	Temescal Canyon	I-15	\$0	\$0
Southwest	Unincorporated			Indian Truck Trail	Temescal Canyon	I-15	\$0	\$0
Southwest	Unincorporated			Murrieta Hot Springs	SR-79 (Winchester)	Pourroy	\$0	\$0
Southwest	Unincorporated			Paia	Pechanga	San Diego County	\$0	\$0
Southwest	Unincorporated			Pourroy	SR-79 (Winchester)	Auld	\$2,236,000	\$2,236,000
Southwest	Unincorporated			Rancho California	Butterfield Stage	Glen Oaks	\$87,369,000	\$87,369,000
Southwest	Unincorporated			Temescal Canyon	Horsethief Canyon Wash	bridge	\$3,340,000	\$3,340,000
Southwest	Unincorporated			Temescal Canyon	Indian Truck Trail	I-15	\$15,739,000	\$15,739,000
Southwest	Unincorporated			Temescal Canyon	Indian Wash	bridge	\$1,462,000	\$1,462,000
Southwest	Wildomar			Bundy Canyon	Mission	I-15	\$9,704,000	\$9,704,000
Southwest	Wildomar			Grand	Carydon	Wildomar Trail	\$0	\$0
Southwest	Wildomar			Mission	Bundy Canyon	Palomar	\$0	\$0
Southwest	Wildomar			Palomar	Clinton Keith	Washington	\$3,227,000	\$3,227,000
Southwest	Wildomar			Palomar	Mission	Clinton Keith	\$13,493,000	\$13,493,000
Southwest	Wildomar			Wildomar Trail	I-15	Baxter	\$1,281,000	\$1,281,000
Southwest	Wildomar			Wildomar Trail	I-15	interchange	\$32,698,000	\$27,858,000
Southwest	Wildomar			Wildomar Trail	Baxter	Palomar	\$11,316,000	\$11,316,000
Southwest	Wildomar			Wildomar Trail	Palomar	Grand	\$0	\$0
Subtotal							\$2,508,329,000	\$1,913,028,000
Totals								
	Network						\$4,840,250,000	\$3,874,735,000
	Transit						\$217,870,000	\$154,831,000
	Administration						\$161,183,000	\$161,183,000
	MSHCP						\$64,606,000	\$53,859,000
	TOTAL						\$5,283,909,000	\$4,244,608,000

Table 4.5 – TUMF Transit Cost Estimates

AREA PLAN DIST	LEAD AGENCY	PROJECT NAME	LOCATION	UNITS (number/length in miles)	UNIT COST	TOTAL	MAXIMUM TUMF SHARE
Central	RTA	Menifee Mobility Hub	Menifee	1	\$7,465,000	\$7,465,000	\$5,305,000
Northwest	RTA	Riverside Mobility Hub at Vine Street	Riverside	1	\$11,195,000	\$11,195,000	\$7,956,000
Central	RTA	Moreno Valley Mobility Hub(s)	Moreno Valley	1	\$11,195,000	\$11,195,000	\$7,956,000
Northwest	RTA	Jurupa Valley Mobility Hub(s)	Jurupa Valley	1	\$11,195,000	\$11,195,000	\$7,956,000
Pass	RTA	Pass Area Mobility Hub(s)	Banning	1	\$11,195,000	\$11,195,000	\$7,956,000
Southwest	RTA	Lake Elsinore / Canyon Lake Mobility Hub(s)	Lake Elsinore	1	\$11,195,000	\$11,195,000	\$7,956,000
San Jacinto	RTA	Hemet Mobility Hub	Hemet	1	\$11,195,000	\$11,195,000	\$7,956,000
San Jacinto	RTA	San Jacinto Mobility Hub	San Jacinto	1	\$11,195,000	\$11,195,000	\$7,956,000
San Jacinto	RTA	MSJC Mobility Hub	San Jacinto	1	\$1,245,000	\$1,245,000	\$885,000
Regional	RTA	ZEB Technology Enhancements	Various locations region wide	10	\$100,000	\$1,000,000	\$711,000
Northwest	RTA	Regional Operations and Maintenance Facility	Riverside	1	\$62,186,000	\$62,186,000	\$44,192,000
Regional	RTA	Annual Transit Enhancements Program	Various locations region wide	290	\$50,000	\$14,500,000	\$10,304,000
Northwest	RTA	HQTC Improvements	UCR, Riverside to Perris	42	\$75,000	\$3,150,000	\$2,239,000
Regional	RTA	Vehicle Fleet Small Buses/Vans	Various locations region wide	30	\$160,000	\$4,800,000	\$3,411,000
Regional	RTA	Vehicle Fleet Medium Buses	Various locations region wide	20	\$300,000	\$6,000,000	\$4,264,000
Regional	RTA	Vehicle Fleet Large Buses	Various locations region wide	29	\$1,271,000	\$36,859,000	\$26,194,000
Regional	RTA	COA Study	Various locations region wide	2	\$1,150,000	\$2,300,000	\$1,634,000
TOTAL						\$217,870,000	\$154,831,000

4.8 TUMF Network Evaluation

To assess the effectiveness of the proposed TUMF Network improvements to mitigate the cumulative regional impact of new development in Western Riverside County, the proposed network improvements were added to the 2021 existing network in RivCoM and the model was run with 2045 socioeconomic data to determine the relative impacts on horizon year traffic conditions. To quantify the impacts of the TUMF Network improvements, the various traffic measures of effectiveness described in **Section 3.1** for the 2018 Existing and 2045 No-Build scenarios were again calculated for the 2045 TUMF Build scenario. The results for VMT, VHT, VHD, and total VMT experiencing unacceptable level of service (LOS E) were then compared to the results presented in **Table 3.1** for the no-build conditions. The 2045 TUMF Build comparison results are provided in **Table 4.6**. Plots of the Network Extents are attached in **Appendix H**.

As shown in **Table 4.6**, the 2045 peak period VMT on all arterial facilities experiencing LOS of E or worse will decrease with the addition of the TUMF Network improvements while the share of VMT on the TUMF arterial network experiencing LOS E or worse during the peak periods will be reduced to 32% (which is still above the level experienced in 2018). It should be noted that the total VMT on the arterial system **increases** because of freeway trips being diverted to the arterial system to benefit from the proposed TUMF improvements.

Despite a greater share of the total peak period VMT in 2045, the arterial system can more efficiently accommodate the increased demand with the proposed TUMF improvements. Although peak period VMT on the TUMF improved arterial system increases by approximately 6% in 2045 compared to the No Build condition, VHT on the arterial system remains almost constant. Additionally, a benefit is observed on the

freeway system with VMT and VHT being reduced following TUMF Network improvements. By completing TUMF improvements, the total VHD experienced by all area motorists would be reduced during the peak period by over 7% from the levels that would be experienced under the 2045 No-Build scenario. These results highlight the effectiveness of the TUMF Program to mitigate the cumulative regional transportation impacts of new development commensurate with the level of impact being created.

Table 4.6 – Regional Highway System Measures of Performance (2018 Existing and 2045 No-Build Scenarios to 2045 TUMF Build Scenario)

Measure of Performance*	Peak Periods (Total)		
	2018 Existing	2045 No-Build	2045 Build
VMT - Total ALL FACILITIES	23,284,724	29,897,254	30,160,328
VMT - FREEWAYS	13,514,522	15,490,284	15,418,548
VMT - ALL ARTERIALS	9,770,202	14,406,970	14,741,781
TOTAL - TUMF ARTERIAL VMT	6,216,985	8,597,200	9,096,417
VHT - TOTAL ALL FACILITIES	541,350	915,439	895,725
VHT - FREEWAYS	263,792	399,128	388,847
VHT - ALL ARTERIALS	277,558	516,311	506,878
TOTAL TUMF ARTERIAL VHT	174,455	320,869	321,062
VHD - TOTAL ALL FACILITIES	108,900	338,056	313,288
VHD - FREEWAYS	66,156	170,649	161,528
VHD - ALL ARTERIALS	42,745	167,407	151,760
TOTAL TUMF ARTERIAL VHD	33,249	124,863	114,451
VMT LOS E - TOTAL ALL FACILITIES	5,605,070	13,369,483	12,788,016
VMT LOS E - FREEWAYS	4,725,471	9,316,891	9,115,937
VMT LOS E & F - ALL ARTERIALS	879,599	4,052,592	3,672,079
TOTAL TUMF ARTERIAL VMT w/ LOS E or worse	765,782	3,184,133	2,929,288
% of TUMF ARTERIAL VMT w/ LOS E or worse	12%	37%	32%

* Source: RivCoM 2018 base network and SCAG 2020 RTP/SCS SED with updated 2021 arterial network as existing in December 2021 and RivCoM 2018 base network and SCAG 2020 RTP/SCS SED with updated 2021 arterial network plus future TUMF network projects.

NOTES:

Volume is adjusted by PCE factor

VMT = vehicle miles of travel (the total combined distance that all vehicles travel on the system)

VHT = vehicle hours of travel (the total combined time that all vehicles are traveling on the system)

VHD = vehicle hours of delay (the total combined time that all vehicles have been delayed on the system based on the difference between forecast travel time and free-flow (ideal) travel time)

LOS = level of service (based on forecast volume to capacity ratios).

LOS E or Worse was determined by V/C ratio that exceeds 0.9 thresholds as indicated in the Riverside County General Plan.

5.0 TUMF NEXUS ANALYSIS

The objective of this section is to evaluate and document the rational nexus (or reasonable relationship) between the proposed fee and the transportation system improvements it will be used to help fund. The analysis starts by documenting the correlation between future development and the need for transportation system improvements on the TUMF network to mitigate the cumulative regional impacts of this new development, followed by analysis of the nexus evaluation of the key components of the TUMF concept.

5.1 Future Development and the Need for Improvements

Previous sections of this report documented the projected population, household and employment growth in Western Riverside County, the expected increases in traffic congestion and travel delay, and the identification of the transportation system improvements that will serve these future inter-community travel demands. The following points coalesce this information in a synopsis of how the future growth relates to the need for improvements to the TUMF system.

- Western Riverside County is expected to continue growing.
Development in Western Riverside County is expected to continue at a robust rate of growth into the foreseeable future. Current projections estimate the population is projected to grow from a level of approximately 1.91 million in 2018 to a future level of about 2.53 million in 2045, while employment is projected to grow from a level of about 570,000 in 2018 to approximately 846,000 in 2045 (as shown in **Table 2.3**).
- Continuing growth will result in increasing congestion on arterial roadways.
Traffic congestion and delay on arterial roadways are projected to increase dramatically in the future (as shown in **Table 3.1**). Without improvements to the transportation system, congestion levels will grow rapidly and travelers will experience unacceptable travel conditions with slow travel speeds and lengthy delays.
- The future arterial roadway congestion is directly attributable to future development in Western Riverside County.
Traffic using arterial roadways within Western Riverside County is virtually all generated within or attracted to Western Riverside County, since longer-distance trips passing through the region typically use the freeway system, not arterial roadways. Therefore, the future recurring congestion problems on these roadways will be attributable to new trips that originate in, terminate in, or travel within Western Riverside County.
- Capacity improvements to the transportation system will be needed to alleviate the future congestion caused by new development.
To maintain transportation service closer to current levels of efficiency, capacity enhancements will need to be made to the arterial roadway system. These enhancements could include new or realigned roads, additional lanes on existing

roads, new or expanded bridges, new or upgraded freeway interchanges, grade separation of at-grade rail crossings, or the installation of new ITS to improve traffic flows. The completion of improvements to the arterial roadway system would enhance regional mobility and reduce the total peak period vehicles hours of travel (VHT) by over 2%, reduce peak period vehicle hours of delay (VHD) by over 7%, and reduce the share of traffic experiencing congestion in the peak periods by over 4% (as shown in **Table 4.6**). The specific needs and timing of implementation will depend on the location and rate of future development, so the specific improvements to be funded by the TUMF and their priority of implementation will be determined during future project programming activities as improvement needs unfold and as TUMF funds become available.

- Roads on the TUMF network are the facilities that merit improvement through this fee program.

The criteria used to identify roads for the TUMF network (future number of lanes, future traffic volume, future congestion level, and roadway function linking communities and activity centers and serving public transportation) were selected to ensure that these are the roadways that will serve inter-community travel and will require future improvement to alleviate congestion.

- Improvements to the public transportation system will be needed to provide adequate mobility for transit-dependent travelers and to provide an alternative to automobile travel.

Since a portion of the population does not own an automobile and depends on public transportation for mobility, public transportation infrastructure and service will need to be enhanced and expanded to ensure continued mobility for this segment of the population. In addition, improvements to the public transportation system will be required to ensure that transit service can function as a viable option for future new Western Riverside County residents and employees who choose to avoid congestion by using public transportation.

For the reasons cited above, it can be readily concluded that there is a rational nexus between the future need for transportation improvements on the TUMF system and the future development upon which the proposed TUMF would be levied. The following sections evaluate the rational nexus in relation to the system components and the types of uses upon which the fee is assessed.

5.2 Application of Fee to System Components

As noted in **Section 3.2**, the TUMF concept includes splitting the fee revenues between the backbone system of arterials, the secondary system of arterials, and the public transportation system. This section evaluates the travel demands to determine the rational nexus between the future travel demands and the use of the fee to fund improvements to the future system components.

The split of fee revenues between the backbone and secondary highway networks is related to the proportion of highway vehicle trips that are relatively local (between

adjacent communities) and longer distance (between more distant communities but still within Western Riverside County). To estimate a rational fee split between the respective networks, the future combined AM and PM peak period travel forecast estimates were aggregated to a matrix of trips between zones to show the percentage of trips that remain within each zone in relation to the volume that travels to the other zones. This analysis was completed using the Year 2045 No-Build scenario trip tables from RivCoM.

The first step in the analysis was to create a correspondence table between the TAZs in the model and the five WRCOG TUMF zones (i.e. Northwest, Southwest, Central, Hemet/San Jacinto and Pass). The TAZs were then compressed into six districts (the five WRCOG zones and one for the rest of the SCAG region).

Table 5.1 shows the estimated peak period vehicle trips within and between each of the zones. **Table 5.2** shows the percentage of peak period vehicle trips within and between the respective zones. **Appendix I** includes the detailed RivCoM outputs used to develop the regional trip distribution profile shown in **Table 5.1** and **5.2**.

Table 5.1 - 2045 No-Build Peak Period Vehicle Trips by WRCOG Zone

From \ To	Central	Hemet/San Jacinto	Northwest	Pass	Southwest	Outside WRCOG	TOTAL
Central	417,608	23,474	89,780	6,301	55,101	57,558	649,822
Hemet/San Jacinto	29,401	209,005	8,647	8,432	16,081	18,078	289,645
Northwest	58,578	2,684	743,234	2,687	11,032	196,041	1,014,257
Pass	8,068	7,585	6,114	110,385	908	32,334	165,395
Southwest	55,812	16,232	32,852	1,976	667,255	62,713	836,839
Outside WRCOG	33,907	7,574	192,712	24,490	33,867		292,550
TOTAL	603,375	266,554	1,073,340	154,271	784,244	366,724	3,248,507

Based on RivCoM Year 2045 No-Build scenario

Table 5.2 – 2045 No-Build Percent Peak Period Vehicle Trips By WRCOG Zone

From \ To	Central	Hemet/San Jacinto	Northwest	Pass	Southwest	Outside WRCOG	TOTAL
Central	64.3%	3.6%	13.8%	1.0%	8.5%	8.9%	100%
Hemet/San Jacinto	10.2%	72.2%	3.0%	2.9%	5.6%	6.2%	100%
Northwest	5.8%	0.3%	73.3%	0.3%	1.1%	19.3%	100%
Pass	4.9%	4.6%	3.7%	66.7%	0.5%	19.5%	100%
Southwest	6.7%	1.9%	3.9%	0.2%	79.7%	7.5%	100%

Based on RivCoM Year 2045 No-Build scenario

Table 5.3 summarizes the calculation of the split between the backbone and secondary highway networks as derived from the peak period trip values provided in **Table 5.1**. Peak period vehicle trips to and from areas outside Western Riverside County were subtracted from the calculation, on the presumption that most of their inter-regional travel would occur on the freeway system. Peak period trips between zones (regional) were assigned to the backbone network, since these trips are primarily served by the arterial roadways that provide connections between the zones. Peak period trips within zones (local) were split between the backbone network and the secondary network in proportion to their lane-miles, since roadways on both networks serve intra-zonal trips. The backbone network includes approximately 41.1% of the lane-miles on the future TUMF system, and the secondary network includes approximately 58.9% of the lane-miles.

The backbone network is therefore assigned all the inter-zonal peak period trips plus 41.1% of the intra-zonal peak period trips. The secondary network is assigned 58.9% of the intra-zonal peak period trips and none of the inter-zonal peak period trips. The overall result is that 51.1% of the regional travel is assigned to the backbone network and 48.9% is assigned to the secondary network.

Table 5.3 - Backbone-Secondary Network Share Calculation

Calculation Value Description	Input Values	Backbone Value	Backbone Share	Secondary Value	Secondary Share
Total Western Riverside County Peak Period Vehicle Trips	3,248,507				
Less Internal/External Peak Period Vehicle Trips	-659,273				
Total Peak Period Vehicle Trips Internal to Western Riverside County	2,589,234				
Peak Period Vehicle Trips Between TUMF Zones	441,747				
Peak Period Vehicle Trips Within TUMF Zones	2,147,487				
TUMF Future Network Lane-Miles	3,029.9	1,243.9	41.1%	1,786.0	58.9%
Peak Period Vehicle Trips Between TUMF Zones	441,747	441,747	100.0%	0	0.0%
Peak Period Vehicle Trips Within TUMF Zones (as share of intra-zonal trips)	2,147,487	882,332	41.1%	1,265,155	58.9%
Total Peak Period Vehicle Trips Assigned	2,589,234	1,324,079	51.1%	1,265,155	48.9%

Based on RivCoM Year 2045 No-Build scenario; TUMF Nexus Study Exhibit H-1

5.3 Application of Fee to Residential and Non-Residential Developments

In order to establish the approximate proportionality of the future traffic impacts associated with new residential development and new non-residential development, the growth in daily VMT between the 2018 Existing and 2045 No-Build Scenarios from RivCoM were aggregated by trip purpose. RivCoM produces person trips (irrespective of mode choice) on the basis of five trip purposes: home-based-work (HBW), home-based-other (HBO), home-based-school (HBS), non-home-based (NHB), and home-based-university (HBU).

NCHRP Report #187 Quick Response Urban Travel Estimation Techniques and Transferable Parameters User's Guide (Transportation Research Board, 1978) details operational travel estimation techniques that are universally used for the travel demand modeling. Chapter 2 of this report, which details trip generation estimation, states that "HBW (Home Based Work) and HBNW (Home Based Non-Work) trips are generated at the households, whereas the NHB (Non-Home Based) trips are generated elsewhere." In accordance with NCHRP Report #187, growth in daily VMT was aggregated into home-based growth in daily VMT (combining the four home-based purposes: HBW, HBO, HBSC and HBU) and non-home-based growth in daily VMT. The home-based growth in daily VMT represents 77.7% of the total future growth in daily VMT and the non-home-based growth in daily VMT represent 22.3% of the total future growth in daily VMT, as shown in **Table 5.4**. **Appendix J** includes the RivCoM outputs used to develop the trip purpose summary in **Table 5.4**.

Table 5.4 - Daily VMT Growth by Trip Purpose for Western Riverside County (2018 - 2045)

VEHICLE TRIP PURPOSE	2018 EXISTING DAILY VMT	2045 NO-BUILD DAILY VMT	DAILY VMT GROWTH	DAILY VMT GROWTH SHARE
Home-Based-Work	81,121,525	98,818,811	17,697,286	31.8%
Home-Based-Other	114,840,696	138,710,519	23,869,822	42.9%
Home-Based-School (K-12)	8,592,941	9,230,272	637,331	1.1%
Non-Home-Based	61,534,566	73,907,099	12,372,533	22.3%
Home-Based-University	5,377,197	6,400,662	1,023,465	1.8%
TOTAL	271,466,925	327,067,363	55,600,437	100.00%
Home-Based Trips (Residential Uses)			43,227,904	77.7%
Non-Home-Based Trips (Non-Residential Uses)			12,372,533	22.3%

Based on RivCoM Year 2018 Existing Scenario, November 2023 and RivCoM Year 2045 No Build Scenario, November 2023

6.0 FAIR-SHARE FEE CALCULATION

The fee amounts, by type of development, that are justified to mitigate the cumulative regional impacts of new development on transportation facilities in Western Riverside County are quantified in this section. The total cost of improving the TUMF system is \$5.28 billion. Existing funding obligated for improvements to the TUMF system totals \$382.9 million while unfunded improvement needs generated by existing development represent \$646.9 million of the total cost. The balance of the unfunded TUMF system improvement needs is \$4.24 billion which is the maximum value attributable to the mitigation of the cumulative regional transportation impacts of future new development in the WRCOG region and will be captured through the TUMF Program. By levying the uniform fee directly on future new developments (and indirectly on new residents and new employees to Western Riverside County), these transportation system users are assigned their “fair share” of the costs to address the cumulative impacts of additional traffic they will generate on the regional transportation system.

Of the \$4.24 billion in unfunded future improvement needs, 77.7% (\$3.30 billion) will be assigned to future new residential development and 22.3% (\$946.5 million) will be assigned to future new non-residential development.

6.1 Residential Fees

The portion of the unfunded future improvement cost allocable to new residential development through the TUMF is \$3.30 billion. Since this future transportation system improvement need is generated by new residential development anticipated through the Year 2045, the fee will be spread between the residential developments projected to be constructed between 2018 and 2045. The projected residential growth from year 2018 to 2045 is 257,826 households (or dwelling units) as is indicated in **Table 2.3**.

Different household types generate different numbers of trips. To reflect the difference in trip generation between lower density “single-family” dwelling units and higher density “multi-family” dwelling units, the TUMF was weighted based on the respective trip generation rates of these different dwelling unit types. For the purposes of the TUMF Program, single family dwelling units are those housing units with a density of less than 8 units per acre while multi-family units are those with a density of 8 or more units per acre. According to the SCAG 2020 RTP/SCS forecasts included in **Table 2.3** and **Appendix B**, single family dwelling units (including mobile homes) are forecast to constitute 65.0% of the growth in residential dwelling units in the region between 2018 and 2045.

Data provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (2021) show that, on average, single-family dwelling units generate 0.99 vehicle trips per dwelling unit per hour in the PM peak hour, whereas apartments, condominiums and townhouses (considered to be representative of higher density multi-family dwelling units) generate a median of 0.50 vehicle trips per unit per hour in the PM peak hour. The growth in dwelling units for single-family and multi-family, respectively, were multiplied by the corresponding trip generation rates to determine

the weighted proportion of the change in trips attributable to each use type as the basis for determining the per unit fee required to levy the necessary \$3.20 billion to mitigate the cumulative regional transportation impacts of future new residential development. **Table 6.1** summarizes the calculation of the fee for single-family and multi-family dwelling units. **Appendix K** includes worksheets detailing the calculation of the residential (and non-residential) TUMF for Western Riverside County.

Table 6.1 - Fee Calculation for Residential Share

Residential Sector	2018 Dwelling Units	2045 Dwelling Units	Dwelling Unit Change	Trip Generation Rate	Trip Change	Percentage of Trip Change	Fee/DU
Single-Family	397,407	564,898	167,491	0.99	165,816	78.6%	\$15,476
Multi-Family	157,166	247,501	90,335	0.50	45,168	21.4%	\$7,816
Total	554,573	812,399	257,826		210,984	100.0%	

Household data based on SCAG 2020 RTP/SCS;
 Trip Generation based on ITE Trip Generation (2021).

6.2 Non-Residential Fees

The portion of the unfunded future improvement cost allocable to new non-residential development through the TUMF is \$946.5 million. Estimates of employment by sector were obtained from the SCAG 2020 RTP/SCS socioeconomic data included in **Table 2.3** and **Appendix B**. From the 2045 employment forecast, the amount of employee growth in each sector was calculated. The employment figures were then translated into square footage of new development using typical ratios of square feet per employee derived from four sources including: Cordoba Corporation/Parsons Brinckerhoff Quade and Douglas (PBQD), Land Use Density Conversion Factors For Long Range Corridor Study San Bernardino and Riverside Counties, August 20, 1990; Orange County Transportation Authority (OCTA), Orange County Subarea Model Guidelines Manual, June 2001; SCAG, Employment Density Study, October 31, 2001; and the County of Riverside, General Plan, as amended December 15, 2015. Worksheets showing the development of the TUMF employee conversion factors and the application of the conversion factors to calculate the square footage of future new non-residential development in Western Riverside County are included in **Appendix L**.

To account for the differences in trip generation between various types of non-residential uses, the new non-residential development was weighted by trip generation rate for each sector. Typical trip generation rates per employee were obtained from the Institute of Transportation Engineers (ITE) Trip Generation – 11th Edition (2021), and were weighted based on a calculated value of trips per employee as derived from the employee conversion factors and ITE typical trip generation rates per square foot of development, before being assigned to the non-residential categories as follows: Industrial – 0.6 PM peak hour trips per employee, Retail – 1.8 PM peak hour trips per employee, Service – 1.2 PM peak hour trips per employee, and Government/Public –

2.1 PM peak hour trips per employee¹². These rates were applied to the employment growth in each sector to determine the relative contribution of each sector to new trip-making, and the \$946.5 million was then allocated among the non-residential categories based on the percentage of new trips added. This proportionate non-residential fee share by sector was then divided by the estimated square footage of future new development to obtain the rate per square foot for each type of use. The calculation of the non-residential fee by sector is shown in **Table 6.2**.

Table 6.2 - Fee Calculation for Non-Residential Share

Non-Residential Sector	Employment Change	Trip Generation Rate per Employee	Trip Change	Percentage of Trip Change	Change in Square Feet of Gross Floor Area	Fee/SF
Industrial	76,581	0.6	45,949	15.1%	61,489,565	\$2.33
Retail	13,115	1.8	23,607	7.8%	6,557,500	\$11.21
Service	174,255	1.2	209,106	68.8%	66,735,957	\$9.76
Government/Public	12,071	2.1	25,349	8.3%	3,420,665	\$23.07
Total	276,022		304,011	100.0%	138,203,688	

Employment Change data based on SCAG 2020 RTP/SCS; Trip Generation based on ITE (2021); Change in Square Feet conversion factor based on Cordoba (1990), OCTA (2001), SCAG (2001) and County of Riverside (2015).

¹² The median trip generation rate for 'Retail' and 'Service' was reduced to reflect the influence of pass-by trips using the weekday PM peak median pass-by trip rate for select uses as derived from the ITE Trip Generation Manual (11th Edition) (September 2021).

7.0 CONCLUSIONS

Based on the results of the Nexus Study evaluation, there is reasonable relationship between the cumulative regional transportation impacts of new land development projects in Western Riverside County and the need to mitigate these transportation impacts using funds levied through the ongoing TUMF Program. Factors that reflect this reasonable relationship include:

- Western Riverside County is expected to continue growing because of future new development.
- Continuing new growth will result in increasing congestion on arterial roadways.
- The future arterial roadway congestion is directly attributable to the cumulative regional transportation impacts of future development in Western Riverside County.
- Capacity improvements to the transportation system will be needed to mitigate the cumulative regional impacts of new development.
- Roads on the TUMF network are the facilities that merit improvement through this fee program.
- Improvements to the public transportation system will be needed to provide adequate mobility for transit-dependent travelers and to provide an alternative to automobile travel.

The Nexus Study evaluation has established a proportional “fair share” of the improvement cost attributable to new development based on the impacts of existing development and the availability of obligated funding through traditional sources. Furthermore, the Nexus Study evaluation has divided the fair share of the cost to mitigate the cumulative regional impacts of future new development in Western Riverside County in rough proportionality to the cumulative impacts of future residential and non-residential development in the region. The respective fee allocable to future new residential and non-residential development in Western Riverside County is summarized for differing use types in **Table 7.1**.

Table 7.1 - Transportation Uniform Mitigation Fee for Western Riverside County

Land Use Type	Units	Development Change	Fee Per Unit	Total Revenue (\$ million)
Single Family Residential	DU	167,491	\$15,476	\$2,592.0
Multi Family Residential	DU	90,335	\$7,816	\$706.1
Industrial	SF GFA	61,489,565	\$2.33	\$143.1
Retail	SF GFA	6,557,500	\$11.21	\$73.5
Service	SF GFA	66,735,957	\$9.76	\$651.1
Government/Public	SF GFA	3,420,665	\$23.07	\$78.9
MAXIMUM TUMF VALUE				\$4,244.6

8.0 APPENDICES

The following Appendices incorporate the extent of materials used to support the development of the WRCOG TUMF Nexus Study and, where appropriate, specifically the 2024 Update. The respective Appendices also incorporate an explanation of the methodology and assumptions used to develop the various elements of the Nexus Study.

These Appendices represent a compilation of materials derived from a variety of technical resources. Each of the following Appendices relate to the development of a specific element of the Nexus Study. These Appendices are as follows:

Appendix A - List of WRCOG Committees

Appendix B - Western Riverside County Population and Employment Growth 2018 – 2045

Appendix C - Western Riverside County Traffic Growth 2018 – 2045

Appendix D - Western Riverside County Transit System Ridership 2018 – 2045

Appendix E - Western Riverside County Regional System of Highways and Arterials Performance Measures

Appendix F - TUMF Network Cost Assumptions

Appendix G - TUMF 2024 Program Update Disposition of Network Change Requests

Appendix H - TUMF Network Cost Estimate and Evaluation

Appendix I - Western Riverside County Regional Trip Distribution

Appendix J - Western Riverside County Regional Trip Purpose

Appendix K - Residential Fee Calculation

Appendix L - Non-Residential Fee Calculation

Appendix A - List of WRCOG Committees

WRCOG Executive Committee

Sheri Flynn	City of Banning
Mike Lara	City of Beaumont
Wendy Hewitt	City of Calimesa
Mark Terry	City of Canyon Lake
Jacque Casillas (2nd Vice-Chair)	City of Corona
Christian Dinco	City of Eastvale
Jackie Peterson	City of Hemet
Chris Barajas (Past Chair)	City of Jurupa Valley
Brian Tisdale	City of Lake Elsinore
Bob Karwin	City of Menifee
Elena Baca-Santa Cruz	City of Moreno Valley
Lisa DeForest	City of Murrieta
Kevin Bash	City of Norco
Rita Rogers (Chair)	City of Perris
Chuck Conder	City of Riverside
Crystal Ruiz	City of San Jacinto
James Stewart	City of Temecula
Joseph Morabito	City of Wildomar
Kevin Jeffries	County of Riverside Dist. 1
Karen Spiegel	County of Riverside Dist. 2
Chuck Washington	County of Riverside Dist. 3
Yxstian Gutierrez	County of Riverside Dist. 5
Phil Paule	Eastern Municipal Water District
Dr. Edwin Gomez	Riverside County Superintendent of Schools (ex-officio)
Brenda Dennstedt (Vice-Chair)	Western Water

WRCOG Technical Advisory Committee

Doug Schulze	City of Banning
Elizabeth Gibbs	City of Beaumont
Will Kolbow	City of Calimesa
Aaron Brown	City of Canyon Lake
Brett Channing	City of Corona
Mark Orme	City of Eastvale
Mark Prestwich	City of Hemet
Rod Butler (Past Chair)	City of Jurupa Valley
Jason Simpson	City of Lake Elsinore
Armando Villa	City of Menifee
Mike Lee	City of Moreno Valley
Kim Summers	City of Murrieta
Lori Sassoon	City of Norco
Clara Miramontes (Chair)	City of Perris
Mike Futrell	City of Riverside
Rob Johnson	City of San Jacinto
Aaron Adams	City of Temecula
Dan York	City of Wildomar
Jeff Van Wagenen	County of Riverside
Joe Mouawad	Eastern Municipal Water District
Grace Martin	March Joint Power Authority
Matt Snellings	Riverside County Office of Education
Craig Miller	Western Water

WRCOG Planning Directors' Committee

no new appointment made (as of 07/24/24)	City of Banning
Carole Kendrick	City of Beaumont
Kelly Lucia	City of Calimesa
Jim Morrisey	City of Canyon Lake
Joanne Coletta	City of Corona
David Murray	City of Eastvale
Monique Alaniz-Flejter	City of Hemet
Joe Perez (Chair)	City of Jurupa Valley
Damaris Abraham	City of Lake Elsinore
Cheryl Kitzerow	City of Menifee
Sean Kelleher (2nd Vice-Chair)	City of Moreno Valley
David Chantarangsu	City of Murrieta
Alma Robles	City of Norco
Kenneth Phung (Vice-Chair)	City of Perris
Judy Eguez	City of Riverside
Travis Randel	City of San Jacinto
Matt Peters	City of Temecula
Matthew Bassi	City of Wildomar
John Hildebrand	County of Riverside
Jeffrey Smith	March Joint Powers Authority
Jennifer Nguyen	Riverside Transit Agency
Ryan Shaw	Western Water

WRCOG Public Works Committee

Art Vela	City of Banning
Robert Vestal	City of Beaumont
Michael Thornton	City of Calimesa
Stuart McKibben	City of Canyon Lake
Savat Khamphou (Vice-Chair)	City of Corona
Jimmy Chung	City of Eastvale
Noah Rau	City of Hemet
Paul Toor (Chair)	City of Jurupa Valley
Remon Habib	City of Lake Elsinore
Nick Fidler	City of Menifee
Melissa Walker	City of Moreno Valley
Bob Moehling	City of Murrieta
Sam Nelson	City of Norco
John Pourkazemi	City of Perris
Gil Hernandez	City of Riverside
Stuart McKibbin (Vice-Chair)	City of San Jacinto
Patrick Thomas	City of Temecula
Jason Farag	City of Wildomar
Patricia Romo	County of Riverside
Lauren Sotelo	March Joint Powers Authority
Jillian Guizado	Riverside County Transportation Commission
Mauricio Alvarez	Riverside Transit Agency

WRCOG Finance Directors' Committee

Lincoln Bogard	City of Banning
Jennifer Ustation	City of Beaumont
Celeste Reid	City of Calimesa
Terry Shea	City of Canyon Lake
Kim Sitton	City of Corona
Amanda Wells	City of Eastvale
vacant	City of Hemet
June Overholt	City of Jurupa Valley
Shannon Buckley	City of Lake Elsinore
Travis Hickey	City of Menifee
Launa Jimenez	City of Moreno Valley
Javier Carcamo (Past Chair)	City of Murrieta
Lisette Free	City of Norco
Ernie Reyna (Chair)	City of Perris
Kristie Thomas	City of Riverside
Erika Gomez (2nd Vice-Chair)	City of San Jacinto
Jennifer Hennessy	City of Temecula
Adam Jantz	City of Wildomar
Vacant	County of Riverside
John Adams	Eastern Municipal Water District
Grace Martin	March Joint Power Authority
Dr. Ruth Perez	Riverside County Office of Education
Kevin Mascaro	Western Water

Appendix B - Western Riverside County Population and Employment Growth 2008 – 2035

Although a variety of alternate demographic information is available for the purpose of quantifying population and household growth in Western Riverside County, it was determined that the data developed by SCAG to support the 2020 RTP/SCS represented the most comprehensive source of socioeconomic data (SED) for the six-county SCAG region that includes Riverside County. The SCAG 2020 RTP/SCS SED information is disaggregated to the level of traffic analysis zones (TAZ) that comprise inputs to RivCoM. These SED data by TAZ were extracted from RivCoM (specifically the TAZ_Data.CSV file located in the PopSyn output folder) and aggregated to correspond with the TUMF zones to support this update of the TUMF Nexus. The SCAG 2020 RTP/SCS SED data retrieved from RivCoM and used as the basis for the Nexus Update is summarized in this Appendix.

The SCAG employment data for 2018 and 2045 was provided for thirteen employment sectors consistent with the California Employment Development Department (EDD) Major Groups including: Farming, Natural Resources and Mining; Construction; Manufacturing; Wholesale Trade; Retail Trade; Transportation, Warehousing and Utilities; Information; Financial Activities; Professional and Business Service; Education and Health Service; Leisure and Hospitality; Other Service; and Government. For the purposes of the Nexus Study, the SCAG Employment Categories were aggregated to Industrial (Farming, Natural Resources and Mining; Construction; Manufacturing; Wholesale Trade; Transportation, Warehousing and Utilities), Retail (Retail Trade), Service (Information; Financial Activities; Professional and Business Service; Education and Health Service; Leisure and Hospitality; Other Service) and Government/Public Sector (Government). These four aggregated sector types were used as the basis for calculating the fee as described in **Section 6.2**. This Appendix includes tables detailing the SCAG RTP/SCS SED Employment Categories and corresponding North American Industry Classification System (NAICS) Categories that are included in each non-residential sector type.

The page is a placeholder for:

EXHIBIT B-1

Western Riverside County 2018 Socioeconomic Data (SED) by TUMF Zone

***Western Riverside County Population, Households and Employment (2018) -
SCAG 2020 RTP/SCS Base Year***

Source: SCAG 2020 RTP/SCS

EXHIBIT B-1

Western Riverside County Population, Households and Employment (2018) - SCAG 2020 RTP/SCS Base Year

SED Type/Zone	Central	Northwest	Pass	San Jacinto	Southwest	Total
Population						
Total Population	408,260	777,900	98,688	187,677	432,915	1,905,440
Households						
Single-Family	83,142	152,897	24,937	38,888	97,543	397,407
Multi-Family	26,889	63,591	8,661	26,055	31,970	157,166
Total Households	110,031	216,488	33,598	64,943	129,513	554,573
Employment						
Farming, Natural Resources and Mining	799	3,431	559	1,625	2,080	8,494
Construction	6,245	31,914	1,807	2,067	13,290	55,323
Manufacturing	4,172	25,866	1,101	925	8,902	40,966
Wholesale Trade	8,428	9,269	268	546	6,490	25,001
Retail Trade	13,346	32,061	5,472	4,564	18,371	73,814
Transportation, Warehousing and Utilities	7,349	22,686	1,132	2,132	6,251	39,550
Information	425	2,073	496	177	863	4,034
Financial Activities	1,887	8,632	586	1,003	5,414	17,522
Professional and Business Service	7,834	32,973	3,434	1,630	13,532	59,403
Education and Health Service	20,423	76,884	6,092	13,659	29,192	146,250
Leisure and Hospitality	8,391	21,990	7,207	3,726	18,270	59,584
Other Service	2,834	10,603	1,244	1,891	5,338	21,910
Government	2,579	11,727	871	761	2,631	18,569
TUMF Industrial	26,993	93,166	4,867	7,295	37,013	169,334
TUMF Retail	13,346	32,061	5,472	4,564	18,371	73,814
TUMF Service	41,794	153,155	19,059	22,086	72,609	308,703
TUMF Government/Public Sector	2,579	11,727	871	761	2,631	18,569
Total Employment	84,712	290,109	30,269	34,706	130,624	570,420

Source: SCAG 2020 RTP/SCS

EXHIBIT B-2

Western Riverside County Population, Households & Employment (2045) - SCAG 2020 RTP/SCS Horizon Year

SED Type/Zone	Central	Northwest	Pass	San Jacinto	Southwest	Total
Population						
Total Population	594,678	925,228	158,040	289,439	566,491	2,533,876
Households						
Single-Family	133,507	181,827	43,988	70,713	134,863	564,898
Multi-Family	53,555	79,359	14,362	43,654	56,571	247,501
Total Households	187,062	261,186	58,350	114,367	191,434	812,399
Employment						
Farming, Natural Resources and Mining	712	2,212	527	1,218	2,001	6,670
Construction	18,304	48,533	3,186	5,861	20,236	96,120
Manufacturing	6,836	24,624	1,393	1,149	10,335	44,337
Wholesale Trade	6,150	9,048	324	559	6,529	22,610
Retail Trade	16,310	33,656	7,136	6,338	23,489	86,929
Transportation, Warehousing and Utilities	18,227	38,043	2,705	4,771	12,432	76,178
Information	642	2,166	476	191	1,116	4,591
Financial Activities	2,906	9,889	1,229	1,536	6,665	22,225
Professional and Business Service	14,214	41,712	6,016	4,518	21,058	87,518
Education and Health Service	52,764	111,454	13,803	25,739	51,118	254,878
Leisure and Hospitality	13,197	27,739	10,540	8,424	24,641	84,541
Other Service	5,148	13,062	1,532	2,838	6,625	29,205
Government	6,229	18,222	1,176	1,471	3,542	30,640
TUMF Industrial	50,229	122,460	8,135	13,558	51,533	245,915
TUMF Retail	16,310	33,656	7,136	6,338	23,489	86,929
TUMF Service	88,871	206,022	33,596	43,246	111,223	482,958
TUMF Government/Public Sector	6,229	18,222	1,176	1,471	3,542	30,640
Total Employment	161,639	380,360	50,043	64,613	189,787	846,442

Source: SCAG 2020 RTP/SCS

EXHIBIT B-3

Western Riverside County Population, Households and Employment (2018 to 2045 Change) - SCAG 2020 RTP/SCS

SED Type/Zone	Central	Northwest	Pass	San Jacinto	Southwest	Total
Population						
Total Population	186,418	147,328	59,352	101,762	133,576	628,436
Households						
Single-Family	50,365	28,930	19,051	31,825	37,320	167,491
Multi-Family	26,666	15,768	5,701	17,599	24,601	90,335
Total Households	77,031	44,698	24,752	49,424	61,921	257,826
Employment						
Farming, Natural Resources and Mining	-87	-1,219	-32	-407	-79	-1,824
Construction	12,059	16,619	1,379	3,794	6,946	40,797
Manufacturing	2,664	-1,242	292	224	1,433	3,371
Wholesale Trade	-2,278	-221	56	13	39	-2,391
Retail Trade	2,964	1,595	1,664	1,774	5,118	13,115
Transportation, Warehousing and Utilities	10,878	15,357	1,573	2,639	6,181	36,628
Information	217	93	-20	14	253	557
Financial Activities	1,019	1,257	643	533	1,251	4,703
Professional and Business Service	6,380	8,739	2,582	2,888	7,526	28,115
Education and Health Service	32,341	34,570	7,711	12,080	21,926	108,628
Leisure and Hospitality	4,806	5,749	3,333	4,698	6,371	24,957
Other Service	2,314	2,459	288	947	1,287	7,295
Government	3,650	6,495	305	710	911	12,071
TUMF Industrial	23,236	29,294	3,268	6,263	14,520	76,581
TUMF Retail	2,964	1,595	1,664	1,774	5,118	13,115
TUMF Service	47,077	52,867	14,537	21,160	38,614	174,255
TUMF Government/Public Sector	3,650	6,495	305	710	911	12,071
Total Employment	76,927	90,251	19,774	29,907	59,163	276,022

Source: SCAG 2020 RTP/SCS

Exhibit B-4a - TUMF 2024 Nexus Update

Western Riverside County Population, Households and Employment (2018-2045)

SED Type/Zone	2018	2045	Change	Percent
Total Population	1,905,440	2,533,876	628,436	33%
Total Households	554,573	812,399	257,826	46%
Single-Family	397,407	564,898	167,491	42%
Multi-Family	157,166	247,501	90,335	57%
Total Employment	570,420	846,442	276,022	48%
TUMF Industrial	169,334	245,915	76,581	45%
TUMF Retail	73,814	86,929	13,115	18%
TUMF Service	308,703	482,958	174,255	56%
TUMF Government/Public Sector	18,569	30,640	12,071	65%

Source: SCAG 2020 RTP/SCS

Exhibit B-4b - TUMF 2016 Nexus Update

Western Riverside County Population, Households and Employment (2012-2040)

SED Type/Zone	2012	2040	Change	Percent
Total Population	1,773,935	2,429,633	655,698	37%
Total Households	525,149	775,231	250,082	48%
Single-Family	366,588	539,631	173,043	47%
Multi-Family	158,561	235,600	77,039	49%
Total Employment	460,787	861,455	400,668	87%
TUMF Industrial	120,736	201,328	80,592	67%
TUMF Retail	65,888	101,729	35,841	54%
TUMF Service	253,372	528,092	274,720	108%
TUMF Government/Public Sector	20,791	30,306	9,515	46%

Source: SCAG 2016 RTP/SCS

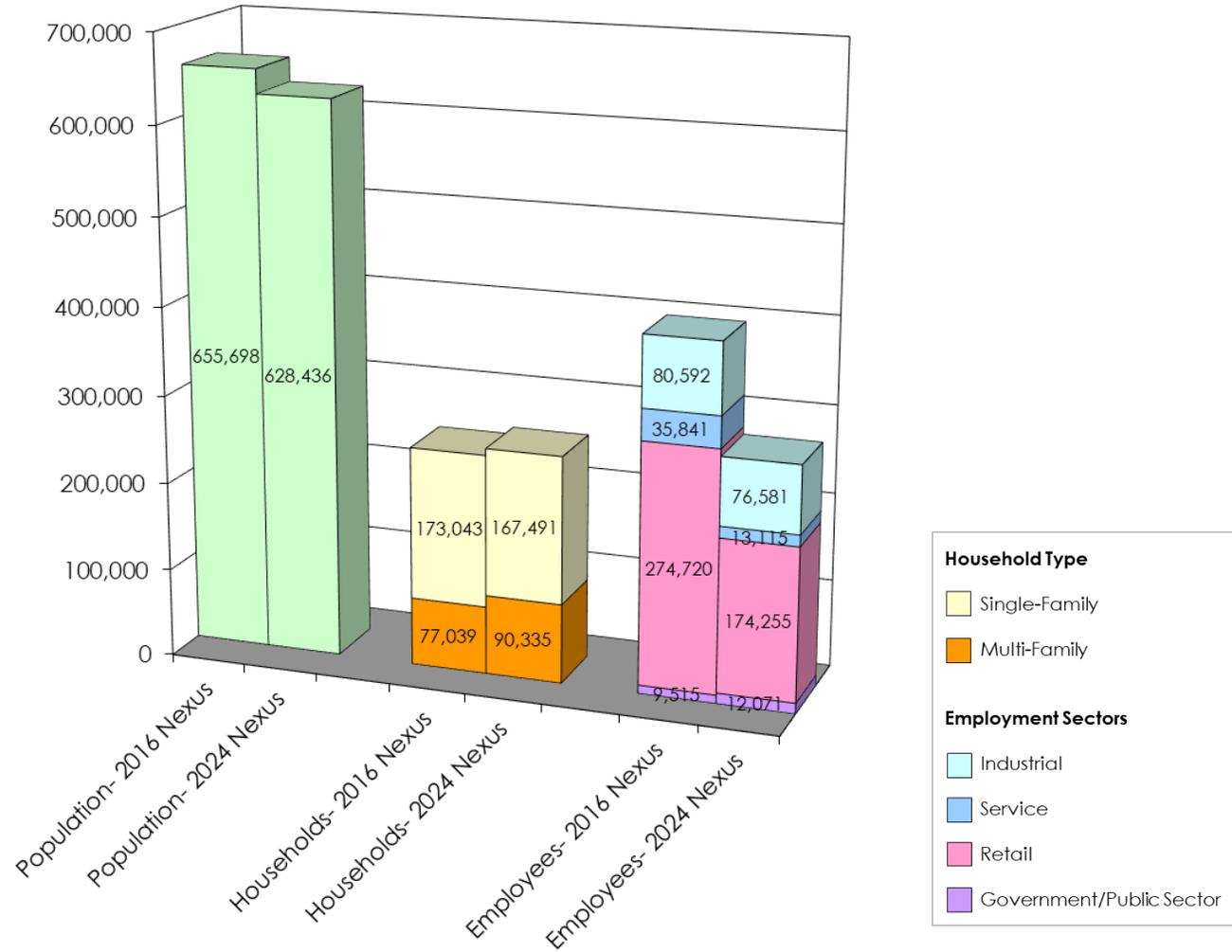
Exhibit B-4c - TUMF 2016 Nexus Update to 2024 Nexus Update Comparison

Western Riverside County Population, Households and Employment (Existing to Future Change)

SED Type/Zone	2016 Update (2012-2040)	2024 Update (2018-2045)	Difference	Percent
Total Population	655,698	628,436	-27,262	-4%
Total Households	250,082	257,826	7,744	3%
Single-Family	173,043	167,491	-5,552	-3%
Multi-Family	77,039	90,335	13,296	17%
Total Employment	400,668	276,022	-124,646	-31%
TUMF Industrial	80,592	76,581	-4,011	-5%
TUMF Retail	35,841	13,115	-22,726	-63%
TUMF Service	274,720	174,255	-100,465	-37%
TUMF Government/Public Sector	9,515	12,071	2,556	27%

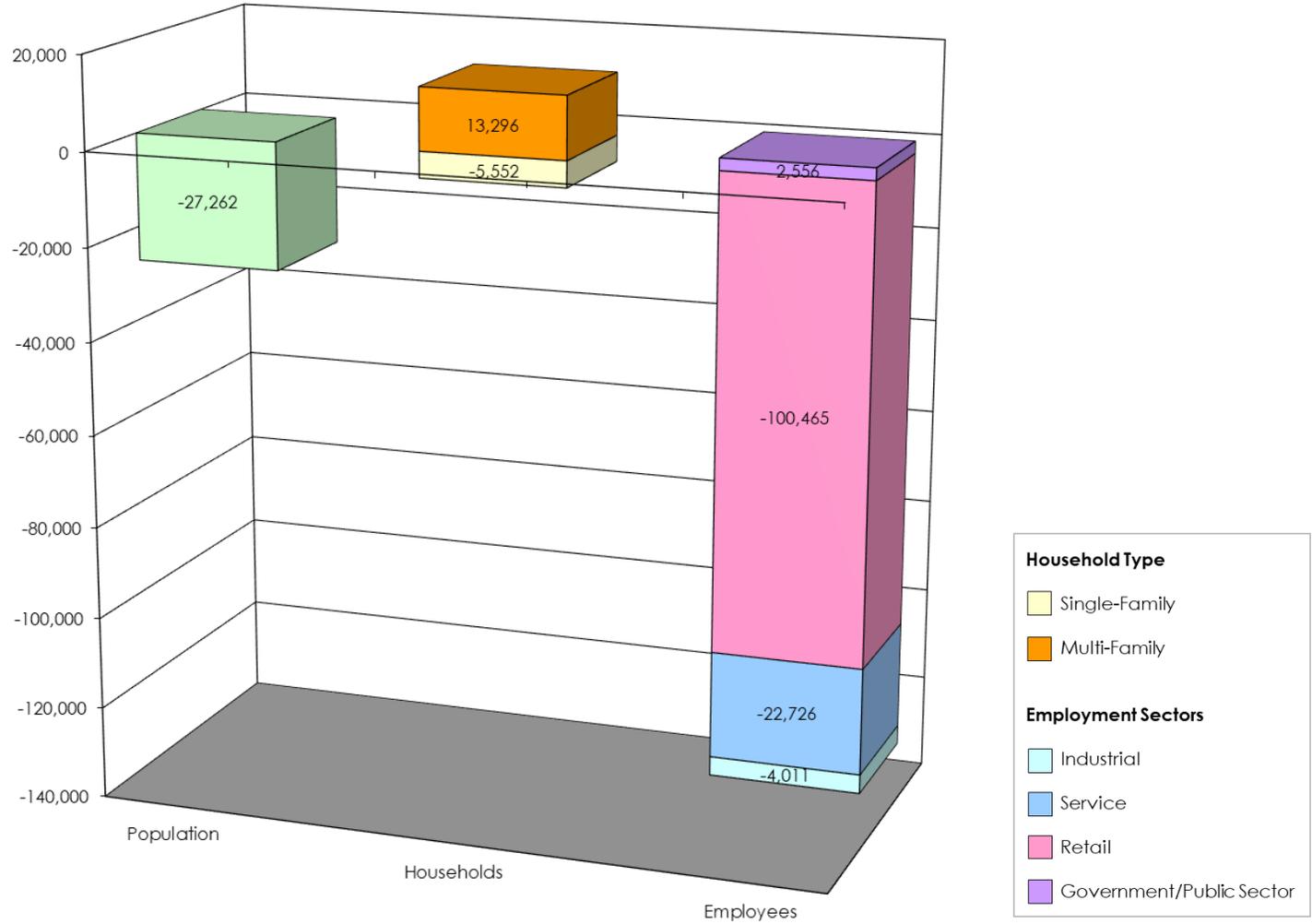
Source: SCAG 2016 RTP/SCS; SCAG 2020 RTP/SCS

EXHIBIT B-4d
Western Riverside County Population, Households and Employment Change (2012 to 2040 and 2018 to 2045)
TUMF 2016 Nexus Update Comparison to TUMF 2024 Nexus Update



Sources:
 Year 2012 to Year 2040 Growth (2016 Nexus Update): SCAG 2016 RTP/SCS; WSP, April 2016
 Year 2018 to Year 2045 Growth (2024 Nexus Update): SCAG 2020 RTP/SCS

EXHIBIT B-4e
Difference in Population, Households and Employment Growth in Western Riverside County
TUMF 2016 Nexus Update Comparison to TUMF 2024 Nexus Update



Source:
 Year 2012 to Year 2040 Growth (2016 Nexus Update): SCAG 2016 RTP/SCS; WSP, April 2016
 Year 2018 to Year 2045 Growth (2024 Nexus Update): SCAG 2020 RTP/SCS

EXHIBIT B-5a

TUMF Non-Residential Category Detailed NAICS Correspondence Summary

TUMF Category	SCAG RTP/SCS Employment Categories	NAICS Two Digit Code		NAICS Three Digit Code	
		NAICS Code	NAICS Title	NAICS Code	NAICS Title
Industrial					
	Farming, Natural Resources and Mining	11	Agriculture, Forestry, Fishing and Hunting	111	Crop Production
				112	Animal Production and Aquaculture
				113	Forestry and Logging
				114	Fishing, Hunting and Trapping
				115	Support Activities for Agriculture and Forestry
		21	Mining, Quarrying, and Oil and Gas Extraction	211	Oil and Gas Extraction
				212	Mining (except Oil and Gas)
				213	Support Activities for Mining
	Construction	23	Construction	236	Construction of Buildings
				237	Heavy and Civil Engineering Construction
				238	Specialty Trade Contractors
	Manufacturing	31-33	Manufacturing	311	Food Manufacturing
				312	Beverage and Tobacco Product Manufacturing
				313	Textile Mills
				314	Textile Product Mills
				315	Apparel Manufacturing
				316	Leather and Allied Product Manufacturing
				321	Wood Product Manufacturing
				322	Paper Manufacturing
				323	Printing and Related Support Activities
				324	Petroleum and Coal Products Manufacturing
				325	Chemical Manufacturing
				326	Plastics and Rubber Products Manufacturing
				327	Nonmetallic Mineral Product Manufacturing
				331	Primary Metal Manufacturing
				332	Fabricated Metal Product Manufacturing
				333	Machinery Manufacturing
				334	Computer and Electronic Product Manufacturing
				335	Electrical Equipment, Appliance, and Component Manufacturing
				337	Furniture and Related Product Manufacturing
				339	Miscellaneous Manufacturing
	Wholesale Trade	42	Wholesale Trade	423	Merchant Wholesalers, Durable Goods
				424	Merchant Wholesalers, Nondurable Goods
				425	Wholesale Trade Agents and Brokers
	Transportation, Warehousing and Utilities	22	Utilities	221	Utilities
		48-49	Transportation and Warehousing	481	Air Transportation
				482	Rail Transportation
				483	Water Transportation
				484	Truck Transportation
				485	Transit and Ground Passenger Transportation
				486	Pipeline Transportation
				487	Scenic and Sightseeing Transportation
				488	Support Activities for Transportation
				491	Postal Service
				492	Couriers and Messengers
				493	Warehousing and Storage
Retail					
	Retail Trade	44-45	Retail Trade	441	Motor Vehicle and Parts Dealers
				444	Building Material and Garden Equipment and Supplies Dealers
				445	Food and Beverage Retailers
				449	Furniture, Home Furnishings, Electronics, and Appliance Retailers
				455	General Merchandise Retailers
				456	Health and Personal Care Retailers
				457	Gasoline Stations and Fuel Dealers
				458	Clothing, Clothing Accessories, Shoe, and Jewelry Retailers
				459	Sporting Goods, Hobby, Musical Instrument, Book, and Miscellaneous Retailers

TUMF Non-Residential Category Detailed NAICS Correspondence Summary

TUMF Category	SCAG RTP/SCS	NAICS Two Digit Code		NAICS Three Digit Code		
	Employment Categories	NAICS Code	NAICS Title	NAICS Code	NAICS Title	
Service						
	Information	51	Information	512	Motion Picture and Sound Recording Industries	
				513	Publishing Industries	
				516	Broadcasting and Content Providers	
				517	Telecommunications	
				518	Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services	
				519	Web Search Portals, Libraries, Archives, and Other Information Services	
	Financial Activities	52	Finance and Insurance	521	Monetary Authorities-Central Bank	
				522	Credit Intermediation and Related Activities	
				523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	
				524	Insurance Carriers and Related Activities	
				525	Funds, Trusts, and Other Financial Vehicles	
		53	Real Estate and Rental and Leasing	531	Real Estate	
				532	Rental and Leasing Services	
				533	Lessor of Nonfinancial Intangible Assets (except Copyrighted Works)	
	Professional and Business Services	54	Professional, Scientific, and Technical Services	541	Professional, Scientific, and Technical Services	
		55	Management of Companies and Enterprises	551	Management of Companies and Enterprises	
		56	Administrative and Support and Waste Management and Remediation Services	561	Administrative and Support Services	
				562	Waste Management and Remediation Services	
	Education and Health Services	61	Educational Services	611	Educational Services	
		62	Health Care and Social Assistance	621	Ambulatory Health Care Services	
				622	Hospitals	
				623	Nursing and Residential Care Facilities	
				624	Social Assistance	
	Leisure and Hospitality	71	Arts, Entertainment, and Recreation	711	Performing Arts, Spectator Sports, and Related Industries	
				712	Museums, Historical Sites, and Similar Institutions	
				713	Amusement, Gambling, and Recreation Industries	
		72	Accommodation and Food Services	721	Accommodation	
				722	Food Services and Drinking Places	
	Other Service	81	Other Services (except Public Administration)	811	Repair and Maintenance	
				812	Personal and Laundry Services	
				813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	
				814	Private Households	
	Government/Public Sector					
		Government	92	Public Administration	921	Executive, Legislative, and Other General Government Support
					922	Justice, Public Order, and Safety Activities
					923	Administration of Human Resource Programs
					924	Administration of Environmental Quality Programs
					925	Administration of Housing Programs, Urban Planning, and Community Development
					926	Administration of Economic Programs
					927	Space Research and Technology
					928	National Security and International Affairs

Source: SCAG 2020 RTP/SCS
 California Employment Development Department (EDD)
 US Census Bureau, North American Industry Classification System (NAICS), 2022

EXHIBIT B-5b

TUMF Non-Residential Category Detailed NAICS Correspondence

TUMF Category	SCAG RTP/SCS	NAICS Two Digit Code	NAICS Three Digit Code	NAICS Six Digit Code
Employment Categories	NAICS Code	NAICS Title	NAICS Code	NAICS Title
Industrial	Farming, Natural Resources and Mining	11	Agriculture, Forestry, Fishing and Hunting	
			111 Crop Production	
			11110	Soybean Farming
			11120	Oilseed (except Soybean) Farming
			11130	Dry Pea and Bean Farming
			11140	Wheat Farming
			11150	Corn Farming
			11160	Rice Farming
			11191	Oilseed and Grain Combination Farming
			11199	All Other Grain Farming
			11211	Potato Farming
			11219	Other Vegetable (except Potato) and Melon Farming
			11310	Orange Groves
			11320	Citrus (except Orange) Groves
			11331	Apple Orchards
			11332	Grape Vineyards
			11333	Strawberry Farming
			11334	Berry (except Strawberry) Farming
			11335	Tree Nut Farming
			11336	Fruit and Tree Nut Combination Farming
			11339	Other Noncitrus Fruit Farming
			11411	Mushroom Production
			11419	Other Food Crops Grown Under Cover
			11421	Nursery and Tree Production
			11422	Floriculture Production
			11910	Tabacco Farming
			11920	Cotton Farming
			11930	Sugarcane Farming
			11940	Hay Farming
			11991	Sugar Beet Farming
			11992	Peanut Farming
			11998	All Other Miscellaneous Crop Farming
			112 Animal Production and Aquaculture	
			11211	Beef Cattle Ranching and Farming
			11212	Cattle Feedlots
			11213	Dairy Cattle and Milk Production
			11214	Dual-Purpose Cattle Ranching and Farming
			11220	Hog and Pig Farming
			11230	Chicken Egg Production
			11232	Broilers and Other Meat Type Chicken Production
			11233	Turkey Production
			11234	Poultry Hatcheries
			11239	Other Poultry Production
			11240	Sheep Farming
			11242	Goat Farming
			11251	Finfish Farming and Fish Hatcheries
			11252	Shellfish Farming
			11259	Other Aquaculture
			11290	Apiculture
			11292	Horses and Other Equine Production
			11293	Fur-Bearing Animal and Rabbit Production
			11299	All Other Animal Production
			113 Forestry and Logging	
			11310	Timber Tract Operations
			11320	Forest Nurseries and Gathering of Forest Products
			11330	Logging
			114 Fishing, Hunting and Trapping	
			11411	Finfish Fishing
			11412	Shellfish Fishing
			11419	Other Marine Fishing
			11420	Hunting and Trapping
			115 Support Activities for Agriculture and Forestry	
			11511	Cotton Ginning
			11512	Soil Preparation, Planting, and Cultivating
			11513	Crop Harvesting, Primarily by Machine
			11514	Postharvest Crop Activities (except Cotton Ginning)
			11515	Farm Labor Contractors and Crew Leaders
			11516	Farm Management Services
			11520	Support Activities for Animal Production
			11530	Support Activities for Forestry
			21 Mining, Quarrying, and Oil and Gas Extraction	
			211 Oil and Gas Extraction	
			21120	Crude Petroleum Extraction
			21130	Natural Gas Extraction
			212 Mining (except Oil and Gas)	
			21214	Surface Coal Mining
			21215	Underground Coal Mining
			21220	Iron Ore Mining
			21222	Gold Ore and Silver Ore Mining
			21230	Copper, Nickel, Lead, and Zinc Mining
			21290	Other Metal Ore Mining
			21231	Dimension Stone Mining and Quarrying
			21232	Crushed and Broken Limestone Mining and Quarrying
			21233	Crushed and Broken Granite Mining and Quarrying
			21239	Other Crushed and Broken Stone Mining and Quarrying
			21232	Construction Sand and Gravel Mining
			21232	Industrial Sand Mining
			21232	Kaolin, Clay, and Ceramic and Refractory Minerals Mining
			21239	Other Nonmetallic Mineral Mining and Quarrying
			213 Support Activities for Mining	
			21311	Drilling Oil and Gas Wells
			21312	Support Activities for Oil and Gas Operations
			21313	Support Activities for Coal Mining
			21314	Support Activities for Metal Mining
			21315	Support Activities for Nonmetallic Minerals (except Fuels) Mining

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	Employment Categories	NAICS Code NAICS Title	NAICS Code NAICS Title	NAICS Code NAICS Title				
Construction	23	Construction	236	Construction of Buildings				
					236115	New Single-Family Housing Construction (except For-Sale Builders)		
					236116	New Multifamily Housing Construction (except For-Sale Builders)		
					236117	New Housing For-Sale Builders		
					236118	Residential Remodelers		
					236210	Industrial Building Construction		
					236220	Commercial and Institutional Building Construction		
					237	Heavy and Civil Engineering Construction	237110	Water and Sewer Line and Related Structures Construction
							237120	Oil and Gas Pipeline and Related Structures Construction
							237130	Power and Communication Line and Related Structures Construction
							237210	Land Subdivision
							237310	Highway, Street, and Bridge Construction
							237990	Other Heavy and Civil Engineering Construction
					238	Specialty Trade Contractors	238110	Poured Concrete Foundation and Structure Contractors
							238120	Structural Steel and Precast Concrete Contractors
							238130	Framing Contractors
							238140	Masonry Contractors
							238150	Glass and Glazing Contractors
							238160	Roofing Contractors
							238170	Siding Contractors
							238190	Other Foundation, Structure, and Building Exterior Contractors
							238210	Electrical Contractors and Other Wiring Installation Contractors
							238220	Plumbing, Heating, and Air-Conditioning Contractors
							238290	Other Building Equipment Contractors
							238310	Drywall and Insulation Contractors
							238320	Painting and Wall Covering Contractors
							238330	Flooring Contractors
							238340	Tile and Terrazzo Contractors
							238350	Finish Carpentry Contractors
							238390	Other Building Finishing Contractors
							238910	Site Preparation Contractors
238990	All Other Specialty Trade Contractors							
Manufacturing	31-33	Manufacturing	311	Food Manufacturing				
							311111	Dog and Cat Food Manufacturing
							311119	Other Animal Food Manufacturing
							311211	Flour Milling
					311212	Rice Milling		
					311213	Malt Manufacturing		
					311221	Wet Corn Milling and Starch Manufacturing		
					311224	Soybean and Other Oilseed Processing		
					311225	Fats and Oil Refining and Blending		
					311230	Breakfast Cereal Manufacturing		
					311313	Beet Sugar Manufacturing		
					311314	Cane Sugar Manufacturing		
					311340	Nonchocolate Confectionery Manufacturing		
					311351	Chocolate and Confectionery Manufacturing from Cocoa Beans		
					311352	Confectionery Manufacturing from Purchased Chocolate		
					311411	Frozen Fruit, Juice, and Vegetable Manufacturing		
					311412	Frozen Specialty Food Manufacturing		
					311421	Fruit and Vegetable Canning		
					311422	Specialty Canning		
					311423	Dried and Dehydrated Food Manufacturing		
					311511	Fluid Milk Manufacturing		
					311512	Creamery Butter Manufacturing		
					311513	Cheese Manufacturing		
					311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing		
					311520	Ice Cream and Frozen Dessert Manufacturing		
					311611	Animal (except Poultry) Slaughtering		
					311612	Meat Processed from Carcasses		
					311613	Rendering and Meat Byproduct Processing		
					311615	Poultry Processing		
					311710	Seafood Product Preparation and Packaging		
					311811	Retail Bakeries		
311812	Commercial Bakeries							
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing							
311821	Cookie and Cracker Manufacturing							
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour							
311830	Tortilla Manufacturing							
311911	Roasted Nuts and Peanut Butter Manufacturing							
311919	Other Snack Food Manufacturing							
311920	Coffee and Tea Manufacturing							
311930	Flavoring Syrup and Concentrate Manufacturing							
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing							
311942	Spice and Extract Manufacturing							
311991	Perishable Prepared Food Manufacturing							
311999	All Other Miscellaneous Food Manufacturing							
312	Beverage and Tobacco Product Manufacturing	312111	Soft Drink Manufacturing					
		312112	Bottled Water Manufacturing					
		312113	Ice Manufacturing					
		312120	Breweries					
		312130	Wineries					
		312140	Distilleries					
312230	Tobacco Manufacturing							
313	Textile Mills	313110	Fiber, Yarn, and Thread Mills					
		313210	Broadwoven Fabric Mills					
		313220	Narrow Fabric Mills and Schiffli Machine Embroidery					
		313230	Nonwoven Fabric Mills					
		313240	Knit Fabric Mills					
		313310	Textile and Fabric Finishing Mills					
313320	Fabric Coating Mills							
314	Textile Product Mills	314110	Carpet and Rug Mills					
		314120	Curtain and Linen Mills					
		314910	Textile Bag and Canvas Mills					
		314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills					
		314999	All Other Miscellaneous Textile Product Mills					
315	Apparel Manufacturing	315120	Apparel Knitting Mills					
		315210	Cut and Sew Apparel Contractors					
		315250	Cut and Sew Apparel Manufacturing (except Contractors)					
		315990	Apparel Accessories and Other Apparel Manufacturing					
316	Leather and Allied Product Manufacturing	316110	Leather and Hide Tanning and Finishing					
		316210	Footwear Manufacturing					
		316990	Other Leather and Allied Product Manufacturing					

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			321 Wood Product Manufacturing	321113 Sawmills
			321114 Wood Preservation	
			321211 Hardwood Veneer and Plywood Manufacturing	
			321212 Softwood Veneer and Plywood Manufacturing	
			321215 Engineered Wood Member Manufacturing	
			321219 Reconstituted Wood Product Manufacturing	
			321911 Wood Window and Door Manufacturing	
			321912 Cut Stock, Resawing Lumber, and Planing	
			321918 Other Millwork (including Flooring)	
			321920 Wood Container and Pallet Manufacturing	
			321991 Manufactured Home (Mobile Home) Manufacturing	
			321992 Prefabricated Wood Building Manufacturing	
			321999 All Other Miscellaneous Wood Product Manufacturing	
			322 Paper Manufacturing	322110 Pulp Mills
			322120 Paper Mills	
			322130 Paperboard Mills	
			322211 Corrugated and Solid Fiber Box Manufacturing	
			322212 Folding Paperboard Box Manufacturing	
			322219 Other Paperboard Container Manufacturing	
			322220 Paper Bag and Coated and Treated Paper Manufacturing	
			322230 Stationery Product Manufacturing	
			322291 Sanitary Paper Product Manufacturing	
			322299 All Other Converted Paper Product Manufacturing	
			323 Printing and Related Support Activities	323111 Commercial Printing (except Screen and Books)
			323113 Commercial Screen Printing	
			323117 Books Printing	
			323120 Support Activities for Printing	
			324 Petroleum and Coal Products Manufacturing	324110 Petroleum Refineries
			324121 Asphalt Paving Mixture and Block Manufacturing	
			324122 Asphalt Shingle and Coating Materials Manufacturing	
			324191 Petroleum Lubricating Oil and Grease Manufacturing	
			324199 All Other Petroleum and Coal Products Manufacturing	
			325 Chemical Manufacturing	325110 Petrochemical Manufacturing
			325120 Industrial Gas Manufacturing	
			325130 Synthetic Dye and Pigment Manufacturing	
			325180 Other Basic Inorganic Chemical Manufacturing	
			325193 Ethyl Alcohol Manufacturing	
			325194 Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing	
			325199 All Other Basic Organic Chemical Manufacturing	
			325211 Plastics Material and Resin Manufacturing	
			325212 Synthetic Rubber Manufacturing	
			325220 Artificial and Synthetic Fibers and Filaments Manufacturing	
			325311 Nitrogenous Fertilizer Manufacturing	
			325312 Phosphatic Fertilizer Manufacturing	
			325314 Fertilizer (Mixing Only) Manufacturing	
			325315 Compost Manufacturing	
			325320 Pesticide and Other Agricultural Chemical Manufacturing	
			325411 Medicinal and Botanical Manufacturing	
			325412 Pharmaceutical Preparation Manufacturing	
			325413 In-Vitro Diagnostic Substance Manufacturing	
			325414 Biological Product (except Diagnostic) Manufacturing	
			325510 Paint and Coating Manufacturing	
			325520 Adhesive Manufacturing	
			325611 Soap and Other Detergent Manufacturing	
			325612 Polish and Other Sanitation Good Manufacturing	
			325613 Surface Active Agent Manufacturing	
			325620 Toilet Preparation Manufacturing	
			325910 Printing Ink Manufacturing	
			325920 Explosives Manufacturing	
			325991 Custom Compounding of Purchased Resins	
			325992 Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	
			325998 All Other Miscellaneous Chemical Product and Preparation Manufacturing	
			326 Plastics and Rubber Products Manufacturing	326111 Plastics Bag and Pouch Manufacturing
			326112 Plastics Packaging Film and Sheet (including Laminated) Manufacturing	
			326113 Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	
			326121 Unlaminated Plastics Profile Shape Manufacturing	
			326122 Plastics Pipe and Pipe Fitting Manufacturing	
			326130 Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	
			326140 Polystyrene Foam Product Manufacturing	
			326150 Urethane and Other Foam Product (except Polystyrene) Manufacturing	
			326160 Plastics Bottle Manufacturing	
			326191 Plastics Plumbing Fixture Manufacturing	
			326199 All Other Plastics Product Manufacturing	
			326211 Tire Manufacturing (except Retreading)	
			326212 Tire Retreading	
			326220 Rubber and Plastics Hoses and Belting Manufacturing	
			326291 Rubber Product Manufacturing for Mechanical Use	
			326299 All Other Rubber Product Manufacturing	
			327 Nonmetallic Mineral Product Manufacturing	327110 Pottery, Ceramics, and Plumbing Fixture Manufacturing
			327120 Clay Building Material and Refractories Manufacturing	
			327211 Flat Glass Manufacturing	
			327212 Other Pressed and Blown Glass and Glassware Manufacturing	
			327213 Glass Container Manufacturing	
			327215 Glass Product Manufacturing Made of Purchased Glass	
			327310 Cement Manufacturing	
			327320 Ready-Mix Concrete Manufacturing	
			327331 Concrete Block and Brick Manufacturing	
			327332 Concrete Pipe Manufacturing	
			327390 Other Concrete Product Manufacturing	
			327410 Lime Manufacturing	
			327420 Gypsum Product Manufacturing	
			327910 Abrasive Product Manufacturing	
			327991 Cut Stone and Stone Product Manufacturing	
			327992 Ground or Treated Mineral and Earth Manufacturing	
			327993 Mineral Wool Manufacturing	
			327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing	

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				331	Primary Metal Manufacturing	33110	Iron and Steel Mills and Ferroalloy Manufacturing
				33120	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel		
				33122	Rolled Steel Shape Manufacturing		
				33122	Steel Wire Drawing		
				33131	Alumina Refining and Primary Aluminum Production		
				33134	Secondary Smelting and Alloying of Aluminum		
				33135	Aluminum Sheet, Plate, and Foil Manufacturing		
				33138	Other Aluminum Rolling, Drawing, and Extruding		
				33140	Nonferrous Metal (except Aluminum) Smelting and Refining		
				33140	Copper Rolling, Drawing, Extruding, and Alloying		
				33149	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding		
				33149	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)		
				33151	Iron Foundries		
				33152	Steel Investment Foundries		
				33153	Steel Foundries (except Investment)		
				33153	Nonferrous Metal Die-Casting Foundries		
				33154	Aluminum Foundries (except Die-Casting)		
				33159	Other Nonferrous Metal Foundries (except Die-Casting)		
				332	Fabricated Metal Product Manufacturing	33211	Iron and Steel Forging
				33212	Nonferrous Forging		
				33214	Custom Roll Forming		
				33217	Powder Metallurgy Part Manufacturing		
				33219	Metal Crown, Closure, and Other Metal Stamping (except Automotive)		
				33225	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing		
				33226	Saw Blade and Handtool Manufacturing		
				33231	Prefabricated Metal Building and Component Manufacturing		
				33232	Fabricated Structural Metal Manufacturing		
				33233	Plate Work Manufacturing		
				33232	Metal Window and Door Manufacturing		
				33232	Sheet Metal Work Manufacturing		
				33233	Ornamental and Architectural Metal Work Manufacturing		
				33240	Power Boiler and Heat Exchanger Manufacturing		
				33240	Metal Tank (Heavy Gauge) Manufacturing		
				33243	Metal Can Manufacturing		
				33249	Other Metal Container Manufacturing		
				33250	Hardware Manufacturing		
				33263	Spring Manufacturing		
				33268	Other Fabricated Wire Product Manufacturing		
				33270	Machine Shops		
				33272	Precision Turned Product Manufacturing		
				33272	Bolt, Nut, Screw, Rivet, and Washer Manufacturing		
				33281	Metal Heat Treating		
				33282	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers		
				33283	Electroplating, Plating, Polishing, Anodizing, and Coloring		
				33291	Industrial Valve Manufacturing		
				33292	Fluid Power Valve and Hose Fitting Manufacturing		
				33293	Plumbing Fixture Fitting and Trim Manufacturing		
				33293	Other Metal Valve and Pipe Fitting Manufacturing		
				33299	Ball and Roller Bearing Manufacturing		
				33299	Small Arms Ammunition Manufacturing		
				33299	Ammunition (except Small Arms) Manufacturing		
				33299	Small Arms, Ordnance, and Ordnance Accessories Manufacturing		
				33299	Fabricated Pipe and Pipe Fitting Manufacturing		
				33299	All Other Miscellaneous Fabricated Metal Product Manufacturing		
				333	Machinery Manufacturing	33311	Farm Machinery and Equipment Manufacturing
				33312	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing		
				33320	Construction Machinery Manufacturing		
				33331	Mining Machinery and Equipment Manufacturing		
				33332	Oil and Gas Field Machinery and Equipment Manufacturing		
				33334	Food Product Machinery Manufacturing		
				33342	Semiconductor Machinery Manufacturing		
				33343	Sawmill, Woodworking, and Paper Machinery Manufacturing		
				33348	All Other Industrial Machinery Manufacturing		
				33330	Commercial and Service Industry Machinery Manufacturing		
				33343	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing		
				33344	Heating Equipment (except Warm Air Furnaces) Manufacturing		
				33345	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing		
				33351	Industrial Mold Manufacturing		
				33354	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing		
				33355	Cutting Tool and Machine Tool Accessory Manufacturing		
				33357	Machine Tool Manufacturing		
				33359	Rolling Mill and Other Metalworking Machinery Manufacturing		
				33361	Turbine and Turbine Generator Set Units Manufacturing		
				33362	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing		
				33363	Mechanical Power Transmission Equipment Manufacturing		
				33368	Other Engine Equipment Manufacturing		
				33392	Air and Gas Compressor Manufacturing		
				33394	Measuring, Dispensing, and Other Pumping Equipment Manufacturing		
				33392	Elevator and Moving Stairway Manufacturing		
				33392	Conveyor and Conveying Equipment Manufacturing		
				33393	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing		
				33394	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing		
				33399	Power-Driven Handtool Manufacturing		
				33399	Welding and Soldering Equipment Manufacturing		
				33399	Packaging Machinery Manufacturing		
				33399	Industrial Process Furnace and Oven Manufacturing		
				33399	Fluid Power Cylinder and Actuator Manufacturing		
				33399	Fluid Power Pump and Motor Manufacturing		
				33399	All Other Miscellaneous General Purpose Machinery Manufacturing		
				334	Computer and Electronic Product Manufacturing	33411	Electronic Computer Manufacturing
				33412	Computer Storage Device Manufacturing		
				33418	Computer Terminal and Other Computer Peripheral Equipment Manufacturing		
				33420	Telephone Apparatus Manufacturing		
				33420	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing		
				33420	Other Communications Equipment Manufacturing		
				33430	Audio and Video Equipment Manufacturing		
				33442	Bare Printed Circuit Board Manufacturing		
				33443	Semiconductor and Related Device Manufacturing		
				33446	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing		
				33447	Electronic Connector Manufacturing		
33448	Printed Circuit Assembly (Electronic Assembly) Manufacturing						
33449	Other Electronic Component Manufacturing						
33450	Electromedical and Electrotherapeutic Apparatus Manufacturing						
33451	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing						
33452	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use						
33453	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables						
33454	Totalizing Fluid Meter and Counting Device Manufacturing						
33455	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals						
33456	Analytical Laboratory Instrument Manufacturing						
33457	Irradiation Apparatus Manufacturing						
33459	Other Measuring and Controlling Device Manufacturing						
33460	Manufacturing and Reproducing Magnetic and Optical Media						

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			335 Electrical Equipment, Appliance, and Component Manufacturing	335131 Residential Electric Lighting Fixture Manufacturing
			335132 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	
			335139 Electric Lamp Bulb and Other Lighting Equipment Manufacturing	
			335210 Small Electrical Appliance Manufacturing	
			335220 Major Household Appliance Manufacturing	
			335211 Power, Distribution, and Specialty Transformer Manufacturing	
			335312 Motor and Generator Manufacturing	
			335313 Switchgear and Switchboard Apparatus Manufacturing	
			335314 Relay and Industrial Control Manufacturing	
			335910 Battery Manufacturing	
			335921 Fiber Optic Cable Manufacturing	
			335929 Other Communication and Energy Wire Manufacturing	
			335931 Current-Carrying Wiring Device Manufacturing	
			335932 Noncurrent-Carrying Wiring Device Manufacturing	
			335991 Carbon and Graphite Product Manufacturing	
			335999 All Other Miscellaneous Electrical Equipment and Component Manufacturing	
			336 Transportation Equipment Manufacturing	336110 Automobile and Light Duty Motor Vehicle Manufacturing
			336120 Heavy Duty Truck Manufacturing	
			336211 Motor Vehicle Body Manufacturing	
			336212 Truck Trailer Manufacturing	
			336213 Motor Home Manufacturing	
			336214 Travel Trailer and Campier Manufacturing	
			336310 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	
			336320 Motor Vehicle Electrical and Electronic Equipment Manufacturing	
			336330 Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	
			336340 Motor Vehicle Brake System Manufacturing	
			336350 Motor Vehicle Transmission and Power Train Parts Manufacturing	
			336360 Motor Vehicle Seating and Interior Trim Manufacturing	
			336370 Motor Vehicle Metal Stamping	
			336390 Other Motor Vehicle Parts Manufacturing	
			336411 Aircraft Manufacturing	
			336412 Aircraft Engine and Engine Parts Manufacturing	
			336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing	
			336414 Guided Missile and Space Vehicle Manufacturing	
			336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	
			336419 Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	
			336510 Railroad Rolling Stock Manufacturing	
			336611 Ship Building and Repairing	
			336612 Boat Building	
			336991 Motorcycle, Bicycle, and Parts Manufacturing	
			336992 Military Armored Vehicle, Tank, and Tank Component Manufacturing	
			336999 All Other Transportation Equipment Manufacturing	
			337 Furniture and Related Product Manufacturing	337110 Wood Kitchen Cabinet and Countertop Manufacturing
			337121 Upholstered Household Furniture Manufacturing	
			337122 Nonupholstered Wood Household Furniture Manufacturing	
			337126 Household Furniture (except Wood and Upholstered) Manufacturing	
			337127 Institutional Furniture Manufacturing	
			337211 Wood Office Furniture Manufacturing	
			337212 Custom Architectural Woodwork and Millwork Manufacturing	
			337214 Office Furniture (except Wood) Manufacturing	
			337215 Showcase, Partition, Shelving, and Locker Manufacturing	
			337910 Mattress Manufacturing	
			337920 Blind and Shade Manufacturing	
			339 Miscellaneous Manufacturing	339112 Surgical and Medical Instrument Manufacturing
339113 Surgical Appliance and Supplies Manufacturing				
339114 Dental Equipment and Supplies Manufacturing				
339115 Ophthalmic Goods Manufacturing				
339116 Dental Laboratories				
339910 Jewelry and Silverware Manufacturing				
339920 Sporting and Athletic Goods Manufacturing				
339930 Doll, Toy, and Game Manufacturing				
339940 Office Supplies (except Paper) Manufacturing				
339950 Sign Manufacturing				
339991 Gasket, Packing, and Sealing Device Manufacturing				
339992 Musical Instrument Manufacturing				
339993 Fastener, Button, Needle, and Pin Manufacturing				
339994 Broom, Brush, and Mop Manufacturing				
339995 Burial Casket Manufacturing				
339999 All Other Miscellaneous Manufacturing				
Wholesale Trade	42 Wholesale Trade	423 Merchant Wholesalers, Durable Goods	423110 Automobile and Other Motor Vehicle Merchant Wholesalers	
			423120 Motor Vehicle Supplies and New Parts Merchant Wholesalers	
			423130 Tire and Tube Merchant Wholesalers	
			423140 Motor Vehicle Parts (used) Merchant Wholesalers	
			423210 Furniture Merchant Wholesalers	
			423220 Home Furnishing Merchant Wholesalers	
			423310 Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	
			423320 Brick, Stone, and Related Construction Material Merchant Wholesalers	
			423330 Roofing, Siding, and Insulation Material Merchant Wholesalers	
			423390 Other Construction Material Merchant Wholesalers	
			423410 Photographic Equipment and Supplies Merchant Wholesalers	
			423420 Office Equipment Merchant Wholesalers	
			423430 Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	
			423440 Other Commercial Equipment Merchant Wholesalers	
			423450 Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	
			423460 Ophthalmic Goods Merchant Wholesalers	
			423490 Other Professional Equipment and Supplies Merchant Wholesalers	
			423510 Metal Service Centers and Other Metal Merchant Wholesalers	
			423520 Coal and Other Mineral and Ore Merchant Wholesalers	
			423610 Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	
			423620 Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	
			423690 Other Electronic Parts and Equipment Merchant Wholesalers	
			423710 Hardware Merchant Wholesalers	
			423720 Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	
			423730 Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	
			423740 Refrigeration Equipment and Supplies Merchant Wholesalers	
			423810 Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	
			423820 Farm and Garden Machinery and Equipment Merchant Wholesalers	
			423830 Industrial Machinery and Equipment Merchant Wholesalers	
			423840 Industrial Supplies Merchant Wholesalers	
			423850 Service Establishment Equipment and Supplies Merchant Wholesalers	
			423860 Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	
			423910 Sporting and Recreational Goods and Supplies Merchant Wholesalers	
			423920 Toy and Hobby Goods and Supplies Merchant Wholesalers	
			423930 Recyclable Material Merchant Wholesalers	
			423940 Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	
			423990 Other Miscellaneous Durable Goods Merchant Wholesalers	

TUMF Non-Residential Category Detailed NAICS Correspondence

TUMF Category	SCAG RTP/SCS	NAICS Two Digit Code	NAICS Three Digit Code	NAICS Six Digit Code			
	Employment Categories	NAICS Code NAICS Title	NAICS Code NAICS Title	NAICS Code NAICS Title			
			424 Merchant Wholesalers, Nondurable Goods	42410 Printing and Writing Paper Merchant Wholesalers			
			42412 Stationery and Office Supplies Merchant Wholesalers				
			42413 Industrial and Personal Service Paper Merchant Wholesalers				
			42420 Drugs and Druggists' Sundries Merchant Wholesalers				
			42430 Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers				
			42434 Footwear Merchant Wholesalers				
			42435 Clothing and Clothing Accessories Merchant Wholesalers				
			42440 General Line Grocery Merchant Wholesalers				
			42442 Packaged Frozen Food Merchant Wholesalers				
			42443 Dairy Product (except Dried or Canned) Merchant Wholesalers				
			42444 Poultry and Poultry Product Merchant Wholesalers				
			42445 Confectionery Merchant Wholesalers				
			42446 Fish and Seafood Merchant Wholesalers				
			42447 Meat and Meat Product Merchant Wholesalers				
			42448 Fresh Fruit and Vegetable Merchant Wholesalers				
			42449 Other Grocery and Related Products Merchant Wholesalers				
			42450 Grain and Field Bean Merchant Wholesalers				
			42452 Livestock Merchant Wholesalers				
			42459 Other Farm Product Raw Material Merchant Wholesalers				
			42460 Plastics Materials and Basic Forms and Shapes Merchant Wholesalers				
			42469 Other Chemical and Allied Products Merchant Wholesalers				
			42470 Petroleum Bulk Stations and Terminals				
			42472 Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)				
			42480 Beer and Ale Merchant Wholesalers				
			42482 Wine and Distilled Alcoholic Beverage Merchant Wholesalers				
			42490 Farm Supplies Merchant Wholesalers				
			42492 Book, Periodical, and Newspaper Merchant Wholesalers				
			42493 Flower, Nursery Stock, and Florists Supplies Merchant Wholesalers				
			42494 Tobacco Product and Electronic Cigarette Merchant Wholesalers				
			42495 Paint, Varnish, and Supplies Merchant Wholesalers				
			42499 Other Miscellaneous Nondurable Goods Merchant Wholesalers				
						425 Wholesale Trade Agents and Brokers	42520 Wholesale Trade Agents and Brokers
			Transportation, Warehousing and Utilities				
					22 Utilities	221 Utilities	22111 Hydroelectric Power Generation
							22112 Fossil Fuel Electric Power Generation
							22113 Nuclear Electric Power Generation
							22114 Solar Electric Power Generation
							22115 Wind Electric Power Generation
							22116 Geothermal Electric Power Generation
							22117 Biomass Electric Power Generation
							22118 Other Electric Power Generation
							22121 Electric Bulk Power Transmission and Control
							22122 Electric Power Distribution
							22120 Natural Gas Distribution
							22130 Water Supply and Irrigation Systems
				22132 Sewage Treatment Facilities			
				22133 Steam and Air-Conditioning Supply			
		48-49 Transportation and Warehousing	481 Air Transportation	48111 Scheduled Passenger Air Transportation			
				48112 Scheduled Freight Air Transportation			
				48121 Nonscheduled Chartered Passenger Air Transportation			
				48122 Nonscheduled Chartered Freight Air Transportation			
				48129 Other Nonscheduled Air Transportation			
			482 Rail Transportation	48211 Line-Haul Railroads			
				48212 Short Line Railroads			
			483 Water Transportation	48311 Deep Sea Freight Transportation			
				48312 Deep Sea Passenger Transportation			
				48313 Coastal and Great Lakes Freight Transportation			
				48314 Coastal and Great Lakes Passenger Transportation			
				48321 Inland Water Freight Transportation			
				48322 Inland Water Passenger Transportation			
			484 Truck Transportation	48410 General Freight Trucking, Local			
				48421 General Freight Trucking, Long-Distance, Truckload			
				48422 General Freight Trucking, Long-Distance, Less Than Truckload			
				48420 Used Household and Office Goods Moving			
				48423 Specialized Freight (except Used Goods) Trucking, Local			
				48424 Specialized Freight (except Used Goods) Trucking, Long-Distance			
			485 Transit and Ground Passenger Transportation	48511 Mixed Mode Transit Systems			
				48512 Commuter Rail Systems			
				48513 Bus and Other Motor Vehicle Transit Systems			
				48519 Other Urban Transit Systems			
				48520 Interurban and Rural Bus Transportation			
				48530 Taxi and Ridesharing Services			
				48532 Limousine Service			
				48540 School and Employee Bus Transportation			
				48550 Charter Bus Industry			
				485991 Special Needs Transportation			
				485999 All Other Transit and Ground Passenger Transportation			
			486 Pipeline Transportation	48610 Pipeline Transportation of Crude Oil			
				48620 Pipeline Transportation of Natural Gas			
				48690 Pipeline Transportation of Refined Petroleum Products			
				48699 All Other Pipeline Transportation			
			487 Scenic and Sightseeing Transportation	48710 Scenic and Sightseeing Transportation, Land			
				48720 Scenic and Sightseeing Transportation, Water			
				48790 Scenic and Sightseeing Transportation, Other			
			488 Support Activities for Transportation	48811 Air Traffic Control			
				48819 Other Airport Operations			
				48890 Other Support Activities for Air Transportation			
				48820 Support Activities for Rail Transportation			
				48830 Port and Harbor Operations			
				48832 Marine Cargo Handling			
				48833 Navigational Services to Shipping			
				48839 Other Support Activities for Water Transportation			
				48840 Motor Vehicle Towing			
				48849 Other Support Activities for Road Transportation			
				48850 Freight Transportation Arrangement			
				48891 Packing and Crating			
				488999 All Other Support Activities for Transportation			
			491 Postal Service	49110 Postal Service			
			492 Couriers and Messengers	49210 Couriers and Express Delivery Services			
				49220 Local Messengers and Local Delivery			
			493 Warehousing and Storage	49310 General Warehousing and Storage			
				49320 Refrigerated Warehousing and Storage			
				49330 Farm Product Warehousing and Storage			
				49390 Other Warehousing and Storage			

TUMF Non-Residential Category Detailed NAICS Correspondence

TUMF Category	SCAG RTP/SCS	NAICS Two Digit Code	NAICS Three Digit Code	NAICS Six Digit Code
	Employment Categories	NAICS Code NAICS Title	NAICS Code NAICS Title	NAICS Code NAICS Title
Retail	Retail Trade	44-45 Retail Trade	441 Motor Vehicle and Parts Dealers	441110 New Car Dealers 441120 Used Car Dealers 441210 Recreational Vehicle Dealers 441222 Boat Dealers 441227 Motorcycle, ATV, and All Other Motor Vehicle Dealers 441330 Automotive Parts and Accessories Retailers 441340 Tire Dealers
			444 Building Material and Garden Equipment and Supplies Dealers	444110 Home Centers 444120 Paint and Wallpaper Retailers 444140 Hardware Retailers 444180 Other Building Material Dealers 444230 Outdoor Power Equipment Retailers 444240 Nursery, Garden Center, and Farm Supply Retailers
			445 Food and Beverage Retailers	445110 Supermarkets and Other Grocery Retailers (except Convenience Retailers) 445131 Convenience Retailers 445132 Vending Machine Operators 445230 Fruit and Vegetable Retailers 445240 Meat Retailers 445250 Fish and Seafood Retailers 445291 Baked Goods Retailers 445292 Confectionery and Nut Retailers 445298 All Other Specialty Food Retailers 445320 Beer, Wine, and Liquor Retailers
			449 Furniture, Home Furnishings, Electronics, and Appliance Retailers	449110 Furniture Retailers 449121 Floor Covering Retailers 449122 Window Treatment Retailers 449129 All Other Home Furnishings Retailers 449210 Electronics and Appliance Retailers
			455 General Merchandise Retailers	455110 Department Stores 455211 Warehouse Clubs and Supercenters 455219 All Other General Merchandise Retailers
			456 Health and Personal Care Retailers	456110 Pharmacies and Drug Retailers 456120 Cosmetics, Beauty Supplies, and Perfume Retailers 456130 Optical Goods Retailers 456191 Food (Health) Supplement Retailers 456199 All Other Health and Personal Care Retailers
			457 Gasoline Stations and Fuel Dealers	457110 Gasoline Stations with Convenience Stores 457120 Other Gasoline Stations 457210 Fuel Dealers
			458 Clothing, Clothing Accessories, Shoe, and Jewelry Retailers	458110 Clothing and Clothing Accessories Retailers 458210 Shoe Retailers 458310 Jewelry Retailers 458320 Luggage and Leather Goods Retailers
			459 Sporting Goods, Hobby, Musical Instrument, Book, and Miscellaneous Retailers	459110 Sporting Goods Retailers 459120 Hobby, Toy, and Game Retailers 459130 Sewing, Needlework, and Piece Goods Retailers 459140 Musical Instrument and Supplies Retailers 459210 Book Retailers and News Dealers 459310 Florists 459410 Office Supplies and Stationery Retailers 459420 Gift, Novelty, and Souvenir Retailers 459510 Used Merchandise Retailers 459910 Pet and Pet Supplies Retailers 459920 Art Dealers 459930 Manufactured (Mobile) Home Dealers 459991 Tobacco, Electronic Cigarette, and Other Smoking Supplies Retailers 459999 All Other Miscellaneous Retailers

TUMF Non-Residential Category Detailed NAICS Correspondence

TUMF Category	SCAG RTP/SCS	NAICS Two Digit Code	NAICS Three Digit Code	NAICS Six Digit Code							
Employment Categories	NAICS Code	NAICS Title	NAICS Code	NAICS Title							
Service	Information	51	Information	512 Motion Picture and Sound Recording Industries 512110 Motion Picture and Video Production 512120 Motion Picture and Video Distribution 512131 Motion Picture Theaters (except Drive-Ins) 512132 Drive-In Motion Picture Theaters 512191 Teleproduction and Other Postproduction Services 512199 Other Motion Picture and Video Industries 512230 Music Publishers 512240 Sound Recording Studios 512250 Record Production and Distribution 512290 Other Sound Recording Industries 513 Publishing Industries 513110 Newspaper Publishers 513120 Periodical Publishers 513130 Book Publishers 513140 Directory and Mailing List Publishers 513191 Greeting Card Publishers 513199 All Other Publishers 513210 Software Publishers 516 Broadcasting and Content Providers 516110 Radio Broadcasting Stations 516120 Television Broadcasting Stations 516210 Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers 517 Telecommunications 517111 Wired Telecommunications Carriers 517112 Wireless Telecommunications Carriers (except Satellite) 517121 Telecommunications Resellers 517122 Agents for Wireless Telecommunications Services 517410 Satellite Telecommunications 517810 All Other Telecommunications 518 Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services 518210 Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services 519 Web Search Portals, Libraries, Archives, and Other Information Services 519210 Libraries and Archives 519290 Web Search Portals and All Other Information Services							
					Financial Activities	52	Finance and Insurance	521 Monetary Authorities-Central Bank 521110 Monetary Authorities-Central Bank 522 Credit Intermediation and Related Activities 522110 Commercial Banking 522130 Credit Unions 522180 Savings Institutions and Other Depository Credit Intermediation 522210 Credit Card Issuing 522220 Sales Financing 522291 Consumer Lending 522292 Real Estate Credit 522299 International, Secondary Market, and All Other Nondepository Credit Intermediation 522310 Mortgage and Nonmortgage Loan Brokers 522320 Financial Transactions Processing, Reserve, and Clearinghouse Activities 522390 Other Activities Related to Credit Intermediation 523 Securities, Commodity Contracts, and Other Financial Investments and Related Activities 523150 Investment Banking and Securities Intermediation 523160 Commodity Contracts Intermediation 523210 Securities and Commodity Exchanges 523910 Miscellaneous Intermediation 523940 Portfolio Management and Investment Advice 523991 Trust, Fiduciary, and Custody Activities 523999 Miscellaneous Financial Investment Activities 524 Insurance Carriers and Related Activities 524113 Direct Life Insurance Carriers 524114 Direct Health and Medical Insurance Carriers 524126 Direct Property and Casualty Insurance Carriers 524127 Direct Title Insurance Carriers 524128 Other Direct Insurance (except Life, Health, and Medical) Carriers 524130 Reinsurance Carriers 524210 Insurance Agencies and Brokerages 524291 Claims Adjusting 524292 Pharmacy Benefit Management and Other Third Party Administration of Insurance and Pension Funds 524298 All Other Insurance Related Activities 525 Funds, Trusts, and Other Financial Vehicles 525110 Pension Funds 525120 Health and Welfare Funds 525190 Other Insurance Funds 525910 Open-End Investment Funds 525920 Trusts, Estates, and Agency Accounts 525990 Other Financial Vehicles			
									53	Real Estate and Rental and Leasing	531 Real Estate 531110 Lessors of Residential Buildings and Dwellings 531120 Lessors of Nonresidential Buildings (except Miniwarehouses) 531130 Lessors of Miniwarehouses and Self-Storage Units 531190 Lessors of Other Real Estate Property 531210 Offices of Real Estate Agents and Brokers 531311 Residential Property Managers 531312 Nonresidential Property Managers 531320 Offices of Real Estate Appraisers 531390 Other Activities Related to Real Estate 532 Rental and Leasing Services 532111 Passenger Car Rental 532112 Passenger Car Leasing 532120 Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing 532210 Consumer Electronics and Appliances Rental 532281 Formal Wear and Costume Rental 532282 Video Tape and Disc Rental 532283 Home Health Equipment Rental 532284 Recreational Goods Rental 532289 All Other Consumer Goods Rental 532310 General Rental Centers 532411 Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing 532412 Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing 532420 Office Machinery and Equipment Rental and Leasing 532490 Other Commercial and Industrial Machinery and Equipment Rental and Leasing 533 Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) 533110 Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)

TUMF Non-Residential Category Detailed NAICS Correspondence

TUMF Category	SCAG RTP/SCS Employment Categories	NAICS Two Digit Code NAICS Code NAICS Title	NAICS Three Digit Code NAICS Code NAICS Title	NAICS Six Digit Code NAICS Code NAICS Title				
	Professional and Business Services	54 Professional, Scientific, and Technical Services	541 Professional, Scientific, and Technical Services	54110 Offices of Lawyers				
				54112 Offices of Notaries				
				54119 Title Abstract and Settlement Offices				
				54199 All Other Legal Services				
				54211 Offices of Certified Public Accountants				
				54213 Tax Preparation Services				
				54214 Payroll Services				
				54219 Other Accounting Services				
				54310 Architectural Services				
				54320 Landscape Architectural Services				
				54330 Engineering Services				
				54340 Drafting Services				
				54350 Building Inspection Services				
				54360 Geophysical Surveying and Mapping Services				
				54370 Surveying and Mapping (except Geophysical) Services				
				54380 Testing Laboratories and Services				
				54410 Interior Design Services				
				54420 Industrial Design Services				
				54430 Graphic Design Services				
				54490 Other Specialized Design Services				
				54511 Custom Computer Programming Services				
				54512 Computer Systems Design Services				
				54513 Computer Facilities Management Services				
				54519 Other Computer Related Services				
				54611 Administrative Management and General Management Consulting Services				
				54612 Human Resources Consulting Services				
				54613 Marketing Consulting Services				
				54614 Process, Physical Distribution, and Logistics Consulting Services				
				54618 Other Management Consulting Services				
				54620 Environmental Consulting Services				
				54690 Other Scientific and Technical Consulting Services				
				54713 Research and Development in Nanotechnology				
				54714 Research and Development in Biotechnology (except Nanobiotechnology)				
				54715 Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)				
				54720 Research and Development in the Social Sciences and Humanities				
				54810 Advertising Agencies				
				54820 Public Relations Agencies				
				54830 Media Buying Agencies				
				54840 Media Representatives				
				54850 Indoor and Outdoor Display Advertising				
				54860 Direct Mail Advertising				
				54870 Advertising Material Distribution Services				
				54890 Other Services Related to Advertising				
				54910 Marketing Research and Public Opinion Polling				
				54921 Photography Studios, Portrait				
				54922 Commercial Photography				
				54930 Translation and Interpretation Services				
				54940 Veterinary Services				
				54990 All Other Professional, Scientific, and Technical Services				
				55 Management of Companies and Enterprises	551 Management of Companies and Enterprises	55111 Offices of Bank Holding Companies	55112 Offices of Other Holding Companies	55114 Corporate, Subsidiary, and Regional Managing Offices
				56 Administrative and Support and Waste Management and Remediation Services	561 Administrative and Support Services	56110 Office Administrative Services	56120 Facilities Support Services	56131 Employment Placement Agencies
						56132 Executive Search Services	56133 Temporary Help Services	56130 Professional Employer Organizations
						56140 Document Preparation Services	56142 Telephone Answering Services	561422 Telemarketing Bureaus and Other Contact Centers
						561431 Private Mail Centers	561439 Other Business Service Centers (including Copy Shops)	561440 Collection Agencies
						561450 Credit Bureaus	561491 Repossession Services	561492 Court Reporting and Stenotype Services
						561499 All Other Business Support Services	56150 Travel Agencies	561520 Tour Operators
						561591 Convention and Visitors Bureaus	561599 All Other Travel Arrangement and Reservation Services	561611 Investigation and Personal Background Check Services
						561612 Security Guards and Patrol Services	561613 Armored Car Services	561621 Security Systems Services (except Locksmiths)
						561622 Locksmiths	56170 Exterminating and Pest Control Services	561720 Janitorial Services
						561730 Landscaping Services	561740 Carpet and Upholstery Cleaning Services	561790 Other Services to Buildings and Dwellings
						561910 Packaging and Labeling Services	561920 Convention and Trade Show Organizers	561990 All Other Support Services
					562 Waste Management and Remediation Services	56211 Solid Waste Collection	56212 Hazardous Waste Collection	56219 Other Waste Collection
						56221 Hazardous Waste Treatment and Disposal	56222 Solid Waste Landfill	56223 Solid Waste Combustors and Incinerators
						562219 Other Nonhazardous Waste Treatment and Disposal	562910 Remediation Services	562920 Materials Recovery Facilities
						562991 Septic Tank and Related Services	562998 All Other Miscellaneous Waste Management Services	

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TUMF Category	SCAG RTP/SCS Employment Categories	NAICS Two Digit Code NAICS Code NAICS Title	NAICS Three Digit Code NAICS Code NAICS Title	NAICS Six Digit Code NAICS Code NAICS Title		
	Education and Health Services	61 Educational Services	611 Educational Services	61110 Elementary and Secondary Schools		
				61120 Junior Colleges		
				61130 Colleges, Universities, and Professional Schools		
				61140 Business and Secretarial Schools		
				611420 Computer Training		
				611430 Professional and Management Development Training		
				611511 Cosmetology and Barber Schools		
				611512 Flight Training		
				611513 Apprenticeship Training		
				611519 Other Technical and Trade Schools		
				611610 Fine Arts Schools		
				611620 Sports and Recreation Instruction		
				611630 Language Schools		
				611691 Exam Preparation and Tutoring		
				611692 Automobile Driving Schools		
				611699 All Other Miscellaneous Schools and Instruction		
				611710 Educational Support Services		
				62 Health Care and Social Assistance	621 Ambulatory Health Care Services	62111 Offices of Physicians (except Mental Health Specialists)
						62112 Offices of Physicians, Mental Health Specialists
						62120 Offices of Dentists
						62130 Offices of Chiropractors
		621320 Offices of Optometrists				
		621330 Offices of Mental Health Practitioners (except Physicians)				
		621340 Offices of Physical, Occupational and Speech Therapists, and Audiologists				
		621391 Offices of Podiatrists				
		621399 Offices of All Other Miscellaneous Health Practitioners				
		621410 Family Planning Centers				
		621420 Outpatient Mental Health and Substance Abuse Centers				
		621491 HMO Medical Centers				
		621492 Kidney Dialysis Centers				
		621493 Freestanding Ambulatory Surgical and Emergency Centers				
		621498 All Other Outpatient Care Centers				
		621511 Medical Laboratories				
		621512 Diagnostic Imaging Centers				
		621610 Home Health Care Services				
		621910 Ambulance Services				
		621991 Blood and Organ Banks				
		621999 All Other Miscellaneous Ambulatory Health Care Services				
		622 Hospitals	62210 General Medical and Surgical Hospitals			
			62220 Psychiatric and Substance Abuse Hospitals			
			62230 Specialty (except Psychiatric and Substance Abuse) Hospitals			
		623 Nursing and Residential Care Facilities	62310 Nursing Care Facilities (Skilled Nursing Facilities)			
			62320 Residential Intellectual and Developmental Disability Facilities			
			623220 Residential Mental Health and Substance Abuse Facilities			
			62331 Continuing Care Retirement Communities			
			623312 Assisted Living Facilities for the Elderly			
		623990 Other Residential Care Facilities				
624 Social Assistance	62410 Child and Youth Services					
	62420 Services for the Elderly and Persons with Disabilities					
	624190 Other Individual and Family Services					
	624210 Community Food Services					
	624221 Temporary Shelters					
	624229 Other Community Housing Services					
	624230 Emergency and Other Relief Services					
	624310 Vocational Rehabilitation Services					
624410 Child Care Services						
Leisure and Hospitality	71 Arts, Entertainment, and Recreation	711 Performing Arts, Spectator Sports, and Related Industries	71110 Theater Companies and Dinner Theaters			
			71120 Dance Companies			
			71130 Musical Groups and Artists			
			71190 Other Performing Arts Companies			
			711211 Sports Teams and Clubs			
			711212 Racetracks			
			711219 Other Spectator Sports			
			711310 Promoters of Performing Arts, Sports, and Similar Events with Facilities			
			711320 Promoters of Performing Arts, Sports, and Similar Events without Facilities			
			711410 Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures			
			711510 Independent Artists, Writers, and Performers			
			712 Museums, Historical Sites, and Similar Institutions	71210 Museums		
				712120 Historical Sites		
				712130 Zoos and Botanical Gardens		
				712190 Nature Parks and Other Similar Institutions		
		713 Amusement, Gambling, and Recreation Industries	71310 Amusement and Theme Parks			
			71320 Amusement Arcades			
			713210 Casinos (except Casino Hotels)			
			713290 Other Gambling Industries			
			713910 Golf Courses and Country Clubs			
			713920 Skiing Facilities			
713930 Marinas						
713940 Fitness and Recreational Sports Centers						
713950 Bowling Centers						
713990 All Other Amusement and Recreation Industries						

TUMF Non-Residential Category Detailed NAICS Correspondence

TUMF Category	SCAG RTP/SCS	NAICS Two Digit Code		NAICS Three Digit Code		NAICS Six Digit Code						
	Employment Categories	NAICS Code	NAICS Title	NAICS Code	NAICS Title	NAICS Code	NAICS Title					
		72	Accommodation and Food Services									
			721	Accommodation								
				72110	Hotels (except Casino Hotels) and Motels							
				72112	Casino Hotels							
				721191	Bed-and-Breakfast Inns							
				721199	All Other Traveler Accommodation							
				721211	RV (Recreational Vehicle) Parks and Campgrounds							
				721214	Recreational and Vacation Camps (except Campgrounds)							
				721310	Rooming and Boarding Houses, Dormitories, and Workers' Camps							
				722	Food Services and Drinking Places							
					722310	Food Service Contractors						
			722320		Caterers							
			722330		Mobile Food Services							
			722410		Drinking Places (Alcoholic Beverages)							
			722511		Full-Service Restaurants							
			722513	Limited-Service Restaurants								
			722514	Cafeterias, Grill Buffets, and Buffets								
			722515	Snack and Nonalcoholic Beverage Bars								
			Other Service		81	Other Services (except Public Administration)						
						811	Repair and Maintenance					
811111	General Automotive Repair											
811114	Specialized Automotive Repair											
811121	Automotive Body, Paint, and Interior Repair and Maintenance											
811122	Automotive Glass Replacement Shops											
811191	Automotive Oil Change and Lubrication Shops											
811192	Car Washes											
811198	All Other Automotive Repair and Maintenance											
811210	Electronic and Precision Equipment Repair and Maintenance											
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance											
811411	Home and Garden Equipment Repair and Maintenance											
811412	Appliance Repair and Maintenance											
811420	Reupholstery and Furniture Repair											
811430	Footwear and Leather Goods Repair											
811490	Other Personal and Household Goods Repair and Maintenance											
812	Personal and Laundry Services											
	812111	Barber Shops										
	812112	Beauty Salons										
	812113	Nail Salons										
	812191	Diet and Weight Reducing Centers										
	812199	Other Personal Care Services										
	812210	Funeral Homes and Funeral Services										
	812220	Cemeteries and Crematories										
	812310	Coin-Operated Laundries and Drycleaners										
	812320	Drycleaning and Laundry Services (except Coin-Operated)										
	812331	Linen Supply										
	812332	Industrial Launderers										
	812910	Pet Care (except Veterinary) Services										
	812921	Photofinishing Laboratories (except One-Hour)										
	812922	One-Hour Photofinishing										
	812930	Parking Lots and Garages										
812990	All Other Personal Services											
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations											
	813110	Religious Organizations										
	813211	Grantmaking Foundations										
	813212	Voluntary Health Organizations										
	813219	Other Grantmaking and Giving Services										
	813311	Human Rights Organizations										
	813312	Environment, Conservation and Wildlife Organizations										
	813319	Other Social Advocacy Organizations										
	813410	Civic and Social Organizations										
	813910	Business Associations										
	813920	Professional Organizations										
813930	Labor Unions and Similar Labor Organizations											
813940	Political Organizations											
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)											
814	Private Households											
	814110	Private Households										

TUMF Non-Residential Category Detailed NAICS Correspondence

TUMF Category	SCAG RTP/SCS	NAICS Two Digit Code	NAICS Three Digit Code	NAICS Six Digit Code
Employment Categories	NAICS Code	NAICS Title	NAICS Code	NAICS Title
Government/Public Sector				
Government	92	Public Administration	921 Executive, Legislative, and Other General Government Support	
				92110 Executive Offices
				92120 Legislative Bodies
				92130 Public Finance Activities
				92140 Executive and Legislative Offices, Combined
				92150 American Indian and Alaska Native Tribal Governments
				92190 Other General Government Support
			922 Justice, Public Order, and Safety Activities	
				92210 Courts
				92220 Police Protection
				92230 Legal Counsel and Prosecution
				92240 Correctional Institutions
				92250 Parole Offices and Probation Offices
				92260 Fire Protection
				92290 Other Justice, Public Order, and Safety Activities
			923 Administration of Human Resource Programs	
				92310 Administration of Education Programs
				92320 Administration of Public Health Programs
				92330 Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs Programs)
				92340 Administration of Veterans' Affairs
			924 Administration of Environmental Quality Programs	
				92410 Administration of Air and Water Resource and Solid Waste Management Programs
				92420 Administration of Conservation Programs
			925 Administration of Housing Programs, Urban Planning, and Community Development	
				92510 Administration of Housing Programs
				92520 Administration of Urban Planning and Community and Rural Development
			926 Administration of Economic Programs	
				92610 Administration of General Economic Programs
				92620 Regulation and Administration of Transportation Programs
				92630 Regulation and Administration of Communications, Electric, Gas, and Other Utilities
				92640 Regulation of Agricultural Marketing and Commodities
				92650 Regulation, Licensing, and Inspection of Miscellaneous Commercial Sectors
			927 Space Research and Technology	
				92710 Space Research and Technology
			928 National Security and International Affairs	
				92810 National Security
	92820 International Affairs			

Source: SCAG 2020 RTP/SCS
 California Employment Development Department (EDD)
 US Census Bureau, North American Industry Classification System (NAICS), 2022

Appendix C - Western Riverside County Traffic Growth 2018 – 2045

Existing (2018) and future (2045) traffic data were derived from RivCoM. The model area of coverage, level of roadway network and TAZ detail, and application on other regional transportation study efforts represented RivCoM as the appropriate tool for evaluating traffic growth as part of the Nexus Study.

The forecasts of existing and future congestion levels were derived from the Year 2018 Existing and Year 2045 No-Build scenarios, respectively. The 2018 Existing and 2045 No-Build scenarios were developed using RivCoM to model 2018 and 2045 SED, respectively, as derived from the SCAG 2020 RTP/SCS adopted SED forecasts, on the transportation network as it existed in 2021. The 2018 existing transportation network represents the most recent baseline network developed for RivCoM, and only reflects the inclusion of those projects that were funded, committed and under construction at that time, and therefore imminently to be part of the baseline transportation system in 2018. For the purposes of the TUMF network analysis, additional improvements on the TUMF arterial highway network that were either completed or under construction in the period between 2018 and December 2021 were added to the network to create a 2021 existing network. The 2021 existing network was subsequently modeled in RivCoM using both 2018 and 2045 SED to provide the 2018 Baseline and 2045 No-Build scenarios as the basis for comparison and analysis. The 2045 No-Build scenario did not include transportation improvements that are planned as part of the recently adopted SCAG 2020 RTP/SCS on the basis they are uncommitted (meaning that their implementation is dependent on securing future funding and approval). Inclusion of the uncommitted improvements masks the congestion effects of increasing travel. Inclusion of these improvements and the resultant masking is not appropriate for this analysis aimed at identifying the effects of increasing travel if improvements were not built.

The WRCOG TUMF study area was extracted from RivCoM for the purpose of calculating the following measures for Western Riverside County only. Traffic growth impacts for each of the two scenarios were calculated using the TransCAD platform.

- Total daily vehicle miles of travel (VMT),
- Total daily VMT on facilities experiencing LOS E or worse.
- Total daily vehicle hours of travel (VHT), and
- Total combined daily vehicle hours of delay (VHD)

The following formulas were used to calculate the respective values.

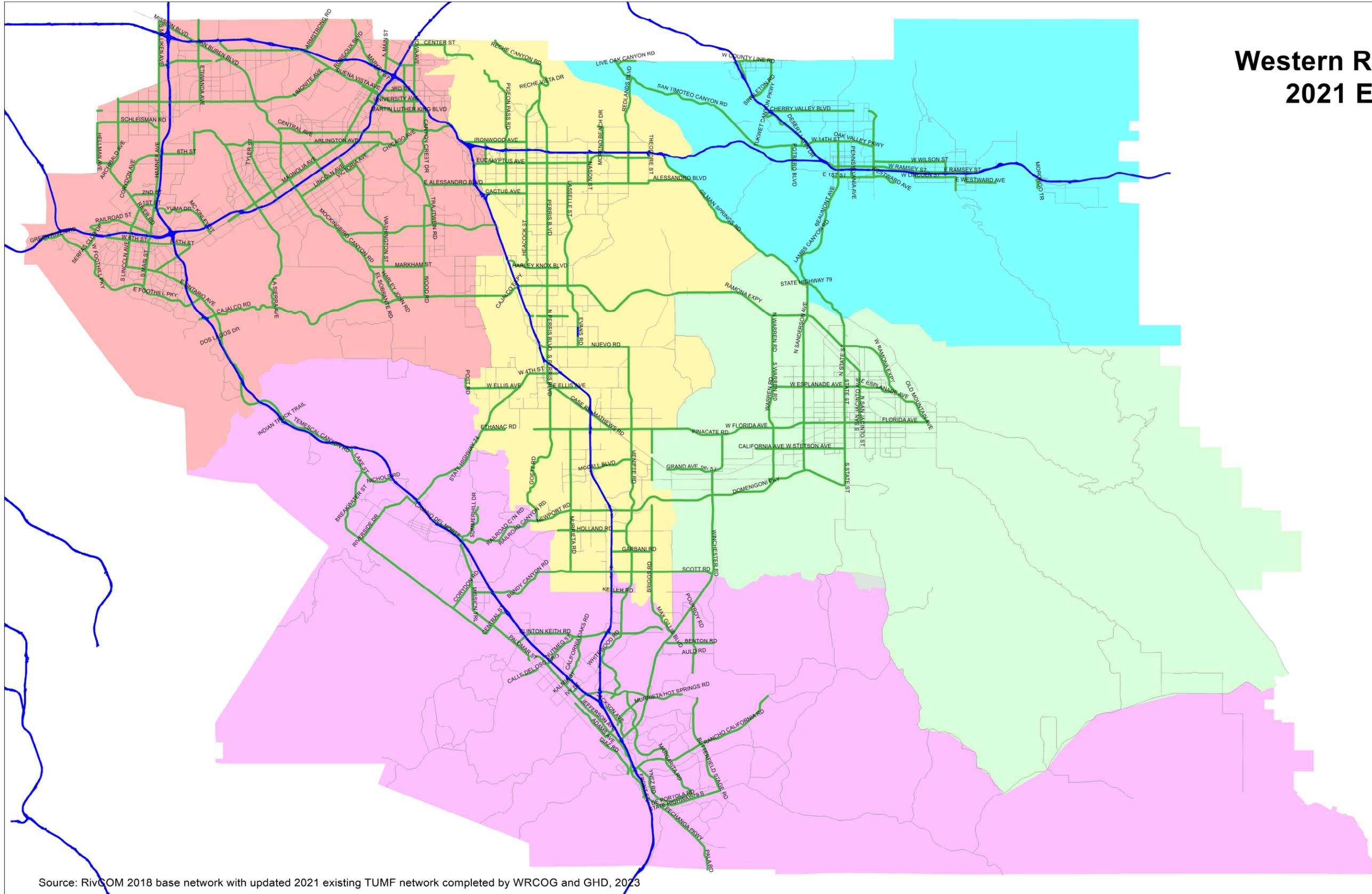
- $VMT = \text{Link Distance} * \text{Total Daily Volume}$
- $VHT = \text{Average Loaded (Congested) Link Travel Time} * \text{Total Daily Volume}$
- $VHD = VHT - (\text{Free-flow (Uncongested) Link Travel Time} * \text{Total Daily Volume})$
- $VMT \text{ LOS E or F} = VMT \text{ (on links where Daily V/C exceeded 0.90)}^{13}$

¹³ LOS Thresholds for LOS E are based on the 2010 Edition of the [Highway Capacity Manual](#) (Transportation Research Board, National Research Council, Washington, D.C., 2010) LOS Maximum V/C Criteria for Multilane Highways with 45 mph Free Flow Speed (Exhibit 14-5, Chapter 14, Page 14-5).

RivCoM breaks down its roadway network into functional categories called assignment groups. The measures were calculated selectively for all facilities, freeways only, arterials only, and TUMF arterials only by including and excluding different assignment groups and facilities. For the calculation of measures on “all facilities”, only the centroid connectors were excluded. Arterial values excluded all mixed-flow to carpool lane connector ramps, freeways, carpool lanes, centroid connectors, and freeway-to-freeway connector ramps, respectively. Freeways were defined as including mixed-flow to carpool lane connector ramps, freeways, carpool lanes, and freeway-to-freeway connector ramps, respectively.

The 2021 Existing Network by Facility Type is included in this Appendix as **Exhibit C-1**. The 2021 existing network was used as the basis for the 2018 Existing and 2045 No-Build scenarios by modeling 2018 and 2045 SED, respectively, on the 2021 existing network using RivCoM to determine the comparative effects of population, household and employment growth in the region. The results of the analysis of existing and future congestion levels are presented for peak periods in **Exhibit C-2** and for daily in **Exhibit C-3** in this Appendix and extracted for the combined peak periods in **Table 3.1** of the study report.

EXHIBIT C-1 Western Riverside County 2021 Existing Network Facility Type



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

Existing Facility Type

- TUMF Arterials
- NonTUMF Arterials
- Freeways

0 3 6 9
Miles

Source: RivCOM 2018 base network with updated 2021 existing TUMF network completed by WRCOG and GHD, 2023

EXHIBIT C-2

**Western Riverside County
Regional Highway System Measures of Performance (2018 - 2045) – Peak Periods**

Measures of Performance	AM Peak				PM Peak			
	2018	2045	% Change	% Annual	2018	2045	% Change	% Annual
VMT - Total ALL FACILITIES	10,324,900	13,225,039	28%	0.9%	12,959,824	16,672,215	29%	0.9%
VMT - FREEWAYS	5,877,972	6,720,682	14%	0.5%	7,636,550	8,769,602	15%	0.5%
VMT - ALL ARTERIALS	4,446,928	6,504,357	46%	1.4%	5,323,274	7,902,613	48%	1.5%
TOTAL - TUMF ARTERIAL VMT	2,793,846	3,826,810	37%	1.2%	3,423,139	4,770,390	39%	1.2%
VHT - TOTAL ALL FACILITIES	251,133	435,243	73%	2.1%	290,218	480,196	65%	1.9%
VHT - FREEWAYS	120,257	186,102	55%	1.6%	143,535	213,027	48%	1.5%
VHT - ALL ARTERIALS	130,875	249,142	90%	2.4%	146,683	267,169	82%	2.2%
TOTAL TUMF ARTERIAL VHT	81,578	154,106	89%	2.4%	92,877	166,763	80%	2.2%
VHD - TOTAL ALL FACILITIES	57,989	177,814	207%	4.2%	50,911	160,242	215%	4.3%
VHD - FREEWAYS	34,221	86,616	153%	3.5%	31,935	84,033	163%	3.6%
VHD - ALL ARTERIALS	23,768	91,198	284%	5.1%	18,977	76,209	302%	5.3%
TOTAL TUMF ARTERIAL VHD	18,024	66,789	271%	5.0%	15,225	58,074	281%	5.1%
VMT LOS E & F - TOTAL ALL FACILITIES	2,960,551	6,364,419	115%	2.9%	2,644,519	7,005,063	165%	3.7%
VMT LOS E & F - FREEWAYS	2,435,804	4,276,258	76%	2.1%	2,289,667	5,040,633	120%	3.0%
VMT LOS E & F - ALL ARTERIALS	524,747	2,088,161	298%	5.2%	354,852	1,964,430	454%	6.5%
TOTAL TUMF ARTERIAL VMT w/ LOS E & F	448,168	1,585,571	254%	4.8%	317,614	1,598,561	403%	6.2%
% of TUMF ARTERIAL VMT w/ LOS E & F	16%	41%			9%	34%		

* Based on RivCoM 2018 network and SCAG 2020 RTP/SCS SED with updated 2021 arterial network completed.

NOTES:

Volume is adjusted by PCE factor

VMT = vehicle miles of travel (the total combined distance that all vehicles travel on the system)

VHT = vehicle hours of travel (the total combined time that all vehicles are traveling on the system)

VHD = vehicle hours of delay (the total combined time that all vehicles have been delayed on the system based on the difference between forecast travel time and free-flow (ideal) travel time)

LOS = level of service (based on forecast volume to capacity ratios).

LOS E or Worse was determined by V/C ratio that exceeds 0.9 thresholds as indicated in the Riverside County General Plan.

EXHIBIT C-3

**Western Riverside County
Regional Highway System Measures of Performance (2018 - 2045) – Daily**

Measures of Performance	Peak Periods (Total)				Daily			
	2018	2045	% Change	% Annual	2018	2045	% Change	% Annual
VMT - Total ALL FACILITIES	23,284,724	29,897,254	28%	0.9%	41,378,907	53,832,389	30%	1.0%
VMT - FREEWAYS	13,514,522	15,490,284	15%	0.5%	24,642,357	29,200,582	18%	0.6%
VMT - ALL ARTERIALS	9,770,202	14,406,970	47%	1.4%	16,736,551	24,631,807	47%	1.4%
TOTAL - TUMF ARTERIAL VMT	6,216,985	8,597,200	38%	1.2%	10,794,415	15,170,125	41%	1.3%
VHT - TOTAL ALL FACILITIES	541,350	915,439	69%	2.0%	893,813	1,433,458	60%	1.8%
VHT - FREEWAYS	263,792	399,128	51%	1.5%	440,073	637,990	45%	1.4%
VHT - ALL ARTERIALS	277,558	516,311	86%	2.3%	453,740	795,469	75%	2.1%
TOTAL TUMF ARTERIAL VHT	174,455	320,869	84%	2.3%	285,520	496,757	74%	2.1%
VHD - TOTAL ALL FACILITIES	108,900	338,056	210%	4.3%	131,965	410,511	211%	4.3%
VHD - FREEWAYS	66,156	170,649	158%	3.6%	79,532	208,287	162%	3.6%
VHD - ALL ARTERIALS	42,745	167,407	292%	5.2%	52,434	202,223	286%	5.1%
TOTAL TUMF ARTERIAL VHD	33,249	124,863	276%	5.0%	41,025	152,200	271%	5.0%
VMT LOS E - TOTAL ALL FACILITIES	5,605,070	13,369,483	139%	3.3%	6,153,146	16,090,205	161%	3.6%
VMT LOS E - FREEWAYS	4,725,471	9,316,891	97%	2.5%	5,141,215	11,306,348	120%	3.0%
VMT LOS E & F - ALL ARTERIALS	879,599	4,052,592	361%	5.8%	1,011,931	4,783,858	373%	5.9%
TOTAL TUMF ARTERIAL VMT w/ LOS E or worse	765,782	3,184,133	316%	5.4%	878,465	3,819,635	335%	5.6%
% of TUMF ARTERIAL VMT w/ LOS E or worse	12%	37%			8%	25%		

* Based on RivCoM 2018 network and SCAG 2020 RTP/SCS SED with updated 2021 arterial network completed.

NOTES:

Volume is adjusted by PCE factor

VMT = vehicle miles of travel (the total combined distance that all vehicles travel on the system)

VHT = vehicle hours of travel (the total combined time that all vehicles are traveling on the system)

VHD = vehicle hours of delay (the total combined time that all vehicles have been delayed on the system based on the difference between forecast tr

LOS = level of service (based on forecast volume to capacity ratios).

LOS E or Worse was determined by V/C ratio that exceeds 0.9 thresholds as indicated in the Riverside County Generc

Appendix D - Western Riverside County Bus Transit System Ridership 2023 – 2045

Actual average weekday daily ridership for Riverside Transit Agency (RTA) transit bus services was tabulated for 2023. Forecast average weekday daily ridership for RTA bus transit services was retrieved from the SCAG 2020 RTP/SCS Model for horizon year 2045. The bus transit ridership for 2023 and 2045 was tabulated to represent existing and future regional bus transit trips consistent with the analysis of highway trips described in **Section 3.1** and **Appendix C. Table D-1** summarizes the weekday bus transit ridership in Western Riverside County.

TABLE D-1 - Regional Bus Transit Weekday System Ridership

Year	Western Riverside Weekday Projected System Ridership
2023*	16,575
2045**	57,282

Notes: * - 2023 actual average weekday daily ridership provided by RTA staff December 1, 2023

** - 2045 forecast average weekday daily ridership obtained from SCAG 2020 RTP/SCS Model as provided by Fehr and Peers, November 28, 2023

Appendix E - Western Riverside County Regional System of Highways and Arterials Performance Measures

An integral element of the Nexus Study is the designation of the Western Riverside County Regional System of Highways and Arterials (also referred to as the "TUMF Network"). This network of regionally significant highways represents those arterial and collector highway and roadway facilities that primarily support inter-community trips in Western Riverside County and supplement the regional freeway system, and represents the extents of the network of highways and roadways that would be eligible for TUMF funded improvements. The Regional System of Highways and Arterials does NOT include the freeways of Western Riverside County which primarily serve inter-regional trips.

The designation of the Regional System of Highways and Arterials in the original TUMF Nexus Study adopted by the WRCOG Executive Committee in October 2002 was initiated with the identification of highways and roadways that met certain specified guidelines as defined by the WRCOG Public Works Committee. The guidelines are defined in **Section 4.1** of the Nexus Report, and include:

1. Arterial highway facilities proposed to have a minimum of four lanes at future buildout (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 in the future horizon year.
4. Facilities with forecast volume to capacity ratio of 0.90 (LOS E) or greater in the future horizon year.
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).

The original candidate facilities were identified by overlaying various transportation system and land use plots depicting parameters consistent with those defined by the specified guidelines. These plots included existing and proposed numbers of lanes, network volumes and volume to capacity ratio (LOS) derived from SCAG CTP Model networks developed by Transcore to support the ongoing Western Riverside County CETAP study, and existing land use information provided by SCAG. These plots were included in the Appendices that accompanied the original 2002 TUMF Nexus Study. Fixed route transit service information was provided by the Riverside County Regional Transportation Authority (RTA).

These various data inputs were overlaid and reviewed leading the definition of a segmented skeletal network of highways and roadways for further consideration. The skeletal network was further enhanced to reflect regional connectivity and access to activity center considerations. An initial draft Regional System of Highways and Arterials was developed and subsequently distributed to the County of Riverside and each City in Western Riverside County for review in the context of their respective City General

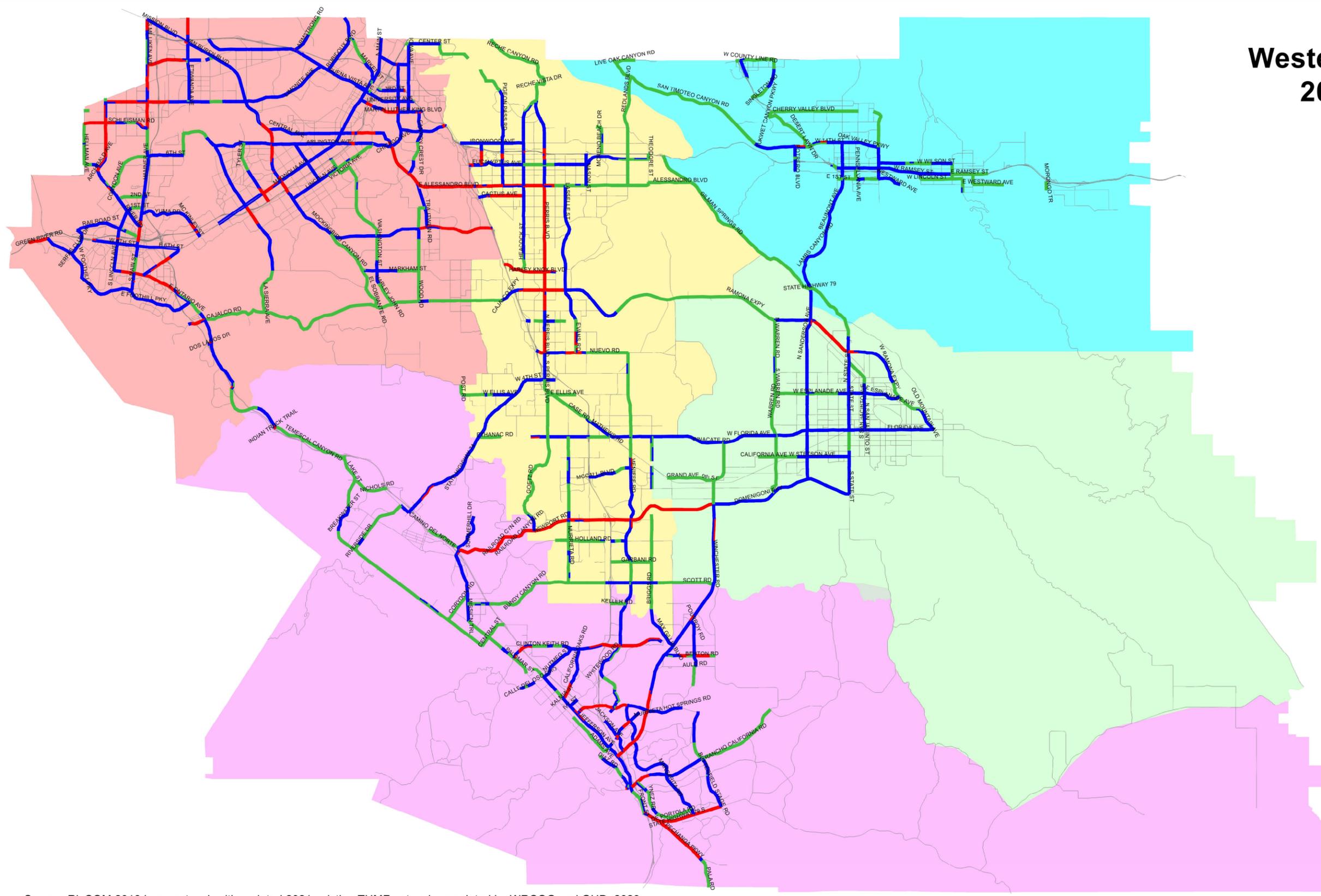
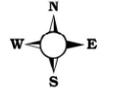
Plan Circulation Elements, primarily to confirm existing and future number of lanes and appropriateness of the facilities identified. The initial draft network was subsequently revised to consolidate appropriate General Plan Circulation Elements, including the identification of proposed new facilities as alternatives to existing facilities. It should be pointed out that the Regional System of Highways and Arterials does not represent a simple compilation of regional General Plan Circulation Elements, but rather incorporates the elements of regional General Plan Circulation Elements that are necessary for mitigating the cumulative regional traffic impacts of new development within the horizon year of the TUMF program.

The consolidated list of proposed network improvements (along with associated initial cost estimates) was subsequently distributed to each of the WRCOG jurisdictions, individual landowners, and other stakeholders including representatives of the development community through the Building Industry Association (BIA) for review. The review of the consolidated list of improvements (and associated costs) prompted a series of five peer review workshop meetings to specifically review each segment of roadway identified and the associated improvements to mitigate the traffic impacts of new development. One peer review workshop meeting was held for each of the five zones in the WRCOG region with meetings held at the Riverside County Assessor's Office between June 27, 2002 and July 18, 2002. The peer review workshop meetings involved representatives from WRCOG, the respective zone jurisdictions and the BIA. The peer review workshops culminated in the development (by consensus of the groups) of a revised list of proposed network improvements (and associated costs) more accurately reflecting the improvements necessary to mitigate the cumulative regional traffic impacts of new development.

Following the peer review, the initial Regional System of Highways and Arterials was reviewed and endorsed by the TUMF Technical Advisory Committee, the TUMF Policy Committee and the WRCOG Executive Committee and utilized as the basis for developing the original TUMF Nexus Study in October 2002.

For the 2024 update of the TUMF Nexus Study, the Regional System of Highways and Arterials was reassessed. Consistent with the changing rate of new development forecast for Western Riverside County as part of the SCAG 2020 RTP/SCS, including reductions in the overall level of non-residential employment, the review of the TUMF Network as part of the 2024 Nexus Update ensured facilities generally still met the previously described performance guidelines, and/or that the scope and magnitude of specific improvements to the TUMF Network were roughly proportional to the impacts needing to be mitigated. This review process involved the comparison of model outputs for the 2018 Baseline and 2045 No-Build Scenarios on the 2021 Existing arterial network to identify those facilities no longer expected to be impacted substantially by the cumulative effects of traffic growth from new development. This review resulted in various changes in the scope and magnitude of specific improvements previously identified on the TUMF Network. The updated model output plots utilized as the basis for the latest network review are included in this appendix as **Exhibit E-1** through **E-8**. The Regional System of Highways and Arterials is included as **Figure 4.1** in the Nexus Study report.

EXHIBIT E-1 Western Riverside County 2021 Existing Network Number of Lanes



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

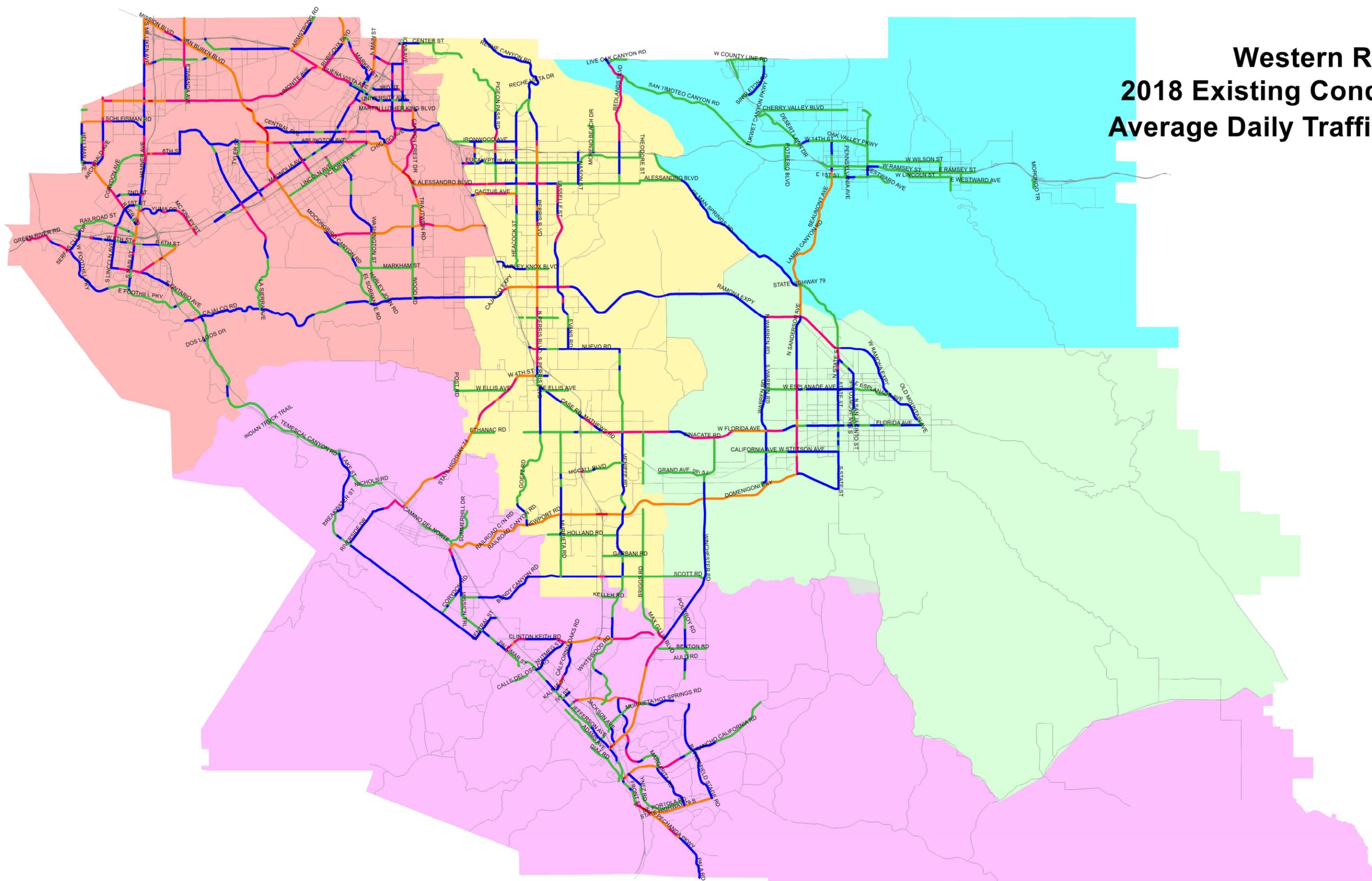
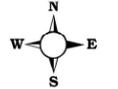
Existing Number of Lanes (Directional)

- 1 lane
- 2 lanes
- 3+ lanes



Source: RivCOM 2018 base network with updated 2021 existing TUMF network completed by WRCOG and GHD, 2023

EXHIBIT E-2 Western Riverside County 2018 Existing Conditions Scenario Average Daily Traffic Volume (ADT)



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

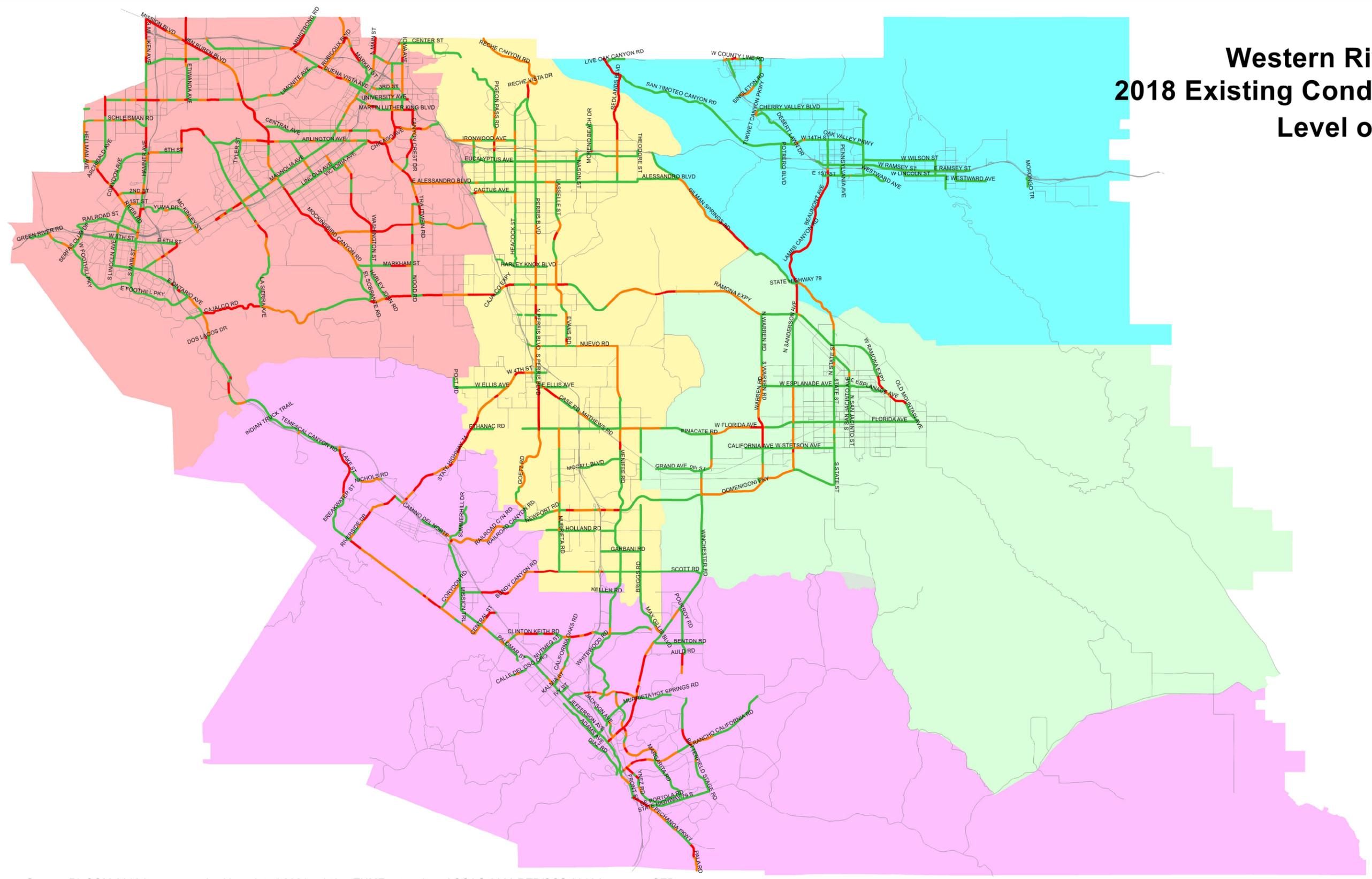
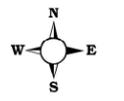
Average Daily Traffic (ADT)

- <10,000
- 10,000-20,000
- 20,000-30,000
- 30,000-50,000
- 50,000+

0 3 6 9
Miles

Source: RivCOM 2018 base network with updated 2021 existing TUMF network and SCAG 2020 RTP/SCS 2018 base year SED

EXHIBIT E-3 Western Riverside County 2018 Existing Conditions Scenario Level of Service (LOS)



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

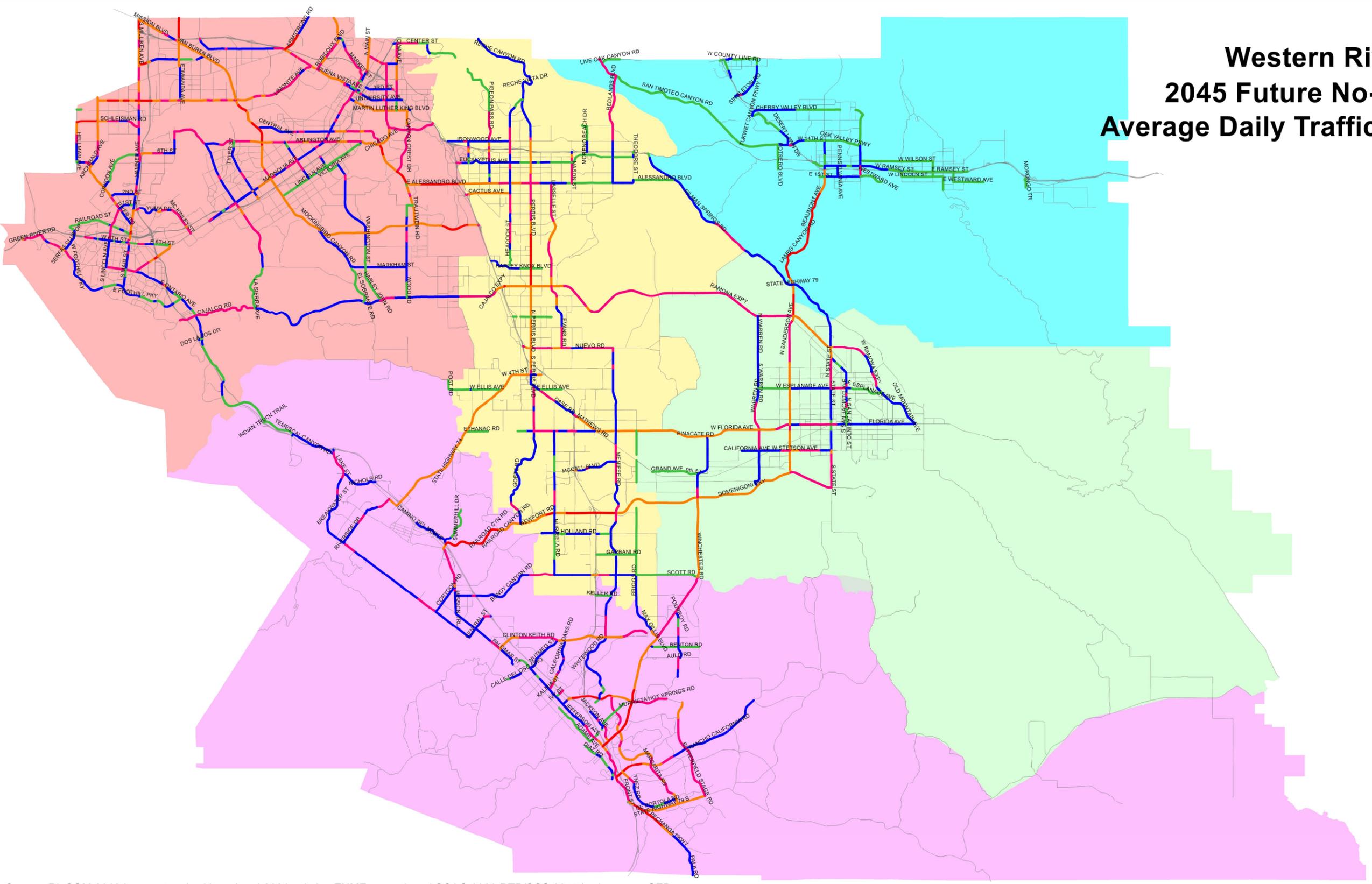
Peak Period LOS

- LOS A or B
- LOS C or D
- LOS E or F

0 3 6 9
Miles

Source: RivCOM 2018 base network with updated 2021 existing TUMF network and SCAG 2020 RTP/SCS 2018 base year SED

EXHIBIT E-4 Western Riverside County 2045 Future No-Build Scenario Average Daily Traffic Volume (ADT)



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

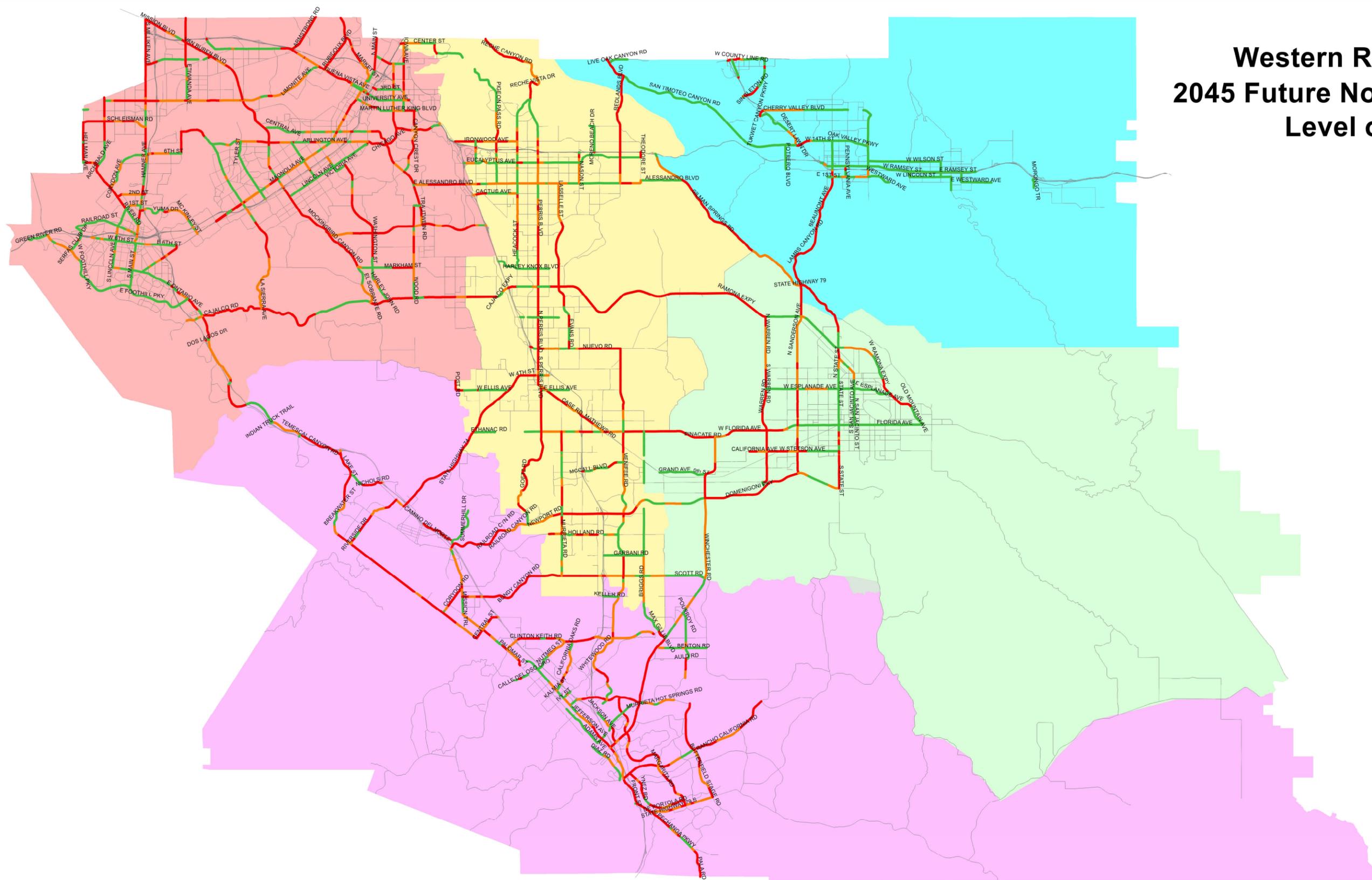
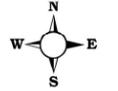
Average Daily Traffic (ADT)

- <10,000
- 10,000-20,000
- 20,000-30,000
- 30,000-50,000
- 50,000+

0 3 6 9
Miles

Source: RivCOM 2018 base network with updated 2021 existing TUMF network and SCAG 2020 RTP/SCS 2045 horizon year SED

EXHIBIT E-5 Western Riverside County 2045 Future No-Build Scenario Level of Service (LOS)



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

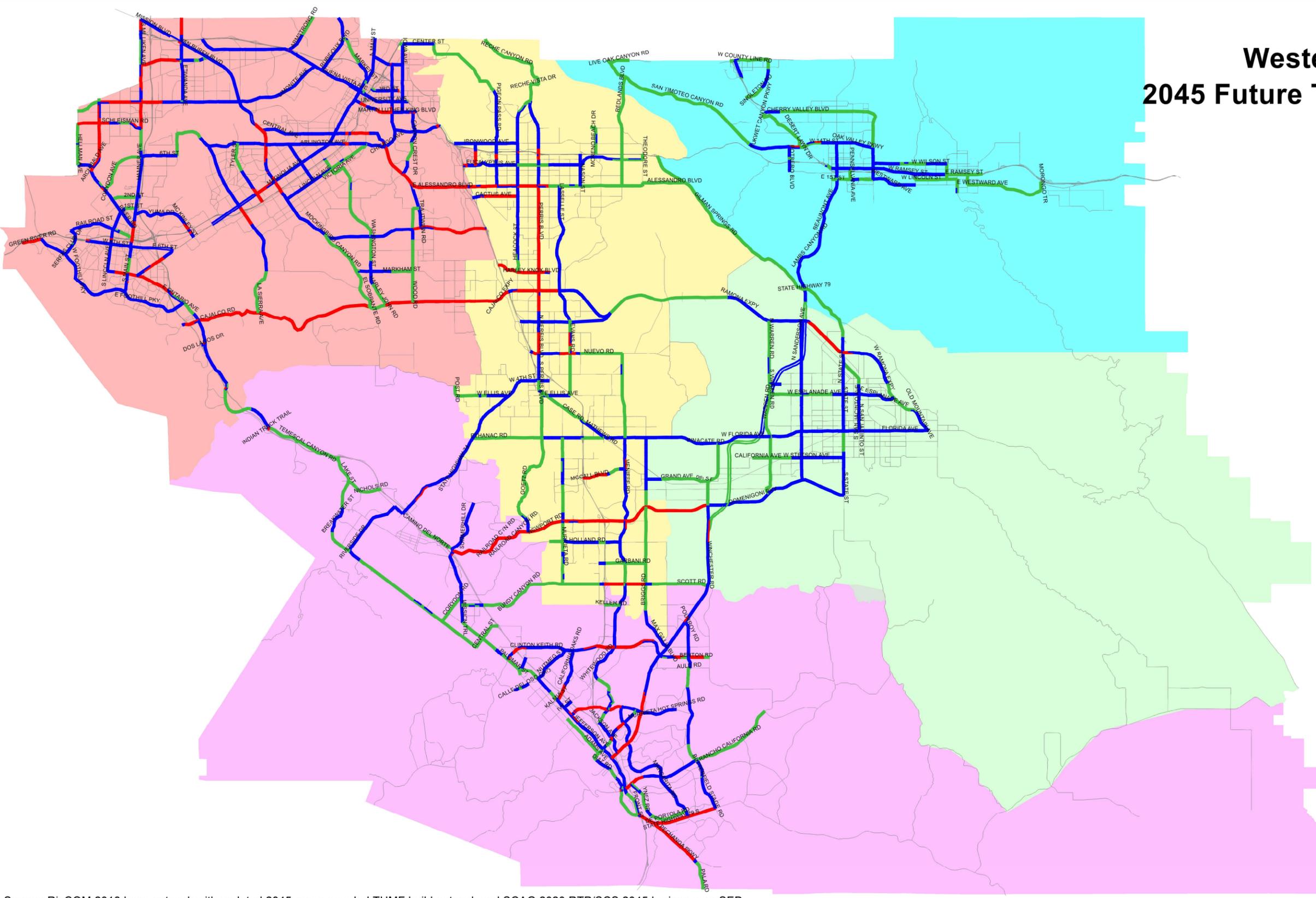
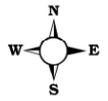
Peak Period LOS

- LOS A or B
- LOS C or D
- LOS E or F

0 3 6 9
Miles

Source: RivCOM 2018 base network with updated 2021 existing TUMF network and SCAG 2020 RTP/SCS 2045 horizon year SED

EXHIBIT E-6 Western Riverside County 2045 Future TUMF Build Scenario Number of Lanes



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

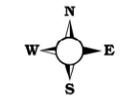
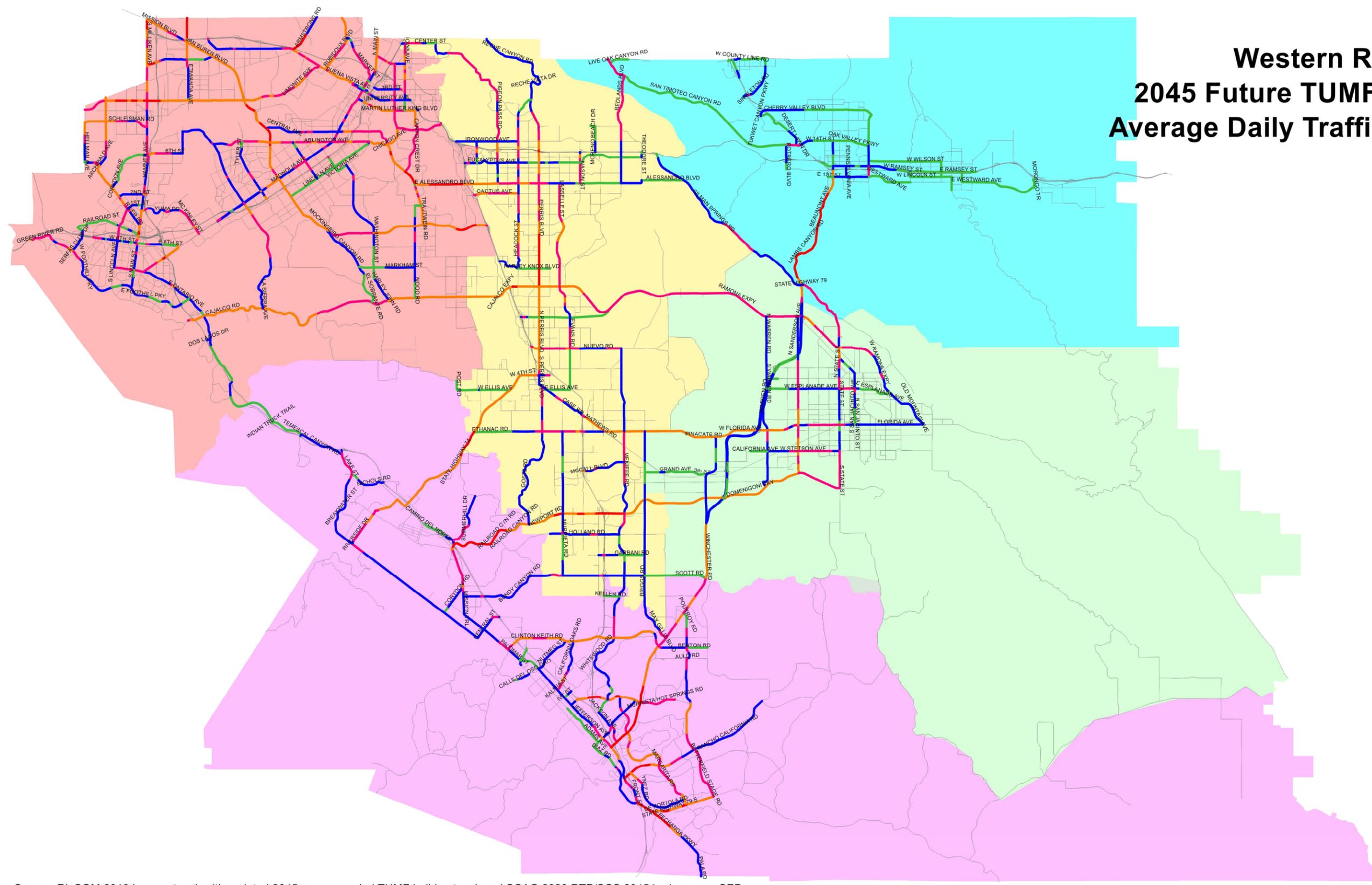
Existing Number of Lanes (Directional)

- 1 lane
- 2 lanes
- 3+ lanes

0 3.3 6.7 10
Miles

Source: RivCOM 2018 base network with updated 2045 recommended TUMF build network and SCAG 2020 RTP/SCS 2045 horizon year SED

EXHIBIT E-7 Western Riverside County 2045 Future TUMF Build Scenario Average Daily Traffic Volume (ADT)



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

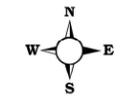
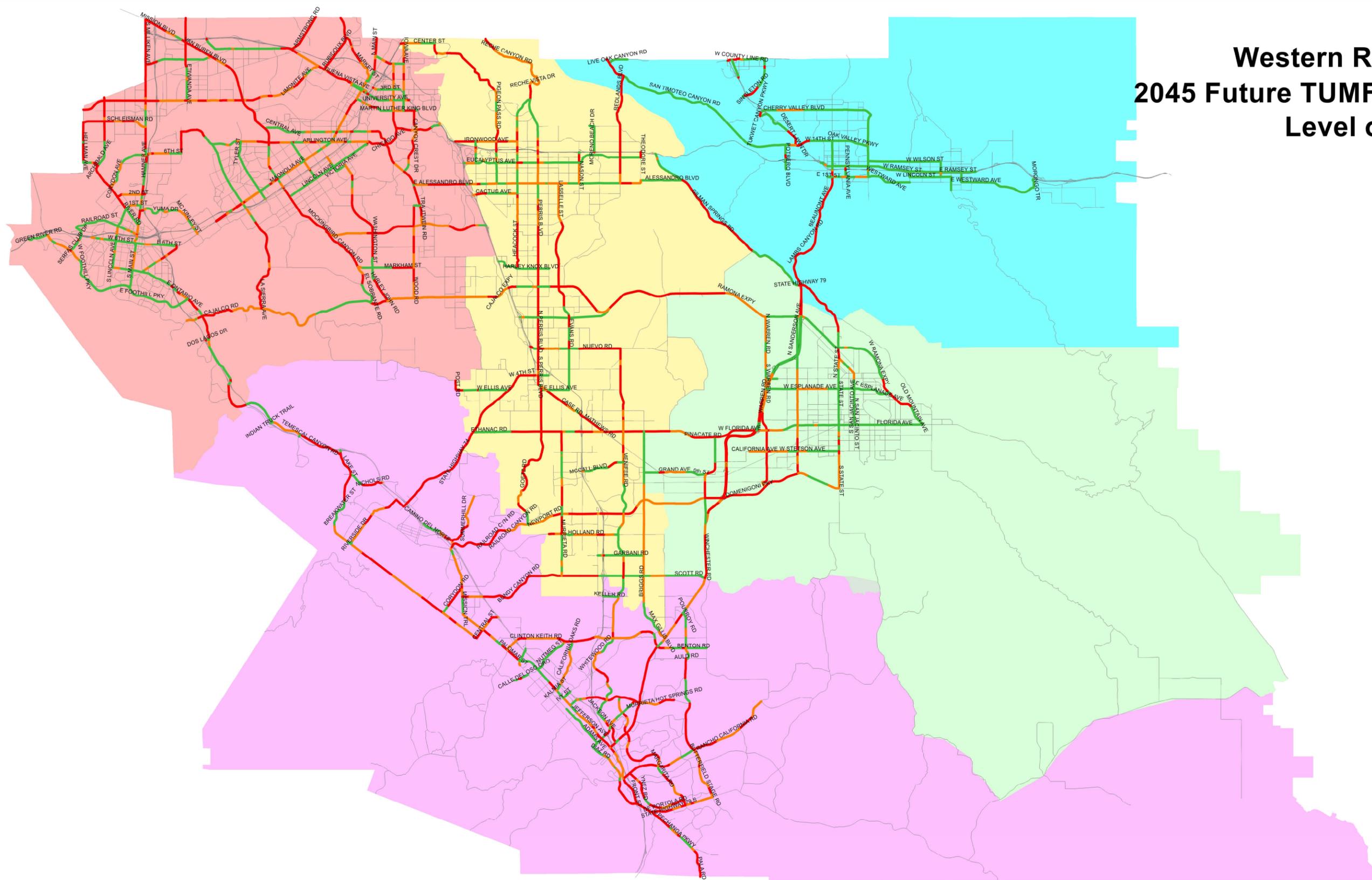
Average Daily Traffic (ADT)

- <10,000
- 10,000-20,000
- 20,000-30,000
- 30,000-50,000
- 50,000+

0 3 6 9
Miles

Source: RivCOM 2018 base network with updated 2045 recommended TUMF build network and SCAG 2020 RTP/SCS 2045 horizon year SED

EXHIBIT E-8 Western Riverside County 2045 Future TUMF Build Scenario Level of Service (LOS)



LEGEND

TUMF ZONE

- Northwest
- Central
- Pass
- Southwest
- Hemet/San Jacinto

Peak Period LOS

- LOS A or B
- LOS C or D
- LOS E or F

0 3 6 9
Miles

Source: RivCOM 2018 base network with updated 2045 recommended TUMF build network and SCAG 2020 RTP/SCS 2045 horizon year SED

Appendix F - TUMF Network Cost Assumptions

The TUMF program was established as a uniform impact fee program that is applied to mitigate the cumulative transportation impacts of new development on the regional arterial highway system. In establishing the technical basis for TUMF, like any impact fee program, there are two fundamental requirements that must be addressed: establishing a rational nexus for the program; and determining that any fee is roughly proportional to the impact of a proposed development. These requirements are rooted in two well-known legal cases: *Nollan v. California Coastal Commission* (1987) 483 U.S. 825; and *Dolan v. City of Tigard* (1994) 512 U.S. 374.

To establish project costs that meet the rough proportionality test for an expansive network of facilities, WRCOG utilizes a conceptual planning level project and cost estimation approach based on typical unit costs for a variety of project types and conditions. These unit costs are intended to reflect a range of values that are typical for the types of projects that are necessary to mitigate the cumulative regional impacts of new development. These unit costs are developed for each typical project type based on actual observed values for the various materials, labor and right-of-way that would typically be required to complete a project. Although the actual materials, labor, right-of-way and associate costs to complete each specific project can be expected to vary based on the particular conditions of each site and project requirements at the time the project is actually implemented, the approach of using typical unit costs as the basis for the TUMF program represents a manageable and appropriate level of detail to establish conceptual project cost estimates that meet the requirement for rough proportionality.

The application of typical unit costs and the associated identification of a maximum TUMF share for each eligible project also provides a framework that protects the program from projects with actual costs that vary significantly from the typical cost estimates used as the program basis. The TUMF program administrative polices limit reimbursement of costs associated with eligible TUMF projects to the lesser of maximum TUMF share identified in the Nexus Study or the actual eligible project costs. In this manner, projects that are completed by participating jurisdictions or developers for less than the maximum TUMF share are reimbursed (or credited) for the actual amount expended, while projects that exceed the maximum TUMF share are only reimbursed (or credited) by the program up to the maximum TUMF share value ensuring that the program is mitigating impacts at a level that is roughly proportional to that typically expected, and is not subject to extreme project costs to address unusual or exceptional local conditions or requirements.

For the purposes of TUMF, unit cost values were developed for various eligible improvement types that all provide additional capacity needed to mitigate the cumulative regional traffic impacts of new development to facilities on the TUMF Network. Eligible improvement types include:

1. Construction of additional Network roadway lanes;
2. Construction of new Network roadway segments;
3. Expansion of existing Network bridge structures;

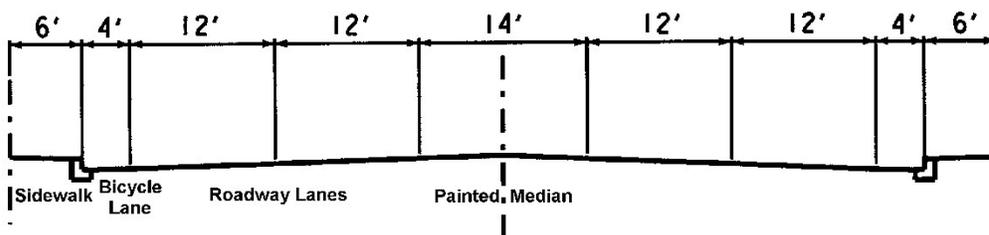
4. Construction of new Network bridge structures;
5. Expansion of existing Network interchanges with freeways;
6. Construction of new Network interchanges with freeways;
7. Grade separation of existing Network at-grade railroad crossings;
8. Expansion of existing Network-to-Network intersections;
9. Infrastructure for Intelligent Transportation Systems (ITS) of Network roadway segments.

Because roadway improvement standards vary considerably between respective jurisdictions, a typical roadway standard for the TUMF Network was recommended by the Public Works Committee (PWC) during the development of the original TUMF Nexus Study adopted by the WRCOG Executive Committee in October 2002 as the basis for developing the TUMF Network cost estimate. The typical roadway standard assumes the following design characteristics that are consistent with the minimum requirements of the Caltrans Highway Design Manual:

- Asphalt concrete pavement and appropriate base material to accomplish up to 12 feet per travel lane plus up to four feet for ancillary treatments (e.g. shoulders, or Class II Bike Lane);
- Concrete curb and gutter and associated drainage (e.g. paved roadway shoulders and/or open swale);
- Storm drains located within curb to curb, and associated transverse portions perpendicular to the roadway and adjoining portions longitudinal to the roadway;
- 14 foot paved and painted median (or dual center left turn lane);
- Traffic signals at intersections with state highways and other major arterials that are also on the TUMF Network;
- Pavement striping and roadway signing, as required;
- 6 foot wide concrete sidewalks and associated curb cuts for ADA access at street crossings.

A cross-section of the Typical Roadway Standard is illustrated in **Figure F-1**.

Figure F-1. Typical Roadway Standard Cross-Section



It is recognized that the typical roadway standard is not appropriate in all potential TUMF Network locations. Where appropriate, typical design standards could be substituted with design elements such as open swale drainage and paved roadway shoulders with no curbing that would typically cost less than the implementation of the

Typical Roadway Standard. Roadway improvements in excess of the Typical Roadway Standard include, but are not limited to:

- Portland concrete cement pavement or other aesthetic pavement types (except at intersections);
- Major rehabilitation or overlay of existing pavement in adjacent roadway lanes;
- Raised barrier medians;
- Parking lanes;
- Roadway tapers outside the extents of the approved project
- Sanitary sewage infrastructure;
- Water systems
- Dry utilities
- Undergrounding infrastructure
- Relocation of non-prior rights utilities
- Storm Drain Systems in excess of draining the roadway
- Landscaping;
- Streetlighting;
- Class I Bike Lanes (e.g. separate bicycle paths)
- Environmental Permitting
- Detection/Retention Basins outside of Street Right-of-Way
- Agency Staff time in excess of 15% of Engineering
- Agency Staff Time in excess of 15% of Construction

These improvements in excess of Typical Roadway Standards are not eligible for TUMF funding and will be the responsibility of the local funding agency.

Unit cost estimates for the implementation of TUMF Network improvements were developed based on the unit cost to accomplish the Typical Roadway Standard. Initial unit cost estimates were developed as part of the original TUMF Nexus in 2002. These original values were adjusted as part of the 2005 Nexus Update to reflect changes in cost based on relevant indices. The unit cost estimates were fully revised as part of the 2009 Nexus Update to capture the full effects of the economic recession on the costs of labor, materials and property acquisition. For the previous 2016 Nexus Update, the unit costs were fully revised. The 2016 Nexus Update reflected the effects of the ongoing recovery from the economic recession that has saw the costs of materials, labor and land acquisition in California rebound from relative historical lows previously observed at the time of the 2009 Nexus Update.

For the 2024 Nexus Update, the unit costs were again fully revised to generate entirely new unit cost values based on the most recent available construction cost, labor cost and land acquisition cost values for comparable projects within and adjacent to Riverside County. The recalculation of the TUMF unit cost components was completed as part of the 2024 Nexus Update to account for the unprecedented materials cost increases, labor shortages and high rate of inflation generally attributable to a combination of the disruption to global supply chains caused by the COVID-19 pandemic and additional tariffs on a range of products imported into the United States. In December 2023, the unit cost values were validated utilizing Caltrans Contract Cost Data and the resultant unit costs are noted in **Exhibit F-2** and summarized in **Table 4.1**.

For simplicity, the roadway unit cost was assumed to provide for the full depth construction (including grading) of 16 feet of new pavement per lane (to accommodate a minimum 12 foot lane and ancillary treatments). The unit cost was assumed to include the following construction elements:

- Sawcut of existing pavement
- Removal of existing pavement
- Roadway excavation and embankment
- 10" thick class 2 aggregate base
- 4.0" thick asphaltic concrete surface
- Concrete curb, gutter and drainage improvements

Roadway unit costs were determined for each unique cost item. The source used to determine the roadway unit costs as part of the 2024 Nexus Update are listed below.

- Caltrans Contract Cost Data 2021-2022
- Projects within Riverside County and Adjacent Counties
- Typical experience for local cities, Western Riverside County
- Michael Baker international (MBI), Structural Group
- MBI, ITS Group
- Caltrans Contract Cost Data 2022-2023

All data described above was initially obtained in October 2022 and refreshed and validated in December 2023.

Right-of-way acquisition costs were determined based on the cost to acquire 18 feet of right-of-way per lane of new roadway improvement. For urban and suburban land use areas, the amount of right-of-way to be acquired as part of the TUMF program was reduced by 75% to account for property already owned by a participating jurisdiction through prior acquisition or dedication. Right-of-way unit costs were assumed to include the following elements:

- Land acquisition
- Documentation and legal fees
- Relocation and demolition costs and condemnation compensation requirements
- Utility relocation
- Direct environmental mitigation

Right-of-way unit costs were determined based on a review of actual property sales within the WRCOG region during the prior 18 month period. The task of determining the valuation per square foot of right-of-way for different land uses was completed by Epic Land Solutions, Inc.

A typical existing condition of each component type was used as a guideline for quantity assessments.

- Terrain 1: Level terrain with 0% profile grade. Construction cost is per lane mile.
- Terrain 2: Rolling Terrain with 1.5 % profile grade. Construction cost is per lane mile.

- Terrain 3: Mountainous Terrain with 3% profile grade. Construction cost is per lane mile.
- Land Use 1, 2 and 3; ROW cost factor per lane mile, for Urban, Suburban and Rural areas respectively.
- Interchange 1: Complex New Interchange/Interchange Modification. Existing complex interchange at I-15 & SR-91 was used as a guideline for quantity assessments.
- Interchange 2: New Interchange/Interchange Modification is assumed to be a New Cloverleaf Interchange consisting of 4 (3 lane) direct ramps and 4 (2 lane) loop ramps.
- Interchange 3: Major Interchange Improvement is assumed to correspond to adding 1 lane to each ramp on a cloverleaf Interchange.
- Bridge: New Bridge cost. Construction cost is per linear foot per lane.
- RRXing 1: New Rail Grade Crossing. Construction cost is per lane per crossing.
- RRXing 2: Widening Existing Grade Crossing. Construction cost is per lane per crossing.
- ITS 1: Infrastructure for Intelligent Transportation Systems (ITS) on TUMF Network roadway segments per route mile

The cost estimating methodology here is intended to provide a Present Value Cost Estimate for the WRCOG Transportation Uniform Mitigation Fee based on year 2023 unit prices. A more detailed description of cost categories is detailed below.

I. Roadway Items

Roadway Excavation:

A unit cost of \$38.55 per cubic yard (Source: Local Projects and Caltrans Contract Cost Data) is applied to account for the excavation quantities. Assuming proposed profiles to be at 0% grade, the excavation values are estimated based on the component type as follows:

- Terrain 2 and 3: excavation for one lane (16 feet wide and 4 feet deep) is assumed.

Imported Borrow:

The unit cost used for imported borrow is \$20.47 per cubic yard (Source: Local Projects and Caltrans Contract Cost Data). Locations where imported borrow is required are determined from aerial photos.

- Terrain 2 and 3: Excavation for one lane (16 feet wide and 4 feet deep) is assumed.
- Interchanges 1, 2, and 3: Vertical clearance of 24.5 feet is used to calculate the maximum amount of imported borrow at areas adjacent to an undercrossing.
- RRXing 1 and 2: Vertical clearance of 31.5 feet and Bridge approach of 1,000 feet is used to determine the quantity of Imported borrow for this component type.

Clearing and Grubbing:

The unit cost for clearing and grubbing is \$12,100.00 per acre (Source: Local Projects and Caltrans Contract Cost Data).

- Terrain 1, 2 and 3: The area of clearing and grubbing is assumed to extend 16 feet for the addition of each new lane.
- Interchange 1 and 2: The area of clearing and grubbing is assumed to extend 40 feet beyond the proposed outside edge of shoulder. The clearing and grubbing width varies depending on the number of added lanes.
- Interchange 3 and Intersection: The area of clearing and grubbing is assumed to extend 16 feet for the addition of each lane.

Development of Water Supply:

A lump sum value is used to account for developing water supply. The lump sum cost is estimated as 10% of the combined cost for roadway excavation and imported borrow (Source: RCTC).

PCC Pavement:

The unit cost for PCC pavement is \$354.83 per cubic yard (Source: Local Projects and Caltrans Contract Cost Data).

- Terrain 1, 2 and 3: It is assumed that PCC is used at mainline shoulders. The PCC shoulder pavement is assumed to be 4 inch thick and 4 feet wide.

Asphalt Concrete Type A:

It is assumed that Asphalt Concrete is used at mainline and where ramp and bridge widening is required. A unit cost of \$240.62 per cubic yard (Source: Local Projects and Caltrans Contract Cost Data) is used to account for asphalt concrete quantities. The asphalt concrete overlay is assumed to be 4 inch thick.

Aggregate Base:

The unit cost for aggregate base is \$73.54 per cubic yard (Source: Local Projects and Caltrans Contract Cost Data). Aggregate base quantities are estimated by means of calculating the areas of additional lanes. The aggregate base layer is considered to be 10 inch thick. It is assumed that aggregate base is used over the entire widening width below the PCC pavement and asphalt concrete layers.

Curb and Gutter:

The unit cost used for curb and gutter is \$65.74 per linear foot (Source: Local Projects and Caltrans Contract Cost Data). It is assumed that type A2-6 curb and gutter is used on the entire length of travel way where required.

Project Drainage:

A lump sum value is used to account for project drainage cost of roadway construction. The project drainage cost is estimated as 15% (Source: RCTC project 2007) of combined cost for earthwork and pavement structural section.

Traffic Signals:

The costs for traffic signals are calculated per ramp termini intersection. The unit cost used for traffic signals is \$531,086 (Source: Caltrans Contract Cost Data and typical experience, Western Riverside County) per intersection. Traffic signals costs are considered only at the Intersection (Network-to-Network) upgrade.

Striping:

The unit cost used for Striping is \$2.58 per linear foot (Source: Local Projects and Caltrans Contract Cost Data). It is assumed that two lines of thermo-plastic striping are required for every lane addition.

Marking:

The unit cost used for marking is \$7.31 per square foot (Source: Local Projects and Caltrans Contract Cost Data).

- Terrains 1, 2 and 3: It is assumed that there are 8 arrow markers, 2 Stop sign markers and 4 Bike sign markers.
- Interchanges 1, 2, and 3: It is assumed that there are 2 Type I arrows on each on ramp, and 2 Type IV (L) arrows on each off ramp.
- Intersection (network to network) upgrade: It is assumed that there are 2 right turn arrows and two right lane drop arrows for each lane modification for the interchange upgrade

Pavement Marker:

Type G one-way clear retroreflective pavement markers (Spacing @ 48 feet) were assumed for Terrain 1, 2 and 3 component types only. The unit cost used for pavement marker is \$5.06 each (Source: Local Projects and Caltrans Contract Cost Data).

Signage:

The signage unit cost accounts for the costs of one-post signs and two-post signs. The unit cost used for one-post signs and two-post signs are \$367.69 and \$1,211.58 each, respectively (Source: Local Projects and Caltrans Contract Cost Data). The post sign quantities assumed for each component type is summarized below.

Sign Type	Terrain 1, 2 & 3	Interchange			Intersection
		1	2	3	
One Post Signs	33	14	36	20	3
Two Post Signs	-	4	4	4	0

Intelligent Transportation Systems (ITS):

The unit cost used for ITS is \$686,338.50 per route mile (Source: Local Projects and MBI ITS Group). It is assumed that there is no existing ITS infrastructure (with the exception of isolated ITS devices) within the TUMF Network roadway segments and essential ITS infrastructure is furnished and installed. This essential ITS infrastructure includes ethernet switch, fiber jumper, fiber distribution unit, splice enclosure, pull box, new cabinet with foundation, 144 strand single-mode fiber optic (SMFO) cable and 3" conduits.

Minor Items, Roadway Mobilization, and Roadway Additions:

A lump sum value is used to account for minor items, roadway mobilization and roadway additions as described below. These lump sum values are recommended based on provisions in Project Development Procedure Manual (PDPM) and the

date from individual sources presented in the introduction of this report (Source: RCTC)

Items	Unit Cost
Minor Items	10% of earthwork, pavement structure, drainage, specialty items and traffic items.
Roadway Mobilization	10% of earthwork, pavement structure, drainage, specialty items, traffic items and minor items.
Roadway Additions	10% of earthwork, pavement structure, drainage, specialty items, traffic items and minor items.

II. Structure Items

New Bridge:

New interchanges account for construction of a new bridge. The unit cost for a new travel way bridge construction and RRXings1 and 2 (New and Widening of Rail Grade Crossings) is \$400.00 per square foot (Source: MBI Structural group). The width of a new bridge is assumed to be 82 feet (4 lanes x 12ft + 10ft shoulder x 2 + 14ft median).

Bridge Widening:

Bridge widenings account for the widening of existing bridges. The unit cost is \$500.00 per square foot (Source: MBI Structural group). The width of a bridge widening is assumed to be: 2 lanes x 12ft + 10ft shoulder. The width of an arterial crossing over rail road is assumed to be 16 feet (1 lane x 12ft + 4ft shoulder).

Structural Mobilization:

The cost for structural mobilization is estimated as 10% of total structure item cost (Source: Typical experience).

III. Right of Way Items

The right of way unit cost varies with land use designation. The unit cost for ROW was developed by Epic Land Solutions, Inc. based on a review of actual property sales within the WRCOG region during the prior 18 month period. The area of right of way acquisition for the travel way is calculated per additional lane mile, assuming the width of the right-of-way required to be 18 feet per lane (to accommodate a 12 foot roadway lane, shoulders and ancillary amenities, like storm water drainage). The right of way acquisition for RRXings1 and 2 is calculated based on ROW acquisition for bridge approaches.

Property costs per square foot are derived by reviewing a large sample of recently sold land and improved properties within the greater Riverside area. The properties reviewed are identified specifically from completed semi large to very large infrastructure projects and upcoming projects with preferred alternatives and/or approved environmental reports. For the purposes of the 2022 Nexus Study update, an overall sample of approximately 2,700 properties was used.

The properties were designated as: urban areas (generally considered downtown, or very close to downtown in the larger cities - predominantly Corona and Riverside, with a few parcels in Temecula and Moreno Valley); suburban (primarily considered the greater areas of Hemet, Perris, San Jacinto, Moreno Valley, Lake Elsinore, outer portions of Riverside / Corona, Temecula, Murrieta, Calimesa, Eastvale, Norco, and other cities of relative size and location as those previously mentioned); and rural (considered the exurban areas between Corona / Lake Elsinore and Perris along the SR-74/79, Lake Matthews, between Wildomar and Murrieta, Temecula and Perris and other similar areas) to correspond with the land use classifications used for cost estimating purposes in the TUMF program. The properties were also determined to be partial or full property takes to determine the relative percentage of each in order to appropriately weight the average cost per square foot of each type of property. Specialty cost percentages as a share of total acquisition costs (i.e. relocation and demolition) were also derived from actual costs based on a sample of the Inland Empire projects that Epic Land Solutions, Inc. was directly involved in and therefore able to obtain reliable data.

The result is an estimated average cost per square foot for ROW acquisition by land use classification which is then multiplied by the number of square feet per lane mile to obtain the required ROW to accomplish the TUMF typical cross section. The ROW requirement is then reduced by a factor of 75% for urban and suburban areas based on the collective recommendation of the PWC during the development of the initial program cost estimation methodology to reflect the assumption that a majority of the proposed TUMF facilities in these areas already exist and/or have a substantial portion of the necessary right-of-way already owned by or dedicated to the responsible jurisdiction. As a result, the TUMF program only includes the estimated cost for 25% of the right-of-way that could potentially be required to accomplish the TUMF cross sections for the conceptual improvement projects identified as part of the program in urban and suburban areas.

Maintenance of Traffic:

A lump sum value is used to account for maintenance of traffic cost of roadway construction. The project maintenance of traffic cost is estimated as 5% (Source: RCTC) of the total project cost.

The consolidated unit cost values include typical per mile or lump sum costs for each of the eligible improvement element. These elements include new roadways, bridge improvements, interchange improvements and railroad grade separation construction costs, and right of way acquisition.

The consolidated unit costs as developed for the 2024 Nexus Update are summarized in **Exhibit F-1**. **Exhibit F-2** provides a summary of the unit costs for the various roadway and structures construction elements defined. **Exhibit F-3** provides a summary of the unit costs for the various right of way categories. **Exhibit F-4** provides worksheets showing the detailed unit cost calculation for each TUMF unit cost category related to roadway and structures construction, and right of way acquisition.

The unit cost assumptions were subsequently applied to the TUMF Network improvements identified to mitigate the cumulative regional transportation impacts of future new development. The resultant cost value was tabulated for each unique segment of the network, by improvement type. A separate cost estimate was generated for regional transit improvements based on information provided by RTA and added to the TUMF Network Cost Estimate table.

Supplemental categories have been added to the cost assumptions to better delineate the costs associated with planning and engineering a project, accommodating contingencies, mitigating the cumulative multi-species habitat impacts of TUMF arterial highway improvements in accordance with the adopted Riverside County Multi-Species Habitat Conservation Plan (MSHCP), and administering the TUMF program.

Soft Costs

The TUMF program provides for planning, engineering and contingency costs (collectively referred to as soft costs) for eligible projects to be reimbursed through the program. As indicated in **Table 4.1**, planning costs are considered to include those costs associated with planning, preliminary engineering and environmental assessment of the proposed project, with the eligible amount being 10% of the estimated TUMF eligible construction cost only. Engineering costs are considered to include project study report, design, permitting and construction oversight costs based on 25% of the estimated eligible construction cost only. Contingency is provided based on 10% of the total estimated eligible facility cost.

Soft costs include all reasonable required planning, environmental clearance and mitigation, right-of-way documentation, engineering design, plan, specification and estimate preparation and construction management and oversight costs necessary to accomplish the project. The estimated soft cost factors for planning, engineering and contingency were initially established in 2002 by the WRCOG Public Works Committee, which was responsible for the development of the initial TUMF Nexus Study. The percentage multipliers were established by consensus of the PWC based on the collective experience of members in delivering similar public highway projects. A review of various data sources indicates the cost factors are generally consistent with industry guidance for conceptual cost estimation purposes. The City of Los Angeles, Department of Public Works, Bureau of Engineering *California Multi-Agency CIP Benchmarking Study* (December 2016) indicates that combined design and construction management costs for roadway projects represent, on average, 50% of the total cost of construction¹⁴. Similarly, the American Association of State Highway and Transportation Officials (AASHTO) *Practical Guide for Estimating* (December 2011) also cites the following average multipliers for a range of planning and engineering activities based on national research as a basis for conceptual cost estimation:

¹⁴ City of Los Angeles, Department of Public Works, Bureau of Engineering *California Multi-Agency CIP Benchmarking Study* (December 2016), Table 3-6 Average Project Delivery Costs by Project Type (% of TCC) (Full Range of TCC).

- Preliminary Engineering Costs (including survey/data collection, design, environmental, utilities and contract administration) – 10% to 25% of total construction cost¹⁵
- Construction Engineering – 10% to 26% of total construction costs¹⁶

Furthermore, the contingency rate utilized in the TUMF program is significantly less than the industry norm for conceptual cost estimation purposes. Specifically, Caltrans *Project Development Procedures Manual* (July 2021) advocates for contingency rates of 30% to 50% of total costs to be used at the project feasibility (conceptual planning) phase of project development¹⁷, with contingency rates reduced to 10% for preliminary engineers cost estimates completed during project design¹⁸.

MSHCP

Section 8.5.1 of the Riverside County Integrated Project (RCIP) Multiple Species Habitat Conservation Plan (MSHCP) adopted by the Riverside County Board of Supervisors on June 17, 2003, states that “each new transportation project will contribute to Plan implementation. Historically, these projects have budgeted 3% - 5% of their construction costs to mitigate environmental impacts.” This provision is reiterated in the Western Riverside County Multiple Species Habitat Conservation Plan Nexus Fee Study Update Final Report (Economic & Planning Systems, Inc., October 2020) section “6. RCA Non-Fee Revenues” which states “The MSHCP forecast an array of revenue sources, in addition to fee revenue, supporting the conservation program. These sources were anticipated to total about 44 percent of the revenue for the program, including:

- Transportation funding – includes the Measure A sales tax which is authorized through 2039 and other transportation funding sources such as the Transportation Uniform Mitigation Fees (TUMF) charged on new development.” Table 23 Annual Non-Fee Revenue Projection in this section indicates that an average of \$950,000 in MSHCP revenue was derived annually from TUMF during the three years from FY16/17- 18/19 reflecting a TUMF contribution at 5% of construction costs consistent with the MSHCP as adopted in 2003. To clearly demonstrate compliance with the provisions of the MSHCP, the TUMF program will continue to incorporate a cost element to account for the required MSHCP contribution to mitigate the multi-species habitat impacts of constructing TUMF projects.

¹⁵ AASHTO Technical Committee on Cost Estimating (TCCE) *AASHTO Practical Guide for Estimating* (December 2011), Table 2.4. Preliminary Engineering Costs' Average Percentage Ranges (% of Construction).

¹⁶ AASHTO Technical Committee on Cost Estimating (TCCE) *AASHTO Practical Guide for Estimating* (December 2011), Section 2.2.3.2.3 Construction Engineering, “highway improvement projects in an urban environment”.

¹⁷ California Department of Transportation (Caltrans) Division of Design *Project Development Procedures Manual* (July 2021), Chapter 20 – Project Development Cost Estimates, Section 2 – Project Planning Cost Estimates, Article 2 Project Feasibility Cost Estimate, Contingencies.

¹⁸ California Department of Transportation (Caltrans) Division of Design *Project Development Procedures Manual* (July 2021), Chapter 20 – Project Development Cost Estimates, Section 3 – Project Design Cost Estimates, Article 4 Preliminary Engineer's Cost Estimate, Contingencies.

An amount equal to 5% of the construction cost for new TUMF network lanes, bridges and railroad grade separations will continue to be specifically included as part of TUMF program with revenues to be provided to the Western Riverside County Regional Conservation Authority (RCA) for the acquisition of land identified in the MSHCP. The relevant sections of the MSHCP document and the 2020 MSHCP Nexus Report are included in this Appendix as **Exhibits F-5** and **F-6**, respectively.

Similarly, an amount of 4% of the total TUMF eligible network cost is included as part of the TUMF program with revenues to be utilized by WRCOG to cover the direct costs to administer the program. The costs incurred by WRCOG include direct salary, fringe benefit and overhead costs for WRCOG staff assigned to administer the program and support participating jurisdictions, and costs for consultant, legal and auditing services to support the implementation of the TUMF program.

Table 4.1 summarizes the unit cost estimate assumptions used to develop the TUMF network cost estimate, including a comparison of the original TUMF unit cost assumptions and the current revised unit cost assumptions developed as part of the 2009 Update of the TUMF Nexus Study. Cost estimates are provided in year of original values as indicated.

EXHIBIT F-5

Riverside County Integrated Project (RCIP) Multiple Species Habitat Conservation Plan (MSHCP)

adopted by the Riverside County Board of Supervisors on June 17, 2003

Section 8.0 MSHCP Funding/Financing of Reserve Assembly and Management

8.0 MSHCP Funding/Financing of Reserve Assembly and Management



8.5 LOCAL FUNDING PROGRAM

The following local funding plan describes the local commitment for funding Reserve Assembly, Management, and Monitoring.

The local funding program includes funding from a variety of sources, including but not limited to, regional funding resulting from the importation of waste into landfills in Riverside County, mitigation for regional public infrastructure projects, mitigation for private infrastructure projects, mitigation for private Development, funds generated by local or regional incentive programs that encourage compact growth and the creation of transit-oriented communities, and dedications of lands in conjunction with local approval of private development projects.

The local funding program will fund the local portion of:

- Land acquisition
- Management
- Monitoring
- Adaptive Management
- Plan administration

8.5.1 Funding Sources

Local funding sources include funding from both public and private developers and regional entities in an effort to spread the financial burden of the MSHCP over a broad base. The mix of funding sources provides an equitable distribution of the cost for local mitigation under the MSHCP. In addition to equitably distributing mitigation for local projects, utilizing a mixture of funding sources will help ensure the long-term viability of the local funding program because a temporary decline in funding from one source may be offset by increases from another. The proposed local funding sources are described below and include:

- Local Development Mitigation Fees
- Density Bonus Fees
- Regional Infrastructure Project Contribution
- Landfill Tipping Fees

8.0 MSHCP Funding/Financing of Reserve Assembly and Management



- Other Potential New Revenue Sources
- **Local Development Mitigation Fees**

New Development affects the environment directly through construction activity and cumulatively through population bases that result from Development. Government Code Section 66000 et seq. allows cities and counties to charge new Development for the costs of mitigating the impacts of new Development. The Cities and County will implement a Development Mitigation Fee pursuant to the MSHCP; this fee will be one of the primary sources of funding the implementation of the MSHCP. The fee ordinance adopted by the Cities and the County will provide for an annual CPI adjustment based upon the Consumer Price Index for “All Urban Consumers” in the Los Angeles-Anaheim-Riverside Area, measured as of the month of December in the calendar year which ends in the previous Fiscal Year. There will also be a provision for the fee to be reevaluated and revised should it be found to insufficiently cover mitigation of new Development. A fee of approximately \$1,500 per residential unit (or an equivalent fee per acre) and \$4,800 per acre of commercial or industrial Development was used in the revenue projection shown in *Appendix B-05* of this document. The projected revenues from the Development Mitigation Fee are anticipated to be approximately \$540 million over the next 25 years. A nexus study is required to demonstrate that the proposed fee is proportionate to the impacts of the new Development.

➤ **Density Bonus Fees**

The New Riverside County General Plan creates a number of incentive plans that have the potential both to further the goals of the County’s General Plan and to facilitate the implementation of the MSHCP. *Section 8.4.2* above discusses the use of the Rural Incentive Program to aid in the Conservation of lands through non-acquisition means. An additional component of the Incentive Program enables developers to acquire the right to develop at an additional 25% increase in density by providing enhancements to their projects and by paying a “Density Bonus Fee.” The fee is anticipated to be \$3,000 – \$5,000 per additional unit. This program offers a significant incentive to developers when compared with the typical cost of creating a new buildable lot.

The Density Bonus program is new to Riverside County, and it is, therefore, difficult to project annual revenues. The Local Funding Program assumes that between 10% and 20% of the residential units built in the unincorporated County area will participate in the incentive program and that only 50% of the revenues of the program will be committed to the MSHCP, with the remaining portion staying in the local community in which the additional units are located to provide additional

8.0 MSHCP Funding/Financing of Reserve Assembly and Management



amenities that will help offset the greater density. Of the 330,000 units projected to be built over the next 25 years, 10% (or 33,000 units) are assumed to be built utilizing the Density Bonus Fee resulting in \$132,000,000 in revenues of which 50% (or \$66,000,000) will be allocated to the MSHCP.

➤ Regional Infrastructure Project Contribution

Regional infrastructure projects directly affect the environment not only through the effect they have on species and their Habitats, but also by facilitating continued new Development. It is appropriate, therefore, for regional infrastructure projects to contribute to Plan implementation . Four general categories of infrastructure projects have been identified:

- Transportation Infrastructure
- Regional Utility Projects
- Local Public Capital Construction Projects
- Regional Flood Control Projects

Transportation Infrastructure

The RCIP has identified the need for approximately \$12 billion in new transportation infrastructure to support the Development proposed for the next 25 years. Each new transportation project will contribute to Plan implementation . Historically, these projects have budgeted 3% – 5% of their construction costs to mitigate environmental impacts. The local funding program anticipates that more than one-half of the \$12 billion cost of contribution to acquisition of Additional Reserve Lands will be funded locally and will result in approximately \$371 million in contribution over the next 25 years as discussed below.

▶ Riverside County's ½ cent sales tax for Transportation

In 1988, Riverside County voters approved a measure to increase local sales tax by ½ cent to fund new transportation projects (Measure A). The sales tax measure is due to be reauthorized in 2002. Under the reauthorization, \$121 million will be allocated as local contribution under the MSHCP. (For further information on the sales tax measure, see *Section 13.5* of the MSHCP Implementing Agreement and *Appendix B-07* of this document).

8.0 MSHCP Funding/Financing of Reserve Assembly and Management



Regional Utility Projects

As Riverside County's population doubles over the next 25 years, new regional utility infrastructure will be required. Since the utilities are not Permittees under the MSHCP, they may choose to mitigate under the Plan or seek their own regulatory permits. In either case, their mitigation will be focused on the objectives of the MSHCP and will contribute to the local implementation funding. No estimate of the number of projects or the scope or costs is available at this time; consequently, no estimate of mitigation funding has been made. The Permittees expect that regional utility projects will contribute to the implementation of the MSHCP and provide an additional contingency should other revenue sources not generate the projected levels of funding or should implementation costs be higher than projected.

Local Public Capital Construction Projects

Local public capital construction projects may include construction of new schools, universities, City or County administrative facilities, jails, courts, juvenile facilities, parks, libraries, or other facilities that serve the public. These projects will be mitigated under the MSHCP and will utilize a per acre mitigation fee based on the fee then in place for private, commercial and industrial Development. No attempt has been made to estimate the number or magnitude of these projects. The Permittees expect that local public construction projects will contribute to the implementation of the MSHCP and provide an additional contingency should other revenue sources not generate the projected levels of funding or should implementation costs be higher than projected.

Regional Flood Control Projects

Flood control projects will receive coverage under the MSHCP for both new capital construction and for the maintenance of existing and new facilities. Preliminary estimates from the Riverside County Flood Control and Water Conservation District indicate that they will likely budget approximately \$15 M in projects annually. Based on using 3% of capital costs, the District would be expected to contribute approximately \$450,000 to \$750,000 annually to MSHCP implementation. Since many flood control projects serve existing developed communities and therefore have less impacts than projects adding capacity to serve new Development and may provide some conservation value especially in terms of Constrained Linkages, the District's contributions may average something below the 5% level on average.

8.0 MSHCP Funding/Financing of Reserve Assembly and Management



➤ **Landfill Tipping Fees**

Riverside County has utilized revenues from public and private landfills in Riverside County to generate funding for conservation and open space projects for over a decade. In 1990, the County utilized \$1 per ton tipping fee assessed all waste deposited in County landfills to fund the acquisition of the Santa Rosa Plateau and approximately \$260,000 annually to fund the operation of the County Park and Open Space Districts. More recently, the County has negotiated agreements with two private landfills in the County to commit \$1 per ton on all waste imported from outside Riverside County to Conservation within Riverside County.

El Sobrante Landfill

This privately owned landfill was permitted to expand its capacity to 10,000 tons per day in 2001. In approving the landfill expansion, the Riverside County Board of Supervisors authorized fifty cents per ton of the County's portion of the revenue from the landfill expansion to be applied to Conservation in addition to the \$1 per ton that was committed under the landfill agreement. The projection of the annual tonnage and revenue for Conservation included in *Appendix B-09* of this document reflects the \$1.5 per ton commitment to Conservation. Over the life of the landfill, 60 million tons of imported waste are allowed. Sixty million tons at \$1.5 per ton will generate \$90 million for Conservation. The Cash Flow Analysis in *Appendix B-10* of this document reflects the annual revenues from the El Sobrante Landfill.

County Landfills

The County Board of Supervisors, beginning in 1990, authorized \$1 per ton for all in-county waste deposited in County landfills to go toward habitat and open space Conservation. After adjusting for the debt service on the Santa Rosa Plateau acquisition and an annual commitment to the Park and Open Space District, there is a projected annual balance of \$400,000 that can be applied to additional Conservation under the MSHCP. *Appendix B-09* of this document includes a projection of tonnage from in-County waste at County landfills. The Cash Flow Analysis in *Appendix B-10* of this document reflects the annual revenues from the County landfills. Over the next 25 years, County landfills will contribute approximately \$10 million to the implementation of the MSHCP.

8.0 MSHCP Funding/Financing of Reserve Assembly and Management



Eagle Mountain

In 1997, the County approved the use of the old Kaiser mine at Eagle Mountain in eastern Riverside County as a regional landfill to serve primarily Los Angeles County. Subsequently, the Los Angeles County Sanitation District has acquired the rights to the Eagle Mountain Landfill and intends to begin operation of the landfill within the next decade. At this time, litigation is still pending that could prohibit the development of the landfill. The Development Agreement with the County would require the payment of \$1 per ton for Conservation if the landfill is developed. Conservation needs in the Coachella Valley would have first priority over the revenues from the Eagle Mountain Landfill; however, some portion of the revenues would be available to support Conservation needs in Western Riverside County. The Permittees expect that the Eagle Mountain Landfill will provide funding to support implementation of the MSHCP over the life of the MSHCP. However, no revenue from the Eagle Mountain Landfill has been projected in the funding program at this time. These potential revenues provide a contingency should other revenue sources not generate the projected levels of funding or should implementation costs be higher than projected.

➤ Potential New Revenue Sources

The County and Cities may levy assessments to pay for services that directly benefit the property on which the fee is levied. Under current law, a local election may be required to initially levy the assessment or to confirm the assessment if a protest is filed. No such assessments are currently projected for the MSHCP. As the MSHCP Conservation Area is developed, however, its value as open space and for recreation opportunities may lend itself to a local funding program for ongoing management and enhancement. In more urban areas, which Western Riverside County will be in 25 years, local voters routinely approve such funding programs.

Other revenue opportunities may be realized over the next 25 years. The County, Cities, and RCA will explore new revenue sources to support the acquisition of the MSHCP Conservation Area and its long-term management and enhancement. A goal of any new fee would be to spread a portion of the costs for the MSHCP across as broad a regional base as possible.

8.0 MSHCP Funding/Financing of Reserve Assembly and Management



**TABLE 8-5
LOCAL PUBLIC/REGIONAL FUNDING SOURCES**

Source Anticipated	\$ Range	Requirements to Implement	Responsible Party
Private Funding Sources:			
Cities and County Development Mitigation Fees	\$539.6M	Approval of County Ordinance Approval of City(ies) Ordinance	County Cities
Density Bonus Fees	\$66M	Approval of General Plan	County
Public Funding Sources			
Local Roads	\$121M	Approval of Measure A, local agreement on allocation	RCTC/County
Other Transportation	\$250M	% of new road construction	RCTC/County
Other infrastructure Projects	\$unknown	Project-by-project negotiation	County and Cities
El Sobrante Landfill	\$90M	In place	County
County Landfills	\$10M	In place	County
Eagle Mountain Landfill	\$unknown	In place pending start-up	County
New Regional funding	\$unknown	Voter approval	County and Cities
TOTAL LOCAL FUNDS	\$1,076.6M		

8.6 ADEQUACY OF FUNDING

The Permittees and the Wildlife Agencies will annually evaluate the performance of the funding mechanisms and, notwithstanding other provisions of the MSHCP, will develop any necessary modifications to the funding mechanisms to address additional funding needs. Additionally, this annual evaluation will include an assessment of the funding plan and anticipate funding needs over the ensuing 18 months for the purpose of identifying any potential deficiencies in cash flow. If deficiencies are identified through this evaluation, then the Permittees and the Wildlife Agencies will develop strategies to address any additional funding needs consistent with the terms and conditions of the MSHCP.

EXHIBIT F-6

**Western Riverside County Multiple Species Habitat Conservation Plan Nexus Fee Study
Update Final Report
Economic & Planning Systems, Inc., October 2020**

The Economics of Land Use



Final Report

Western Riverside County Multiple Species Habitat Conservation Plan Nexus Fee Study Update

Prepared for:

Western Riverside County Regional Conservation Authority

Prepared by:

Economic & Planning Systems, Inc.

October 2020

*Economic & Planning Systems, Inc.
1330 Broadway
Suite 450
Oakland, CA 94612
510 841 9190 tel*

*Oakland
Sacramento
Denver
Los Angeles*

www.epsys.com

EPS #171034

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1. INTRODUCTION AND KEY FINDINGS

This Updated Nexus Study (2020 Nexus Study) provides the technical justification for changes to the Local Development Mitigation Fee schedule that applies to Local Permittee participants in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan). These changes are necessary to ensure adequate funding of the obligations of the Local Permittees under the MSHCP and the associated Incidental Take Permit and Implementing Agreement. The resulting increased fee revenues will support the continued implementation of the MSHCP and the streamlining of endangered species incidental take permitting for new Western Riverside County development provided under the MSHCP. This Nexus Study is consistent with the requirements of California Government Code 66000 et seq. (the Mitigation Fee Act) that requires specific findings (as well as administration and implementation procedures) for “any action establishing, increasing, or imposing a fee as a condition of approval of a development project by a local agency.”

Background

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan), originally adopted in 2004, is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on the conservation of species and their associated habitats in Western Riverside County. The MSHCP was developed in response to the need for future growth opportunities in Western Riverside County while addressing the requirements of the State and federal Endangered Species Acts. The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973 as well as a Natural Communities Conservation Plan under the NCCP Act of 2001. The MSHCP streamlines these environmental permitting processes by allowing the participating jurisdictions to authorize “take” of plant and wildlife species identified within the Plan Area. At the same time, Plan implementation provides a coordinated MSHCP Conservation Area and implementation program to preserve biological diversity and maintain the region’s quality of life.

The MSHCP and the associated Implementing Agreement and Incidental Take Permit collectively determine a set of conservation actions that must be taken to meet the terms of the Incidental Take Permit and benefit from the regulatory streamlining and other benefits of the MSHCP. This includes the identification of the responsible parties, including the responsibilities of the Local Permittees.¹ One of the key requirements of the MSHCP, Implementing Agreement, and Incidental Take Permit (consistent with the requirements of the federal Endangered Species Act) is the provision of adequate funding by Local Permittees to the Implementing Entity (the Western Riverside County Regional Conservation Authority²) to conduct their portion of the conservation actions identified in the MSHCP.

¹ Local Permittees include the Western Riverside cities, the County of Riverside, County Flood Control and Water Conservation District, County Regional Park and Open-Space District, County Department of Waste Resources, and Riverside County Transportation Commission.

² The Western Riverside County Regional Conservation Agency is a Joint Powers Authority established in 2004 to implement the MSHCP.

Section 8.0 of the MSHCP outlines the MSHCP funding/financing approach. It also identified best estimates of Plan implementation costs at the time of Plan adoption, including the local funding commitment that represents a portion of the overall land acquisition, management and monitoring, and Plan administration costs. The Local Funding Program included a mix of funding sources to provide “an equitable distribution of the cost for local mitigation under the MSHCP.” The proposed funding sources included Local Development Mitigation Fees (and land dedications), regional infrastructure project public contributions (including contributions to mitigate for transportation infrastructure, regional utility projects, local public capital construction projects, and regional flood control projects), and landfill tipping fees.

Participating cities and the County were each required to implement a Local Development Mitigation Fee under California Government Code Section 66000 et seq. (the “Mitigation Fee Act”) and supported by the separate “Final Mitigation Fee Nexus Study Report for the Western Riverside County Multiple Species Habitat Conservation Plan,” July 1, 2003 (Original or 2003 Nexus Study). The MSHCP funding chapter notes the need for frequent evaluations of the performance of the funding mechanisms and assessments of the funding plan and the need to make any necessary modifications to the funding mechanisms. The MSHCP also notes that the mitigation fee will need to be “reevaluated and revised should it be found to insufficiently cover mitigation of new development.”

In addition to the common practice of updating mitigation fees periodically to account for changing circumstances, the Western Riverside County Regional Conservation Authority (RCA) has determined that significant changes have occurred and/or circumstances have arisen that justify an update to the mitigation fees. These changes include, but are not limited to, the following:

- The need to acquire more land than originally forecast due to the lower than expected land dedication.
- The lower-than-expected levels of non-fee funding from local and regional funding sources.
- The lower than expected levels of residential development.
- The need to diversify land acquisitions away from a focus on the larger, more remote parcels to also acquiring parcels closer to urbanized areas, consistent with the reserve assembly requirements of the MSHCP.

Original and Existing Fee Schedule

All local jurisdictions participating in the MSHCP and obtaining coverage for public and private take in their jurisdictions were required to adopt and implement the 2004 Mitigation Fee Schedule through ordinance and resolution and then to pass through the fee funding (except for any additional administrative charges added by the jurisdictions) to the RCA to fund MSHCP implementation. The ordinances allowed for periodic inflationary increases based on the annual change in the Consumer Price Index for the Los Angeles-Anaheim-Riverside area. In 2018 the Bureau of Labor Statistics implemented a geographic revision, establishing Riverside as its own Core Based Statistical Area. As a result, Riverside was removed from the Consumer Price Index encompassing Los Angeles and Anaheim. Going forward, inflationary increases will be based on the annual change in the Consumer Price Index for the newly established Riverside-San

Bernardino-Ontario area. As outlined in the 2003 Nexus Study (Original Nexus Study), all new development in Western Riverside County is required to pay the mitigation fee.

Table 1 shows the original 2004 Local Development Mitigation Fee schedule and the current 2021 Fee Schedule that reflects periodic inflationary fee adjustments using the indexing process that collectively increased the fees by 35 percent between 2004 and 2020 (this was below the overall inflation index increase over this period).

Table 1 2004 and 2021 MSHCP Fee Schedule

Fee Category	2004 Fee per unit or per acre	2021 Fee per unit or per acre ³
Residential: Up to 8.0 dwelling units per acre (DUAC)	\$1,651	\$2,234
Residential: 8.0-14.0 DUAC	\$1,057	\$1,430
Residential: 14.0+ DUAC	\$859	\$1,161
Commercial (per acre)	\$5,620	\$7,606
Industrial (per acre)	\$5,620	\$7,606

Updated Mitigation Fee Schedules

This 2020 Nexus Study has estimated the increased fee level that would be required to provide sufficient revenues, based on the best available forecasts of future growth, to support the full implementation of the MSHCP, including the completion of all land acquisition and the establishment of the necessary endowment, by 2029 (Year 25 of Plan implementation).⁴ Because, as shown below, this would require a major increase in the fee levels, three other scenarios are also considered where different time extensions provide more time for land acquisition.⁵ These extensions allow for the costs of Plan implementation (including land acquisitions) to be spread across more development and, as a result, moderate the level of mitigation fee increase required. In addition, the longer extension scenarios require a pace of land acquisition that is more consistent with what has proven to be achievable. All of these fee

³ Note it is RCA procedure to refer to fees during, for example, Fiscal Year 2020/2021, as the 2021 fee. The 2021 fee became effective July 1, 2020, and applies for the fiscal year of 2020-21 (i.e., until June 30, 2021 when the 2022 Fee begins).

⁴ The MSHCP provided a 25-year period of the required land acquisition with the larger 75-year permit term. This is labelled the “No Extension” or “Baseline Scenario” in this Update Study.

⁵ The baseline scenario as well as the extension scenarios assume that all land acquisition as well as the full endowment will be completed/ established by the end of the specified implementation/ land acquisition period. Interest from the non-depleting endowment will fund all ongoing costs thereafter.

increases would be consistent with the Mitigation Fee Act and the MSHCP and associated Incidental Take Permit and Implementing Agreement.

The mitigation fee levels shown for each extension scenario are the fee levels required to cover the appropriate portion of the Local Permittee MSHCP implementation costs based on the best information available at this time. The revised mitigation fee levels reflect changes in estimated costs, expected levels of land dedication, and non-fee funding. Consistent with the MSHCP and Original Nexus Study, it is assumed that all new development in Western Riverside County will pay the mitigation fee because, as noted in the MSHCP, “new development affects the environment through construction activity and cumulatively through population bases that result from such development.”⁶ Importantly, the revised mitigation fee levels also reflect the decision to determine the mitigation fee that applies to different land uses on a consistent per gross acre basis. This approach is considered to provide a clear, consistent, and proportionate method for determining mitigation fees on new development.⁷ The 2020 Nexus Study does convert the overarching per gross acre fee into per unit residential fees for different density ranges; this conversion was conducted to provide implementation/administrative consistency for member jurisdictions.

Table 2 Updated MSHCP Implementation Costs and Per Acre Mitigation Fees

Fee Per Acre	No Extension	5-Year Extension	10-Year Extension	15-Year Extension
Net Cost	\$912,756,583	\$902,353,150	\$892,767,438	\$883,987,805
Acres of Development				
Residential	14,026	21,818	29,611	37,403
Nonresidential	<u>6,239</u>	<u>9,705</u>	<u>13,171</u>	<u>16,637</u>
Total	20,265	31,523	42,782	54,040
Mitigation Fee per Acre	\$45,041	\$28,625	\$20,868	\$16,358

Sources: Southern California Association of Governments; Western Riverside County RCA; Economic & Planning Systems, Inc.

⁶ Consistent with the Original Nexus Study and the technical analysis in this study update (and as described in more detail in the Fee Implementation Handbook), certain types of public improvements/ infrastructure projects will make mitigation payments calculated as a percent of total improvement cost. All projects are required to make a mitigation payment/contribution (except where exempted as specified in the Ordinance); where no mitigation payment process is specified, the project will pay the updated per acre mitigation fee.

⁷ This is the approach taken by the majority of regional Habitat Conservation Plans in California, including the Coachella Valley Multiple Species Habitat Conservation Plan mitigation fee.

As shown in **Table 2**, the required mitigation fee per gross acre of development varies substantially based on level of extension as follows:

- **No Extension.** Under the current structure, where all land acquisition must occur by the end of Year 25 of MSHCP implementation (2029), a mitigation fee of **\$45,041 per acre** of development would be required.
- **5-Year Extension.** With a 5-year extension, where all land acquisition must occur by the end of Year 30 of MSHCP implementation (2034), a mitigation fee of **\$28,625 per acre** of development would be required.
- **10-Year Extension.** With a 10-year extension, where all land acquisition must occur by the end of Year 35 of MSHCP implementation (2039), a mitigation fee of **\$20,868 per acre** of development would be required.
- **15-Year Extension.** With a 15-year extension, where all land acquisition must occur by the end of Year 40 of MSHCP implementation (2044), a mitigation fee of **\$16,358 per acre** of development would be required.

For residential development, the per gross acre fee is translated into per residential unit fees by density category to provide for a fee framework that is consistent with the current fee structure. The per residential unit fees are calculated by dividing the per gross acre fee by an assumed typical/ average density for each of the three density ranges (low, medium, and high).⁸ The full mitigation fee schedule (for each extension scenario) is shown in **Table 3**, including the per unit residential fees by density category and per gross acre fees for non-residential development. The typical/ average residential densities used to calculate the per-unit residential fees are the same as the density assumptions in the Original Nexus Study.⁹

⁸ For example, the \$3,635 per unit Residential – Low fee under the 15-year extension is derived by dividing the overall per gross acre mitigation fee of \$16,358 (shown in Figure 2) by the assumed typical/average density of Residential Low of 4.5 units/acre.

⁹ The Fee Implementation Handbook provides more specifics on how to determine a project's residential density and therefore the appropriate per unit residential fee that applies.

Table 3 Updated Mitigation Fee Schedule by Extension Scenario

Fee Per Unit	Current Fee 2021 ¹	No Extension	5-Year Extension	10-Year Extension	15-Year Extension
Residential - Low (Up to 8.0 DUAC) ^{2,3}	\$2,234	\$10,009	\$6,361	\$4,637	\$3,635
Residential - Medium (8.0-14.0 DUAC) ^{2,3}	\$1,430	\$4,170	\$2,650	\$1,932	\$1,515
Residential - High (14.0+ DUAC) ^{2,3}	\$1,161	\$1,846	\$1,173	\$855	\$670
Commercial / Industrial (per acre)	\$7,606	\$45,041	\$28,625	\$20,868	\$16,358

1. Western Riverside County Multiple Species Conservation. Local Development Mitigation Fee Schedule for FY 2020-21 (Effective July 1, 2020 – June 30, 2021), annually adjusted using the Consumer Price Index.

2. Per acre mitigation fees translated into per unit fees based on the following residential densities: for low density, 4.5 units per acre; for medium density, 10.8 units per acre; for high density, 24.4 units per acre, consistent with the assumptions used in Appendix E of the original Nexus Study.

3. DUAC stands for Dwelling Units per Acre.

Sources: Southern California Association of Governments; Western Riverside County RCA; Economic & Planning Systems, Inc.

Key Drivers of Fee Change

The change in Local Development Mitigation Fee is the result of a number of different contributing factors (“moving parts”), fully documented and detailed in **Chapters 2** through **7**. This Nexus Study is based on the most current information available including, for some inputs, recent years of experience from MSHCP implementation. The factors that have had the most significant effect on the Local Development Mitigation Fee calculations are summarized below.

1. Lower-than-expected land dedications substantially increase the Local Permittee habitat acquisition cost component of MSHCP implementation. The MSHCP assumed that 41,000 of the 97,000 acres (42 percent) to be conserved by Local Permittee action/funding would be provided at no cost through land dedication associated with development inside the Criteria Cells. Through the first sixteen years of Plan implementation, less than 1,000 acres of the Local Permittee habitat conservation obligations have been generated through these dedications. An additional 10,000 acres of land dedication requirements have been required as part of proposed developments that have yet to occur. Beyond the dedication associated with previously proposed projects, additional land dedication is not expected.¹⁰ As a result, the 2020 Nexus Study assumes the noted 10,000 acres of land dedication is formalized over the next eight years (an average annual land dedication of 1,250 acres per year) prior to the end of the current land acquisition period. No additional land dedication is assumed, even if the acquisition period is extended. As a result, at the end of the current habitat acquisition period (Year 25 of Plan

¹⁰ In September 2016, the RCA revised its fee credit and waiver policy, limiting the likelihood of projects paying fees and dedicating land.

implementation), total land dedication is expected to represent about 11,000 acres and about 11 percent of the Local Permittee land conservation requirement. The RCA therefore needs to directly acquire an additional 30,000 acres of land relative to the expectations of the Original Nexus Study.

- 2. Lower than expected regional infrastructure public contributions have reduced the non-fee funding available, increasing the costs to be funded through the mitigation fee.** The MSHCP assumed a substantial level of funding from regional infrastructure project public contributions, including transportation infrastructure, regional utility projects, local public capital construction projects, and regional flood control projects, as well as from landfill tipping fees. While the Measure A sales tax has provided substantial funding as expected, other revenue sources, on aggregate, have provided (and are expected to continue to provide) substantially less funding than forecast in the 2003 Nexus Study. As a result, mitigation fees will need to cover about 91 percent of Local Permittee MSHCP implementation costs relative to the original assumption of about 56 percent.
- 3. The change towards a consistent “per gross developed acre” fee basis provides a more consistent approach for all land use development types.** The 2003 Nexus Study used an “Equivalent Benefit Unit” approach to distributing mitigation costs between different land use categories. This Nexus Study adjusts the fee calculation to the more commonly used per gross acre basis. Under this approach, the new Local Development Mitigation Fees are all based on one “across the board” per gross acre fee determination. Non-residential development then pays this per acre fee, while per unit residential fees by density category are derived from this common per gross acre fee.¹¹ This change evens out some of the prior differences in mitigation fee levels.
- 4. The estimates of average per acre land values have not changed substantially, so they have had a limited effect on the change in mitigation fees.** The original MSHCP implementation cost estimate was based on an average land value of about \$13,100 per acre. This was based on research on land transactions of parcels with different land use designations and sizes in 2001/2002. The land valuation analysis conducted for this Nexus Study estimated a planning-level land value of about \$14,300 per acre based on land transactions primarily in the 2014 to 2017 period (inflated to 2019-dollar terms). As a result, land value estimates have not changed substantially in nominal dollar terms since the Original Nexus Study. This estimated per acre land value is above the cost of most RCA transactions to date, though the average land values of future RCA land acquisition are expected to increase due to the increasing need to purchase more expensive land in “linkage” areas.

¹¹ Similar to the Original Nexus Study, all new development in Western Riverside County is required to pay the mitigation fee (or otherwise provide the necessary mitigation). The conversion from per gross acre to per unit fees for residential development is conducted to provide administrative continuity for member agencies.

Organization of Report

This Nexus Study includes several chapters. **Chapter 1**, this chapter, describes the purpose and need for this Nexus Study, the recommended changes in the Local Development Mitigation Fee, and the key drivers of these changes. **Chapters 2 through 7** provide the technical analysis that supports the updated fees and nexus findings. **Chapter 2** summarizes the purpose of and basis for the MSHCP, the conservation requirements of the MSHCP, and the financing strategy and approach developed to implement the MSHCP in 2004. **Chapter 3** describes the conservation achievements to date, identifies the remaining conservation requirements, and identifies expected land dedication. **Chapter 4** provides the development forecast used in the calculation of the updated mitigation fees. **Chapter 5** provides the estimates of MSHCP implementation costs, including land acquisition, management and monitoring, program administration, and endowment. **Chapter 6** describes the historical levels of non-fee revenues available to help fund Local Permittee MSHCP implementation costs. **Chapter 7** brings together the technical analysis in **Chapters 2 through 6** to estimate the updated 2020 Local Development Mitigation Fees. **Chapter 8** provides the nexus findings required under the Mitigation Fee Act as required to establish the updated fees. Finally, **Chapter 9** highlights some of the administration and implementation requirements under the Mitigation Fee Act, recognizing that the Fee Implementation Handbook provides more specific guidance to the RCA and its partner agencies on the implementation of the mitigation fee program.

2. MSHCP POLICIES, GOALS, AND FINANCING STRATEGY

MSHCP Purpose, Basis, and Goals

In response to the need to maintain future growth opportunities in Western Riverside County while addressing the requirements of the state and federal Endangered Species Acts, the County and the Riverside County Transportation Commission initiated the Riverside County Integrated Project (RCIP) in 1999. The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is one part of the RCIP that includes:

- **Updated County General Plan.** Addresses the required general plan elements such as land use, circulation, housing and open space, and conservation and includes programs to implement the MSHCP, enhance transit alternatives, and encourage development of mixed-use centers.
- **Community and Environment Transportation Acceptability Process.** Identifies future transportation corridors in Western Riverside and provides needed environmental documentation to allow preservation of future right-of-ways.
- **MSHCP.** The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP or Plan) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on the conservation of species and their associated habitats in Western Riverside County. The MSHCP conserves vulnerable plant and animal species and their associated habitats in Western Riverside County and supports economic development.

The MSHCP was adopted in 2003 by the Riverside County Board of Supervisors. Subsequently, all of the Western Riverside cities, the County of Riverside, County Flood Control and Water Conservation District, County Regional Parks and Open-Space District, County Department of Waste Resources, Riverside County Transportation Commission, California Department of Transportation, California Department of Parks and Recreation, California Department of Fish and Game, the US Fish and Wildlife Service and the RCA signed an Implementing Agreement for the MSHCP. The Implementing Agreement includes terms to ensure MSHCP-implementation, defines remedies and recourses should any of the parties of the Agreement fail to perform obligations, and provides assurances that, as long as the MSHCP is being implemented, the Wildlife Agencies will not require additional mitigation from the Permittees.¹²

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973 as well as a Natural Communities Conservation Plan under the NCCP Act of 2001. The MSHCP streamlines these environmental permitting processes by allowing the participating jurisdictions to authorize “take” of plant and wildlife species identified within the Plan Area. At the same time, Plan implementation provides a coordinated MSHCP Conservation Area and implementation program to preserve biological diversity and maintain the region’s quality of life.

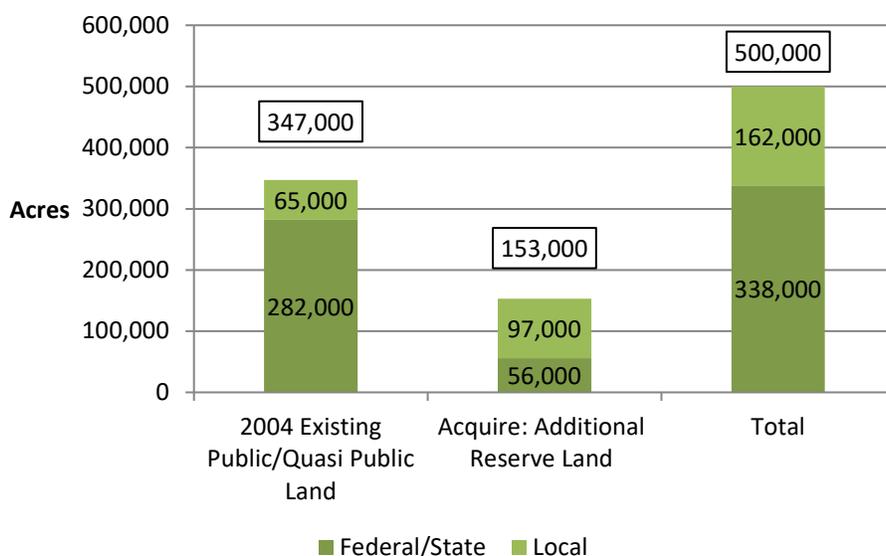
¹² The Wildlife Agencies include the US Fish and Wildlife Service and the California Department of Fish and Wildlife and the Permittees include all of the other parties to the Implementing Agreement.

The MSHCP and the associated Implementing Agreement and Incidental Take Permit collectively determine a set of conservation actions, and the associated responsible parties, that must be taken to meet the terms of the Incidental Take Permit and benefit from the regulatory streamlining and other benefits of the MSHCP. This includes the identification of the responsibilities of the Local Permittees.¹³

MSHCP Conservation Requirements

The goal of the MSHCP is to enhance and maintain biological diversity and ecosystems processes while allowing future economic growth. The MSHCP calls for an MSHCP Conservation Area of 500,000 acres and focuses on the conservation of 146 species.

Figure 1 State of Conservation in 2003: Conserved Land, Additional Reserve Land to be Acquired, and Total MSHCP Conservation Area Needed



As shown in **Figure 1**, when the MSHCP was adopted, existing public and quasi-public conservation lands covered 347,000 acres, leaving a need for 153,000 acres of land, called Additional Reserve Land (ARL), to meet the goals of the MSHCP (see **Figure 1**). The MSHCP specifies that responsibility for the conservation of the 153,000-acre Additional Reserve Lands is shared by the local development process (97,000 acres) and state and federal purchases (56,000).

¹³ Local Permittees include the Western Riverside cities, the County of Riverside, County Flood Control and Water Conservation District, County Regional Park and Open Space District, County Department of Waste Resources, and Riverside County Transportation Commission.

Table 4 MSHCP Goals by Area Plan

Area Plan	Total Area of Criteria Cells	Low End of Goal	High End of Goal	Midpoint
Cities of Riverside and Norco	1,756	90	240	165
Eastvale	665	145	290	220
Elsinore	28,946	11,700	18,515	15,110
Harvest Valley / Winchester	820	430	605	515
Highgrove	1,452	345	675	510
Jurupa	5,476	890	1,870	1,380
Lake Mathews / Woodcrest	11,673	3,215	5,470	4,340
Lakeview / Nuevo	14,682	6,650	10,235	8,445
Mead Valley	7,703	1,885	3,635	2,760
Reche Canyon / Badlands	26,000	10,520	15,610	13,065
REMAP	78,423	41,400	58,470	49,935
San Jacinto Valley	32,828	11,540	19,465	15,500
Southwest Area	66,076	22,500	36,360	29,430
Sun City / Meniffee Valley	2,059	1,120	1,585	1,355
Temescal Canyon	10,007	3,485	5,800	4,645
The Pass	22,652	8,540	13,925	11,230
Total	311,218	124,455	192,750	158,605

The MSHCP includes methods to determine whether the goals of the Plan are being met. One of the methods is measuring the extent to which conservation acquisitions are moving toward acquisition goals by each Area Plan.¹⁴ Area Plans are established in the County's General Plan and are used in the MSHCP as a common geographic unit in Western Riverside County. The MSHCP established low, high, and midpoint acquisition goals for each Area Plan based on biological needs. The midpoint acquisition goals for each Area Plan range from 165 to nearly 49,935 acres, as shown in **Table 4**. The midpoint goals sum to 158,605 which represents 5,605 acres more than are needed to fulfill the MSHCP goals. As a result, acquisitions in some Area Plans can fall below the mid-point targets while the total ARL can still achieve the 153,000-acre goal.

MSHCP Financing Strategy

One of the key requirements of the MSHCP, Implementing Agreement, and Incidental Take Permit (consistent with the requirements of the federal Endangered Species Act) is the provision of adequate funding by Local Permittees to the Implementing Entity (the Regional Conservation Authority) to conduct the conservation actions identified in the MSHCP as the responsibility of the Local Permittees.

¹⁴ Other geographic units include Rough Steps, city jurisdictions, and Area Plan subunits. For the purposes of this analysis, Area Plans have been selected as the primary unit of analysis because they are the middle-sized unit (smaller than Rough Steps and larger than Area Plan subunits) and have not changed over time (unlike jurisdictions, several of which have incorporated since the adoption of the MSHCP).

Section 8.0 of the MSHCP addresses “MSHCP Funding/Financing of Reserve Assembly and Management.” This section provides best estimates of Plan implementation costs at the time of Plan adoption, including the local funding commitment – the portion of Plan implementation costs that represents the Local Permittees’ portion of the overall land acquisition, management, monitoring, adaptive management, and Plan administration costs. Section 8.5 describes the Local Funding Program. The Local Funding Program included a mix of funding sources to provide “an equitable distribution of the cost for local mitigation under the MSHCP.” The proposed funding sources included Local Development Mitigation Fees, density bonus fees, regional infrastructure project public contributions (including transportation infrastructure, regional utility projects, local public capital construction projects, and regional flood control projects), and landfill tipping fees. Key components of the overall MSHCP implementation and funding strategy are highlighted below:

- The Regional Conservation Authority would implement the MSHCP with funding from different sources.
- The permanent protection of 97,000 acres in Additional Reserve Lands by Year 25 of the Plan (2029) would be achieved through direct purchase of habitat lands by the RCA using local funding and through the HANS dedication process.¹⁵
- Local funding sources would fund the ongoing management and maintenance costs of the local portion of the Additional Reserve Lands acquired through local funding (97,000 acres by end of acquisition period).
- Local funding sources would fund monitoring activities on the pre-Plan local conservation and all the new Additional Reserve Lands (500,000 acres by end of acquisition period).
- The permanent protection of 56,000 acres in Additional Reserve Lands by Year 25 would be achieved using state/federal funding sources or contributions.
- State and federal funding sources would fund the management and maintenance costs of the State/federal portion of the required Additional Reserve Lands.
- Local Development Mitigation Fees (on private development) would fund the Local Permittee MSHCP implementation costs that were not funded by other local/regional funding sources or public contributions for public development project mitigation.
- The overall permit period was set at 75 years. Once habitat acquisition was completed by Year 25, remaining funds along with newly created revenue sources were to be used to fund

¹⁵ Section 6.1.1 of the MSHCP describes the HANS process. The Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process applied to any property owner applying for a discretionary permit for land within a Criteria Area/Criteria Cell. Under the process, the County determined whether portions of the property are needed for conservation and then may send their evaluation to the RCA for Joint Project Review (JPR). During JPR, the project applicant negotiated the terms of the development and conservation of the project. The applicant also paid fees on the new development. This approach was refined when a new fee credit policy, adopted in 2016, provided for fee credits where appropriate lands are dedicated.

monitoring and management as well as to fund the establishment of an endowment to cover ongoing post-permit costs (beyond Year 75).

Importantly, the MSHCP funding chapter notes that frequent evaluations of the performance of the funding mechanisms and assessments of the funding plan will occur and that any necessary modifications to the funding mechanisms will be developed.

MSHCP Implementation Costs and Funding Sources

The original estimated costs and proposed funding sources were documented in the MSHCP and are summarized in **Table 5**. These were developed based on research and analysis conducted as part of MSHCP development.

As shown, Plan implementation costs over the first 25 years of implementation were estimated at about \$950 million in 2004-dollar terms. Key assumptions driving the implementation cost estimates included:

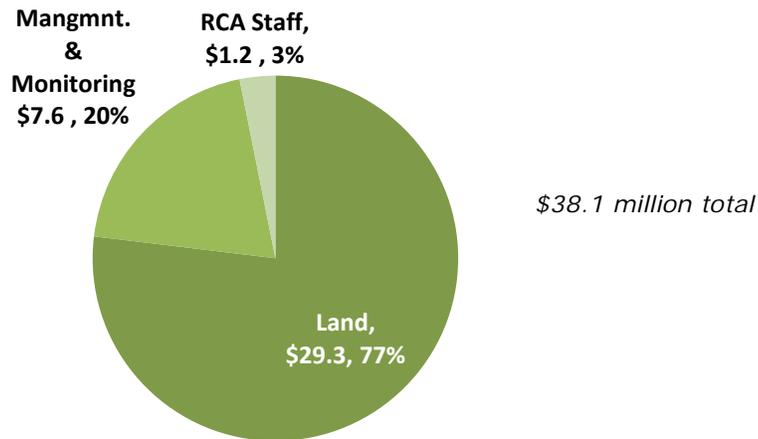
- **Dedications.** Direct acquisition using local funding sources would be required to acquire 56,000 acres, with 41,000 acres (or 42 percent) of the required local habitat protection coming through HANS dedication.
- **Land Cost.** Average land value of \$13,100 per acre for Additional Reserve Lands purchased by the RCA.
- **Management and Monitoring:** Management and monitoring costs included three key components as follows: Reserve Management, Adaptive Management, and Biological Monitoring.¹⁶
- **Program Administration.** RCA program administration costs would average about \$1.2 million each year in 2004 dollars during the 25-year period where land acquisition was required.
- **Cost Distribution.** Overall, land acquisition costs were estimated at 77 percent of total implementation costs, with management and monitoring at 20 percent, and program administration at 3 percent (see **Figure 2**).

¹⁶ See Chapter 5 of the MSHCP for a description of these activities.

Table 5 2004 Estimates: MSHCP Implementation Costs and Funding Sources

Item	Total for 2004 - 2028 (Years 1 - 25)	Average Annual	% of Total Cost/ Funding Need
Local Permittee Land Requirements			
Preservation Requirement	97,000 acres	3,880 acres	na
HANS Dedication	<u>41,000</u> acres	<u>1,640</u> acres	na
Local Permittee Acquisition	56,000 acres	2,240 acres	na
Local Permittee MSHCP Implementation Costs			
Land (1)	\$733,600,000	\$29,344,000	76.91%
Management & Monitoring	\$190,200,000	\$7,608,000	19.94%
RCA Staff	\$30,000,000	\$1,200,000	3.15%
Other Costs	na	na	na
Endowment	<i>not included</i>	<i>not included</i>	na
Total Costs	\$953,800,000	\$38,152,000	100.0%
Local Revenues			
Private Development Mitigation Fees	\$539,600,000	\$21,584,000	50.1%
Density Bonus Fees	\$66,000,000	\$2,640,000	6.1%
Regional Transportation Infra. (2)	\$250,000,000	\$10,000,000	23.2%
Local Roads (Measure A)	\$121,000,000	\$4,840,000 (3)	11.2%
Tipping Fees (4)	\$100,000,000	\$4,000,000	9.3%
Miscellaneous Revenues (5)	<u>\$0</u>	<u>\$0</u>	0.0%
Total Revenues	\$1,076,600,000	\$43,064,000	100%
<p>(1) Average land value per acre assumed to be \$13,100 per acre. (2) Public contributions at specified % of new road construction. (3) \$121 million to be provided over 10 years, so \$12.1 million annually over that period. (4) Includes \$90 million from El Sobrante Landfill and \$10 million from other County landfills. (5) Other potential revenues, including public contributions from other public projects, tipping fees from Eagle Mountain Landfill, and potential new voter-approved regional funding were noted but not estimated.</p>			
Source: Chapter 8 of MSHCP; Economic & Planning Systems.			

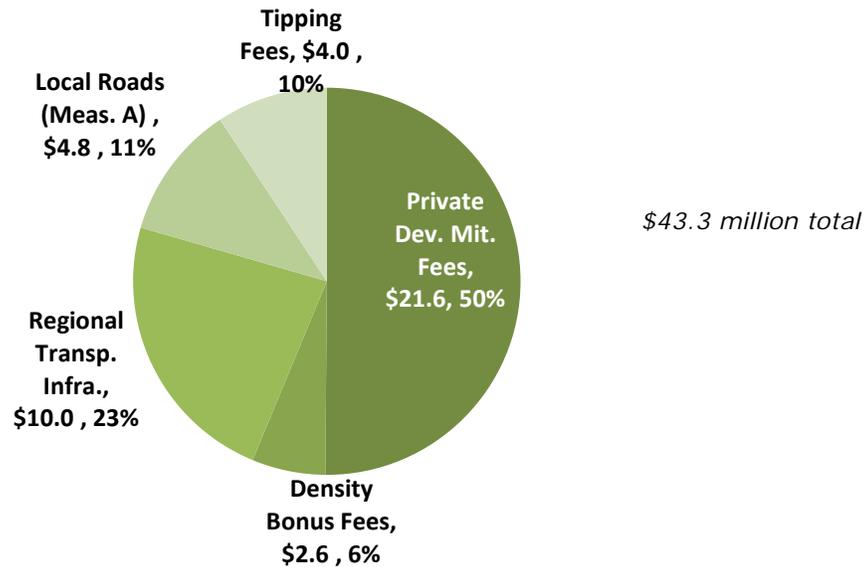
Figure 2 MSHCP Estimated Annual Costs in Millions, 2004 Dollars



As also shown in **Table 5**, MSHCP funding from local/regional sources was estimated to be about \$1.0 billion in 2004 dollars through Year 25, sufficient to cover the implementation costs over this period. Key assumptions driving the funding estimates included:

- **Measure A.** Measure A (local sales tax transportation funding measure) would provide \$121 million over 10 years in 2004-dollar terms.
- **Regional Transportation Funding.** Public contributions from regional transportation infrastructure projects would provide an average of \$10 million each year or \$250 million through Year 25.
- **Tipping Fees.** Landfill tipping fees would provide about \$100 million in revenue over 25 years, about \$4 million each year, primarily from the El Sobrante landfill.
- **Mitigation Fees.** Private development fees, including private development mitigation fees and density bonus fees, would generate over \$600 million over the first 25 years, about \$24 million annually.
- **Development Forecast and Participation.** The forecast of private development fees was based on a preliminary fee schedule and the forecast of 336,000 new residential units (13,440 units each year) and 371 acres each year of commercial and industrial development. All new development was assumed to pay the private development mitigation fee with a portion paying the density bonus fee.
- **Other Funding Options.** Potential additional funding might come through contributions from other local/regional public entities, other landfills, or new voter-approved funding initiatives.
- **Funding Distribution.** Overall, about 55 percent of the estimated funding was expected to be generated by private development fees, with 45 percent from other funding sources.

Figure 3 MSHCP Estimated Annual Revenues in Millions, 2004 Dollars



Development Mitigation Fees and Calculation

The MSHCP notes that “new development affects the environment directly through construction activity and cumulatively through population bases that result from Development.” As a result, the cities and County are required to implement a Local Development Mitigation Fee that was expected to represent one of the primary sources of funding for the implementation of the MSHCP. The MSHCP indicates that the Local Development Mitigation Fee will be adopted under California Government Code Section 66000 et seq. (the “Mitigation Fee Act”) that “allows cities and counties to charge new development for the costs of mitigating the impacts of new development.”

The MSHCP identified preliminary estimates of Local Development Mitigation Fees and indicated that these mitigation fees were expected to generate the majority of funding for Local Permittee obligations. The MSHCP noted that, under the Mitigation Fee Act, “a nexus study is required to demonstrate that the proposed fee is proportionate to the impacts of new development.” The Mitigation Fee Act also includes a number of reviewing and reporting requirements. The MSHCP also notes that the fee will need to be “reevaluated and revised should it be found to insufficiently cover mitigation of new development.”

A nexus study entitled “Final Mitigation Fee Nexus Study Report for the Western Riverside County Multiple Species Habitat Conservation Plan” was completed on July 1, 2003 (2003/Original Nexus Study). This nexus study conducted a detailed analysis of the costs of implementing the Plan, identified the Local Permittee funding obligations, determined the portion to be funded through the Local Development Mitigation Fee, and made the necessary nexus findings under the Mitigation Fee Act. The MSHCP and 2003 Nexus Study both indicated that all new development in the Western Riverside County Plan Area affects covered species and habitat and so the Local Development Mitigation Fees would apply to all new development in participating jurisdictions in Western Riverside County.

Mitigation Fee Schedule and Adjustments

All local jurisdictions participating in the MSHCP and obtaining coverage for public and private take in their jurisdictions were required to adopt and implement this mitigation fee schedule through ordinance and resolution and then to pass through the fee funding (minus any additional administrative charges) to the RCA to fund MSHCP implementation. Indexed-increases based on the annual change in the Consumer Price Index for the Los Angeles-Anaheim-Riverside area were provided for in the ordinances to allow modest adjustments in mitigation fees to respond to inflationary cost increases. Due to the geographic revision implemented by the Bureau of Labor Statistics, going forward indexed-adjustments will be based on the annual change in the Consumer Price Index for the Riverside-San Bernardino-Ontario area.

Table 6 shows the original 2004 Local Development Mitigation Fee schedule and current 2021 Fee schedule that reflects periodic inflationary fee adjustments using the indexing process.

Table 6 2004 and 2021 MSHCP Fee Schedule

Fee Category	2004 Fee per unit or per acre	2021 Fee per unit or per acre
Residential: Up to 8.0 dwelling units per acre (DUAC)	\$1,651	\$2,234
Residential: 8.0-14.0 DUAC	\$1,057	\$1,430
Residential: 14.0+ DUAC	\$859	\$1,161
Commercial (per acre)	\$5,620	\$7,606
Industrial (per acre)	\$5,620	\$7,606

3. HABITAT PROTECTION TO DATE AND FUTURE CONSERVATION SCENARIO

The RCA has achieved substantial levels of habitat protection to date using the funding sources established and the associated variable flows of incoming revenues. The level of habitat protection achieved, because of lower levels of funding and land dedication than expected, has however fallen behind the pace of protection forecast in the Original Nexus Study. This chapter summarizes the achieved protection to (1) establish both the scale of future acquisitions required to meet the overall Additional Reserve Land (ARL) goals, (2) consider the annual pace of habitat protection through acquisitions and dedications in absolute terms and relative to the original MSHCP forecasts, and (3) inform the development of the Conservation Scenario that forms the baseline (project description) for estimating future MSHCP implementation costs and associated funding requirements and updated mitigation fees.

Habitat Protection Accomplishments Through 2019

Between the start of the MSHCP program and the end of 2019, the most recent full calendar year, about 40 percent of the 153,000-acre ARL target has been achieved, totaling almost 62,000 acres in acquisitions, easements, or dedications (see **Table 7**).¹⁷ As shown of the 97,000 acres in Local Permittee ARL obligation about 40,200 acres had been protected by the end of 2019. Of the 56,000 acres in State/Federal ARL obligation, about 21,600 acres have been protected to date.

Table 7 Conservation Through End of 2019

Party	Need	Conserved 2000-2003	Conserved 2004 - 2019	Total Conserved 2000 - 2019	Remaining Need 2020-2043
Local	97,000	4,531	35,681	40,212	56,788
State + Fed	56,000	12,408	9,200	21,608	34,392
Total	153,000	16,939	44,881	61,820	91,180

Sources: Western Riverside County Regional Conservation Authority MSHCP Annual Reports; RCA information on 2019 purchases; Economic & Planning Systems, Inc.

Conservation Goals and Progress

The MSHCP anticipated that acquisition would take place for 25 years, through the end of 2029, with 97,000 acres conserved through local means and 56,000 acres conserved with State/federal funding. To achieve this goal, an average of 6,120 acres of conservation is required each year,

¹⁷ Note that while the MSHCP was adopted in 2004, certain conservation which took place between 2000 and 2003 was counted toward the MSHCP reserve.

including an average of 3,880 annually from local funding sources/dedications and 2,240 annually from State and federal conservation.

Figure 4 illustrates how steady progress would result in achievement of the ARL goals by 2029. **Figure 5** shows actual progress toward the goals, through 2019. More than 21,000 acres have been conserved through State/federal means, and over 40,000 acres have been conserved through local actions. These totals sum to about 40 percent of the total ARL goal of 153,000 acres. As shown in **Figure 5**, with 16 years of the 25-year acquisition period completed, the ARL acquisitions have fallen behind the pace forecast in the Original Nexus Study. Protection through the end of 2019 represents 63 percent of the original forecast (65 percent for Local obligations and 60 percent for State/federal obligations). For the Local Permittee obligations, as discussed further below, the lower level of land dedication relative to the original forecasts account for much of the habitat protection gap that has emerged over the last 16 years.

Figure 4 MSHCP Conservation Goals, 2019 and 2029 Goals Highlighted

MSHCP Goals, 2019 and 2028 Highlighted

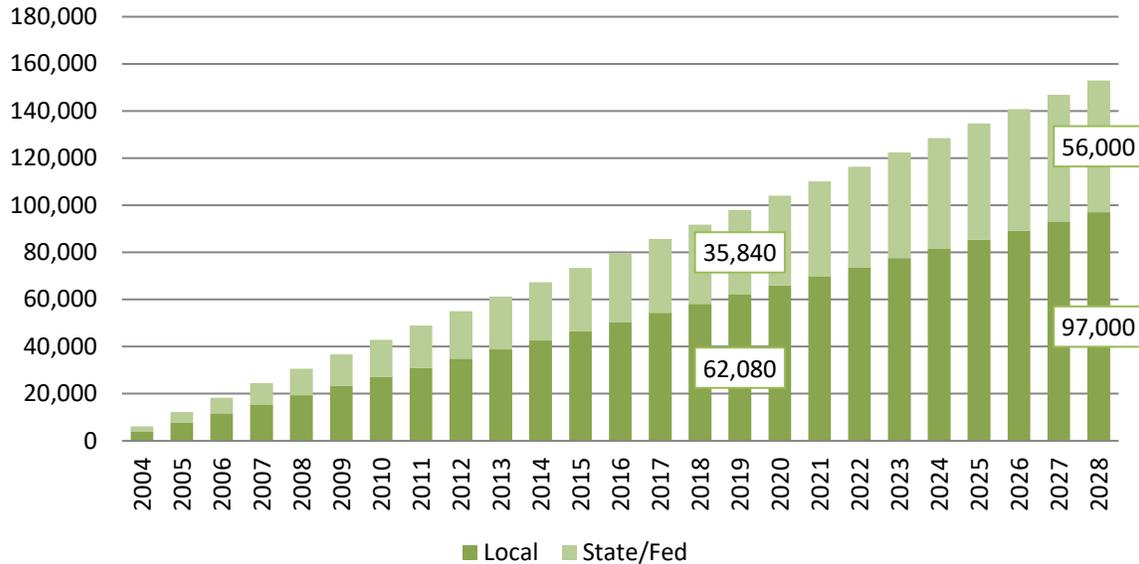
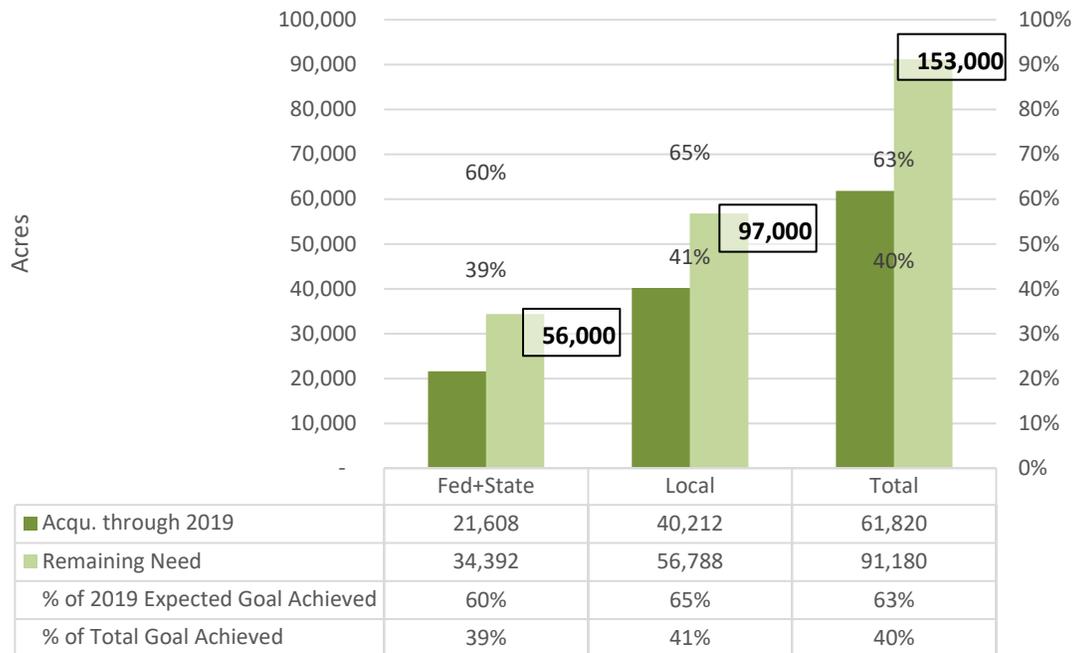


Figure 5 Progress Towards ARL Through End of 2019



Sources: Western Riverside County Regional Conservation Authority; Economic & Planning Systems, Inc.

Land Dedications

The MSHCP envisioned a conservation program where land and easements would be purchased by the RCA and land would be dedicated to the RCA through the development process.¹⁸ In addition, the potential for no-cost and low-cost donations for tax benefit purposes was also created. The MSHCP did not assume donations or conservation easement acquisitions as part of its financial analysis (this is appropriate given the limited number of such transactions). The MSHCP did, however, anticipate that 41,000 acres would be conserved through dedications, 56,000 acres through purchases on behalf of local permittees, and 56,000 acres through purchases conducted by or funded by federal and State agencies/sources for a total of 153,000 acres.

For the local portion of the goal (97,000 acres), this translates into about 42 percent of the goal conserved via dedications associated with the development review process—called Habitat Evaluation and Acquisition Negotiation Strategy (HANS)—and the other 58 percent purchased by the RCA from willing sellers. The level of dedication is a key assumption for the MSHCP implementation cost estimate as each acre dedicated through HANS is one fewer acre which must be conserved through land acquisitions at market values.

The HANS process was established to apply to developments proposed within the Criteria Cells of the MSHCP Study Area. The Criteria Cells represent areas with high conservation values relative to the areas outside of the Criteria Cells. The HANS process was designed to indicate what conservation (dedication) may be needed from new development from a biological needs

¹⁸ This process is known as the Habitat Evaluation and Acquisition Negotiation Strategy (HANS).

perspective. Subsequent to that technical analysis, applicants could then proceed to the Joint Project Review (JPR) process during which the parties negotiate an implementation plan for the project, consistent with the HANS findings. The applicants would also pay mitigation fees on the actual development. To date, a modest amount of land (less than 1,000 acres) has been conserved via the HANS/JPR method compared to the 26,000 acres that was forecast to have occurred by this point in the MSHCP implementation.

While very little land has been dedicated to the RCA through HANS/JPR, several projects went through the HANS/JPR process and have agreements in place for dedication/conservation of lands, but the start date (if any) for these projects is unknown (i.e., may be far in the future). These projects cover about 35,000 acres in the Criteria Cells and, under the JPR agreements, have set aside about 30 percent of that total or about 10,000 acres for conservation/dedication.

The adoption of Resolution No. 2016-003 in September 2016 revised the RCA's fee credit and waiver policy. This resolution indicated that MSHCP fee credit should be provided in exchange for land that contributes to reserve assembly. As a result, after the adoption of this resolution, new development is not be expected to pay mitigation fees and dedicate land in the manner originally envisioned in the MSHCP limiting the likelihood of the types of dedications envisioned in the Original Nexus Study.

Future Conservation Scenario

This updated financial analysis, nexus study, and mitigation fees estimate require a base description of the additional habitat protection required. In subsequent chapters, cost estimates are developed in reference to, and in application to, this conservation scenario to develop the overall implementation costs and the associated funding required, both in aggregate and through time during the land acquisition period of the program. Four questions are of particular importance:

1. **Remaining Habitat Protection.** The amount of habitat protection required to meet the MSHCP requirements.
2. **Dedications.** The amount of land dedication assumed to occur through the HANS/JPR process over the habitat protection period and the associated amount of habitat that must be acquired.
3. **Time Frame.** The period over which habitat protection goals must be met.
4. **Land Characteristics.** The characteristics of the land to be protected to meet MSHCP requirements (e.g., goals by Area Plan, habitat cores and linkages etc., land use designations and parcel sizes).

The answers to question 1 are provided in the data above (see **Table 7**). The answer to question 4 is provided in the subsequent chapter on land costs, with illustrative answers coming from RCA data and GIS analysis. The answer to question 2 is addressed below and is based on information on accomplishments to date (described above), discussions with RCA staff, the current Fee Waiver and Credit Policy, and an assessment of realistic opportunities and expectations. Finally, question 3 raises the issue of whether an extension to the MSHCP land acquisition implementation period should be provided. As described below, three different

extension scenarios (5-, 10-, and 15-year extension scenarios) are evaluated, as well as the baseline, "No Extension Scenario," to indicate the outcomes under different scenarios.

Habitat Protection, Land Dedication, and Conservation Scenarios

As shown in **Table 8**, there is a total of about 91,200 acres of land protection still required to complete the land protection obligations under the MSHCP and to bring the Additional Reserve Lands to 153,000 acres. Of this, the State/federal requirements is for about 34,400 acres, while the Local Permittee requirement is for about 56,800 acres.

The experience of the last 16 years indicates that the MSHCP was overly optimistic in terms of land dedications, assuming that 41,000 acres would be dedicated to the RCA. As noted above, about 10,000 acres of potential future land dedication is associated with a range of previously proposed projects. Based on historical information on actual, dedications agreements on proposed projects, current RCA policy, and consultations with RCA staff, minimal additional dedication is expected or assumed. This analysis, therefore, assumes that the prior agreement concerning dedications, summing to about 10,000 acres, will be secured over the next eight years and prior to the end of the current habitat protection period. Even if the implementation period were extended, no extra land dedication is forecast to occur.

As a result, and as shown in **Table 8**, a total of about 46,800 acres of Additional Reserve Land acquisition is required by Local Permittees for MSHCP implementation once the forecast of dedications is incorporated. As shown in **Table 8**, the required average annual pace of habitat protection varies considerably under the different acquisition period extension scenarios, as described below: ¹⁹

- **Baseline/No Extension Scenario.** As currently structured, RCA is required to complete land acquisition by the end of Year 25 of Plan implementation in 2029. This provides nine (9) years to protect the 47,000 acres through direct land acquisition (distinct from the assumed dedications), an average annual acquisition pace of about 5,200 acres each year.
- **5-Year Extension.** With a 5-year extension to the acquisition period, the RCA would be required to complete land acquisitions by the end of Year 30 of Plan implementation in 2034. This provides fourteen (14) years to protect the 47,000 acres through direct land acquisition (distinct from the assumed dedications), an average annual acquisition pace of about 3,300 acres each year.
- **10-Year Extension.** With a 10-year extension to the acquisition period, the RCA would be required to complete land acquisitions by the end of Year 35 of Plan implementation in 2039. This provides nineteen (19) years to protect the 47,000 acres through direct land acquisition (distinct from the assumed dedications), an average annual acquisition pace of about 2,500 acres each year.

¹⁹ As a point of reference, the historical pace of Local Permittee-driven habitat protection has been somewhat above 2,000 acres each year with availability of funding being an important determinant of the pace of acquisition. The pace of State/federal-driven acquisition has averaged about 1,000 acres each year.

- **15-Year Extension.** With a 15-year extension to the acquisition period, the RCA would be required to complete land acquisitions by the end of Year 40 of Plan implementation in 2044. This provides twenty-four (24) years to protect the 47,000 acres through direct land acquisition (distinct from the assumed dedications), an average annual acquisition pace of about 2,000 acres each year.

Table 8 Required Acquisition Acres to Achieve ARL Goals

Entity/Item	Through 2019	2020-End of Acquisition Period	Years Remaining	Annual Conservation Acres Required	Total Acres
NO EXTENSION					
State/Federal	21,608	34,392	9	3,821	56,000
Local					
HANS Dedication (1)	715	10,000	9	1,111	10,715
Net Local Acquisition	39,497	46,788	9	5,199	86,285
Total Local Conservation	40,212	56,788	9	6,310	97,000
State/Federal + Local = ARL Goal	61,820	91,180	9	10,131	153,000
5 YEAR EXTENSION					
State/Federal			14	2,457	56,000
Local					
HANS Dedication	<i>See above</i>		14	714	10,715
Net Local Acquisition			14	3,342	86,285
Total Local Conservation			14	4,056	97,000
State/Federal + Local = ARL Goal			14	6,513	153,000
10 YEAR EXTENSION					
State/Federal			19	1,810	56,000
Local					
HANS Dedication	<i>See above</i>		19	526	10,715
Net Local Acquisition			19	2,463	86,285
Total Local Conservation			19	2,989	97,000
State/Federal + Local = ARL Goal			19	4,799	153,000
15 YEAR EXTENSION					
State/Federal			24	1,433	56,000
Local					
HANS Dedication	<i>See above</i>		24	417	10,715
Net Local Acquisition			24	1,950	86,285
Total Local Conservation			24	2,366	97,000
State/Federal + Local = ARL Goal			24	3,799	153,000
20 YEAR EXTENSION					
State/Federal			29	1,186	56,000
Local					
HANS Dedication	<i>See above</i>		29	345	10,715
Net Local Acquisition			29	1,613	86,285
Total Local Conservation			29	1,958	97,000
State/Federal + Local = ARL Goal			29	3,144	153,000

1. About 10,000 acres of potential future land dedication is associated with a range of previously proposed projects. Based on historical information on actual, dedications agreements on proposed projects, current RCA policy, and consultations with RCA staff, minimal additional dedication is expected or assumed beyond these agreements. This analysis, therefore, assumes that the prior agreements concerning dedications will occur with future dedications summing to about 10,000 acres. The precise timing of these dedications is uncertain, but are assumed to occur over the next eight years. Average annual numbers in this table are shown distributed across the full remaining acquisition period of each extension scenario.

Shading indicates acreage to be acquired with fee revenue.

Sources: Western Riverside County Regional Conservation Authority; and Economic & Planning Systems, Inc.

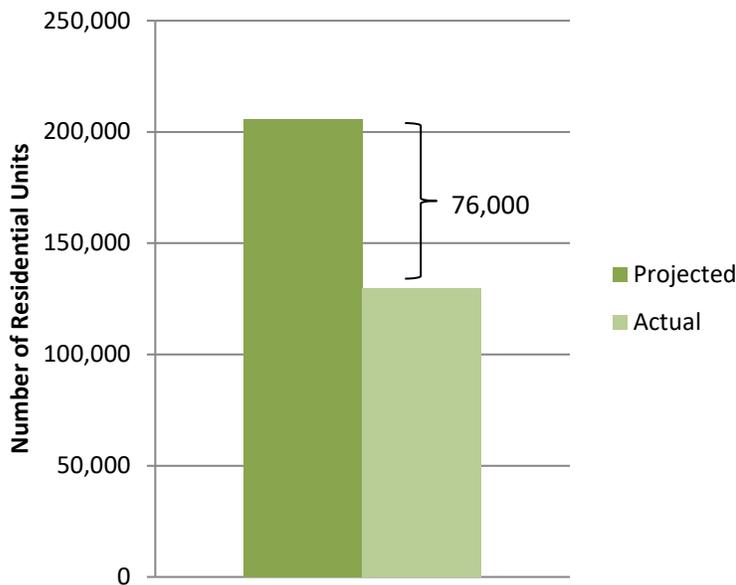
4. FORECASTS OF DEVELOPMENT, DEDICATION, FEE PAYMENT

Future development within Western Riverside County will both reduce land available for conservation while also serving as a primary funding mechanism for habitat acquisitions. This chapter identifies forecasts of future growth in Western Riverside County and develops an associated forecast of land development that is a key component of the fee calculation.

Historic Development and HCP Fees

The MSHCP anticipated that 13,000 to 14,000 residential units and about 370 commercial and industrial acres would be developed on average annually. Specifically, between 2005 and 2019, 206,000 residential units were expected in the Plan Area. A review of new units in the Plan Area indicates about 130,000 units were developed over the period (see **Figure 6**), about 37 percent below the forecast.²⁰ While the substantial volatility in the real estate market over the period (including the housing boom, deep recession, and modest recovery) may explain some of this difference, the slower pace of development means that fee revenues have been similarly constrained relative to the original revenue projections.

Figure 6 Residential Unit Development, Western Riverside County, 2005-2019



Source: California Department of Finance; MSHCP Projections

²⁰ Actual units developed have been derived from the California Department of Finance (DOF), Demographics Unit information through January 1, 2019. Note that the DOF reports data by city and for the entire Riverside County unincorporated area. Western Riverside's portion of the total unincorporated area has been derived based on the area's historic share of unincorporated County, taking into account the incorporations of new cities that occurred in Western Riverside County since MSHCP Plan adoption (Eastvale, Jurupa Valley, Menifee, and Wildomar).

Growth Projections

SCAG Forecasts in Context

The Southern California Association of Governments (SCAG) is a Metropolitan Planning Organization (MPO)²¹ representing six counties, 191 cities and more than 18 million residents. MPOs, such as SCAG are charged under California Senate Bill 375 with developing Sustainable Community Strategies (SCSs) as part of regional transportation plans. SCAG's SCS includes population, household, and job projections through 2040 by city and unincorporated area. SCAG consults with local governments within the region, including the Western Riverside Council of Governments (WRCOG) which represents Western Riverside County, to develop the projections. SCAG adopted the 2012-2040 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS) in 2016. The 2016 RTP/SCS forms the basis of the SCAG projections; EPS extrapolated an annual growth rate from the SCAG projections and, assuming consistent development trends through 2050, applied the rate in order to estimate development projections through 2050.

SCAG forecasts for the future, on an annualized basis, were compared with the MSHCP's original forecast along with historical information (when available) as described further below:

- **Residential Development Forecast.** **Figure 7** shows, for Western Riverside County, the annual residential unit count for SCAG projections through 2050, MSHCP projections through 2029, and residential units produced in Western Riverside County between 2005 and 2019. As shown, the SCAG projections suggest about 8,750 units each. This is similar to the average annual historic pace of growth between 2005 and 2019 of about 9,260 units, but well below the original MSHCP projections of about 13,400 units each year. Based on the similarity between the historical average and the SCAG forecast, the SCAG forecast is considered a reasonable basis for determining the future pace of residential development and associated residential land development (based on assumed densities of development).
- **Commercial Development Forecast.** The SCAG jobs forecast of about 15,000 jobs each year was converted into an annual gross amount of commercial/industrial development using the employment density and FAR assumptions used in the most recent Transportation Uniform Mitigation Fee (TUMF) update documents. As shown in **Figure 8**, this results in a forecast of about 690 acres of commercial/industrial land development each year (representing an overall average of about 21 jobs per acre of development), considerably above the original MSHCP projections of about 370 acres each year. The higher SCAG number, however, appears reasonable given recent and ongoing trends in Western Riverside County where substantial amounts of new logistics/distribution development have occurred covering substantial land areas and, as such, is considered reasonable as the basis of the future forecast of commercial/industrial land development.

²¹ Federal law requires that an urbanized area with a population of at least 50,000 be guided by a regional entity known as an MPO. California's Senate Bill 375 expands the role of the State's 18 MPOs to include regional plans that help the State reach its greenhouse gas reduction targets by encouraging compact development and new development near public transit.

Figure 7 New Housing Units per Year, SCAG and MSHCP Projections and Historic Production (2005-2019)

SCAG (2012-2040) and MSHCP Projections (2004-2029) and Historic Production (2005-2019)

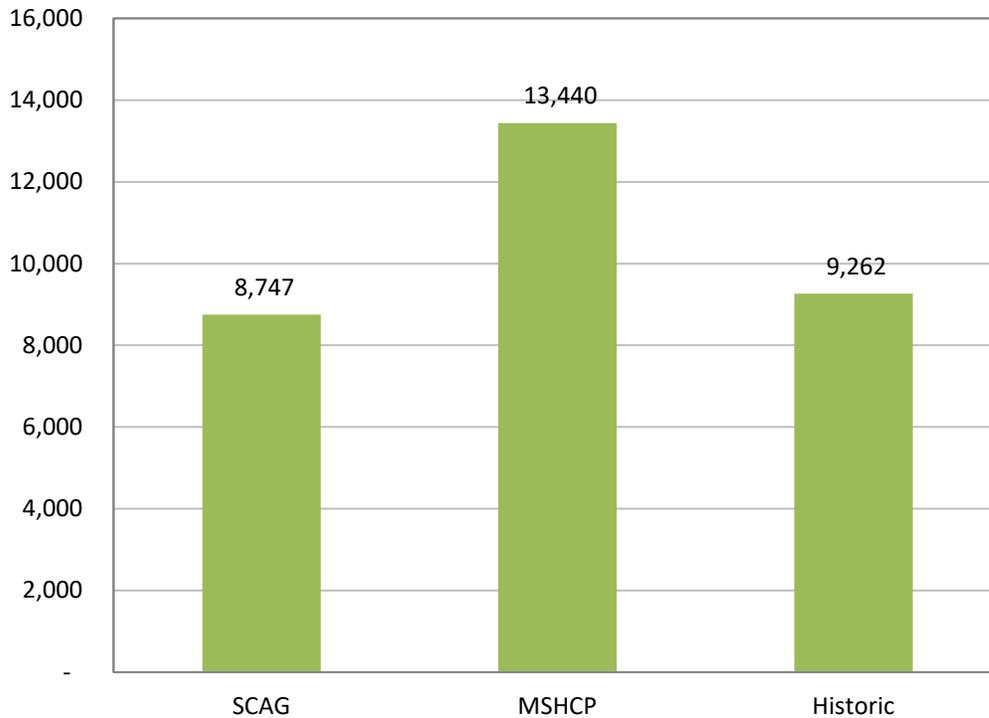
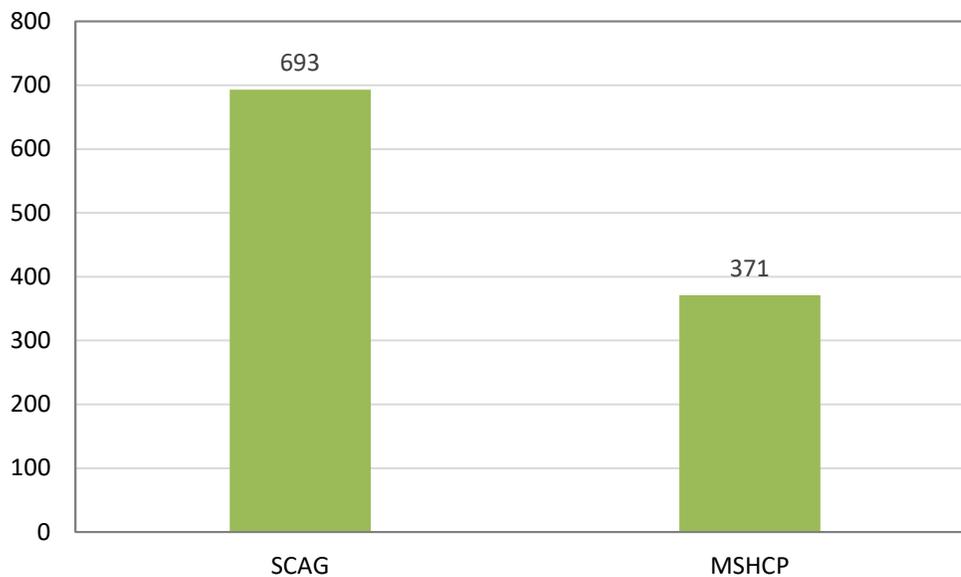


Figure 8 Newly Developed Commercial Acres per Year

SCAG (2012-2040) and MSHCP Projections



Note: SCAG job projections converted into acres by EPS

Forecasts for Fee Calculation

For this fee program update, the SCAG projections are considered a reasonable basis for forecasting future land development. Because all new development is expected to pay the mitigation fee, all of the forecasted household and job growth is converted into a land development forecast that is, in turn, used to calculate the mitigation fees. **Table 9** shows SCAG's overall projections for households and employment in Western Riverside County between 2012 and 2050, and **Table 10** shows the implied average annual land development rates, and, in turn, the overall level of residential and commercial/industrial land development that would be expected to occur through the end of the land acquisition period for each of the extension scenarios.²² As shown, all scenarios assume an overall average annual land development of 2,252 acres each year, including 693 acres in commercial/industrial land development and 1,558 acres in annual residential land development.²³

- **Baseline/No Extension Scenario.** Under the no extension scenario, a total of 20,265 acres of land development is expected to occur during the remaining Plan implementation period of nine (9) years and would pay the mitigation fees.
- **5-Year Extension.** Under the 5-year extension to the acquisition period, a total of 31,523 acres of land development is expected to occur during the remaining Plan implementation period of 14 years and would pay the mitigation fees.
- **10-Year Extension.** Under the 10-year extension to the acquisition period, a total of 42,782 acres of land development is expected to occur during the remaining Plan implementation period of 19 years and would pay the mitigation fees.
- **15-Year Extension.** Under the 15-year extension to the acquisition period, a total of 54,040 acres of land development is expected to occur during the remaining Plan implementation period of 24 years and would pay the mitigation fees.

²² Under the MSHCP, all new development is required to pay the mitigation fee and contribute to funding the implementation of the MSHCP except where specifically exempted in the Ordinance.

²³ The 1,558 acres of residential land development was derived based on the forecasted 8,747 residential units each year and assumptions concerning distribution by density category and an average density level. More specifically, consistent with the recent TUMF analysis assumptions, 70 percent of new residential units are assumed to be in the low density category (less than 8 units per acre) with an average of 4.5 units/acre, 20 percent are assumed to be the medium density category (8 to 16 units per acre) with an average of 10.8 units/acre, and 10 percent are assumed to be the high density category (over 16 units per acre) with an average of 24.4 units/acre. The unit per acre factors are consistent with those indicated in the Original Nexus Study. The overall implied average residential density is 5.6 units/gross acre.

Table 9 Projected Growth in Western Riverside County, through 2050

SCAG	Western Riverside MSHCP Plan Area	
	Households	Employment
2012	530,970	463,833
2040 Projection	775,882	869,792
2050 Projection (1)	863,350	1,014,777
New Households/Jobs Expected by 2050	332,380	550,944
Average Annual	8,747	14,499

(1) SCAG projections forecast growth through 2040. EPS assumes the annual growth rate from 2012 to 2040 remains constant through 2050 and applies the rate to an additional 10 years in order to project growth through 2050.

Sources: Southern California Association of Governments; Economic & Planning Systems, Inc.

Table 10 Projected Developed Acres in Western Riverside County, by Extension Scenario

SCAG	Western Riverside MSHCP Plan Area				
	Residential		Non Residential		Total
No Extension					
Proportionate Share 2020-2028 ¹	78,722	Households	130,487	Jobs	
New Development to Acres²					
Acres of New Development Through 2028	14,026	Acres	6,239	Acres	20,265 Acres
Acres per Year	1,558	Acres	693	Acres	2,252 Acres
5 Year Extension					
Proportionate Share 2020-2034 ¹	122,456	Households	202,979	Jobs	
New Development to Acres²					
Acres of New Development Through 2034	21,818	Acres	9,705	Acres	31,523 Acres
Acres per Year	1,558	Acres	693	Acres	2,252 Acres
10 Year Extension					
Proportionate Share 2020-2038 ¹	166,190	Households	275,472	Jobs	
New Development to Acres²					
Acres of New Development Through 2038	29,611	Acres	13,171	Acres	42,782 Acres
Acres per Year	1,558	Acres	693	Acres	2,252 Acres
15 Year Extension					
Proportionate Share 2020-2043 ¹	209,924	Households	347,965	Jobs	
New Development to Acres²					
Acres of New Development Through 2043	37,403	Acres	16,637	Acres	54,040 Acres
Acres per Year	1,558	Acres	693	Acres	2,252 Acres

(1) SCAG forecasts from the 2016 Report have been used for all cities in Western Riverside County. The projections for the entire unincorporated area in Riverside have been split into just the Western part of the County through a review of WRCOG's recent proportion of unincorporated growth, compared to the whole County.

(2) Conversion from household projections to residential acres of developed land is based on expected development mix and average residential density by land use type, with an average residential density of 5.6 DUAC. Similarly, conversion from job projections to nonresidential acres of developed land is based on distribution of jobs by workspace type and average employment density by land use type, with an average nonresidential density of 21 jobs per land acre. Residential density assumptions are based on data from the Census and California Department of Finance; Employment density assumptions are based on SCAG data.

Sources: California Department of Finance; US Census Bureau; Southern California Association of Governments; Economic & Planning Systems, Inc.

5. MSHCP IMPLEMENTATION COSTS

This chapter describes the analysis and assumptions that underpin the estimation of the total remaining MSHCP implementation costs in 2019 dollars. Key cost factors evaluated include land costs, management and monitoring costs, administration and professional services costs, and endowment costs. Together these cost components form the total MSHCP implementation costs. Because the duration allowed for land acquisition and endowment establishment affect several of these cost items, distinct total implementation cost estimates are provided for all scenarios (i.e., Baseline/ No Extension and the three extension scenarios).

Land Costs

Planning-level estimates of the per acre values associated with potential Additional Reserve Land (ARL) acquisitions are a critical input into the estimation of total land acquisition costs associated with Plan implementation. Land acquisition costs represented the majority of the original estimates of MSHCP implementation costs. This chapter provides planning-level estimates of per acre land conservation costs in 2019-dollar terms based on available information. In combination with assumptions concerning the characteristics of the Additional Reserve Lands to be acquired and potential levels of dedication, the per acre land value estimates drive the estimate of overall land acquisition costs.

Actual per acre habitat conservation costs may vary from the average planning-level estimates presented in this chapter for a number of reasons, including differences in the specific characteristics of the actual parcels acquired as well as fluctuations in economic, real estate, and land market conditions over time. Individual transactions will require appraisals to establish their value at the time of acquisition based on parcel characteristics and pertinent market conditions at the time of appraisal. Over time, per acre and overall cost estimates typically change for a number of reasons as discussed further in **Chapter 9**.

MSHCP/Original Nexus Study

The initial adoption of the mitigation fees was based on a nexus study completed in July 2003 that included a land valuation analysis that was completed in December 2002. The land valuation analysis assumed the acquisition of vacant and unentitled lands in the Criteria Cells. The land value analysis provided planning-level estimates of per acre land values by grouped land use designation and by Area Plan. Planning-level land value estimates were based on sales comparables. The land value estimates indicated per acre land values that were primarily driven by differentiation in land use category. The land use designation categories represent groupings of the broad number of land use designations present in the Study Area. **Table 11** summarizes the per-acre land value ranges and resulting averages. Based on this analysis, an overall weighted average of \$13,100 per acre was applied in the MSHCP financial sections in the Original Nexus Study.

Table 11 Per-Acre Land Value Estimates—2003 Dollars (2003 Nexus Study)

Land Use Designation	Value Range	Resulting Average *
Open Space	\$2,500 to \$10,000 per acre	\$ 8,000 per acre
Rural/Agricultural	\$5,000 to \$25,000 per acre	\$11,000 per acre
Community Development	\$20,000 to \$80,000 per acre	\$45,000 per acre
Overall (1)	\$2,500 to \$80,000 per acre	Varied (1)

* Per acre values rounded to the nearest 1,000.

(1) Reported overall average land value per acre depends on mix of land types. Number varies by documents, though \$13,100 per acre was overall value applied in the MSHCP financing sections.

Source: Original 2003 Nexus Study

RCA Experience to Date

Table 12 summarizes average RCA land acquisition costs to date. Including land purchased shortly before the MSHCP was adopted through the end of 2018, costs for Local Permittee land acquisitions summed to \$352.5 million in nominal dollar terms, an average of \$9,400 per acre. However, for the year 2018, about 2,100 acres were acquired at the higher average per acre cost of \$13,200 per acre.

Table 12 Local Conservation Costs Through 2018

Item	Pre-MSHCP through 2018	2018
Total Acres Acquired (1)	37,547	2,066
Total Cost (millions)	\$352.5	\$27.4
Cost per Acre (Nominal \$s)	\$9,400	\$13,200

(1) Includes all acres purchased; does not include acres conserved via easement.

Sources: Western Riverside County Regional Conservation Authority MSHCP Annual Report 2018; Economic & Planning Systems, Inc.

To date, the overall historical level of per acre land acquisition expenditures is well below the original 2004 per acre land value estimates. The cost of RCA acquisitions during this timeframe were kept relatively low by concentrating more on lower cost parcels (larger parcels in remote areas with limited development potential). In 2018, as in the future, the average cost per acre is expected to be higher than this historical average due to the characteristics of land still needing to be acquired.

New Land Value Analysis and Conclusions

New 2019 per acre land value estimates were developed based on recent historical transactions as reported in the sales comparables sections of appraisals conducted for RCA acquisitions. This data set provided a substantial inventory of over 150 land sales between 2012 and 2017 that supported conclusions concerning per acre land values by key land value characteristic.

Similar to the Original Nexus Study, land values were determined to be substantially affected by land use designation and by parcel size. Land values were developed for twelve different value categories based on combinations of three land use designations and four different size ranges.

Based on the land valuation data and detailed GIS analysis by RCA staff, parcels were divided into three groups of development potential based on their land use designation:²⁴

- **Open Space.** Low development potential land use designations included open space, rural mountainous, and rural residential.
- **Rural.** Medium development potential land use designations include agriculture and rural communities land use designations.
- **Community Development.** High development potential land use designations include all community development designations, including residential, non-residential, and other community development designations.

In addition to these three land use designation groupings reflecting different levels of development potential, parcels were also divided by parcel size. The land value information indicated a per acre value distinction between the following parcels sizes:

- Parcels less than 5 acres.
- Parcels between 5 and 20 acres.
- Parcels between 20 and 80 acres.
- Parcels over 80 acres.

Based on the analysis of the sales comparables, **Table 13** shows the planning level per acre land value by land use designation grouping/size range in 2017 dollars.

Table 13 Planning Level Per Acre Land Value Estimates by Category

Land Use Designation	Per Acre Land Value (\$ / Acre) ¹			
	Less than 5 Acres	5 - 19.99 Acres	20 - 79.99 Acres	80 + Acres
Open Space	\$11,761	\$5,091	\$3,949	\$1,866
Rural	\$33,363	\$11,553	\$8,337	\$5,531
Community Development	\$177,414	\$76,050	\$72,369	\$24,335

1. Most land sale comparables used for pricing are from 2013 to 2017 and were converted to 2017 dollars using BLS CPI adjustments for the Los Angeles-Riverside-Orange County area.

Sources: Economic & Planning Systems, Inc.

²⁴ RCA staff developed a consistent set of land use designation categories across different jurisdictions in the Study Area for the purposes of this study. These formed the basis of the development potential categories.

The average land value per acre for future RCA acquisitions is dependent on the different land values per acre as well as the expected distribution of future acquisitions. The actual land to be acquired is uncertain and is dependent on the availability of land through willing sellers. However, based on the conservation needs by Area Plan, the suitable land available for protection, as well as the specific linkages that must be created between the core reserve areas, RCA staff provided sufficient information for EPS to develop a general expression of parcels by characteristic to support the land value analysis. An illustration of the expected distribution of acres by land use designation and size range is provided in **Table 14**.

Table 14 Illustrative Distribution of Land Acquisitions by Land Use and Size

Land Use Designation	Conservation Scenario (Acres) (1)				Total
	Less than 5 Acres	5 - 19.99 Acres	20 - 79.99 Acres	80 + Acres	
Open Space	535	1,531	3,626	4,654	10,346
Rural	1,901	17,241	26,802	29,428	75,371
Community Development	<u>638</u>	<u>1,707</u>	<u>3,613</u>	<u>4,384</u>	<u>10,342</u>
Total Purchases by Acreage	3,074	20,479	34,041	38,466	96,059

1. Conservation scenario analysis was conducted in 2017 so overall acres acquired more than those required as of end of 2019.

Sources: RCA; Economic & Planning Systems, Inc.

Applying the per acre land values in **Table 13** to the illustrative land conservation distribution in **Table 14** provides an estimate of the aggregate land value, supporting the estimate of the average planning level land value per acre in 2017-dollar terms (see **Table 15**).

Table 15 Aggregate Land Value of Remaining Areas (2017 dollars)

Land Use Designation	Land Comparables by Acres				Total
	Less than 5 Acres	5 - 19.99 Acres	20 - 79.99 Acres	80 + Acres	
Open Space	\$6,292,633	\$7,795,633	\$14,319,467	\$8,682,942	\$37,090,674
Rural	\$63,411,345	\$199,183,566	\$223,437,526	\$162,777,034	\$648,809,470
Community Development	<u>\$113,198,910</u>	<u>\$129,817,405</u>	<u>\$261,456,200</u>	<u>\$106,682,740</u>	<u>\$611,155,254</u>
Total Cost of Purchases	\$182,902,887	\$336,796,603	\$499,213,192	\$278,142,716	\$1,297,055,399
% of Total	14%	26%	38%	21%	100%

1. This table is the average land value per acre multiplied by the Conservation Scenario. See **Table E-1** and **E-2**.

Sources: RCA; Economic & Planning Systems, Inc.

As shown in **Table 15**, the aggregate land value of the approximately 96,000 acres remaining to be protected as part of the MSHCP as of 2017 is estimated at about \$1.3 billion in 2017 dollars. This represents an average land value of about \$13,500 per acre. To convert this land value into 2019 dollars terms (similar to the rest of the analysis), EPS indexed the value to about \$14,300 per acre in 2019-dollar terms.²⁵

Other Costs—Administration, Management, and Monitoring

Program administration, reserve management, and reserve monitoring are required functions that require annual funding. The forecasts for each of these cost categories are described below.

Administration and Professional Service Costs

The Western Riverside County Regional Conservation Authority is responsible for implementing the MSHCP. Since 2004, RCA staff members have directed the acquisition, management, and monitoring of the local portion of the Additional Reserve Land (ARL) required by the MSHCP, monitored State and federal Public/Quasi-Public lands and the State and federal portions of the ARL, and undertook all of the administrative tasks associated with maintaining the permit.

Costs categorized in this fee study under MSHCP administration include all RCA staff costs and other costs like building rents and average expenditures on non-acquisition related professional services that are not anticipated to vary as the size of the ARL increases. The forecast for the acquisition period assumes that these costs will remain at approximately \$4.2 million in constant 2019 dollars, increasing with inflation but not increasing as the size of the ARL grows (see **Table 16**). This includes salaries and benefits of about \$2.3 million annually and about \$1.5 million in professional services, supplies, and other costs.

²⁵ Two years of inflation (2017 – 2019) based on by BLS CPI adjustment for Riverside-San Bernardino-Ontario Metro Area.

Table 16 Administrative and Professional Services Costs

Expenditures	RCA FY16/17- 18/19 3-Year Average of Actuals	CPI Adjusted to 2019\$ ¹
Total Salaries and Employee Benefits	\$2,219,261	\$2,288,495
Professional Services and Supplies		
Environmental		
Legal	\$394,320	\$406,621
Auditing, Accounting & Financial Services	\$101,717	\$104,891
GIS Services	\$10,000	\$10,312
Personnel Services	\$13,920	\$14,354
Real Estate Services	\$653,774	\$674,169
<u>Other Services</u>	<u>\$247,979</u>	<u>\$255,715</u>
Subtotal	\$1,421,710	\$1,466,062
Other Charges	<u>\$388,145</u>	<u>\$400,254</u>
Total	\$4,029,116	\$4,154,811

(1) Three year average CPI-adjusted by one year, the average of the annual CPI adjustments for the three years.

Sources: Western Riverside County Regional Conservation Authority; Bureau of Labor Statistics;

Management and Monitoring

Reserve Management

The MSHCP describes reserve management activities focused on maintaining and improving habitat conditions and ecosystem functions including habitat and landscape-based activities and species-specific activities. For the purposes of this analysis, the average per acre cost estimate for Reserve Management as reported in the RCA actual spending for FY 2018-19 has been used to inform cost projections through the full acquisition period. Because RCA staff and relevant contractors have indicated that the current spending on staff capacity is not adequate to accomplish necessary management with existing land holdings, additional staffing and associated expenditures have been added to the current reserve management expenditures. Specifically, three new full time equivalent (FTE) positions are added to the current 2019 spending for reserve management. Overall, the 2019 per acre reserve management cost of \$25.39 per acre was adjusted to \$32.70 per acre (2019 dollars) to account for three new mid-level park ranger FTEs. While as of the end of 2019 about 40,200 acres were under management, ultimately, reserve management activities will cover the entire 97,000 acres to be acquired by the RCA.

Biological Monitoring

The purpose of biological monitoring is to provide Reserve Managers with information and data upon which reserve management decisions will be made. According to the MSHCP, the monitoring program must provide “sufficient, scientifically reliable data for Reserve Managers to assess the MSHCP’s effectiveness at meeting resource objectives and achieving or maintaining a

healthy MSHCP Conservation Area in perpetuity.” Unlike the RCA’s reserve management activities which are limited to local ARL acres, the RCA will ultimately be responsible for monitoring all 500,000 acres of the reserve lands mandated under the MSHCP. The acreage currently being monitored totals roughly 408,000 acres. For the purposes of this analysis, the \$1.1 million annual cost estimate based on FY 2018-19 actual spending was used to inform cost projections through the full acquisition period. Because current staff capacity is not adequate to accomplish necessary biological monitoring with existing land holdings, to address the additional land acquisitions, two new full time equivalent (FTE) positions are added to the current 2019 spending for reserve monitoring. The 2019 per acre reserve monitoring cost of \$2.67 was adjusted to \$3.01 (2019 dollars) to account for two new entry-level biologist FTEs. (see **Table 17**). This constant dollar per acre cost was assumed to apply throughout the period of implementation.

Reserve Management and Biological Monitoring Costs

Table 17 summarizes estimated per acre costs for reserve management and monitoring in 2019 dollars. Applying these per acre costs (in 2019 dollars) to current acreage under management and monitoring projects results in annual costs of \$1.32 million and \$1.23 million, respectively. The annual reserve management and biological monitoring costs increase as new acquisitions occur.

Table 17 Management and Monitoring Anticipated Costs in 2004 and 2019 Dollars

Item	Actual FY 2019 Spending
Reserve Management¹	
Acres under Management	40,212
Existing Reserve Management Expenses	\$1,021,000
<u>Additional Staff Capacity Required³</u>	<u>\$294,000</u>
Total Reserve Management Expenses	\$1,315,000
\$/Acre	\$32.70
\$/Acre without additional staff capacity	\$25.39
Biological Monitoring²	
Acres being Monitored	408,820
Existing Biological Monitoring Expenses	\$1,092,000
<u>Additional Staff Capacity Required³</u>	<u>\$140,000</u>
Total Biological Monitoring Expenses	\$1,232,000
\$/Acre	\$3.01
\$/Acre without additional staff capacity	\$2.67

1. Reserve Management costs include Parks & Open Space contract fees, maintenance of motor vehicles, and HOA dues.
2. Biological Monitoring costs include SAWA contract fees, office and computer supplies, training, private mileage reimbursement, building rent, and rental vehicles/fuel.
3. Current staff capacity is not sufficient to accomplish necessary management and monitoring. An Expanded staff capacity scenario envisions adding 3 FTE mid-level park rangers to Reserve Management and 2 FTE entry-level biologists to Reserve Monitoring, with salaries and benefits of \$98,000 and \$70,000

Sources: Western Riverside County Regional Conservation Authority; and Economic & Planning Systems, Inc.

Endowment Funding

The overall permit period was set at 75 years, ending in 2079. To cover ongoing management and monitoring costs beyond the duration when mitigation fees will be collected, the establishment of a non-depleting endowment is required. In other words, the endowment must be sufficient such that expected average interest revenues (after inflation and transaction costs) can cover the ongoing costs associated with administration, management and monitoring in perpetuity. This section summarizes the estimated cost of establishing this endowment under the different scenarios. A key assumption is that the endowment must be fully established by

the end of the land acquisition period as it is assumed that no more mitigation fees will be collected at that time.²⁶

For the purposes of this analysis, we have assumed that habitat management and habitat monitoring costs continue in full, while administration costs are reduced by half following the end of the land acquisition period. All of these costs then continue in perpetuity. As a result and as shown in **Table 18**, the endowment is sized to cover the expected annual management and monitoring costs and 50 percent of the administration costs, totaling \$6.8 million (2019 dollars) once all lands have been acquired.

Table 18 Annual Implementation Cost Estimate (2019\$)

Cost Categories	Annual Cost by Last Year of Land Acquisition Period	Adjustment	Annual Post-Land Acquisition Cost
Ongoing Habitat Management	\$3,172,063	100%	\$3,172,063
Ongoing Habitat Monitoring	\$1,506,776	100%	\$1,506,776
Administration ¹	\$4,154,811	50%	\$2,077,406
Total	\$8,833,650		\$6,756,244

1. Administration includes salaries and benefits, accounting, auditing and reporting, contracts, etc.. Assumes less administration is needed following the land acquisition period; ongoing administrative needs include oversight, auditing and reporting, and board staffing.

Sources: Western Riverside County Regional Conservation Authority; and Economic & Planning Systems, Inc.

Consistent with many regional habitat conservation plans, the average annual net, real (allowing for inflation and institutional fees) interest rate is assumed to be three (3) percent.²⁷ Under all extension scenarios, the total required endowment funding is \$225.2 million. Because the longer extension periods provide more time for the accrual of interest revenues, the net endowment cost (that must be funded by mitigation fees) is different for each scenario. **Table 19** shows the consistent total endowment funding required by scenario as well as the different levels of aggregate endowment interest and associated net endowment funding requirement. For a detailed time-series accounting of endowment funding by extension scenario, see **Appendix II**.

²⁶ It is important to note that the RCA has collected a distinct set of endowment funds for situations where specific conservation activities are required over-and-above the core activities covered by this endowment calculation.

²⁷ This assumes that the implementing entity can use investment vehicles that may be not be typical for Riverside County.

Table 19 Endowment Funding (2019\$), by Extension Scenario

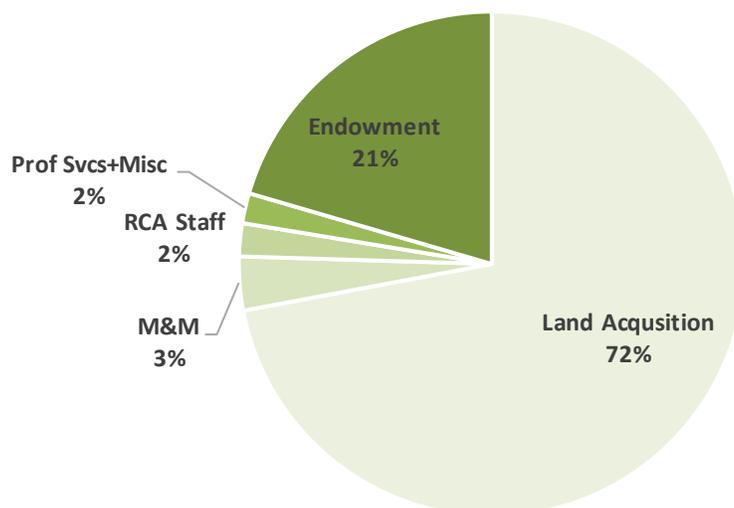
Item	No Extension	5-Year Extension	10-Year Extension	15-Year Extension
Total Endowment Funding Required	\$225,208,133	\$225,208,133	\$225,208,133	\$225,208,133
(Less) Endowment Interest	<u>(\$25,695,187)</u>	<u>(\$40,679,628)</u>	<u>(\$54,846,349)</u>	<u>(\$68,206,990)</u>
Net Endowment Funding Required	\$199,512,947	\$184,528,506	\$170,361,785	\$157,001,144

Sources: Western Riverside County Regional Conservation Authority; and Economic & Planning Systems, Inc.

Total Implementation Costs

Implementation costs include land costs, administrative and professional services expenses, management and monitoring costs, and the required net endowment funding. The remaining MSHCP implementation costs, as described in detail in the preceding sections, are all estimated in 2019 constant dollar terms. Under the Baseline/ No Extension scenario, as shown in **Figure 9**, the \$702 million in estimated land acquisition costs make up 72 percent of the total implementation cost of \$974 million. Administrative costs total about 4 percent of total costs, management and monitoring sum to 3 percent of total implementation costs, and the endowment constitutes 21 percent of total costs.

Figure 9 Comparison of Costs by Category



Total implementation costs vary by extension scenario. Land acquisition costs are the same for all scenarios. Administrative, management and monitoring costs increase the longer the acquisition period is extended, but the endowment funding required decreases the longer the

acquisition period is extended. As shown in **Table 20**, total implementation costs range from \$890 million to \$967 million depending on the extension period. Although total costs over time increase with longer extension periods the per-year implementation costs decrease with longer extension periods, as shown in **Table 21**. For a detailed time-series of all implementation costs excepting the endowment, see **Appendix I**.

Table 20 Total Implementation Costs (2019\$*), by Extension Scenario

Local Permittee MSHCP Implementation Costs	Total for 2020 - 2028 No Extension	Total for 2020 - 2033 5-Yr Extension	Total for 2020 - 2038 10-Yr Extension	Total for 2020 - 2043 15-Yr Extension
Land ¹	\$701,931,902	\$701,931,902	\$701,931,902	\$701,931,902
Management & Monitoring	\$33,582,193	\$51,646,790	\$69,711,387	\$87,775,983
RCA Staff ²	\$20,596,453	\$32,038,927	\$43,481,401	\$54,923,875
Professional Services and Supplies ²	\$13,194,561	\$20,524,873	\$27,855,185	\$35,185,497
Loan Repayment ³	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Other Costs ^{2,4}	\$3,602,285	\$5,603,554	\$7,604,824	\$9,606,093
Net Endowment Funding Required	<u>\$199,512,947</u>	<u>\$184,528,506</u>	<u>\$170,361,785</u>	<u>\$157,001,144</u>
Total Costs	\$974,420,341	\$998,274,552	\$1,022,946,483	\$1,048,424,494

1. Land value estimates at \$14,288 per acre in 2019 dollar terms.

2. RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.

3. RCA has "Other Long Term Obligations" totaling \$5 million, which was a loan received from the County in FY 2012/13 and is now payable in increments of \$1 million starting in FY 2018.

4. Includes rents and all other miscellaneous expenses.

NOTE: In some cases numbers may not perfectly sum due to rounding.

Sources: Western Riverside County RCA; Economic & Planning Systems, Inc.

* All costs are provided in constant 2019 dollar terms. Costs will change over time due to inflation and other factors. These changes will be addressed through the fee indexing/ updating process that will include automatic inflation-indexed fee changes annually based on the regional Consumer Price Index and periodic comprehensive updates to the Nexus Study.

Table 21 Average Annual Implementation Costs (2019\$), by Extension Scenario

Local Permittee MSHCP Implementation Costs	Average Annual			
	2020 - 2028 No Extension	2020 - 2033 5-Yr Extension	2020 - 2038 10-Yr Extension	2020 - 2043 15-Yr Extension
Land ¹	\$77,992,434	\$50,137,993	\$36,943,784	\$29,247,163
Management & Monitoring	\$3,731,355	\$3,689,056	\$3,669,020	\$3,657,333
RCA Staff ²	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495
Professional Services and Supplies ²	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062
Loan Repayment ³	\$222,222	\$142,857	\$105,263	\$83,333
Other Costs ^{2,4}	\$400,254	\$400,254	\$400,254	\$400,254
Net Endowment Funding Required	<u>\$22,168,105</u>	<u>\$13,180,608</u>	<u>\$8,966,410</u>	<u>\$6,541,714</u>
Total Costs	\$108,268,927	\$71,305,325	\$53,839,289	\$43,684,354

1. Land value estimates at \$14,288 per acre in 2019 dollar terms.

2. RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.

3. RCA has "Other Long Term Obligations" totaling \$5 million, which was a loan received from the County in FY 2012/13 and is now payable in increments of \$1 million starting in FY 2018.

4. Includes rents and all other miscellaneous expenses.

NOTE: In some cases numbers may not perfectly sum due to rounding.

Sources: Western Riverside County RCA; Economic & Planning Systems, Inc.

6. RCA NON-FEE REVENUES

MSHCP Forecast of Non-Fee Revenues

The MSHCP forecast an array of revenue sources, in addition to fee revenue, supporting the conservation program. These sources were anticipated to total about 44 percent of the revenue for the program, including:

- **Transportation funding** – includes the Measure A sales tax which is authorized through 2039 and other transportation funding sources such as the Transportation Uniform Mitigation Fees (TUMF) charged on new development. Note that the MSHCP envisioned up to \$121 million of Measure A money to the HCP.
- **Other infrastructure projects** – funding from this source was not quantified in the MSHCP but reflected the expectation that local public construction projects such as schools, administrative facilities, libraries, jails, and other projects like flood control and utility projects would mitigate the construction through the payment of a per-acre fee.²⁸ Since MSHCP adoption, the standard contribution has been three to five percent of total project costs.
- **Landfill contributions** – Landfill tipping fees have been used in the County since the 1990 for conservation programs. Under county permitting of landfills, the County has committed to divert portions of tipping fees to MSHCP implementation.

Table 22 and **Figure 10** summarizes the revenue forecasts under the MSHCP. Including the fee revenues, these sources totaled \$1.07 billion or an estimated average almost \$43 million per year for 25-years (in 2004 dollars). Excluding fee revenues, a total of \$18.84 million in annual revenues were forecast, including Measure A funding, \$10 million each year from other transportation projects, and \$4.0 million from land fill contributions.

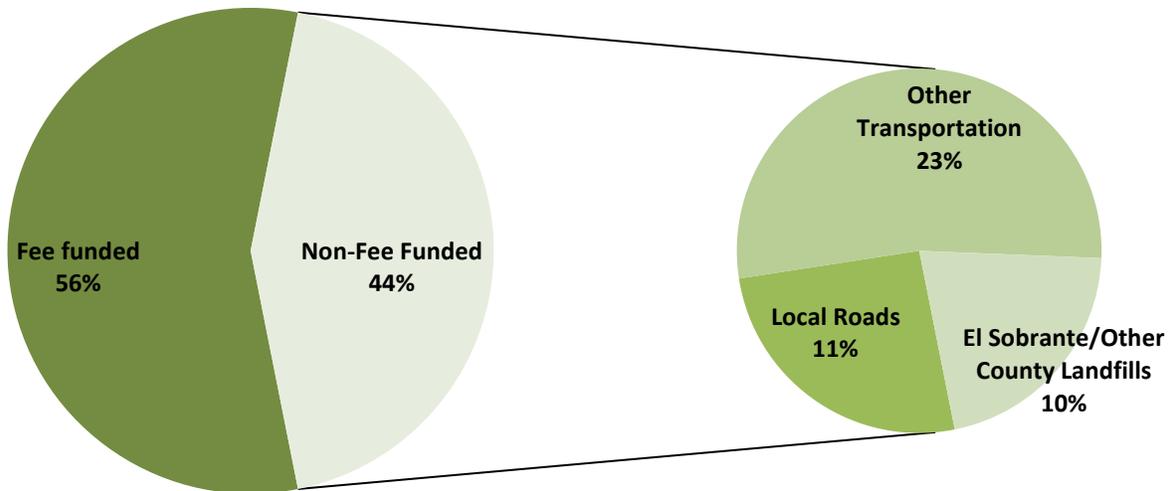
As described further below, at this point, the average annual funding from non-fee revenues sources are well below the MSCHP forecast. Measure A, a voter-approved ½ cent sales tax measure did provide substantial funding as envisioned (though is now fully used/ allocated) and, collectively, the other non-fee funding sources are well beyond what was originally envisioned.

²⁸ See Chapter 8.5.1 Funding Sources in the MSHCP.

Table 22 2004 MSHCP Anticipated Funding Sources

MSHCP Anticipated Funding Source	Estimate (millions)	% of Avg/Yr Total	(millions over 25 years)
Fee Funded Sources:			
Cities and County Development Mitigation Fees	\$539.6	50%	\$21,584,000
Density Bonus Fees	<u>\$66.0</u>	6%	<u>\$2,640,000</u>
Non-Fee Funded Sources	\$605.6		\$24,224,000.0
Public Funding Sources			
Local Roads (Measure A)	\$121.0	11%	\$4,840,000
Other Transportation	\$250.0	23%	\$10,000,000
Other infrastructure Projects	unknown	0%	\$0
El Sobrante Landfill	\$90.0	8%	\$3,600,000
County Landfills	\$10.0	1%	\$400,000
Eagle Mountain Landfill	unknown	0%	\$0
New Regional funding	<u>unknown</u>	0%	<u>\$0</u>
Non-Fee Funded Sources	\$471.0		\$18,840,000
Total, Local Funds	\$1,076.6	100%	\$43,064,000

Figure 10 2004 MSHCP Anticipated Funding Sources



New Forecast of Non-Fee Revenues

Non-fee revenues to the RCA are projected to be \$6.85 million annually in 2019 dollars. This estimate was derived from a line by line review of the major revenue items for a 3-year period from FY 2016-17 to FY 2018-19, projections by collection entities (e.g., TUMF revenue), and recent dynamics likely to affect the revenue source (e.g., greater diversion of trash to recycling

will likely reduce tipping fees). The estimates have been inflated from a three-year average to 2019 dollars, as detailed in **Table 23**.

Table 23 Annual Non-Fee Revenue Projection (2019\$s)

Non-Fee Revenue Item	RCA FY16/17- 18/19 3-Year Average of Actuals	CPI Adjusted to 2019\$
<u>Transportation Mitigation¹</u>		
TUMF Revenue-Developer Fees	\$950,000	\$979,637
Subtotal	\$950,000	\$979,637
<u>Tipping Fee</u>	\$3,865,728	\$3,986,326
<u>Public Project Mitigation</u>		
PSE Mitigation Fee ²	NA	\$500,000
Other Gov MSHCP Infrastructure	\$284,570	\$293,448
Other Gov MSHCP Civic Projects	\$93,629	\$96,550
Flood Control District	\$293,084	\$302,227
Subtotal	\$671,283	\$1,192,225
<u>Other Revenue</u>		
Interest and Other Sources	\$467,073	\$481,644
Rents	\$80,531	\$83,043
Joint Project Review Fees	\$124,762	\$128,654
Subtotal	\$672,365	\$693,341
Total Revenue	NA	\$6,851,529

1. All Measure A funding was provided prior to 2020 and the associated obligations have been met.

2. Participating Special Entities fees. This does not include Developer Mitigation Fees. These fees vary widely year over year, \$500,000 is used as an annual average per the recommendation of RCA staff.

Sources: Western Riverside County Regional Conservation Authority; Economic & Planning Systems, Inc.

7. MITIGATION FEE CALCULATION

The revised Local Development Mitigation Fee is based on a generally similar methodology to the Original Nexus Study that ensures the fee level is proportional to the development impact. This methodology looks at the remaining conservation requirements associated with Local Permittee obligations under the MSHCP and associated Incidental Take Permit and Implementing Agreement, determines the remaining Local Permittee implementation cost, subtracts out reasonable estimates of non-fee revenues and other contributions, to determine the overall fee-funding obligation. This obligation is then divided among the new development forecast to determine the required mitigation fee. In others words, the original 2003 and updated 2020 Local Development Mitigation Fee estimates are the outcome of the following formula (the 2003 and 2020 Nexus Studies differ in their process of allocating funding required between land uses):

1. Implementation Costs

minus

2. Non-Fee Funding

equals

3. Outstanding Funding Required

divided by

4. Development Forecast

equals

5. Local Development Mitigation Fee Schedule

Table 24 summarizes the estimated Net Implementation Costs, Expected Acres of Development, and the associated per gross acre mitigation fee. As shown, the average mitigation fee per gross acre decreases with each extension as similar levels of net implementation costs are spread across more development. **Tables 25** through **28** provide the detailed calculations that determine the total net MSHCP implementation costs shown in **Table 24**. As noted in **Chapter 1**, for residential development, the per-gross-acre fee is translated into a per-unit fee schedule for administrative continuity.

Table 24 MSHCP Implementation Costs and Per Acre Mitigation Fees

Fee Per Acre	No Extension	5-Year Extension	10-Year Extension	15-Year Extension
Net Cost	\$912,756,583	\$902,353,150	\$892,767,438	\$883,987,805
Acres of Development				
Residential	14,026	21,818	29,611	37,403
Nonresidential	<u>6,239</u>	<u>9,705</u>	<u>13,171</u>	<u>16,637</u>
Total	20,265	31,523	42,782	54,040
Mitigation Fee per Acre	\$45,041	\$28,625	\$20,868	\$16,358

Sources: Southern California Association of Governments; Western Riverside County RCA; Economic & Planning Systems, Inc.

Table 25 Recommended Fee Level—No Extension

Item	Total for 2020 - 2029 (Years 17 - 25)	9 yrs	Average Annual	% of Total Cost/ Funding Need
Local Permittee Land Requirements				
Preservation Requirement	56,788 acres		6,310 acres	na
(less) HANS Dedication	<u>10,000</u> acres		<u>1,111</u> acres	na
Local Permittee Acquisition	46,788 acres		5,199 acres	na
Local Permittee MSHCP Implementation Costs				
Land (1)	\$701,931,902		\$77,992,434	72.0%
Management & Monitoring	\$33,582,193		\$3,731,355	3.4%
RCA Staff (2)	\$20,596,453		\$2,288,495	2.1%
Professional Services and Supplies (2)	\$13,194,561		\$1,466,062	1.4%
Loan Repayment (3)	\$2,000,000		\$222,222	0.2%
Other Costs (2) (4)	\$3,602,285		\$400,254	0.4%
Net Endowment Funding Required	\$199,512,947		\$22,168,105	20.5%
Total Costs	\$974,420,341		\$108,268,927	100.0%
Offsetting Revenues (5) (exc. Private Development Mitigation)				
Public Project Mitigation (6)	\$10,730,025		\$1,192,225	1.4%
Transportation Mitigation (7)	\$8,816,731		\$979,637	1.1%
Tipping Fees	\$35,876,934		\$3,986,326	4.6%
Other Revenues (8)	<u>\$6,240,068</u>		<u>\$693,341</u>	<u>0.8%</u>
Total Selected Revenues	\$61,663,758		\$6,851,529	8.0%
Funding Required from Private Development Mitigation				
Net Cost	\$912,756,583		\$101,417,398	93.7%
Mitigation Fee Estimates (per gross acre of development)				
<u>Growth Projection:</u>				
Development	2020 - 2028		Annual	
Residential Units	79,000		8,778	
Residential Acres	14,026		1,558	
Non-Residential Acres	6,239		693	
Total Acres	20,265		2,252	
Mitigation Fee	\$45,041 per acre			

- (1) Land value estimates at \$14,288 per acre in 2019 dollar terms plus a 5% transaction cost.
 (2) RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
 (3) RCA has "Other Long Term Obligations" totaling \$2 million, which was a loan received from the County in FY 2012/13 and is now payable in increments of \$1 million over the course of two years.
 (4) Includes rents and all other miscellaneous expenses.
 (5) RCA Revenues are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
 (6) Includes Flood Control District, PSE mitigation payments, and other government MSHCP infrastructure & civic project revenues.
 (7) Includes TUMF fees.
 (8) Includes interest and other sources, rents, and joint project review fees.

Sources: MSHCP; RCA; Economic & Planning Systems, Inc.

Table 26 Recommended Fee Level—5-Year Extension

Item	Total for 2020 - 2034 (Years 17 - 30)	14 yrs	Average Annual	% of Total Cost/ Funding Need
Local Permittee Land Requirements				
Preservation Requirement	56,788 acres		4,056 acres	na
(less) HANS Dedication	<u>10,000</u> acres		<u>714</u> acres	na
Local Permittee Acquisition	46,788 acres		3,342 acres	na
Local Permittee MSHCP Implementation Costs				
Land (1)	\$701,931,902		\$50,137,993	70.3%
Management & Monitoring	\$51,646,790		\$3,689,056	5.2%
RCA Staff (2)	\$32,038,927		\$2,288,495	3.2%
Professional Services and Supplies (2)	\$20,524,873		\$1,466,062	2.1%
Loan Repayment (3)	\$2,000,000		\$142,857	0.2%
Other Costs (2) (4)	\$5,603,554		\$400,254	0.6%
Net Endowment Funding Required	\$184,528,506		\$13,180,608	18.5%
Total Costs	\$998,274,552		\$71,305,325	100.0%
Offsetting Revenues (5) (exc. Private Development Mitigation)				
Public Project Mitigation (6)	\$16,691,150		\$1,192,225	2.1%
Transportation Mitigation (7)	\$13,714,915		\$979,637	1.7%
Tipping Fees	\$55,808,564		\$3,986,326	6.9%
Other Revenues (8)	<u>\$9,706,772</u>		<u>\$693,341</u>	<u>1.2%</u>
Total Selected Revenues	\$95,921,402		\$6,851,529	11.8%
Funding Required from Private Development Mitigation				
Net Cost	\$902,353,150		\$64,453,796	90.4%
Mitigation Fee Estimates (per gross acre of development)				
<u>Growth Projection:</u>				
Development	2020 - 2033		Annual	
Residential Units (4.2 DU/Acres)	122,456		8,747	
Residential Acres	21,818		1,558	
Non-Residential Acres	9,705		693	
Total Acres	31,523		2,252	
Mitigation Fee	\$28,625 per acre			

- (1) Land value estimates at \$14,288 per acre in 2019 dollar terms plus a 5% transaction cost.
(2) RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
(3) RCA has "Other Long Term Obligations" totaling \$2 million, which was a loan received from the County in FY 2012/13 and is now payable in increments of \$1 million over the course of two years.
(4) Includes rents and all other miscellaneous expenses.
(5) RCA Revenues are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
(6) Includes Flood Control District, PSE mitigation payments, and other government MSHCP infrastructure & civic project revenues.
(7) Includes TUMF fees.
(8) Includes interest and other sources, rents, and joint project review fees.

Sources: MSHCP; RCA; Economic & Planning Systems, Inc.

Table 27 Recommended Fee Level—10-Year Extension

Item	Total for 2020 - 2039 (Years 17 - 35)	19 yrs	Average Annual	% of Total Cost/ Funding Need
Local Permittee Land Requirements				
Preservation Requirement	56,788 acres		2,989 acres	na
(less) HANS Dedication	<u>10,000</u> acres		<u>526</u> acres	na
Local Permittee Acquisition	46,788 acres		2,463 acres	na
Local Permittee MSHCP Implementation Costs				
Land (1)	\$701,931,902		\$36,943,784	68.6%
Management & Monitoring	\$69,711,387		\$3,669,020	6.8%
RCA Staff (2)	\$43,481,401		\$2,288,495	4.3%
Professional Services and Supplies (2)	\$27,855,185		\$1,466,062	2.7%
Loan Repayment (3)	\$2,000,000		\$105,263	0.2%
Other Costs (2) (4)	\$7,604,824		\$400,254	0.7%
Net Endowment Funding Required	\$170,361,785		\$8,966,410	16.7%
Total Costs	\$1,022,946,483		\$53,839,289	100.0%
Offsetting Revenues (5) (exc. Private Development Mitigation)				
Public Project Mitigation (6)	\$22,652,275		\$1,192,225	2.7%
Transportation Mitigation (7)	\$18,613,099		\$979,637	2.2%
Tipping Fees	\$75,740,195		\$3,986,326	8.9%
Other Revenues (8)	<u>\$13,173,476</u>		<u>\$693,341</u>	<u>1.5%</u>
Total Selected Revenues	\$130,179,045		\$6,851,529	15.3%
Funding Required from Private Development Mitigation				
Net Cost	\$892,767,438		\$46,987,760	87.3%
Mitigation Fee Estimates (per gross acre of development)				
<u>Growth Projection:</u>				
Development	2020 - 2038		Annual	
Residential Units (4.2 DU/Acres)	166,000		8,737	
Residential Acres	29,611		1,558	
Non-Residential Acres	13,171		693	
Total Acres	42,782		2,252	
Mitigation Fee	\$20,868 per acre			

- (1) Land value estimates at \$14,288 per acre in 2019 dollar terms plus a 5% transaction cost.
(2) RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
(3) RCA has "Other Long Term Obligations" totaling \$2 million, which was a loan received from the County in FY 2012/13 and is now payable in increments of \$1 million over the course of two years.
(4) Includes rents and all other miscellaneous expenses.
(5) RCA Revenues are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
(6) Includes Flood Control District, PSE mitigation payments, and other government MSHCP infrastructure & civic project revenues.
(7) Includes TUMF fees.
(8) Includes interest and other sources, rents, and joint project review fees.

Sources: MSHCP; RCA; Economic & Planning Systems, Inc.

Table 28 Recommended Fee Level—15-Year Extension

Item	Total for 2020 - 2044 (Years 17 - 40)	24 yrs	Average Annual	% of Total Cost/ Funding Need
Local Permittee Land Requirements				
Preservation Requirement	56,788 acres		2,366 acres	na
(less) HANS Dedication	<u>10,000</u> acres		<u>417</u> acres	na
Local Permittee Acquisition	46,788 acres		1,950 acres	na
Local Permittee MSHCP Implementation Costs				
Land (1)	\$701,931,902		\$29,247,163	67.0%
Management & Monitoring	\$87,775,983		\$3,657,333	8.4%
RCA Staff (2)	\$54,923,875		\$2,288,495	5.2%
Professional Services and Supplies (2)	\$35,185,497		\$1,466,062	3.4%
Loan Repayment (3)	\$2,000,000		\$83,333	0.2%
Other Costs (2) (4)	\$9,606,093		\$400,254	0.9%
Net Endowment Funding Required	\$157,001,144		\$6,541,714	15.0%
Total Costs	\$1,048,424,494		\$43,684,354	100.0%
Offsetting Revenues (5) (exc. Private Development Mitigation)				
Public Project Mitigation (6)	\$28,613,400		\$1,192,225	3.2%
Transportation Mitigation (7)	\$23,511,283		\$979,637	2.6%
Tipping Fees	\$95,671,825		\$3,986,326	10.7%
Other Revenues (8)	<u>\$16,640,181</u>		<u>\$693,341</u>	<u>1.9%</u>
Total Selected Revenues	\$164,436,689		\$6,851,529	18.4%
Funding Required from Private Development Mitigation				
Net Cost	\$883,987,805		\$36,832,825	84.3%
Mitigation Fee Estimates (per gross acre of development)				
<u>Growth Projection:</u>				
Development	2020 - 2043		Annual	
Residential Units	210,000		8,750	
Residential Acres	37,403		1,558	
Non-Residential Acres	16,637		693	
Total Acres	54,040		2,252	
Mitigation Fee	\$16,358 per acre			

- (1) Land value estimates at \$14,288 per acre in 2019 dollar terms plus a 5% transaction cost.
(2) RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
(3) RCA has "Other Long Term Obligations" totaling \$2 million, which was a loan received from the County in FY 2012/13 and is now payable in increments of \$1 million over the course of two years.
(4) Includes rents and all other miscellaneous expenses.
(5) RCA Revenues are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
(6) Includes Flood Control District, PSE mitigation payments, and other government MSHCP infrastructure & civic project revenues.
(7) Includes TUMF fees.
(8) Includes interest and other sources, rents, and joint project review fees.

Sources: MSHCP; RCA; Economic & Planning Systems, Inc.

8. MITIGATION FEE ACT (NEXUS) FINDINGS

Mitigation fees are utilized in California to finance public facilities necessary to mitigate impacts stemming from new development. In 1987, the California Legislature adopted the Mitigation Fee Act to provide a framework for the application and administration of such fees. Current prevailing practice among the majority of approved and permitted regional multiple-species Habitat Conservation Plans is that any habitat mitigation fees are to be adopted by the relevant jurisdictions (cities and Counties) consistent with the Mitigation Fee Act.²⁹ As discussed further in **Chapter 9**, the adoption of fees under the Mitigation Fee Act includes a number of auditing and reporting requirements.

The Mitigation Fee Act, defined in California Government Code Sections 66000 to 66025, requires all public agencies to document five findings when establishing or increasing a fee as a condition for new development. These findings were made when the Western Riverside County MSHCP Local Development Mitigation Fees were first justified and established.³⁰

This Chapter of the Western Riverside Habitat Conservation Plan Nexus Fee Study was prepared to describe how the proposed increase in the Local Development Mitigation Fee satisfies the five statutory findings required by the Mitigation Fee Act and is based on the appropriate nexus between new development and the imposition of a mitigation fee. The five statutory findings required for the establishment of a mitigation fee are summarized in the sections below and supported by the technical analysis in the prior chapters of this Study.

Purpose of Fee

Identify the purpose of the fee. (66001(a)(1))

The purpose of the Local Development Mitigation Fee is to contribute to the funding required to implement the MSCHP and, as a result, help maintain the incidental take permits for new private and public development in Western Riverside County under the federal and State Endangered Species Acts. Maintaining the incidental take permit is necessary to allow for future development, and without the development community paying for the cost of the MSHCP, individual applicants will need to apply independently for development approval under federal and State law if the project impacts a threaten or endangered species. The federal Endangered Species Act specifically requires that the applicant for incidental take permit “ensure that adequate funding for the plan will be provided.”³¹ In addition, the Local Development Mitigation Fee helps provide the regional benefit of streamlined economic development in Western Riverside County as well as

²⁹ In addition to the current Western Riverside County habitat mitigation fee, see also the Coachella Valley habitat mitigation fee, the San Joaquin County Multi-Species Habitat Conservation and Open Space Fee, and the East Contra Costa County HCP/NCCP mitigation fee.

³⁰ See the Final Mitigation Nexus Report for the Western Riverside County Multiple Species Habitat Conservation Plan, published July 1, 2003.

³¹ See Section 1539(a)(2)Biii of the federal Endangered Species Act.

the provision of contiguous open spaces that will serve as a community amenity to residents, workers, and visitors.

Use of Fee Revenues

Identify the use to which the fee is to be put. If the use is financing public facilities, the facilities shall be identified. That identification may, but need not, be made by reference to a capital improvement plan as specific in Section 65403 or 66002, may be made in applicable general or specific plan requirements, or may be made in other public documents that identify the public facilities for which the fee is charged. (66001(a)(2)).

The MSHCP is the public document that outlines the actions required as a whole and the particular set of actions required by the Local Permittees (and the Regional Conservation Agency as their agent) to obtain incidental take permits—associated with State and federal Endangered Species Act requirements—for new public and private development in Western Riverside County. Failure to meet the requirements of the MSHCP will result in an inability to obtain or maintain incidental take permits through the MSHCP, which would require future development to secure individual take authorization if the project impacts a threaten or endangered species.

Revenues from the Local Development Mitigation Fee will be used, in conjunction with other local and regional funding sources, to fund the conservation actions identified as the responsibility of Local Permittees in the MSHCP. The revenue from the Local Development Mitigation Fee will be used to help fund the appropriate habitat acquisition (land acquisition and associated transaction costs), maintenance and monitoring of habitat land (preserve management, monitoring, and adaptive management), and program management, administration, and oversight activities and costs.³² **Chapter 3** of this report describes the Local Permittee conservation requirements, progress to date, and the remaining actions required under the MSHCP.

Relationship

Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed. (66001(a)(3)).

The implementation of the MSHCP, and the mitigation fee as a fundamental part of it, will benefit all new development by mitigating their collective impacts on covered species and associated habitat. All new public and private development in the Plan area will affect habitat and species either directly, indirectly, or as a cumulative effect. New infrastructure development, for example, in addition to its direct effects, will support new development on other parcels and other locations in the Plan Area. Similarly, new private development will require new infrastructure and also result in additional demand for new developments through linkages—for

³² Consistent with the interpretation applied to the majority of permitted and approved regional, multiple-species Habitat Conservation Plans in California and guidance from RCA Counsel, the Local Development Mitigation Fee is assumed to fund its proportionate share (as determined by the technical analysis and constrained by the statutory requirements) of applicable MSHCP implementation costs including, but also limited to, habitat acquisition costs (and associated transaction costs), the costs of managing and monitoring the habitat preserves in perpetuity, and the administrative and other costs of managing the overall program.

example, the need for new housing to accommodate new workers at commercial developments or the need for new retail developments to serve new residents at residential developments. In other words, all new development in Western Riverside County will benefit from the incidental take permits obtained through the MSHCP and via the use of the mitigation fee revenues.

In addition, the incidental take permits are necessary to permit any future development within the Plan Area, and in order to obtain or maintain such incidental take permits, the MSHCP must be fully funded. Because funding the MSHCP is required in order to allow for future development under the MSHCP, there is a direct relationship between the proposed use of the mitigation fee and development within the Plan Area.

Need

Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed. (66001(a)(4)).

Without new development, no MSHCP would be necessary and no further habitat conservation would be required under the federal and State Endangered Species Acts. To allow for any future development under the Plan, the MSHCP must be fully funded. New development in the Plan Area, as noted above, will directly, indirectly, or cumulatively affect species and habitat in Western Riverside County. Because of this, development of the MSHCP was undertaken to provide a regional, streamlined approach to benefit future development of all types in Western Riverside County, including the development and improvements envisioned under the numerous General Plans and the Regional Transportation Improvement Program. The requirements of the MSHCP (habitat acquisition, management and monitoring, program administration) are a direct result of the regional approach to mitigation that is engendered by all new development in the Plan Area under the pertinent environmental regulations. Meeting the requirements of the MSHCP is necessary to obtain the necessary federal authorization to develop within the Plan Area.

Proportionality

Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed. (66001(b)).

The MSHCP includes detailed conservation requirements based on the scientific evaluations that form the basis of the MSHCP. Based on these evaluations, conservation responsibilities were allocated between the Local Permittees and other agencies, such as the State and federal governments. The Local Development Mitigation Fee appropriately provides funding towards the fulfillment of the Local Permittee conservation requirements. Furthermore, the Local Permittee obligations are not fully funded through the Local Development Mitigation Fee revenues. Other local and regional funding sources, such as the Measure A sales tax and tipping fees, provide additional mitigation and/or offsetting revenues that reduce the overall cost allocation to the Local Development Mitigation Fee Program. In addition, consistent with the relationship between new development in Western Riverside County and the need for the public facilities (conservation program) described above, proportional attribution between new development is ensured

through the determination of a consistent per gross acre Local Development Mitigation Fee.³³ As a result, the Local Development Mitigation Fee level calculations are carefully determined to fund only the proportionate (or less than) conservation costs attributable to the new development on which the fee is imposed and to allocate the fee levels proportionally across all new development. It is this process of careful calculation based on the requirements of the MSHCP that is the subject of a substantial portion of this Nexus Study (see **Chapters 2** through **7**).

³³ Determining habitat mitigation fees on a gross acre basis is the clearest way of ensuring proportionate cost allocations among new developments and is a common practice among adopted Habitat Conservation Plans. For purposes of implementation/administrative consistency, for residential uses, the per-gross-acre fee is translated into per unit fees for different density categories.

9. FEE IMPLEMENTATION

The revised Local Development Mitigation Fee must be implemented consistent with the MSHCP (and associated Incidental Take Permit and Implementing Agreement) as well as the California Mitigation Fee Act. A detailed set of guidance is included in the Fee Implementation Handbook to support clarity and specificity in the implementation of the updated fee program by Local Permittees. The sections below summarize some of the key implementation and administration actions to be consistent with the requirements.

Adoption of Revised LDMF

- Consistent with the MSHCP and associated documents, each Local Permittee (i.e., all participating jurisdictions) must adopt an updated LDMF ordinance and a fee resolution establishing the revised fee level as prescribed by the Mitigation Fee Act.
- Consistent with the Mitigation Fee Act, the revised ordinance and associated fee resolution will become effective after a public hearing and 60 days.
- RCA Legal Counsel will prepare a Fee Update Ordinance and Resolution to facilitate the consistent adoption of the updated LDMF by Local Permittees.

Securing Supplemental Funding

The revised Local Development Mitigation Fee is set at the level that would cover the Local Permittee cost obligations once expected non-fee revenues are subtracted out. To the extent any discounts/exemptions are provided to new Western Riverside County development below the updated fee level, additional funding will be required to backfill the fee revenue losses. To the extent, these revenues do not make up for any fee discounts provided, other sources of funding will need to be sought by the RCA and the Local Permittees to fulfill their Plan obligations. At the same time, if new substantial funding sources become available to the RCA for Local Permittee obligations, the funding required through fees may decrease, in turn reducing the required fee levels through a new update.

Annual Review

The Mitigation Fee Act (at Gov. C. §§ 66001(c), 66006(b)(1)) stipulates that each local agency that requires payment of a fee make specific information available to the public annually within 180 days of the last day of the fiscal year. In this case, the RCA can play this role on behalf of the Local Permittees. This information includes the following:

- A description of the type of fee in the account.
- The amount of the fee (the mitigation fee schedule).
- The beginning and ending balance of the fund.
- The amount of fees collected and interest earned.
- Identification of the improvements constructed.
- The total cost of the improvements constructed.
- The fees expended to construct the improvement.
- The percentage of total costs funded by the fee.

If sufficient fees have been collected to fund specific improvement cost, the agency must specify the approximate date for the cost of that improvement. Because of the dynamic nature of growth and MSHCP implementation costs and consistent with current practice, the RCA should continue to monitor progress towards MSHCP goals. The overall adequacy of the fee revenues and other available funding in meeting these goals should be reviewed annually.

Surplus Funds

The Mitigation Fee Act also requires that if any portion of a fee remains unexpended or uncommitted in an account for 5 years or more after deposit of the fee, the RCA, acting for the Local Permittees, shall make findings once each year (1) to identify the purpose to which the fee is to be put, (2) to demonstrate a reasonable relationship between the fee and the purpose for which it was charged, (3) to identify all sources and amounts of funding anticipated to complete financing of incomplete improvements, and (4) to designate the approximate dates on which the funding identified in (3) is expected to be deposited into the appropriate fund (§66001(d)).

If adequate funding has been collected for specific investments, an approximate date must be specified as to when the cost of the investment will be incurred. If the findings show no need for the unspent funds, or if the conditions discussed above are not met, and the administrative costs of the refund do not exceed the refund itself, the local agency that has collected the funds must refund them (Gov. C §66001(e)(f)).

Annual and Periodic Updates

Consistent with the current practice, the Fee Ordinance should allow an automatic annual adjustment to the fees based on the Riverside-San Bernardino-Ontario, CA Consumer Price Index (CPI) or a similar inflation factor. In addition, a more comprehensive update should be conducted required periodically. The Nexus Study and the technical information it contains should be reviewed periodically by the RCA (every five years is recommended) to identify any necessary refinements to the Local Development Mitigation Fees to ensure adequate funding to implement the MSHCP. Under certain circumstances, the RCA may wish to conduct a Nexus Study update sooner than after five years. For example, to the extent there are significant and unexpected changes in implementation costs, in the level of non-fee funding, and/ or the level of fee-paying private development over time, a more immediate fee update may be appropriate.

APPENDIX I:
Detailed Time Series of Implementation Costs



All Implementation Costs Over Time – No Extension

Habitat Lands/ Cost Items	Factors	End of:								
		17 2020	18 2021	19 2022	20 2023	21 2024	22 2025	23 2026	24 2027	25 2028
ACRES										
Land Acquisition Costs										
Land Acquisition (Annual)										
Local		6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310
(less) HANS/JPR Dedications		-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	0
Total Local		5,060	5,060	5,060	5,060	5,060	5,060	5,060	5,060	6,310
State/Fed		3,821	3,821	3,821	3,821	3,821	3,821	3,821	3,821	3,821
Total		8,881	8,881	8,881	8,881	8,881	8,881	8,881	8,881	10,131
Land Acquisition (Cumulative)										
Local ¹		45,272	50,332	55,391	60,451	65,511	70,571	75,630	80,690	87,000
State/Fed		25,429	29,251	33,072	36,893	40,715	44,536	48,357	52,179	56,000
Local - HANS/JPR Dedications		1,250	2,500	3,750	5,000	6,250	7,500	8,750	10,000	10,000
Total		71,951	82,082	92,213	102,344	112,476	122,607	132,738	142,869	153,000
Management and Monitoring Costs										
Reserve Summary										
		Financial Responsibility								
		Monitoring	Management							
State/ Federal										
PQP	RCA	State/ Fed		282,000	282,000	282,000	282,000	282,000	282,000	282,000
ARL	RCA	State		25,429	29,251	33,072	36,893	40,715	44,536	48,357
Total				307,429	311,251	315,072	318,893	322,715	326,536	330,357
Local										
PQP	RCA	Non-RCA Local		65,000	65,000	65,000	65,000	65,000	65,000	65,000
ARL	RCA	RCA		46,522	52,832	59,141	65,451	71,761	78,071	84,380
Total				111,522	117,832	124,141	130,451	136,761	143,071	149,380
Total Acres under RCA Management				46,522	52,832	59,141	65,451	71,761	78,071	84,380
Total Acres under RCA Monitoring				418,951	429,082	439,213	449,344	459,476	469,607	479,738
COSTS (all constant 2019 dollars)										
Land Acquisition Costs										
Local, ARL, Annual	\$14,288 \$/Acre			\$72,294,065	\$72,294,065	\$72,294,065	\$72,294,065	\$72,294,065	\$72,294,065	\$72,294,065
Land Transaction Costs	5% of acquisition costs			\$3,614,703	\$3,614,703	\$3,614,703	\$3,614,703	\$3,614,703	\$3,614,703	\$3,614,703
Total, Land Acquisition Costs				\$75,908,768	\$75,908,768	\$75,908,768	\$75,908,768	\$75,908,768	\$75,908,768	\$75,908,768
Local, ARL, Cumulative				\$75,908,768	\$151,817,536	\$227,726,304	\$303,635,072	\$379,543,840	\$455,452,608	\$531,361,376
Management and Monitoring Costs										
Management, Annual	\$32.70 \$/Acre			\$1,521,340	\$1,727,681	\$1,934,021	\$2,140,361	\$2,346,702	\$2,553,042	\$2,759,382
Management Cumulative				\$1,521,340	\$3,249,021	\$5,183,042	\$7,323,403	\$9,670,105	\$12,223,147	\$14,982,530
Monitoring, Annual	\$3.01 \$/Acre			\$1,262,531	\$1,293,061	\$1,323,592	\$1,354,122	\$1,384,653	\$1,415,184	\$1,445,714
Monitoring Cumulative				\$1,262,531	\$2,555,592	\$3,879,184	\$5,233,306	\$6,617,959	\$8,033,143	\$9,478,857
Endowment Costs										
Net Endowment Funding, Annual				\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105
Net Endowment Funding, Cumulative				\$22,168,105	\$44,336,210	\$66,504,316	\$88,672,421	\$110,840,526	\$133,008,631	\$155,176,736
Administrative Costs ²										
RCA Staff Costs				\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495
Professional Services				\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062
Loan Repayment ³				\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0
Other				\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254
Total Annual				\$5,154,811	\$5,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811
Cumulative Costs				\$5,154,811	\$10,309,622	\$14,464,433	\$18,619,244	\$22,774,055	\$26,928,866	\$31,083,677
TOTAL ALL COSTS										
TOTAL Annual				\$106,015,555	\$106,252,426	\$105,489,297	\$105,726,168	\$105,963,039	\$106,199,910	\$106,436,781
TOTAL Cumulative				\$106,015,555	\$212,267,981	\$317,757,279	\$423,483,447	\$529,446,486	\$635,646,396	\$742,083,177

1. All local land conserved to date, including all HANS dedications to date, are captured in the year 17 number.

2. RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.

3. Annual administrative costs decrease in year 19 due to assumption that loan repayment is completed.

All Implementation Costs Over Time – 5 Year Extension

Habitat Lands/ Cost Items	Factors	End of:													
		17 2020	18 2021	19 2022	20 2023	21 2024	22 2025	23 2026	24 2027	25 2028	26 2029	27 2030	28 2031	29 2032	30 2033
ACRES															
Land Acquisition Costs															
Land Acquisition (Annual)															
Local		4,056	4,056	4,056	4,056	4,056	4,056	4,056	4,056	4,056	4,056	4,056	4,056	4,056	4,056
(less) HANS/JPR Dedications		-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	0	0	0	0	0	0
Total Local		2,806	2,806	2,806	2,806	2,806	2,806	2,806	2,806	4,056	4,056	4,056	4,056	4,056	4,056
State/Fed		2,457	2,457	2,457	2,457	2,457	2,457	2,457	2,457	2,457	2,457	2,457	2,457	2,457	2,457
Total		5,263	5,263	5,263	5,263	5,263	5,263	5,263	5,263	6,513	6,513	6,513	6,513	6,513	6,513
Land Acquisition (Cumulative)															
Local ¹		43,018	45,825	48,631	51,437	54,243	57,050	59,856	62,662	66,719	70,775	74,831	78,887	82,944	87,000
State/Fed		24,065	26,521	28,978	31,434	33,891	36,347	38,804	41,261	43,717	46,174	48,630	51,087	53,543	56,000
Local - HANS/JPR Dedications		1,250	2,500	3,750	5,000	6,250	7,500	8,750	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total		68,333	74,846	81,359	87,871	94,384	100,897	107,410	113,923	120,436	126,949	133,461	139,974	146,487	153,000
Management and Monitoring Costs															
Reserve Summary															
		Financial Responsibility													
		Monitoring	Management												
<u>State/ Federal</u>															
PQP	RCA	State/ Fed		282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000
ARL	RCA	State		24,065	26,521	28,978	31,434	33,891	36,347	38,804	41,261	43,717	46,174	48,630	51,087
Total				306,065	308,521	310,978	313,434	315,891	318,347	320,804	323,261	325,717	328,174	330,630	333,087
<u>Local</u>															
PQP	RCA	Non-RCA Local		65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
ARL	RCA	RCA		44,268	48,325	52,381	56,437	60,493	64,550	68,606	72,662	76,719	80,775	84,831	88,887
Total				109,268	113,325	117,381	121,437	125,493	129,550	133,606	137,662	141,719	145,775	149,831	153,887
Total Acres under RCA Management				44,268	48,325	52,381	56,437	60,493	64,550	68,606	72,662	76,719	80,775	84,831	88,887
Total Acres under RCA Monitoring				415,333	421,846	428,359	434,871	441,384	447,897	454,410	460,923	467,436	473,949	480,461	486,974
COSTS (all constant 2019 dollars)															
Land Acquisition Costs															
Local, ARL, Annual	\$14,288 \$/Acre			\$40,096,188	\$40,096,188	\$40,096,188	\$40,096,188	\$40,096,188	\$40,096,188	\$40,096,188	\$40,096,188	\$57,956,178	\$57,956,178	\$57,956,178	\$57,956,178
Land Transaction Costs	5% of acquisition costs			\$2,004,809	\$2,004,809	\$2,004,809	\$2,004,809	\$2,004,809	\$2,004,809	\$2,004,809	\$2,004,809	\$2,897,809	\$2,897,809	\$2,897,809	\$2,897,809
Total, Land Acquisition Costs				\$42,100,997	\$42,100,997	\$42,100,997	\$42,100,997	\$42,100,997	\$42,100,997	\$42,100,997	\$42,100,997	\$60,853,987	\$60,853,987	\$60,853,987	\$60,853,987
Local, ARL, Cumulative				\$42,100,997	\$84,201,995	\$126,302,992	\$168,403,990	\$210,504,987	\$252,605,985	\$294,706,982	\$336,807,979	\$397,661,967	\$458,515,954	\$519,369,941	\$580,223,928
Management and Monitoring Costs															
Management, Annual	\$32.70 \$/Acre			\$1,447,647	\$1,580,295	\$1,712,942	\$1,845,589	\$1,978,237	\$2,110,884	\$2,243,532	\$2,376,179	\$2,508,826	\$2,641,474	\$2,774,121	\$2,906,768
Management Cumulative				\$1,447,647	\$3,027,942	\$4,740,884	\$6,586,474	\$8,564,710	\$10,675,595	\$12,919,126	\$15,295,305	\$17,804,131	\$20,445,605	\$23,219,726	\$26,126,494
Monitoring, Annual	\$3.01 \$/Acre			\$1,251,627	\$1,271,254	\$1,290,880	\$1,310,507	\$1,330,134	\$1,349,761	\$1,369,388	\$1,389,015	\$1,408,641	\$1,428,268	\$1,447,895	\$1,467,522
Monitoring Cumulative				\$1,251,627	\$2,522,880	\$3,813,761	\$5,124,268	\$6,454,402	\$7,804,163	\$9,173,551	\$10,562,566	\$11,971,207	\$13,399,476	\$14,847,371	\$16,314,893
Endowment Costs															
Net Endowment Funding, Annual				\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608
Net Endowment Funding, Cumulative				\$13,180,608	\$26,361,215	\$39,541,823	\$52,722,430	\$65,903,038	\$79,083,645	\$92,264,253	\$105,444,860	\$118,625,468	\$131,806,076	\$144,986,683	\$158,167,291
Administrative Costs ²															
RCA Staff Costs				\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495
Professional Services				\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062
Loan Repayment ³				\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other				\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254
Total Annual Costs				\$5,154,811	\$5,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811
Cumulative Costs				\$5,154,811	\$10,309,622	\$14,464,433	\$18,619,244	\$22,774,055	\$26,928,866	\$31,083,677	\$35,238,488	\$39,393,299	\$43,548,111	\$47,702,922	\$51,857,733
TOTAL ALL COSTS															
TOTAL Annual				\$63,135,690	\$63,287,964	\$62,440,239	\$62,592,513	\$62,744,787	\$62,897,061	\$63,049,335	\$63,201,610	\$82,106,873	\$82,259,148	\$82,411,422	\$82,563,696
TOTAL Cumulative				\$63,135,690	\$126,423,655	\$188,863,893	\$251,456,406	\$314,201,193	\$377,098,254	\$440,147,590	\$503,349,199	\$585,456,073	\$667,715,220	\$750,126,642	\$832,690,338

1. All local land conserved to date, including all HANS dedications to date, are captured in the year 17 number.

2. RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.

3. Annual administrative costs decrease in year 19 due to assumption that loan repayment is completed.

All Implementation Costs Over Time – 10 Year Extension

Habitat Lands/ Cost Items	Factors	End of:																			
		17 2020	18 2021	19 2022	20 2023	21 2024	22 2025	23 2026	24 2027	25 2028	26 2029	27 2030	28 2031	29 2032	30 2033	31 2034	32 2035	33 2036	34 2037	35 2038	
ACRES																					
Land Acquisition Costs																					
Land Acquisition (Annual)																					
Local		2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	
(less) Anheuser Busch purchase		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(less) HANS/JPR Dedications		-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	0	0	0	0	0	0	0	0	0	0	0	
Total Local		1,739	1,739	1,739	1,739	1,739	1,739	1,739	1,739	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	2,989	
State/Fed		1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	
Total		3,549	3,549	3,549	3,549	3,549	3,549	3,549	3,549	4,799	4,799	4,799	4,799	4,799	4,799	4,799	4,799	4,799	4,799	4,799	
Land Acquisition (Cumulative)																					
Local ¹		41,951	43,690	45,429	47,167	48,906	50,645	52,384	54,123	57,112	60,100	63,089	66,078	69,067	72,056	75,045	78,033	81,022	84,011	87,000	
State/Fed		23,418	25,228	27,038	28,848	30,659	32,469	34,279	36,089	37,899	39,709	41,519	43,329	45,139	46,949	48,760	50,570	52,380	54,190	56,000	
Local - HANS/JPR Dedications		1,250	2,500	3,750	5,000	6,250	7,500	8,750	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
Total		66,619	71,418	76,217	81,016	85,815	90,614	95,413	100,212	105,011	109,809	114,608	119,407	124,206	129,005	133,804	138,603	143,402	148,201	153,000	
Management and Monitoring Costs																					
Reserve Summary																					
		Financial Responsibility																			
		Monitoring									Management										
State/ Federal																					
PQP	RCA	State/ Fed	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	
ARL	RCA	State	23,418	25,228	27,038	28,848	30,659	32,469	34,279	36,089	37,899	39,709	41,519	43,329	45,139	46,949	48,760	50,570	52,380	54,190	
Total			305,418	307,228	309,038	310,848	312,659	314,469	316,279	318,089	319,899	321,709	323,519	325,329	327,139	328,949	330,760	332,570	334,380	336,190	
Local																					
PQP	RCA	Non-RCA Local	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	
ARL	RCA	RCA	43,201	46,190	49,179	52,167	55,156	58,145	61,134	64,123	67,112	70,100	73,089	76,078	79,067	82,056	85,045	88,033	91,022	94,011	
Total			108,201	111,190	114,179	117,167	120,156	123,145	126,134	129,123	132,112	135,100	138,089	141,078	144,067	147,056	150,045	153,033	156,022	159,011	
Total Acres under RCA Management			43,201	46,190	49,179	52,167	55,156	58,145	61,134	64,123	67,112	70,100	73,089	76,078	79,067	82,056	85,045	88,033	91,022	94,011	
Total Acres under RCA Monitoring			413,619	418,418	423,217	428,016	432,815	437,614	442,413	447,212	452,011	456,809	461,608	466,407	471,206	476,005	480,804	485,603	490,402	495,201	
COSTS (all constant 2019 dollars)																					
Land Acquisition Costs																					
Local, ARL, Annual	\$14,288	\$/Acre	\$24,844,562	\$24,844,562	\$24,844,562	\$24,844,562	\$24,844,562	\$24,844,562	\$24,844,562	\$24,844,562	\$42,704,552	\$42,704,552	\$42,704,552	\$42,704,552	\$42,704,552	\$42,704,552	\$42,704,552	\$42,704,552	\$42,704,552	\$42,704,552	
Land Transaction Costs	5%	of acquisition costs	\$1,242,228	\$1,242,228	\$1,242,228	\$1,242,228	\$1,242,228	\$1,242,228	\$1,242,228	\$1,242,228	\$2,135,228	\$2,135,228	\$2,135,228	\$2,135,228	\$2,135,228	\$2,135,228	\$2,135,228	\$2,135,228	\$2,135,228	\$2,135,228	
Total, Land Acquisition Costs			\$26,086,790	\$26,086,790	\$26,086,790	\$26,086,790	\$26,086,790	\$26,086,790	\$26,086,790	\$26,086,790	\$44,839,780	\$44,839,780	\$44,839,780	\$44,839,780	\$44,839,780	\$44,839,780	\$44,839,780	\$44,839,780	\$44,839,780	\$44,839,780	
Local, ARL, Cumulative			\$26,086,790	\$52,173,581	\$78,260,371	\$104,347,161	\$130,433,952	\$156,520,742	\$182,607,532	\$208,694,323	\$253,534,102	\$298,373,882	\$343,213,662	\$388,053,442	\$432,893,222	\$477,733,002	\$522,572,782	\$567,412,562	\$612,252,342	\$657,092,122	\$701,931,902
Management and Monitoring Costs																					
Management, Annual	\$32.70	\$/Acre	\$1,412,740	\$1,510,480	\$1,608,220	\$1,705,961	\$1,803,701	\$1,901,441	\$1,999,181	\$2,096,921	\$2,194,661	\$2,292,402	\$2,390,142	\$2,487,882	\$2,585,622	\$2,683,362	\$2,781,102	\$2,878,843	\$2,976,583	\$3,074,323	
Management Cumulative			\$1,412,740	\$2,923,220	\$4,531,441	\$6,237,402	\$8,041,102	\$9,942,543	\$11,941,725	\$14,038,646	\$16,233,307	\$18,525,709	\$20,915,851	\$23,403,733	\$25,989,355	\$28,672,717	\$31,453,819	\$34,332,662	\$37,309,245	\$40,383,568	\$43,555,631
Monitoring, Annual	\$3.01	\$/Acre	\$1,246,462	\$1,260,924	\$1,275,386	\$1,289,847	\$1,304,309	\$1,318,771	\$1,333,233	\$1,347,695	\$1,362,157	\$1,376,619	\$1,391,081	\$1,405,542	\$1,420,004	\$1,434,466	\$1,448,928	\$1,463,390	\$1,477,852	\$1,492,314	
Monitoring Cumulative			\$1,246,462	\$2,507,386	\$3,782,771	\$5,072,619	\$6,376,928	\$7,695,699	\$9,028,932	\$10,376,627	\$11,738,784	\$13,115,403	\$14,506,484	\$15,912,026	\$17,332,030	\$18,766,497	\$20,215,425	\$21,678,815	\$23,156,667	\$24,648,980	\$26,155,756
Endowment Costs																					
Net Endowment Funding, Annual			\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	
Net Endowment Funding, Cumulative			\$8,966,410	\$17,932,819	\$26,899,229	\$35,865,639	\$44,832,049	\$53,798,458	\$62,764,868	\$71,731,278	\$80,697,687	\$89,664,097	\$98,630,507	\$107,596,917	\$116,563,326	\$125,529,736	\$134,496,146	\$143,462,556	\$152,428,965	\$161,395,375	\$170,361,785
Administrative Costs ²																					
RCA Staff Costs			\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	
Professional Services			\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	
Loan Repayment ³			\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Other			\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	
Total Annual Costs			\$5,154,811	\$5,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	
Cumulative Costs			\$5,154,811	\$10,309,622	\$14,464,433	\$18,619,244	\$22,774,055	\$26,928,866	\$31,083,677	\$35,238,488	\$39,393,299	\$43,548,111	\$47,702,922	\$51,857,733	\$56,012,544	\$60,167,355	\$64,322,166	\$68,476,977	\$72,631,788	\$76,786,599	\$80,941,410
TOTAL ALL COSTS																					
TOTAL Annual			\$42,867,213	\$42,979,415	\$42,091,617	\$42,203,819	\$42,316,021	\$42,428,223	\$42,540,425	\$42,652,627	\$61,517,819	\$61,630,021	\$61,742,223	\$61,854,425	\$61,966,627	\$62,078,829	\$62,191,031	\$62,303,233	\$62,415,435	\$62,527,637	\$62,639,839
TOTAL Cumulative			\$42,867,213	\$85,846,628	\$127,938,245	\$170,142,065	\$212,458,086	\$254,886,309	\$297,426,735	\$340,079,362	\$401,597,181	\$463,227,202	\$524,969,425	\$586,823,850	\$648,790,477	\$710,869,307	\$773,060,338	\$835,363,571	\$897,779,006	\$960,306,644	\$1,022,946,483

1. All local land conserved to date, including all HANS dedications to date, are captured in the year 17 number.
 2. RCA Administrative Costs are based on a three year average of FY 2016-17 through FY 2018-19 actual costs, adjusted to 2019 dollars.
 3. Annual administrative costs decrease in year 19 due to assumption that loan repayment is completed.

All Implementation Costs Over Time – 15 Year Extension

Habitat Lands/ Cost Items	Factors	End of:																							
		17 2020	18 2021	19 2022	20 2023	21 2024	22 2025	23 2026	24 2027	25 2028	26 2029	27 2030	28 2031	29 2032	30 2033	31 2034	32 2035	33 2036	34 2037	35 2038	36 2039	37 2040	38 2041	39 2042	40 2043
ACRES																									
Land Acquisition Costs																									
Land Acquisition (Annual)																									
Local		2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366
(less) HANS/JPR Dedications		-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	-1,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Local		1,116	1,116	1,116	1,116	1,116	1,116	1,116	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	2,366	
State/Fed		1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	1,433	
Total		2,549	2,549	2,549	2,549	2,549	2,549	2,549	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	3,799	
Land Acquisition (Cumulative)																									
Local ¹		41,328	42,444	43,561	44,677	45,793	46,909	48,025	49,141	51,508	53,874	56,240	58,606	60,972	63,338	65,705	68,071	70,437	72,803	75,169	77,535	79,902	82,268	84,634	87,000
State/Fed		23,041	24,474	25,907	27,340	28,773	30,206	31,639	33,072	34,505	35,938	37,371	38,804	40,237	41,670	43,103	44,536	45,969	47,402	48,835	50,268	51,701	53,134	54,567	56,000
Local - HANS/JPR Dedications		1,250	2,500	3,750	5,000	6,250	7,500	8,750	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total		65,619	69,418	73,218	77,017	80,816	84,615	88,414	92,213	96,013	99,812	103,611	107,410	111,209	115,008	118,808	122,607	126,406	130,205	134,004	137,803	141,603	145,402	149,201	153,000
Management and Monitoring Costs																									
Reserve																									
Summary																									
Financial Responsibility																									
Monitoring Management																									
State/ Federal																									
PQP	RCA	State/ Fed	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000	282,000
ARL	RCA	State	23,041	24,474	25,907	27,340	28,773	30,206	31,639	33,072	34,505	35,938	37,371	38,804	40,237	41,670	43,103	44,536	45,969	47,402	48,835	50,268	51,701	53,134	54,567
Total			305,041	306,474	307,907	309,340	310,773	312,206	313,639	315,072	316,505	317,938	319,371	320,804	322,237	323,670	325,103	326,536	327,969	329,402	330,835	332,268	333,701	335,134	336,567
Local																									
PQP	RCA	Non-RCA	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
ARL	RCA	RCA	42,578	44,944	47,311	49,677	52,043	54,409	56,775	59,141	61,508	63,874	66,240	68,606	70,972	73,338	75,705	78,071	80,437	82,803	85,169	87,535	89,902	92,268	94,634
Total			107,578	109,944	112,311	114,677	117,043	119,409	121,775	124,141	126,508	128,874	131,240	133,606	135,972	138,338	140,705	143,071	145,437	147,803	150,169	152,535	154,902	157,268	159,634
Total Acres under RCA Management																									
Total Acres under RCA Monitoring																									
			42,578	44,944	47,311	49,677	52,043	54,409	56,775	59,141	61,508	63,874	66,240	68,606	70,972	73,338	75,705	78,071	80,437	82,803	85,169	87,535	89,902	92,268	94,634
			412,619	416,418	420,218	424,017	427,816	431,615	435,414	439,213	443,013	446,812	450,611	454,410	458,209	462,008	465,808	469,607	473,406	477,205	481,004	484,803	488,603	492,402	496,201
COSTS (all constant 2019 dollars)																									
Land Acquisition Costs																									
Local, ARL, Annual	\$14,288 \$/Acre	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780	\$15,947,780
Land Transaction Costs	5% of acquisition costs	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389	\$797,389
Total, Land Acquisition Costs		\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170	\$16,745,170
Local, ARL, Cumulative		\$16,745,170	\$33,490,339	\$50,235,509	\$66,980,678	\$83,725,848	\$100,471,017	\$117,216,187	\$133,961,356	\$150,706,525	\$167,451,695	\$184,196,864	\$200,942,033	\$217,687,202	\$234,432,371	\$251,177,541	\$267,922,710	\$284,667,879	\$301,413,048	\$318,158,217	\$334,903,386	\$351,648,555	\$368,393,724	\$385,138,893	\$401,884,062
Management and Monitoring Costs																									
Management, Annual	\$32.70 \$/Acre	\$1,392,378	\$1,469,755	\$1,547,133	\$1,624,511	\$1,701,888	\$1,779,266	\$1,856,643	\$1,934,021	\$2,011,399	\$2,088,776	\$2,166,154	\$2,243,532	\$2,320,909	\$2,398,287	\$2,475,664	\$2,553,042	\$2,630,420	\$2,707,797	\$2,785,175	\$2,862,553	\$2,939,930	\$3,017,308	\$3,094,685	\$3,172,063
Management Cumulative		\$1,392,378	\$2,862,133	\$4,409,266	\$6,033,776	\$7,735,664	\$9,514,930	\$11,371,574	\$13,305,595	\$15,316,993	\$17,405,770	\$19,571,923	\$21,815,455	\$24,136,364	\$26,534,651	\$29,010,315	\$31,563,357	\$34,193,777	\$36,901,574	\$39,686,749	\$42,549,302	\$45,489,232	\$48,506,540	\$51,601,225	\$54,773,288
Monitoring, Annual	\$3.01 \$/Acre	\$1,243,449	\$1,254,898	\$1,266,347	\$1,277,796	\$1,289,245	\$1,300,694	\$1,312,143	\$1,323,592	\$1,335,041	\$1,346,490	\$1,357,939	\$1,369,388	\$1,380,837	\$1,392,286	\$1,403,735	\$1,415,184	\$1,426,633	\$1,438,082	\$1,449,531	\$1,460,980	\$1,472,429	\$1,483,878	\$1,495,327	\$1,506,776
Monitoring Cumulative		\$1,243,449	\$2,498,347	\$3,764,694	\$5,042,490	\$6,331,735	\$7,632,429	\$8,944,572	\$10,268,163	\$11,603,204	\$12,949,694	\$14,307,633	\$15,677,021	\$17,057,857	\$18,450,143	\$19,853,878	\$21,269,062	\$22,695,694	\$24,133,776	\$25,583,307	\$27,044,286	\$28,516,715	\$30,000,593	\$31,495,919	\$33,002,695
Endowment Costs																									
Net Endowment Funding, Annual		\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714
Net Endowment Funding, Cumulative		\$6,541,714	\$13,083,429	\$19,625,143	\$26,166,857	\$32,708,572	\$39,250,286	\$45,792,000	\$52,333,715	\$58,875,429	\$65,417,143	\$71,958,858	\$78,500,572	\$85,042,286	\$91,584,001	\$98,125,715	\$104,667,429	\$111,209,144	\$117,750,858	\$124,292,572	\$130,834,286	\$137,376,001	\$143,917,715	\$150,459,429	\$157,001,144
Administrative Costs²																									
RCA Staff Costs		\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495	\$2,288,495
Professional Services		\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062	\$1,466,062
Loan Repayment ³		\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other		\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254	\$400,254
Total Annual Costs		\$5,154,811	\$5,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811	\$4,154,811
Cumulative Costs		\$5,154,811	\$10,309,622	\$14,464,433	\$18,619,244	\$22,774,055	\$26,928,866	\$31,083,677	\$35,238,488	\$39,393,299	\$43,548,111	\$47,702,922	\$51,857,733	\$56,012,544	\$60,167,355	\$64,322,166	\$68,476,977	\$72,631,788	\$76,786,599	\$80,941,410	\$85,096,221	\$89,251,032	\$93,405,843	\$97,560,654	\$101,715,465
TOTAL ALL COSTS																									
TOTAL Annual		\$31,077,521	\$31,166,348	\$30,255,175	\$30,344,001	\$30,432,828	\$30,521,655	\$30,610,481	\$30,699,308	\$49,541,124	\$49,629,951	\$49,718,777	\$49,807,604	\$49,896,430	\$49,985,257	\$50,074,084	\$50,162,910	\$50,251,737	\$5						

APPENDIX II:

Detailed Time Series of Endowment Funding



Annual Cost Estimate for Management and Monitoring, Constant 2019\$

Cost Categories	Annual Cost by Last Year of Land Acquisition Period	Adjustment	Annual Post-Land Acquisition Cost
Ongoing Habitat Management	\$3,172,063	100%	\$3,172,063
Ongoing Habitat Monitoring	\$1,506,776	100%	\$1,506,776
Administration ¹	\$4,154,811	50%	\$2,077,406
Total	\$8,833,650		\$6,756,244

1. Administration includes salaries and benefits, accounting, auditing and reporting, contracts, etc.. Assumes less administration is needed following the land acquisition period; ongoing administrative needs include oversight, auditing and reporting, and board staffing.

Sources: Western Riverside County Regional Conservation Authority; and Economic & Planning Systems, Inc.

Endowment Funding – No Extension Scenario

Item	1	2	3	4	5	6	7	8	9	Post-Permit
New Impact Acres (avg. annual)	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	
Average Per Acre Endowment Fee	\$9,845	\$9,845	\$9,845	\$9,845	\$9,845	\$9,845	\$9,845	\$9,845	\$9,845	
Annual Endowment Funding	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	\$22,168,105	
Endowment Balance	\$22,168,105	\$44,336,210	\$67,169,359	\$90,687,502	\$114,911,189	\$139,861,586	\$165,560,496	\$192,030,373	\$219,294,346	
Annual Interest	\$0	\$665,043	\$1,350,038	\$2,055,582	\$2,782,293	\$3,530,804	\$4,301,772	\$5,095,868	\$5,913,787	
Cumulative Interest Earnings	\$0	\$665,043	\$2,015,081	\$4,070,663	\$6,852,955	\$10,383,760	\$14,685,531	\$19,781,399	\$25,695,187	
Total Endowment	\$22,168,105	\$45,001,254	\$68,519,396	\$92,743,083	\$117,693,481	\$143,392,391	\$169,862,268	\$197,126,241	\$225,208,133	
Average Annual Post Permit Interest										\$6,756,244

(1) Endowment fee set to ensure that, at the end of the permit term, the total endowment (including endowment fee revenues and interest) are sufficient to provide annual interest revenues equal to the post-permit annual cost. The real interest rate is assumed to be 3 percent annually.

Assumptions
20,265 impact acres developed
9 year plan
3% interest rate (real, net)
\$6,756,244 annual post-permit cost estimate
\$9,845 Endowment Funding Per Acre of Conservation

Endowment Funding – 5 Year Extension Scenario

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Post-Permit
New Impact Acres (avg. annual)	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	
Average Per Acre Endowment Fee	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	\$5,854	
Annual Endowment Funding	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	\$13,180,608	
Endowment Balance	\$13,180,608	\$26,361,215	\$39,937,241	\$53,920,547	\$68,323,353	\$83,158,243	\$98,438,180	\$114,176,514	\$130,386,999	\$147,083,799	\$164,281,502	\$181,995,136	\$200,240,180	\$219,032,574	
Annual Interest	\$0	\$395,418	\$802,699	\$1,222,198	\$1,654,282	\$2,099,329	\$2,557,727	\$3,029,877	\$3,516,192	\$4,017,096	\$4,533,027	\$5,064,436	\$5,611,787	\$6,175,559	
Cumulative Interest Earnings	\$0	\$395,418	\$1,198,117	\$2,420,315	\$4,074,598	\$6,173,927	\$8,731,654	\$11,761,531	\$15,277,723	\$19,294,819	\$23,827,846	\$28,892,281	\$34,504,069	\$40,679,628	
Total Endowment	\$13,180,608	\$26,756,633	\$40,739,940	\$55,142,746	\$69,977,636	\$85,257,572	\$100,995,907	\$117,206,392	\$133,903,191	\$151,100,894	\$168,814,529	\$187,059,572	\$205,851,967	\$225,208,133	
Average Annual Post Permit Interest															\$6,756,244

(1) Endowment fee set to ensure that, at the end of the permit term, the total endowment (including endowment fee revenues and interest) are sufficient to provide annual interest revenues equal to the post-permit annual cost. The real interest rate is assumed to be 3 percent annually.

Assumptions	
31,523	impact acres developed
14	year plan
3%	interest rate (real, net)
\$6,756,244	annual post-permit cost estimate
\$5,854	Endowment Funding Per Acre of Conservation

Endowment Funding – 10 Year Extension Scenario

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Post-Permit
New Impact Acres (avg. annual)	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252
Average Per Acre Endowment Fee	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982	\$3,982
Annual Endowment Funding	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410	\$8,966,410
Endowment Balance	\$8,966,410	\$17,932,819	\$27,168,221	\$36,680,686	\$46,478,524	\$56,570,297	\$66,964,823	\$77,671,185	\$88,698,738	\$100,057,118	\$111,756,249	\$123,806,354	\$136,217,962	\$149,001,918	\$162,169,393	\$175,731,892	\$189,701,266	\$204,089,722	\$218,909,831	
Annual Interest	\$0	\$268,992	\$546,054	\$831,428	\$1,125,363	\$1,428,117	\$1,739,952	\$2,061,143	\$2,391,970	\$2,732,721	\$3,083,695	\$3,445,198	\$3,817,547	\$4,201,065	\$4,596,089	\$5,002,964	\$5,422,046	\$5,853,699	\$6,298,303	
Cumulative Interest Earnings	\$0	\$268,992	\$815,047	\$1,646,475	\$2,771,838	\$4,199,955	\$5,939,907	\$8,001,051	\$10,393,020	\$13,125,742	\$16,209,437	\$19,654,635	\$23,472,182	\$27,673,247	\$32,269,336	\$37,272,301	\$42,694,347	\$48,548,046	\$54,846,349	
Total Endowment	\$8,966,410	\$18,201,812	\$27,714,276	\$37,512,114	\$47,603,887	\$57,998,413	\$68,704,775	\$79,732,328	\$91,090,708	\$102,789,839	\$114,839,944	\$127,251,552	\$140,035,508	\$153,202,983	\$166,765,482	\$180,734,856	\$195,123,312	\$209,943,421	\$225,208,133	
Average Annual Post Permit Interest																				\$6,756,244

(1) Endowment fee set to ensure that, at the end of the permit term, the total endowment (including endowment fee revenues and interest) are sufficient to provide annual interest revenues equal to the post-permit annual cost. The real interest rate is assumed to be 3 percent annually.

Assumptions
42,782 impact acres developed
19 year plan
3% interest rate (real, net)
\$6,756,244 annual post-permit cost estimate
\$3,982 Endowment Funding Per Acre of Conservation

Endowment Funding – 15 Year Extension Scenario

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
New Impact Acres (avg. annual)	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252
Average Per Acre Endowment Fee	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905
Annual Endowment Funding	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714
Endowment Balance	\$6,541,714	\$13,083,429	\$19,821,394	\$26,761,499	\$33,909,807	\$41,272,564	\$48,856,204	\$56,667,353	\$64,712,836	\$72,999,684	\$81,535,138	\$90,326,655	\$99,381,917	\$108,708,838	\$118,315,566
Annual Interest	\$0	\$196,251	\$398,390	\$606,594	\$821,043	\$1,041,925	\$1,269,435	\$1,503,769	\$1,745,134	\$1,993,739	\$2,249,803	\$2,513,548	\$2,785,206	\$3,065,014	\$3,353,216
Cumulative Interest Earnings	\$0	\$196,251	\$594,642	\$1,201,235	\$2,022,278	\$3,064,204	\$4,333,638	\$5,837,407	\$7,582,541	\$9,576,280	\$11,826,083	\$14,339,631	\$17,124,837	\$20,189,851	\$23,543,067
Total Endowment	\$6,541,714	\$13,279,680	\$20,219,785	\$27,368,093	\$34,730,850	\$42,314,490	\$50,125,639	\$58,171,122	\$66,457,970	\$74,993,424	\$83,784,941	\$92,840,203	\$102,167,123	\$111,773,852	\$121,668,781
Average Annual Post Permit Interest															

16	17	18	19	20	21	22	23	24	Post-Permit
2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	2,252	
\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	\$2,905	
\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	\$6,541,714	
\$128,210,496	\$138,402,273	\$148,899,805	\$159,712,262	\$170,849,092	\$182,320,028	\$194,135,092	\$206,304,607	\$218,839,209	
\$3,650,063	\$3,955,817	\$4,270,743	\$4,595,116	\$4,929,221	\$5,273,349	\$5,627,801	\$5,992,887	\$6,368,925	
\$27,193,130	\$31,148,947	\$35,419,689	\$40,014,806	\$44,944,027	\$50,217,377	\$55,845,178	\$61,838,065	\$68,206,990	
\$131,860,559	\$142,358,090	\$153,170,547	\$164,307,378	\$175,778,314	\$187,593,377	\$199,762,893	\$212,297,494	\$225,208,133	
									\$6,756,244

(1) Endowment fee set to ensure that, at the end of the permit term, the total endowment (including endowment fee revenues and interest) are sufficient to provide annual interest revenues equal to the post-permit annual cost. The real interest rate is assumed to be 3 percent annually.

Assumptions
54,040 impact acres developed
24 year plan
3% interest rate (real, net)
\$6,756,244 annual post-permit cost estimate
\$2,905 Endowment Funding Per Acre of Conservation

Appendix G - TUMF 2016 Program Update Disposition of Network Change Requests

As part of the 2024 update of the TUMF Nexus Study, the list of proposed improvements to mitigate the cumulative regional impacts of new development in the TUMF Network Cost Estimate table included in the previously adopted Nexus Study was reviewed for accuracy. In particular, the Network Cost table was reviewed to ensure the included projects were consistent with the mitigation needs identified by the RivCoM future year no-build traffic conditions.

To assist in the review of the Network Cost Estimate table, participating local jurisdictions, private developers and the Riverside County Transportation Commission were asked to submit requests for changes to the TUMF Network. The various requests for network changes were subsequently reviewed for consistency with the program guidelines for inclusion on the TUMF Network and to determine if future traffic impacts would be sufficient to require mitigation primarily utilizing the RivCoM future no-build scenario outputs to quantify impacts as well as screening the various qualitative measures that have guided the TUMF Network development since program inception.

Based on the findings of the review of the entire TUMF network, elements of specific projects were revised to reflect only necessary network corrections, modifications to project assumptions and to incorporate a limited number of additional improvements. The preliminary results of the network review and the associated screening of specific requested projects was presented to the WRCOG Public Works Directors Committee (PWC) in August 2023. Updated screening results were presented to the PWC in February 2024 and the findings endorsed confirming the TUMF Network as the basis for the Draft 2024 Nexus Study that was subsequently presented to the PWC for review and comment in April 2024. A matrix summarizing the disposition of the specific project requests received as part of the 2024 TUMF Nexus Update is included as **Exhibit G-1** in this Appendix.

With the release of the Draft 2024 Nexus Update Study Report for a formal review period commencing on May 14, 2024, and ending on June 10, 2024, additional comments were provided to WRCOG staff by thirteen participating jurisdictions or other stakeholders. These comments were reviewed by WRCOG staff and responses were provided to each of the parties that submitted comments. The responses included several changes to the TUMF network to remedy typographical errors contained in the draft report, including misreporting in the number of existing lanes, project percent complete and interchange project type for approximately 10 TUMF network segments. The recommended network revisions were presented to the PWC on August 8, 2024, and are reflected in the TUMF network cost table included in **Exhibit H-1**.

EXHIBIT G-1
2024 TUMF Nexus Study Update - Network Addition Requests

Northwest Zone

City/ County	Street Name	From	To	Recommendation
Eastvale	Hellman	River Road	Walter	Add to network for continuity and mitigate future v/c deficiency
Eastvale	Hellman	Schleisman	Walter	Add to network for continuity and mitigate future v/c deficiency
Eastvale	Hellman	Cucamonga Creek	bridge	Add to network for continuity and mitigate future v/c deficiency
Eastvale	River Rd	Archibald	Hellman	Add to network for continuity and mitigate future v/c deficiency
Eastvale	Limonite ITS	city wide		Add to network for deficient links with no capacity increase
Eastvale	Hamner ITS	city wide		Add to networks for deficient links with no capacity increase
Eastvale	Schliesman ITS	city wide		Add to networks for deficient links with no capacity increase
Eastvale	Archibald ITS	city wide		Add to networks for deficient links with no capacity increase
Eastvale	Limonite	Cucamonga Creek	bridge	Bridge length increased to 50'
Riverside	3rd	Chicago	Iowa	Do not add - no V/C deficiency and interchange overcrossing reconstructed to 4 lanes in 2006-2007
Riverside	La Sierra ITS	SR-91	Victoria	Add to network for deficient links with no capacity increase
Riverside	Madison ITS	SR-91	Victoria	Add to network for deficient links with no capacity increase
Riverside	University ITS	Market St	Canyon Crest	Add to network for deficient links with no capacity increase
Riverside	Tyler ITS	California Ave	Indiana Ave	Do not add - no V/C deficiency
Riverside	Alessandro Blvd ITS	Fairview Ave	Meridian	Add to network for deficient links with no capacity increase
County	Markham St	Mockingbird Canyon	Wood Rd	Do not add - no regional connectivity or V/C deficiency

Central Zone

City/ County	Street Name	From	To	Recommendation
Menifee	Garbani	Haun	Antelope	Do not add - no future v/c deficiency
Menifee	Garbani	I-215	interchange	Add to network to mitigate future v/c deficiency
Menifee	Garbani	I-215	Menifee	Do not add - no future v/c deficiency
Menifee	Garbani	Menifee	Briggs	Do not add - no future v/c deficiency
Menifee	Holland	City Limits (West)	Murrieta	Do not add - no future v/c deficiency
Menifee	Holland	Murrieta	Bradley	Add to network for continuity and mitigate future v/c deficiency
Menifee	Holland	Bradley	Haun	Add to network for continuity and mitigate future v/c deficiency
Menifee	Holland	Antelope	Muenifee	Add to network for continuity and mitigate future v/c deficiency
Menifee	Scott	Haun	Menifee	Already on TUMF Network
Menifee	Scott	Menifee	Briggs	Already on TUMF Network
Menifee	Scott	Sunset	Murrieta	Already on TUMF Network
Menifee	Briggs	Simpson	Angler	Already on TUMF Network
Menifee	Briggs	Salt Creek	bridge	Already on TUMF Network
Perris	Ethanac	Bridge	San Jacinto River	Already on TUMF Network
Unincorporated	Grand Ave	Briggs Rd	SR-79	Do not add - no future v/c deficiency

San Jacinto Zone

City/ County	Street Name	From	To	Recommendation
Hemet	Stetson	Warren	0.85 Miles w/o Warren	Do not add - no regional connectivity or V/C deficiency
San Jacinto	7th St	Western Terminus	Warren Rd	Do not add - no future v/c deficiency
San Jacinto	7st St	Channel adjacent to Warren	bridge	Do not add - no future v/c deficiency

Pass Zone

City/ County	Street Name	From	To	Recommendation
Banning	Highland Springs	Cherry Valley	Oak Valley	Already on TUMF Network - no v/c deficiency
Banning	Cottonwood	I-10	interchange	Do not add - no connectivity to regional network
Banning	Wilson	Highland Springs	Highland Home	Already on TUMF Network - no v/c deficiency
Banning	Sun Lakes	Smith Creek	bridge	Segment already on TUMF Network - Bridge added

Southwest Zone

City/ County	Street Name	From	To	Recommendation
Lake Elsinore	Camino del Norte	Summerhill	Main	Do not add - no connectivity to regional network
Lake Elsinore	Summerhill	Railroad Canyon	Greenwald	Do not add - no regional connectivity or V/C deficiency
Lake Elsinore	Nichols	I-15	Lake	Already on TUMF Network
Wildomar	Inland Valley Dr	I-15	bridge	Do not add - no connectivity to regional network
Wildomar	Palomar	Starbuck	Washington	Already on TUMF Network
Wildomar	Bundy Canyon	I-15	City Limits (Sunset)	Already on TUMF Network
Murrieta	Orange Springs Parkway	Clinton Keith	Scott	Do not add - no regional connectivity or V/C deficiency
Murrieta	Calle del Oso Oro	Vineyard Pkwy	Washington	Do not add - no regional connectivity or V/C deficiency
Murrieta	Calle del Oso Oro	1500 w/o Vineyard Pkwy	bridge	Do not add - no regional connectivity or V/C deficiency
Murrieta	Adams	Murrieta Hot Springs/Hawthorne	Cherry	Do not add - no regional connectivity or V/C deficiency
Temecula	Ynez Road	Rancho California	Santiago	Do not add - no connectivity to regional network
Temecula	Ynez Road/DePortola Road	Santiago	Margarita	Do not add - no connectivity to regional network
Temecula	ITS	Major Arterials (Winchester, Rancho California, Butterfield Stage, Temecula Pkwy, Margarita, Jefferson	City limits	Add to network for deficient links with no capacity increase

Appendix H - TUMF Network Cost Estimate and Evaluation

For the purpose of calculating the “fair share” fee to be applied to new development under the TUMF program, a planning level cost estimate was developed to reflect the cost to complete improvements to the Regional System of Highways and Arterials to adequately accommodate future traffic growth. The planning level cost estimate was established by applying the unit cost values (presented in **Table 4.1**) to the proposed changes identified for the future Regional System of Highways and Arterials. The resultant cost value was tabulated for each unique segment of the network, by improvement type, based on the proposed list of improvements recommended following the review of the TUMF Network (as described in **Section 4.3, Appendix E** and **Appendix G**). A separate cost estimate was generated for regional transit improvements based on information provided by RTA and added to the summary table. The TUMF Network cost estimate table is summarized in **Table 4.4** of the Nexus Report. The detailed TUMF Network cost estimate table is included in this Appendix as **Exhibit H-1**. The detailed TUMF transit cost estimate table is included as **Table 4.5** of the Nexus Report.

Where existing obligated funding has previously been secured through traditional funding sources to complete necessary improvements to the TUMF Network, the cost of these improvements will not be recaptured from future developments through the TUMF program. As a result, the TUMF network cost was adjusted accordingly to reflect the availability of obligated funds.

WRCOG staff, in consultation with RCTC staff, reviewed the current Regional Transportation Improvement Program (RTIP) to identify transportation projects on the TUMF network that had previously secured alternate sources of funding. **Exhibit H-2** identifies those projects included on the TUMF Network having previously obligated funding.

To account for existing needs in the original TUMF Nexus Study, the cost for facilities identified as currently experiencing LOS E or F was adjusted by extracting the share of the cost to improve the portion of those facilities identified in the 2018 Baseline network scenario with a volume to capacity ratio of greater than 0.90, which is the threshold for LOS E. The adjustment to account for existing need as part of the TUMF Nexus Study provides for the mitigation of incremental traffic growth on those facilities with existing need.

The following approach was applied to account for incremental traffic growth associated with new development as part of the existing need methodology:

1. 1. Facilities with an existing need were identified by reviewing the RivCoM 2018 Baseline scenario assigned traffic on the 2021 existing network and delineating those facilities included on the TUMF Cost Fee Summary Table that have an average directional v/c exceeding 0.90.
 - a. Weighted directional v/c values were used to determine existing need for network segments, which was calculated by:

- i. Determining the length for the portion of each segment (model link), and calculating the ratio of link length to the overall segment length
 - ii. Generating the average directional v/c for each link, for both directions in AM and PM periods, and multiplying by link/segment length ratio
 - iii. Determining the maximum peak-period peak-direction v/c for each link, representing the highest directional v/c in either AM or PM
 - iv. Calculating weighted average v/c for each TUMF segment, based on the sum of all weighted max v/c values of each link within a segment
 - b. A similar method was used to determine existing need for spot improvements including interchanges, railroad crossings and bridges. However, no weighting was used in the calculation of existing need for spot improvements. For these facilities, the peak-period peak-direction v/c values (highest directional v/c in either AM or PM) were utilized in the existing need calculation. This was based on the individual link within a network segment where a bridge or railroad crossing is located, or on- and off-ramps in the case of interchanges.
2. Initial costs of addressing the existing need were calculated by estimating the share of a particular roadway segments "new lane" cost, or individual spot improvement cost (including all associated ROW and soft costs).
 3. Incremental growth in v/c was determined by comparing the average directional base year v/c for the TUMF facilities (delineated under step one) with the horizon year v/c for the corresponding segments and spot improvements calculated based on the RivCoM 2045 No-Build scenario assigned traffic on the 2021 existing network using the same methodology as the base year v/c.
 4. The proportion of the incremental growth attributable to new development was determined by dividing the result of step three with the total 2045 No-Build scenario v/c in excess of LOS E.
 5. For those segments experiencing a net increase in v/c over the base year, TUMF will 'discount' the cost of existing need improvements by the proportion of the incremental v/c growth through 2045 No-Build compared to the 2018 Baseline v/c (up to a maximum of 100%).

Exhibit H-2 includes a detailed breakdown of the existing highway improvement needs on the TUMF network, including the associated unfunded improvement cost estimate for each segment experiencing unacceptable LOS.

For transit service improvements, the cost to provide for existing demand was determined by multiplying the total transit component cost by the share of future

projected daily bus transit ridership representing existing demand. **Exhibit H-3** reflects the calculation of the existing transit need share and the existing transit need cost.

To validate the effectiveness of the TUMF Network improvements to mitigate the cumulative regional transportation impacts of new development in Western Riverside County, the future TUMF Network was evaluated. The proposed improvements to the Regional System of Highways and Arterials were coded on the 2021 existing network derived from RivCoM and the model was run to determine the relative impacts on traffic conditions. To quantify the impacts of the TUMF Network improvements, the various traffic measures of effectiveness described in **Section 3.1** for the 2018 Baseline and 2045 No-Build scenarios were calculated for the 2045 TUMF Build network scenario. The results for VMT, VHT, VHD, and total VMT experiencing unacceptable level of service (LOS E) were then compared to the results presented in **Table 3.1** for the no-build conditions. The consolidated results are provided in **Table 4.6**.

EXHIBIT H-1 TUMF Network Detailed Cost Estimate

Updated: July 23, 2024

AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	NETWORK	MILES	EXISTINGLN	FUTURELN	% COMPLETE	INCREASELN MILES	TOPO	LANDUSE	INTERCHG	BRIDGE	RRXING	ITS	NEWLN COST	ROWCOST	INTCHGCOST	BRDGCOST	RRXCOST	ITSCOST	PLNG	ENG	CONTRG	TOTAL COST	MAXIMUM TUMF SHARE		
Central	Menifee	Ethanac	Murieta	Backbone	0.99	4	4	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Ethanac	Murieta	Backbone	0.90	4	4	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Ethanac	I-215	interchange	0.00	0	0	0%	0.00	1	2	3	0	0	0	\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$0	\$2,255,000	\$5,638,000	\$2,255,000	\$32,698,000	\$32,698,000	
Central	Menifee	Ethanac	Sherman	Backbone	0.61	2	4	0%	1.23	1	3	0	0	0	0	\$1,388,000	\$601,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Ethanac	BNSF San Jacinto Branch	railroad crossing	0.00	2	4	0%	0.00	1	3	0	0	1	0	\$0	\$0	\$0	\$0	\$72,800,000	\$0	\$0	\$0	\$139,000	\$347,000	\$199,000	\$2,674,000	\$2,674,000
Central	Menifee	Menifee	SR-74 (Pinacate)	Simpson	2.50	2	4	88%	0.60	1	3	0	0	0	0	\$678,000	\$294,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee	Sail Creek	bridge	0.00	2	4	0%	0.00	1	3	0	0	315	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee	Aldergate	Backbone	0.64	4	4	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$3,024,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee	Newport	Backbone	0.98	4	4	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Menifee	Newport	Backbone	1.07	4	4	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Menifee	Holland	Backbone	1.03	4	4	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Menifee	Garbani	Backbone	1.00	2	4	0%	2.00	1	3	0	0	0	0	\$2,260,000	\$978,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee/Whitewood	Scott	Backbone	0.53	4	4	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Newport	Goetz	Backbone	1.81	6	6	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Newport	Murieta	Backbone	1.99	4	6	87%	0.52	1	3	0	0	0	0	\$586,000	\$254,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Newport	I-215	Backbone	1.02	6	6	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Newport	Lindenberger	Backbone	0.77	6	6	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Newport	Lindenberger	SR-79 (Winchester)	Backbone	3.58	6	6	0%	0.00	1	3	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Scott	I-215	Backbone	1.98	4	6	0%	3.96	1	3	0	0	0	0	\$4,483,000	\$1,941,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Scott	I-215	interchange	0.00	0	0	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Menifee	Scott	Sunset	Backbone	1.01	2	4	0%	2.01	1	3	0	0	0	0	\$2,278,000	\$986,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Scott	Murieta	Backbone	1.94	2	6	0%	7.77	1	3	0	0	0	0	\$8,799,000	\$3,809,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	SR-74	Mathews	Backbone	1.89	4	6	0%	3.79	1	3	0	0	0	0	\$4,285,000	\$1,855,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Alessandro	Peris	Backbone	3.52	4	6	75%	1.76	1	2	0	0	0	0	\$1,992,000	\$974,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Alessandro	Peris	Backbone	2.00	2	2	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Moreno Valley	Alessandro	Nason	Backbone	0.99	2	2	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Moreno Valley	Alessandro	Moreno Beach	Backbone	4.13	2	4	0%	8.26	1	3	0	0	0	0	\$9,355,000	\$4,049,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Gilman Springs	SR-60	Backbone	1.67	2	4	0%	3.34	1	3	0	0	0	0	\$3,785,000	\$1,639,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Gilman Springs	SR-60	interchange	0.00	0	0	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Moreno Valley	Peris	Reche Vista	Backbone	2.09	2	2	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Moreno Valley	Peris	Ironwood	Backbone	0.52	4	4	80%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Moreno Valley	Peris	SR-60	Backbone	0.00	0	0	0%	0.00	1	2	3	0	0	0	\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Peris	Sunnymead	Backbone	2.00	4	4	25%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Moreno Valley	Peris	Cactus	Backbone	3.64	6	6	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Moreno Valley	Reche Vista	County	Backbone	0.44	2	4	0%	0.88	2	2	0	0	0	0	\$1,531,000	\$4,787,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Case	11th/Case	Backbone	0.00	0	0	0%	0.60	1	2	0	0	0	0	\$680,000	\$3,269,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Case	Goetz	Backbone	2.36	2	4	42%	2.74	1	2	0	0	0	0	\$3,099,000	\$1,489,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Case	San Jacinto River	bridge	0.00	2	4	0%	0.00	1	2	0	0	125	0	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Ethanac	Goetz	Backbone	2.24	0	2	38%	2.78	1	2	0	0	0	0	\$3,144,000	\$1,361,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Ethanac	San Jacinto River	bridge	0.00	0	2	0%	0.00	1	2	0	400	0	0	\$0	\$0	\$0	\$3,840,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Ethanac	I-215	Backbone	0.35	2	4	0%	0.70	1	3	0	0	0	0	\$789,000	\$3,793,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Goetz	Case	Backbone	2.16	2	4	84%	0.69	1	3	0	0	0	0	\$782,000	\$339,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Goetz	San Jacinto River	bridge	0.00	2	4	0%	0.00	1	3	0	400	0	0	\$0	\$0	\$0	\$3,840,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Mid-County (Placentia)	I-215	Backbone	0.87	0	4	41%	2.05	1	2	0	0	0	0	\$2,324,000	\$1,169,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Mid-County (Placentia)	I-215	interchange	0.00	0	0	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Mid-County (Placentia)	Evans	Backbone	1.57	0	4	52%	3.01	1	2	0	0	0	0	\$3,412,000	\$1,639,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Mid-County (Placentia)	Peris Valley Storm Channel	bridge	0.00	0	4	0%	0.00	1	2	0	300	0	0	\$0	\$0	\$0	\$5,760,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Harley Knox	Ramona	Backbone	1.00	6	6	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Peris	Ramona	Backbone	2.49	4	6	35%	3.24	1	3	0	0	0	0	\$3,667,000	\$1,587,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Peris	Citrus	Backbone	0.50	6	6	0%	0.00	1	3	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Peris	Nuevo	Backbone	1.75	2	4	74%	0.91	1	2	0	0	0	0	\$1,028,000	\$4,942,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Peris	I-215 overcrossing	bridge	0.00	4	4	0%	0.00	1	2	0	300	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Ramona	I-215	Backbone	1.44	4	6	77%	0.66	1	2	0	0	0	0	\$748,000	\$3,595,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Ramona	I-215	interchange	0.00	0	0	0%	0.00	1	2	3	0	0	0	\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Central	Peris	Ramona	Evans	Backbone	1.00	6	6	0%	0.00	1	2	0	0	0	0	\$0	\$0	\$0										

EXHIBIT H-1 TUMF Network Detailed Cost Estimate

Updated: July 23, 2024

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENT	FROM	TO	SEGMENT	NETWORK	MILES	EXISTING	FUTURE	% COMPLETE	INCREASE	IN MILES	TOPO	LANDUSE	INTERCHG	BRIDGE	RRXING	ITS	NEWLN	ROWCOST	INTCHG	BRDGC	RRXCOST	ITSCOST	PLNG	ENG	CONTIG	TOTAL COST	MAXIMUM TUMF SHARE						
Pass	Banning			Wilson (8th)	Highland Springs	Wilson (8th)	Sun Lakes	interchange	Backbone	0.76	4	4	0%	0.00	0	1	2	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
Pass	Banning			Highland Springs	I-10	Highland Springs	interchange	Backbone	0.00	0	0	0%	0.00	1	2	2	0	0	0	0	0	0	\$0	\$0	\$43,490,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Banning			Highland Springs	Cherry Valley	Oak Valley (14th)	Wilson (8th)	interchange	Backbone	0.73	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Banning			Highland Springs	Cherry Valley	Oak Valley (14th)	Oak Valley (14th)	interchange	Backbone	1.53	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Banning			I-10 Bypass South	I-10	Morongo Trail (Apache Trail)	Morongo Trail (Apache Trail)	interchange	Backbone	3.29	0	0	0%	6.57	1	2	0	0	0	0	0	0	\$7,439,000	\$35,748,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Banning			I-10 Bypass South	I-10	interchange	San Geronio	interchange	Backbone	0.00	0	0	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$43,490,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Banning			I-10 Bypass South	San Geronio	bridge	San Geronio	bridge	Backbone	0.00	0	0	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Banning			I-10 Bypass South	UP/Hargrave	railroad crossing	UP/Hargrave	railroad crossing	Backbone	0.00	0	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Beaumont			Beaumont	Oak Valley (14th)	I-10	Oak Valley (14th)	interchange	Backbone	1.37	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Beaumont			Potero	Oak Valley (San Timoteo Canyon)	SR-60	SR-60	interchange	Backbone	0.72	2	4	65%	0.50	1	3	0	0	0	0	0	0	\$571,000	\$247,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pass	Beaumont			Potero	SR-60	interchange	SR-60	interchange	Backbone	0.00	0	0	0%	0.00	1	3	2	0	0	0	0	0	\$0	\$0	\$43,490,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Beaumont			Potero	UP	railroad crossing	UP	railroad crossing	Backbone	0.00	4	4	0%	0.00	1	3	0	0	0	0	2	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Beaumont			Potero	Noble Creek	bridge	Noble Creek	bridge	Backbone	0.00	4	4	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Beaumont			Potero	SR-60	4th	SR-60	4th	Backbone	0.45	4	4	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Beaumont			SR-79 (Beaumont)	I-10	California	I-10	California	Backbone	1.15	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Beaumont			SR-79 (Beaumont)	I-10	interchange	SR-79 (Beaumont)	interchange	Backbone	0.00	0	0	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Calimesa			Cherry Valley	Cherry Valley	interchange	Cherry Valley	interchange	Backbone	0.00	0	0	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$43,490,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pass	Calimesa			Cherry Valley	Roberts St	Roberts Rd	Roberts St	Roberts Rd	Backbone	0.70	2	4	0%	1.40	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Unincorporated			Cherry Valley	Bellflower	Noble	Bellflower	Noble	Backbone	1.47	0	2	0%	2.94	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pass	Unincorporated			Cherry Valley	Highland Springs	Bellflower	Highland Springs	Bellflower	Backbone	0.44	2	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pass	Unincorporated			Cherry Valley	Noble	Roberts St	Noble	Roberts St	Backbone	3.25	2	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pass	Unincorporated			Cherry Valley	San Timoteo Wash	bridge	San Timoteo Wash	bridge	Backbone	0.00	2	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pass	Unincorporated			(Lamb Canyon)	SR-79 (Lamb Canyon)	Gilman Springs	Gilman Springs	Gilman Springs	Backbone	5.23	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	Hemet			Domenigoni	Warren	Sanderson	Warren	Sanderson	Backbone	1.77	4	6	0%	3.54	1	3	0	0	0	0	0	0	\$4,011,000	\$1,736,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	Hemet			Domenigoni	Sanderson	State	Sanderson	State	Backbone	2.14	4	4	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	Hemet			SR-74	Winchester	Warren	Winchester	Warren	Backbone	2.59	4	6	11%	4.42	1	2	0	0	0	0	0	0	\$5,227,000	\$25,117,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
San Jacinto	San Jacinto			Mid-County (Ramona)	Warren	Sanderson	Warren	Sanderson	Backbone	1.73	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	San Jacinto			Mid-County (Ramona)	Sanderson/SR-79	(Hemet Bypass)	Sanderson/SR-79	(Hemet Bypass)	Backbone	0.00	0	0	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	San Jacinto			Ramona	Sanderson	State	Sanderson	State	Backbone	2.39	6	6	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
San Jacinto	San Jacinto			Ramona	State	Main	State	Main	Backbone	2.66	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
San Jacinto	San Jacinto			Ramona	Main	Cedar	Main	Cedar	Backbone	2.40	0	4	57%	4.13	1	2	0	0	0	0	0	0	\$4,679,000	\$22,485,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	San Jacinto			Ramona	SR-74	Ramona	SR-74	Ramona	Backbone	1.10	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	Unincorporated			Domenigoni	SR-79 (Winchester)	Warren	SR-79 (Winchester)	Warren	Backbone	3.10	4	6	0%	6.20	1	3	0	0	0	0	0	0	\$7,013,000	\$3,036,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
San Jacinto	Unincorporated			Domenigoni	San Diego Aqueduct	bridge	San Diego Aqueduct	bridge	Backbone	0.00	4	6	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	Unincorporated			Gilman Springs	Bridge	Sanderson	Gilman Springs	Bridge	Backbone	2.95	2	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
San Jacinto	Unincorporated			Mid-County (Ramona)	Bridge	Warren	Mid-County (Ramona)	Bridge	Backbone	2.35	2	4	10%	4.23	1	3	0	0	0	0	0	0	\$4,787,000	\$2,072,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Unincorporated			SR-74	Briggs	SR-79 (Winchester)	Briggs	SR-79 (Winchester)	Backbone	3.54	4	6	0%	7.07	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
San Jacinto	Unincorporated			SR-79 (Hemet Bypass)	SR-74 (Florida)	Domenigoni	SR-74 (Florida)	Domenigoni	Backbone	3.22	0	2	1%	6.38	1	3	0	0	0	0	0	0	\$7,217,000	\$3,124,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Unincorporated			SR-79 (Hemet Bypass)	San Diego Aqueduct	bridge	San Diego Aqueduct	bridge	Backbone	0.00	0	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
San Jacinto	Unincorporated			SR-79 (Hemet Bypass)	Domenigoni	Winchester	Domenigoni	Winchester	Backbone	1.50	0	2	0%	3.00	1	3	0	0	0	0	0	0	\$3,396,000	\$1,470,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Unincorporated			SR-79 (San Jacinto Bypass)	SR-74 (Florida)	Ramona	SR-74 (Florida)	Ramona	Backbone	6.50	0	4	0%	26.00	1	3	0	0	0	0	0	0	\$29,432,000	\$12,740,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Unincorporated			SR-79 (Sanderson)	Gilman Springs	Ramona	Gilman Springs	Ramona	Backbone	1.58	4	6	0%	3.16	1	3	0	0	0	0	0	0	\$3,582,000	\$1,55														

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AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	NETWORK	MILES	EXISTINGLN	FUTURELN	% COMPLETE	INCREASELN	MILES	TOPO	LANDUSE	INTERCHG	BRIDGE	RRXING	ITS	NEWLN	ROWCOST	INTCHGCOST	BRDGCOST	RRXCOST	ITSCOST	PLNG	ENG	CONTRG	TOTAL COST	MAXIMUM TUMF SHARE		
Central	Menifee	Briggs	Scott	Secondary	3.05	2	2	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Briggs	SR-74 (Pinacole)	Secondary	2.54	2	4	73%	1.37	1	3							\$1,553,000	\$672,000	\$0	\$0	\$0	\$0	\$155,000	\$388,000	\$223,000	\$2,991,000	\$2,991,000	
Central	Menifee	Briggs	Old Newport	Secondary	1.50	0	2	17%	2.49	1	3							\$2,819,000	\$1,220,000	\$0	\$0	\$0	\$0	\$282,000	\$705,000	\$404,000	\$5,430,000	\$5,430,000	
Central	Menifee	Briggs	Sail Creek	Secondary	0.00	0	2	0%	0.00	1	3				600			\$0	\$0	\$0	\$5,760,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Garbani	interchange	Secondary	0.00	0	0	0%	0.00	1	3			2				\$0	\$0	\$43,490,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Goetz	Lesser Lane	Secondary	2.61	2	4	0%	5.22	1	3							\$5,907,000	\$2,557,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Goetz	Newport	Secondary	1.36	2	2	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Holland	Bradley	Secondary	1.03	2	4	0%	2.06	1	2							\$2,332,000	\$11,206,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Holland	Bradley	Secondary	0.75	2	4	0%	1.50	1	2							\$1,698,000	\$8,160,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Holland	Haun	Secondary	0.31	0	4	0%	1.24	1	2							\$1,404,000	\$6,746,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Holland	Antelope	Secondary	0.00	0	4	0%	0.00	1	2				350			\$0	\$0	\$0	\$6,720,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Holland	Antelope	Secondary	0.70	2	4	64%	0.50	1	2							\$571,000	\$2,742,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	McCall	Aspel	Secondary	1.23	4	6	0%	2.46	1	3							\$2,780,000	\$1,203,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	McCall	interchange	Secondary	0.00	0	0	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	McCall	Menifee	Secondary	0.95	2	4	45%	1.05	1	3							\$1,188,000	\$514,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Ethiatic	Secondary	1.95	2	2	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Newport	Secondary	2.03	2	4	10%	3.45	1	3							\$4,136,000	\$1,790,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	Secondary	3.00	2	2	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Bundy Canyon	Secondary	0.00	0	0	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Heacock	Secondary	2.17	4	6	83%	0.74	1	2							\$834,000	\$4,007,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	interchange	Secondary	0.00	0	0	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	SR-60	Secondary	0.28	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Ironwood	Secondary	0.00	0	0	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	interchange	Secondary	0.00	0	0	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Euclalyptus	Secondary	0.77	6	6	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Euclalyptus	Secondary	1.00	4	6	42%	1.16	1	2							\$1,313,000	\$6,309,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Towngate	Secondary	0.67	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Frederick	Secondary	1.01	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Heacock	Secondary	1.01	2	2	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Kilching	Secondary	2.42	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Moreno Beach	Secondary	2.28	4	4	47%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Moreno Beach	Secondary	1.63	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Theodore	Secondary	2.79	4	4	77%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	San Michele	Secondary	4.73	4	4	92%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Reche Vista	Secondary	0.74	2	2	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Harley Knox	Secondary	1.33	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Ironwood	Secondary	2.01	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Day	Secondary	1.00	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Heacock	Secondary	3.16	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	John F Kennedy	Secondary	0.00	0	0	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	SR-60	Secondary	1.23	2	4	0%	2.47	1	2							\$2,790,000	\$13,410,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	SR-60 overcrossing	Secondary	0.00	4	4	0%	0.00	1	2				250			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Reche Canyon	Secondary	1.51	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Alessandro	Secondary	0.40	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Ironwood	Secondary	2.66	4	4	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Hidden Springs	Secondary	0.35	2	2	0%	0.00	2	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Moreno Valley City Limit	Secondary	2.75	2	4	5%	5.22	1	2							\$5,907,000	\$28,385,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Lucust	Secondary	0.00	0	0	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Alessandro	Secondary	0.26	2	4	0%	0.52	1	2							\$589,000	\$2,829,000	\$22,550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Euclalyptus	Secondary	0.00	0	0	0%	0.00	1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Theodore	Secondary	1.27	0	4	14%	4.37	1	3							\$4,945,000	\$2,141,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Evans	Secondary	1.00	4	4	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Ramona	Secondary	0.59	4	4	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Morgan	Secondary	0.50	4	4	0%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Rider	Secondary	0.56	2	2	79%	0.00	1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Murrieta	Placentia	Secondary	1.52	0	4	51%	2.98	1	3																		

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AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	NETWORK	MILES	EXISTINGLN	FUTURELN	% COMPLETE	INCREASELN	MILES TOPO	LANDUSE	INTERCHG	BRIDGE	RRXING	ITS	NEWLN	ROWCOST	INTCHGCOST	BRDGCOST	RRXCOST	ITSCOST	PLNG	ENG	CONTRG	TOTAL COST	MAXIMUM TUMF SHARE				
Northwest	Archibald	Remington	River	Secondary	3.40	4	4	82%	0.00	1	3	0	0	0	0	1	\$0	\$0	\$0	\$0	\$0	\$2,333,000	\$233,000	\$583,000	\$233,000	\$3,382,000	\$3,382,000			
Northwest	Eastvale	Hamner	Mission	Secondary	3.03	6	6	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Northwest	Eastvale	Hamner	Bellegrave	Secondary	0.20	6	6	0%	0.00	1	3	0	0	0	0	1	\$0	\$0	\$0	\$0	\$0	\$137,000	\$14,000	\$34,000	\$14,000	\$199,000	\$199,000			
Northwest	Eastvale	Hamner	Amberhill	Secondary	0.71	2	6	55%	1.28	1	3	0	0	0	0	1	\$1,447,000	\$626,000	\$0	\$0	\$0	\$0	\$0	\$0	\$207,000	\$2,787,000	\$2,787,000			
Northwest	Eastvale	Hamner	Schleisman	Secondary	1.00	6	6	0%	0.00	1	3	0	0	0	0	1	\$0	\$0	\$0	\$0	\$0	\$684,000	\$68,000	\$171,000	\$68,000	\$991,000	\$991,000			
Northwest	Eastvale	Hamner	Santa Ana River	Secondary	0.82	2	6	23%	2.54	1	3	0	0	0	0	0	\$2,873,000	\$1,243,000	\$0	\$0	\$0	\$0	\$0	\$0	\$287,000	\$5,533,000	\$3,675,000			
Northwest	Eastvale	Hamner	Schleisman	Secondary	0.55	4	4	90%	0.06	1	3	0	0	0	0	0	\$42,000	\$299,000	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$419,000	\$419,000			
Northwest	Eastvale	Hellman	Walters	Secondary	1.41	2	4	0%	2.82	1	2	0	0	0	0	0	\$3,192,000	\$15,341,000	\$0	\$0	\$0	\$0	\$0	\$0	\$319,000	\$18,530,000	\$21,503,000			
Northwest	Eastvale	Hellman	Cucamonga Creek	bridge	0.00	2	4	0%	0.00	1	2	0	0	275	0	0	\$0	\$0	\$0	\$2,640,000	\$0	\$0	\$0	\$264,000	\$660,000	\$264,000	\$3,828,000	\$3,828,000		
Northwest	Eastvale	Limonte	I-15	Secondary	0.29	6	6	0%	0.00	1	3	0	0	0	1	1	\$0	\$0	\$0	\$0	\$0	\$199,000	\$20,000	\$50,000	\$20,000	\$289,000	\$289,000			
Northwest	Eastvale	Limonte	I-15	interchange	0.00	0	0	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Northwest	Eastvale	Limonte	Eastvale Gateway	Secondary	0.26	6	6	0%	0.00	1	3	0	0	0	0	1	\$0	\$0	\$0	\$0	\$0	\$175,000	\$18,000	\$44,000	\$18,000	\$255,000	\$255,000			
Northwest	Eastvale	Limonte	Hamner	Secondary	1.00	4	6	75%	0.50	1	3	0	0	0	0	0	\$568,000	\$246,000	\$0	\$0	\$0	\$0	\$0	\$0	\$57,000	\$1,094,000	\$1,094,000			
Northwest	Eastvale	Limonte	Sumner	Secondary	0.50	6	6	0%	0.00	1	3	0	0	0	0	1	\$0	\$0	\$0	\$0	\$0	\$343,000	\$34,000	\$86,000	\$34,000	\$497,000	\$497,000			
Northwest	Eastvale	Limonte	Harrison	Secondary	0.49	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Northwest	Eastvale	Limonte	Archibald	Secondary	1.15	0	4	78%	1.01	1	3	0	0	0	0	0	\$1,146,000	\$496,000	\$0	\$0	\$0	\$0	\$0	\$0	\$115,000	\$2,208,000	\$2,208,000			
Northwest	Eastvale	Limonte	Hellman (Keller SBD Co.)	Secondary	0.00	0	4	0%	0.00	1	3	0	0	500	0	0	\$0	\$0	\$0	\$9,600,000	\$0	\$0	\$0	\$960,000	\$2,400,000	\$960,000	\$13,920,000	\$9,000		
Northwest	Eastvale	Limonte	Cucamonga Creek	bridge	0.00	0	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Northwest	Eastvale	Limonte	Archibald	Secondary	0.75	2	4	48%	0.78	1	2	0	0	0	0	0	\$883,000	\$4,243,000	\$0	\$0	\$0	\$0	\$0	\$0	\$88,000	\$5,948,000	\$5,948,000			
Northwest	Eastvale	Limonte	Valley	Secondary	1.53	2	4	34%	2.02	2	3	0	0	0	0	0	\$3,518,000	\$991,000	\$0	\$0	\$0	\$0	\$0	\$0	\$352,000	\$880,000	\$6,192,000	\$6,192,000		
Northwest	Eastvale	Limonte	San Bernardino County	Secondary	0.29	2	4	63%	0.21	1	3	0	0	0	0	0	\$241,000	\$104,000	\$0	\$0	\$0	\$0	\$0	\$0	\$24,000	\$60,000	\$35,000	\$464,000	\$464,000	
Northwest	Eastvale	Limonte	San Bernardino County	Secondary	1.82	0	2	90%	0.36	1	3	0	0	0	0	0	\$412,000	\$178,000	\$0	\$0	\$0	\$0	\$0	\$0	\$41,000	\$103,000	\$59,000	\$793,000	\$793,000	
Northwest	Eastvale	Limonte	Bellevue	Secondary	1.05	4	6	6%	0.69	1	3	0	0	0	0	0	\$786,000	\$340,000	\$0	\$0	\$0	\$0	\$0	\$0	\$79,000	\$197,000	\$113,000	\$1,515,000	\$989,000	
Northwest	Eastvale	Limonte	SR-60	Secondary	2.95	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	I-15	Secondary	0.47	6	6	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.99	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.99	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	2.73	2	4	75%	1.37	1	3	0	0	0	0	0	\$1,547,000	\$670,000	\$0	\$0	\$0	\$0	\$0	\$0	\$155,000	\$387,000	\$222,000	\$2,981,000	\$2,981,000	
Northwest	Eastvale	Limonte	Wineville	Secondary	0.79	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	2.45	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	1.19	2	4	0%	2.38	1	3	0	0	0	0	0	\$2,690,000	\$1,164,000	\$0	\$0	\$0	\$0	\$0	\$0	\$269,000	\$673,000	\$385,000	\$5,181,000	\$0	
Northwest	Eastvale	Limonte	Wineville	Secondary	0.00	2	4	0%	0.00	1	3	0	0	1,000	0	0	\$0	\$0	\$0	\$9,600,000	\$0	\$0	\$0	\$960,000	\$2,400,000	\$960,000	\$13,920,000	\$6,204,000		
Northwest	Eastvale	Limonte	Wineville	Secondary	2.10	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	7.24	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.95	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	2.90	4	4	0%	0.00	2	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.00	0	0	0%	0.00	2	3	0	0	0	0	0	\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$2,255,000	\$5,638,000	\$2,255,000	\$32,698,000	\$9,051,000			
Northwest	Eastvale	Limonte	Wineville	Secondary	0.48	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.26	2	2	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.26	4	4	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	1.39	2	2	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	1.71	4	4	0%	0.00	1	2	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.00	0	0	0%	0.00	1	2	0	0	0	0	0	\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	1.00	2	4	0%	1.99	1	2	0	0	0	0	0	\$2,254,000	\$976,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,255,000	\$5,638,000	\$2,255,000	\$32,698,000	\$3,489,000	
Northwest	Eastvale	Limonte	Wineville	Secondary	1.05	2	4	0%	2.00	1	2	0	0	0	0	0	\$2,262,000	\$10,870,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,255,000	\$5,638,000	\$2,255,000	\$32,698,000	\$3,489,000	
Northwest	Eastvale	Limonte	Wineville	Secondary	1.46	2	2	0%	0.00	1	3	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.00	2	6	0%	0.00	1	3	0	0	1,200	0	0	\$0	\$0	\$0	\$23,040,000	\$0	\$0	\$0	\$0	\$0	\$2,304,000	\$5,760,000	\$2,304,000	\$33,408,000	\$11,455,000
Northwest	Eastvale	Limonte	Wineville	Secondary	3.25	4	6	0%	6.50	1	2	0	0	0	0	0	\$7,362,000	\$35,378,000	\$0	\$0	\$0	\$0	\$0	\$0	\$736,000	\$1,841,000	\$4,274,000	\$49,591,000	\$49,591,000	
Northwest	Eastvale	Limonte	Wineville	Secondary	1.46	4	4	0%	0.00	2	2	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Northwest	Eastvale	Limonte	Wineville	Secondary	0.19	4	4	0%	0.00	1																				

EXHIBIT H-1 TUMF Network Detailed Cost Estimate

Updated: July 23, 2024

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENT	FROM	TO	NETWORK	MILES	EXISTING	FUTURE	% COMPLETE	INCREASE	SEASONS	TOPO	LANDUSE	INTERCHG	BRIDGE	RRXING	ITS	NEWLN	ROW	INTCHG	BRDG	RRX	ITSC	PLNG	ENG	CONTIG	TOTAL COST	MAXIMUM TUMF SHARE
Northwest	Unincorporated	Canlu-Galleano Ranch	Hammer	Wineville	Secondary			0.94	6	6	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Dos Lagos (Weirick)	Temescal Canyon	I-15	Secondary			0.17	4	4	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	El Cerrito	I-15	Ontario	Secondary			0.56	4	4	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	El Sobrante	Mockingbird Canyon	Cajalco	Secondary			1.05	2	2	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Harley John	Washington	Scottsdale	Secondary			0.12	4	4	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Harley John	Scottsdale	Cajalco	Secondary			1.19	2	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	La Sierra	Victoria	El Sobrante	Secondary			2.23	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	La Sierra	Cajalco	El Sobrante	Secondary			2.36	2	2	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Mockingbird Canyon	Van Buren	El Sobrante	Secondary			3.41	2	4	0%	6.82	2	3	0	0	0	0	0	0	\$11,860,000	\$3,340,000	\$0	\$0	\$0	\$0	\$1,186,000	\$2,965,000	\$1,520,000	\$20,871,000	\$20,871,000
Northwest	Unincorporated	Temescal Canyon	El Cerrito	Tuscan	Secondary			0.65	2	4	20%	1.03	2	3	0	0	0	0	0	0	\$1,800,000	\$507,000	\$0	\$0	\$0	\$0	\$180,000	\$450,000	\$231,000	\$3,168,000	\$0
Northwest	Unincorporated	Temescal Canyon	Tuscan	Dos Lagos	Secondary			0.91	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Temescal Canyon	Dos Lagos	Leroy	Secondary			1.10	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Temescal Canyon	Leroy	Dawson Canyon	Secondary			1.89	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Temescal Canyon	Dawson Canyon	I-15	Secondary			0.49	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Temescal Canyon	I-15	interchange	Secondary			0.00	0	0	0%	0.00	2	3	3	0	0	0	0	0	\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$2,255,000	\$5,638,000	\$2,255,000	\$32,698,000	\$32,698,000
Northwest	Unincorporated	Temescal Canyon	I-15	Park Canyon	Secondary			2.02	2	4	10%	3.43	3	3	0	0	0	0	0	0	\$8,533,000	\$1,779,000	\$0	\$0	\$0	\$0	\$853,000	\$2,133,000	\$1,031,000	\$14,329,000	\$14,329,000
Northwest	Unincorporated	Temescal Canyon	Park Canyon	Indian Truck Trail	Secondary			2.55	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Unincorporated	Washington	Hermosa	Harley John	Secondary			3.96	2	4	26%	5.86	1	3	0	0	0	0	0	0	\$6,638,000	\$2,874,000	\$0	\$0	\$0	\$0	\$664,000	\$1,660,000	\$951,000	\$12,787,000	\$12,787,000
Northwest	Unincorporated	Wood	Krameria	Cajalco	Secondary			2.99	2	4	4%	5.75	1	3	0	0	0	0	0	0	\$6,509,000	\$2,817,000	\$0	\$0	\$0	\$0	\$651,000	\$1,627,000	\$933,000	\$12,537,000	\$12,537,000
Pass	Banning	8th	Wilson	I-10	Secondary			0.54	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	Lincoln	Sunset	SR-243	Secondary			2.01	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	Ramsey	8th	8th	Secondary			1.70	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	Ramsey	8th	Highland Springs	Secondary			3.55	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	SR-243	I-10	Wesley	Secondary			0.62	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	Sun Lakes	Highland Home	Sunset	Secondary			1.00	0	4	0%	4.00	1	2	0	0	0	0	0	0	\$4,528,000	\$21,760,000	\$0	\$0	\$0	\$0	\$452,000	\$1,132,000	\$2,629,000	\$30,502,000	\$30,502,000
Pass	Banning	Sun Lakes	Smith Creek	bridge	Secondary			0.00	0	0	0%	0.00	1	2	0	0	0	0	300	0	\$0	\$0	\$0	\$0	\$0	\$0	\$576,000	\$1,440,000	\$576,000	\$8,352,000	\$8,352,000
Pass	Banning	Sun Lakes	Montgomery Creek	bridge	Secondary			0.00	0	4	0%	0.00	1	2	0	0	0	200	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$384,000	\$960,000	\$384,000	\$5,568,000	\$5,568,000
Pass	Banning	Sun Lakes	Highland Springs	Highland Home	Secondary			1.33	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	Sunset	Ramsey	Lincoln	Secondary			0.28	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	Sunset	I-10	interchange	Secondary			0.00	0	0	0%	0.00	1	2	3	0	0	0	0	0	\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$2,255,000	\$5,638,000	\$2,255,000	\$32,698,000	\$32,698,000
Pass	Banning	Wilson	Highland Home	8th	Secondary			2.51	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning	Wilson	Highland Springs	Highland Home	Secondary			1.01	4	4	100%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	1st	Viele	Pennsylvania	Secondary			1.28	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	1st	Highland Springs	Highland Springs	Secondary			1.10	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	6th	Highland Springs	Highland Springs	Secondary			2.24	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Desert Lawn	Champions	Oak Valley (STC)	Secondary			0.99	2	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	Highland Springs	Pennsylvania	Secondary			1.13	4	4	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	Pennsylvania	Oak View	Secondary			1.40	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	Oak View	I-10	Secondary			0.65	4	4	50%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	I-10	interchange	Secondary			0.00	0	0	0%	0.00	1	2	2	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (STC)	UP Railroad	Tukwet Canyon	Secondary			2.94	2	2	0%	0.00	2	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (STC)	Tukwet Canyon	I-10	Secondary			2.58	2	2	0%	0.00	1	3	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont	Pennsylvania	6th	1st	Secondary			0.53	2	4	18%	0.86	1	2	0	0	0	0	0	0	\$978,000	\$4,699,000	\$0	\$0	\$0	\$0	\$98,000	\$245,000	\$568,000	\$6,588,000	\$6,588,000
Pass	Beaumont	Pennsylvania	I-10	interchange	Secondary			0.00	0	0	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Calimesa	Bryant	County Line	Avenue L	Secondary			0.38	2	2	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Calimesa	Calimesa	County Line	County Line	Secondary			0.80	4	4	0%	0.00	1	2	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Calimesa	Calimesa	I-10	interchange	Secondary			0.00	0	0	0%	0.00	1	2	2	0	0	0	0	0	\$0	\$0	\$43,490,000	\$0	\$0	\$0	\$4,349,000	\$10,873,000	\$4,349,000	\$63,061,000	\$63,061,000
Pass	Calimesa	County Line	7th	Bryant	Secondary			1.83	2	2	0%																				

EXHIBIT H-1 TUMF Network Detailed Cost Estimate

Updated: July 23, 2024

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENT	FROM	TO	NETWORK	MILES	EXISTING	FUTURE	% COMPLETE	INCREASE	SEASONS	MILES	TOPO	LANDUSE	INTERCHG	BRIDGE	RRXING	ITS	NEWLN	ROWCOST	INTCHG	BRDGCOST	RRXCOST	ITSCOST	PLNG	ENG	CONTR	TOTAL COST	MAXIMUM TUMF SHARE				
Southwest	Lake Elinore		Coydon	Mission	Secondary	Grand		Secondary	1.53	2	4	50%	1.53		1	3							\$1,732,000	\$750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$173,000	\$433,000	\$248,000	\$3,336,000	\$3,336,000	
Southwest	Lake Elinore		Diamond	Mission	Secondary	I-15		Secondary	0.24	6	6	0%	0.00		1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Lake Elinore		Franklin	Integral to Railroad C	Secondary	I-15		Secondary	0.00	0	0	0%	0.00		1	3							\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$0	\$2,255,000	\$5,638,000	\$2,255,000	\$32,698,000	\$32,698,000		
Southwest	Lake Elinore		Grand	Lincoln	Secondary	Toft		Secondary	1.29	4	4	0%	0.00		1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Lake Elinore		Grand	SR-74 (Riverside)	Secondary	Toft		Secondary	0.86	2	4	8%	1.61		1	3							\$1,824,000	\$789,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$182,000	\$456,000	\$261,000	\$3,512,000	\$3,512,000
Southwest	Lake Elinore		Lake	Lincoln	Secondary	I-15		Secondary	3.25	2	4	28%	4.68		2	2							\$8,144,000	\$25,462,000	\$0	\$0	\$0	\$0	\$0	\$0	\$81,400	\$2,036,000	\$3,361,000	\$39,817,000	\$32,726,000	
Southwest	Lake Elinore		Lake	I-15	Secondary	interchange		Secondary	0.00	0	0	0%	0.00		2	2							\$0	\$0	\$22,550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,255,000	\$2,255,000	\$15,771,000	\$15,771,000
Southwest	Lake Elinore		Lake	Temescal Wash	Secondary	bridge		Secondary	0.00	2	4	0%	0.00		2	2							\$0	\$0	\$0	\$1,728,000	\$0	\$0	\$0	\$0	\$173,000	\$432,000	\$173,000	\$2,506,000	\$1,150,000	
Southwest	Lake Elinore		Mission	Railroad Canyon	Secondary	Bundy Canyon		Secondary	2.39	4	4	0%	0.00		1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Lake Elinore		Nichols	Lake	Secondary	Lake		Secondary	1.80	2	4	0%	3.60		1	3							\$4,075,000	\$1,764,000	\$0	\$0	\$0	\$0	\$0	\$0	\$408,000	\$1,019,000	\$584,000	\$7,850,000	\$7,850,000	
Southwest	Lake Elinore		Nichols	Temescal Wash	Secondary	bridge		Secondary	0.00	2	4	0%	0.00		1	3							\$0	\$0	\$0	\$2,880,000	\$0	\$0	\$0	\$0	\$288,000	\$720,000	\$288,000	\$4,176,000	\$4,176,000	
Southwest	Lake Elinore		Nichols	I-15	Secondary	interchange		Secondary	0.00	0	0	0%	0.00		1	3							\$0	\$0	\$43,490,000	\$0	\$0	\$0	\$0	\$0	\$4,349,000	\$10,873,000	\$4,349,000	\$63,061,000	\$63,061,000	
Southwest	Lake Elinore		SR-74 (Collier/Riverside)	I-15	Secondary	Lakeshore		Secondary	2.15	2	4	26%	3.19		1	2							\$3,608,000	\$17,337,000	\$0	\$0	\$0	\$0	\$0	\$0	\$361,000	\$902,000	\$2,095,000	\$24,303,000	\$24,303,000	
Southwest	Lake Elinore		SR-74 (Grand)	Riverside	Secondary	SR-74 (Ortega)		Secondary	0.64	2	4	0%	1.28		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$145,000	\$361,000	\$839,000	\$9,733,000	\$3,691,000	
Southwest	Lake Elinore		SR-74 (Riverside)	Lakeshore	Secondary	Grand		Secondary	1.74	2	4	24%	2.65		1	2							\$2,995,000	\$14,392,000	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$749,000	\$1,739,000	\$20,175,000	\$20,175,000	
Southwest	Lake Elinore		Temescal Canyon	I-15	Secondary	Lake		Secondary	1.21	2	4	0%	2.42		2	3							\$4,211,000	\$1,186,000	\$0	\$0	\$0	\$0	\$0	\$0	\$421,000	\$1,055,000	\$540,000	\$7,411,000	\$7,411,000	
Southwest	Lake Elinore		Temescal Canyon	Temescal Wash	Secondary	bridge		Secondary	0.00	2	4	0%	0.00		2	3							\$0	\$0	\$0	\$2,400,000	\$0	\$0	\$0	\$0	\$240,000	\$600,000	\$240,000	\$3,480,000	\$3,480,000	
Southwest	Murrieta		California Oaks	Jefferson	Secondary	I-15		Secondary	0.32	4	4	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		California Oaks	I-15	Secondary	Jackson		Secondary	0.00	6	6	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		California Oaks	Jackson	Secondary	Clinton Keith		Secondary	1.76	4	4	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Jackson	Whitehead	Secondary	Ynez		Secondary	0.53	4	4	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Jefferson	Palomar	Secondary	Nutmeg		Secondary	1.02	0	2	75%	0.51		2	3							\$887,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$89,000	\$222,000	\$114,000	\$1,562,000	\$1,562,000	
Southwest	Murrieta		Jefferson	Murrieta Hot Springs	Secondary	Nutmeg		Secondary	2.37	0	2	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Jefferson	Murrieta Hot Springs	Secondary	Cherry		Secondary	2.26	4	6	11%	4.02		1	2							\$4,548,000	\$21,854,000	\$0	\$0	\$0	\$0	\$0	\$0	\$455,000	\$1,137,000	\$2,640,000	\$30,634,000	\$30,634,000	
Southwest	Murrieta		Keller	Whitehead	Secondary	Backbone		Secondary	0.75	2	2	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Keller	I-215	Secondary	Backbone		Secondary	0.00	0	0	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Los Alamos	Jefferson	Secondary	I-215		Secondary	1.77	4	4	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Murrieta Hot Springs	Jefferson	Secondary	I-215		Secondary	1.16	6	6	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Murrieta Hot Springs	I-215	Secondary	Margarita		Secondary	1.45	6	6	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Murrieta Hot Springs	Margarita	Secondary	SR-79 (Winchester)		Secondary	1.01	4	6	8%	1.86		1	2							\$2,106,000	\$911,000	\$0	\$0	\$0	\$0	\$0	\$0	\$211,000	\$527,000	\$302,000	\$4,057,000	\$3,899,000	
Southwest	Murrieta		Nutmeg	Jefferson	Secondary	Clinton Keith		Secondary	1.97	4	4	0%	0.00		1	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Whitehead	Clinton Keith	Secondary	Los Alamos		Secondary	2.01	3	4	56%	0.88		2	3							\$1,539,000	\$433,000	\$0	\$0	\$0	\$0	\$0	\$0	\$154,000	\$385,000	\$197,000	\$2,708,000	\$2,708,000	
Southwest	Murrieta		Whitehead	Los Alamos	Secondary	Murrieta Hot Springs		Secondary	1.93	2	2	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Murrieta		Whitehead	Murrieta Hot Springs	Secondary	Jackson		Secondary	0.80	0	2	66%	0.54		2	2							\$947,000	\$2,959,000	\$0	\$0	\$0	\$0	\$0	\$0	\$95,000	\$237,000	\$391,000	\$4,629,000	\$4,629,000	
Southwest	Murrieta		Ynez	Jackson	Secondary	SR-79 (Winchester)		Secondary	1.22	4	4	0%	0.00		1	2							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Temecula		Butterfield Stage	Murrieta Hot Springs	Secondary	Calle Chapas		Secondary	0.82	4	4	0%	0.00		3	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Temecula		Butterfield Stage	La Serena	Secondary	La Serena		Secondary	0.70	4	4	0%	0.00		2	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Temecula		Butterfield Stage	Rancho California	Secondary	Rancho California		Secondary	0.91	4	4	0%	0.00		2	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Temecula		Butterfield Stage	Rancho California	Secondary	Pauba		Secondary	0.85	4	4	0%	0.00		2	3							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Southwest	Temecula		Butterfield Stage	Pauba	Secondary	SR-79 (Temecula Pkwy)		Secondary	1.69	2	4	93%	0.24		2	3							\$412,000	\$116,000	\$0	\$0	\$0	\$0	\$0	\$0	\$41,000	\$103,000	\$53,000	\$725,000	\$725,000	
Southwest	Temecula		Jefferson	Cherry	Secondary	Rancho California		Secondary	2.29	4	4	0%	0.00		1	1							\$0	\$0	\$0	\$0	\$1,575,000	\$158,000	\$394,000	\$158,000	\$1,575,000	\$2,285,000	\$2,285,000			
Southwest	Temecula		Margarita	Murrieta Hot Springs	Secondary	SR-79 (Temecula Pkwy)		Secondary	7.68	4	4	0%	0.00		1	3							\$0	\$0	\$0	\$0	\$5,272,000	\$527,000	\$1,318,000	\$527,000	\$7,644,000	\$7,644,000				
Southwest	Temecula		Old Town Front	Rancho California	Secondary	I-15/SR-79 (Temecula Pkwy)		Secondary	1.45	4	4	0%	0.00		1	1							\$0	\$0												

EXHIBIT H-2 TUMF Network Detailed Cost Estimate - Existing Need and Obligated Funding

Updated: July 23, 2024

AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE	MAX TUMF MSHCP SHARE	EXIST NEED LOS E&F	SEGMENT DESCRIPTION	% EXIST NEED	>2 LANE ADJST	EXIST V/C	FUTURE V/C	TUMF V/C SHARE	EXIST NEED	OBLIGATED	UNFUND EXIST NEED	MSHCP	MSHCP EXIST NEED	MSHCP UNFUND EXIST NEED	COMBINED UNFUND EXIST NEED	
Central	Menifee	Ethanac	Goetz	\$0	\$0	\$0	\$0		0%	0%	0.27	0.87		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Ethanac	Murrieta	\$0	\$0	\$0	\$0		0%	0%	0.29	0.77		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Ethanac	I-215	\$32,698,000	\$32,698,000	\$0	\$0		0%	0%	0.62	1.21		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Ethanac	Sherman	\$2,674,000	\$2,674,000	\$69,000	\$0		0%	0%	0.32	0.61		\$0	\$0	\$0	\$0	\$69,000	\$0	\$0	
Central	Menifee	Ethanac	BNSF San Jacinto Branch	\$105,560,000	\$105,560,000	\$3,640,000	\$0		0%	0%	0.32	0.61		\$0	\$0	\$0	\$3,640,000	\$0	\$0	\$0	
Central	Menifee	Menifee	SR-74 (Pinacate)	\$1,307,000	\$1,307,000	\$34,000	\$0	Between Rouse and Matthews	11%	11%	0.70	0.98		\$0	\$0	\$0	\$0	\$34,000	\$0	\$0	
Central	Menifee	Menifee	Salt Creek	\$4,384,000	\$4,384,000	\$151,000	\$0		0%	0%	0.36	0.55		\$0	\$0	\$0	\$0	\$151,000	\$0	\$0	
Central	Menifee	Menifee	Simpson	\$0	\$0	\$0	\$0		0%	0%	0.39	0.73		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee	Aldergate	\$0	\$0	\$0	\$0		0%	0%	0.45	0.63		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee	Newport	\$0	\$0	\$0	\$0		0%	0%	0.44	0.72		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee	Holland	\$0	\$0	\$0	\$0		0%	0%	0.41	0.54		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Menifee	Garbani	\$0	\$0	\$0	\$0		0%	0%	0.64	0.96		\$0	\$0	\$0	\$0	\$113,000	\$0	\$0	
Central	Menifee	Menifee/Whitehood	Scott	\$4,353,000	\$4,353,000	\$113,000	\$0		0%	0%	0.44	0.76		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Newport	Goetz	\$0	\$0	\$0	\$0		0%	0%	0.59	0.85		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Newport	Murrieta	\$1,130,000	\$1,130,000	\$29,000	\$0	Between Pacific Channel and Winter Hawk, and SR-1215 Exit Ramp and SR-1215 On Ramp	27%	27%	0.84	1.08		\$0	\$0	\$0	\$0	\$29,000	\$0	\$0	
Central	Menifee	Newport	I-215	\$0	\$0	\$0	\$0	Between Menifee Lakes to Menifee, and I-215 SR On Ramp to Antelope	36%	36%	0.93	1.08		85%	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Newport	Menifee	\$0	\$0	\$0	\$0		0%	0%	0.66	0.94		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Newport	Lindenberger	\$0	\$0	\$0	\$0		0%	0%	0.51	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Newport	Lindenberger	\$0	\$0	\$0	\$0		0%	0%	0.51	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Scott	I-215	\$8,635,000	\$8,635,000	\$224,000	\$0	Between SR-1215 On Ramp and Antelope	5%	5%	0.45	0.82		\$0	\$0	\$0	\$0	\$224,000	\$0	\$0	
Central	Menifee	Scott	I-215	\$0	\$0	\$0	\$0		0%	0%	1.17	1.54		57%	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Menifee	Scott	Sunset	\$4,388,000	\$4,388,000	\$114,000	\$0		0%	0%	0.94	1.32		91%	\$0	\$0	\$0	\$0	\$114,000	\$0	
Central	Menifee	Scott	Murrieta	\$16,949,000	\$12,949,000	\$336,000	\$0		0%	0%	0.72	1.03		\$0	\$4,000,000	\$0	\$0	\$440,000	\$0	\$0	
Central	Menifee	SR-74	Matthews	\$8,254,000	\$8,254,000	\$214,000	\$0		0%	0%	0.72	0.98		\$0	\$0	\$0	\$0	\$214,000	\$0	\$0	
Central	Moreno Valley	Alessandro	I-215	\$13,420,000	\$13,420,000	\$100,000	\$0		0%	0%	0.61	0.80		\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	
Central	Moreno Valley	Alessandro	Peris	\$0	\$0	\$0	\$0		0%	0%	0.55	0.75		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Alessandro	Nason	\$0	\$0	\$0	\$0		0%	0%	0.22	0.48		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Alessandro	Moreno Beach	\$18,019,000	\$18,019,000	\$468,000	\$0		0%	0%	0.24	0.66		\$0	\$0	\$0	\$0	\$468,000	\$0	\$0	
Central	Moreno Valley	Gilman Springs	SR-60	\$7,291,000	\$7,291,000	\$189,000	\$0		0%	0%	0.65	0.73		\$0	\$0	\$0	\$0	\$189,000	\$0	\$0	
Central	Moreno Valley	Gilman Springs	SR-60	\$0	\$0	\$0	\$0		0%	0%	0.60	0.76		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Peris	Reche Vista	\$0	\$0	\$0	\$0		0%	0%	0.34	0.46		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Peris	Ironwood	\$0	\$0	\$0	\$0		0%	0%	0.74	0.93		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Peris	Ironwood	\$0	\$0	\$0	\$0		0%	0%	0.74	0.93		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Peris	SR-60	\$32,698,000	\$11,192,000	\$0	\$0		0%	0%	2.03	2.62		34%	\$21,506,000	\$0	\$21,506,000	\$0	\$0	\$21,506,000	
Central	Moreno Valley	Peris	Sunnymead	\$0	\$0	\$0	\$0		0%	0%	0.62	0.74		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Peris	Cactus	\$0	\$0	\$0	\$0	Between Mandana and Harley Knox	18%	18%	0.69	1.01		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Peris	Hayley Knox	\$0	\$0	\$0	\$0		0%	0%	0.72	0.98		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Moreno Valley	Reche Vista	Country	\$7,486,000	\$3,799,000	\$39,000	\$0	Moreno Valley City Limit to Heacock	100%	100%	0.92	0.95		51%	\$3,687,000	\$0	\$3,687,000	\$77,000	\$38,000	\$38,000	\$3,725,000
Central	Peris	11th/Case	Peris	\$4,582,000	\$4,582,000	\$34,000	\$0		0%	0%	0.76	0.85		\$0	\$0	\$0	\$0	\$34,000	\$0	\$0	
Central	Peris	Case	Goetz	\$20,876,000	\$20,876,000	\$155,000	\$0	Between Ellis and Murrieta	40%	40%	0.80	1.18		\$0	\$0	\$0	\$0	\$155,000	\$0	\$0	
Central	Peris	Case	San Jacinto River	\$1,740,000	\$1,235,000	\$43,000	\$0		0%	0%	1.18	1.88		71%	\$505,000	\$0	\$505,000	\$60,000	\$0	\$60,000	
Central	Peris	Ethanac	Keystone	\$6,056,000	\$6,056,000	\$157,000	\$0		0%	0%	0.07	0.30		\$0	\$0	\$0	\$0	\$157,000	\$0	\$0	
Central	Peris	Ethanac	San Jacinto River	\$5,568,000	\$5,568,000	\$192,000	\$0		0%	0%	0.07	0.30		\$0	\$0	\$0	\$0	\$192,000	\$0	\$0	
Central	Peris	Ethanac	I-215	\$5,316,000	\$5,316,000	\$39,000	\$0		0%	0%	0.53	1.15		\$0	\$0	\$0	\$0	\$39,000	\$0	\$0	
Central	Peris	Goetz	Case	\$1,507,000	\$999,000	\$26,000	\$0	Between Case and Ethanac	100%	100%	1.06	1.38		66%	\$508,000	\$0	\$508,000	\$39,000	\$13,000	\$13,000	\$521,000
Central	Peris	Goetz	San Jacinto River	\$5,568,000	\$3,998,000	\$117,000	\$0		0%	0%	1.13	1.50		61%	\$2,170,000	\$0	\$2,170,000	\$192,000	\$0	\$192,000	
Central	Peris	Mid-County (Placentia)	I-215	\$15,655,000	\$15,655,000	\$116,000	\$0		0%	0%	0.65	0.21		\$0	\$0	\$0	\$0	\$116,000	\$0	\$0	
Central	Peris	Mid-County (Placentia)	I-215	\$0	\$0	\$0	\$0		0%	0%	0.46	0.85		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	Mid-County (Placentia)	Peris	\$22,985,000	\$22,985,000	\$171,000	\$0		0%	0%	0.03	0.11		\$0	\$0	\$0	\$0	\$171,000	\$0	\$0	
Central	Peris	Mid-County (Placentia)	Peris Valley Storm Channel	\$8,352,000	\$8,352,000	\$288,000	\$0		0%	0%	0.03	0.11		\$0	\$0	\$0	\$0	\$288,000	\$0	\$0	
Central	Peris	Peris	Harley Knox	\$0	\$0	\$0	\$0		0%	0%	0.86	1.04		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	Ramona	Ramona	\$7,063,000	\$7,063,000	\$183,000	\$0	Between Ramona and Doves, and Rider and Water	39%	39%	0.83	1.06		\$0	\$0	\$0	\$0	\$183,000	\$0	\$0	
Central	Peris	Peris	Citrus	\$0	\$0	\$0	\$0		0%	0%	0.66	0.97		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	Peris	Citrus	\$0	\$0	\$0	\$0		0%	0%	0.72	0.99		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	Nuevo	11th	\$6,927,000	\$6,927,000	\$51,000	\$0		0%	0%	0.72	0.97		\$0	\$0	\$0	\$0	\$51,000	\$0	\$0	
Central	Peris	Peris	I-215 overcrossing	\$0	\$0	\$0	\$0		0%	0%	0.78	1.10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	Ramona	I-215	\$5,039,000	\$5,039,000	\$37,000	\$0	Between SR-1215 On Ramp and Webster	26%	26%	0.77	0.79		\$0	\$0	\$0	\$0	\$37,000	\$0	\$0	
Central	Peris	Ramona	I-215	\$32,698,000	\$7,725,000	\$0	\$0		0%	0%	1.80	2.08		24%	\$24,973,000	\$0	\$24,973,000	\$0	\$0	\$24,973,000	
Central	Peris	Ramona	Peris	\$0	\$0	\$0	\$0		0%	0%	0.67	0.82		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	Ramona	Evans	\$0	\$0	\$0	\$0		0%	0%	0.62	1.06		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	Ramona	Evans	\$0	\$0	\$0	\$0		0%	0%	0.62	1.06		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Peris	SR-74 (4th)	Ellis	\$0	\$0	\$0	\$0	Between Navajo and S.A.31	22%	22%	0.78	1.03		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Central	Unincorporated	Ethanac	SR-74	\$4,666,000	\$4,666,000	\$121,000	\$0		0%	0%	0.04	0.19		\$0	\$0	\$0	\$0	\$121,000	\$0	\$0	
Central	Unincorporated	Gilman Springs	Alessandro	\$30,601,000	\$30,601,000	\$869,000	\$0	Between Olive and Jackabbit	41%	41%	0.87	1.43		\$0	\$0	\$0	\$0	\$869,000	\$0	\$0	
Central	Unincorporated	Menifee	Nuevo	\$16,684,000	\$16,684,000	\$433,000	\$0		0%	0%	0.69	0.98		\$0	\$0	\$0	\$0	\$433,000	\$0	\$0	
Central	Unincorporated	Mid-County	Evans	\$12,156,000	\$12,156,000	\$362,000	\$0		0%	0%	0.08	0.45		\$0	\$0	\$0	\$0	\$362,000	\$0	\$0	
Central	Unincorporated	Mid-County (Ramona)	Ramona (2,800 ft E of Rider)	\$0	\$0																

EXHIBIT H-2 TUMF Network Detailed Cost Estimate - Existing Need and Obligated Funding

Updated: July 23, 2024

AREA	PLAN	DIST	CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE	MAX TUMF MSHCP SHARE	EXIST NEED	LOS E&F SEGMENT DESCRIPTION	% EXIST NEED	>2 LANE ADJST	EXIST V/C	FUTURE V/C	TUMF V/C SHARE	EXIST NEED	OBLIGATED	UNFUND EXIST NEED	MSHCP	MSHCP EXIST NEED	MSHCP UNFUND EXIST NEED	COMBINED UNFUND EXIST NEED
Pass	Banning			Highland Springs	Wilson (8th)	Sun Lakes	\$0	\$0	\$0	\$0		0%	0%	0.46	0.68		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning			Highland Springs	I-10	interchange	\$63,061,000	\$32,516,000	\$0	\$0		0%	0%	1.16	1.43	52%	\$30,545,000	\$14,698,000	\$15,847,000	\$0	\$0	\$0	\$15,847,000
Pass	Banning			Highland Springs	Oak Valley (14th)	Wilson (8th)	\$0	\$0	\$0	\$0		0%	0%	0.29	0.49		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning			Highland Springs	Cherry Valley	Oak Valley (14th)	\$0	\$0	\$0	\$0		0%	0%	0.28	0.50		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning			I-10 Bypass South	I-10	Morongo Trail (Apache Trail)	\$50,110,000	\$50,110,000	\$372,000	\$0		0%	0%	0.04	0.05		\$0	\$0	\$0	\$372,000	\$0	\$0	\$0
Pass	Banning			I-10 Bypass South	I-10	interchange	\$63,061,000	\$63,061,000	\$0	\$0		0%	0%	0.73	0.86		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Banning			I-10 Bypass South	San Geronio	bridge	\$4,176,000	\$4,176,000	\$144,000	\$0		0%	0%	0.26	0.31		\$0	\$0	\$0	\$0	\$144,000	\$0	\$0
Pass	Banning			I-10 Bypass South	UIP/Hargrave	railroad crossing	\$52,780,000	\$52,780,000	\$1,820,000	\$0		0%	0%	0.26	0.31		\$0	\$0	\$0	\$0	\$1,820,000	\$0	\$0
Pass	Beaumont			Beaumont	Oak Valley (14th)	I-10	\$0	\$0	\$0	\$0		0%	0%	0.31	0.37		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont			Patrero	Oak Valley (San Timoteo Car	SR-60	\$1,100,000	\$1,100,000	\$29,000	\$0		0%	0%	0.01	0.37		\$0	\$0	\$0	\$0	\$29,000	\$0	\$0
Pass	Beaumont			Patrero	SR-60	interchange	\$43,061,000	\$29,561,000	\$0	\$0		0%	0%	0.39	0.84		\$0	\$33,500,000	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont			Patrero	UP	railroad crossing	\$40,020,000	\$40,020,000	\$1,380,000	\$0		0%	0%	0.01	0.37		\$0	\$0	\$0	\$1,380,000	\$0	\$0	\$0
Pass	Beaumont			Patrero	Noble Creek	bridge	\$0	\$0	\$0	\$0		0%	0%	0.01	0.37		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont			Patrero	SR-60	4th	\$0	\$0	\$0	\$0		0%	0%	0.01	0.25		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont			SR-79 (Beaumont)	I-10	California	\$0	\$0	\$0	\$0	Between I-10 WB On Ramp and California	100%	100%	1.05	1.18	46%	\$53,000	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Beaumont			SR-79 (Beaumont)	I-10	interchange	\$63,061,000	\$7,408,000	\$0	\$0		0%	0%	2.20	2.37	12%	\$55,653,000	\$0	\$55,653,000	\$0	\$0	\$0	\$55,653,000
Pass	Calimesa			Chery Valley	I-10	interchange	\$63,061,000	\$59,773,000	\$0	\$0		0%	0%	0.93	1.51	95%	\$3,288,000	\$443,000	\$2,845,000	\$0	\$0	\$0	\$2,845,000
Pass	Calimesa			Chery Valley	Roberts St	Roberts Rd	\$3,053,000	\$3,053,000	\$79,000	\$0		0%	0%	0.54	0.71		\$0	\$0	\$0	\$0	\$79,000	\$0	\$0
Pass	Unincorporated			Chery Valley	Bellflower	Noble	\$6,411,000	\$6,411,000	\$166,000	\$0		0%	0%	0.08	0.23		\$0	\$0	\$0	\$0	\$166,000	\$0	\$0
Pass	Unincorporated			Chery Valley	Highland Springs	Bellflower	\$0	\$0	\$0	\$0		0%	0%	0.03	0.10		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Unincorporated			Chery Valley	Chery Valley	Roberts St	\$0	\$0	\$0	\$0		0%	0%	0.41	0.61		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Unincorporated			Chery Valley	San Timoteo Wash	bridge	\$0	\$0	\$0	\$0		0%	0%	0.26	0.41		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pass	Unincorporated			SR-79 (Lamb Canyon)	California	Gilman Springs	\$0	\$0	\$0	\$0	Between California and Gilman Springs	100%	100%	1.21	1.43	42%	\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Hemet			Domenigoni	Warren	Sanderson	\$7,726,000	\$7,726,000	\$201,000	\$0		0%	0%	0.82	1.13		\$0	\$0	\$0	\$0	\$201,000	\$0	\$0
San Jacinto	Hemet			Domenigoni	Sanderson	State	\$0	\$0	\$0	\$0		0%	0%	0.41	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Hemet			SR-74	Winchester	Warren	\$35,208,000	\$35,208,000	\$261,000	\$0	Between Warren and 450 E East of Coraboa	25%	25%	0.83	1.05		\$0	\$0	\$0	\$0	\$261,000	\$0	\$0
San Jacinto	San Jacinto			Mid-County (Ramona)	Warren	Sanderson	\$0	\$0	\$0	\$0		0%	0%	0.57	0.61		\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	San Jacinto			Mid-County (Ramona)	Sanderson/SR-79 (Hemet Byp	interchange	\$0	\$0	\$0	\$0		0%	0%	0.61	0.85		\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	San Jacinto			Ramona	Sanderson	State	\$0	\$0	\$0	\$0		0%	0%	0.48	0.63		\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	San Jacinto			Ramona	State	Main	\$0	\$0	\$0	\$0		0%	0%	0.58	0.67		\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	San Jacinto			Ramona	Main	Cedar	\$31,518,000	\$26,928,000	\$200,000	\$0	Between 7th and Rue Final Blanc, and Hemet and Mountain	68%	34%	0.93	0.97	57%	\$4,590,000	\$0	\$4,590,000	\$234,000	\$34,000	\$34,000	\$4,624,000
San Jacinto	San Jacinto			Ramona	SR-74	SR-74	\$0	\$0	\$0	\$0		0%	0%	0.29	0.35		\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Unincorporated			Domenigoni	SR-79 (Winchester)	Warren	\$13,508,000	\$13,508,000	\$351,000	\$0		0%	0%	0.88	1.13		\$0	\$0	\$0	\$0	\$351,000	\$0	\$0
San Jacinto	Unincorporated			Domenigoni	San Diego Aqueduct	bridge	\$4,176,000	\$4,176,000	\$144,000	\$0		0%	0%	0.88	1.12		\$0	\$0	\$0	\$0	\$144,000	\$0	\$0
San Jacinto	Unincorporated			Gilman Springs	Bridge	Sanderson	\$0	\$0	\$0	\$0		0%	0%	0.42	0.84		\$0	\$0	\$0	\$0	\$0	\$0	\$0
San Jacinto	Unincorporated			Mid-County (Ramona)	Bridge	Warren	\$9,221,000	\$9,221,000	\$239,000	\$0		0%	0%	0.78	1.04		\$0	\$0	\$0	\$0	\$239,000	\$0	\$0
San Jacinto	Unincorporated			SR-74	Briggs	SR-79 (Winchester)	\$15,417,000	\$15,417,000	\$400,000	\$0	Between Briggs and Sultana	14%	14%	0.63	1.06		\$0	\$0	\$0	\$0	\$400,000	\$0	\$0
San Jacinto	Unincorporated			SR-79 (Hemet Bypass)	SR-74 (Florida)	Domenigoni	\$13,901,000	\$13,901,000	\$361,000	\$0		0%	0%	0.62	0.86		\$0	\$0	\$0	\$0	\$361,000	\$0	\$0
San Jacinto	Unincorporated			SR-79 (Hemet Bypass)	San Diego Aqueduct	bridge	\$4,176,000	\$4,176,000	\$144,000	\$0		0%	0%	0.62	0.86		\$0	\$0	\$0	\$0	\$144,000	\$0	\$0
San Jacinto	Unincorporated			SR-79 (Hemet Bypass)	Domenigoni	Winchester	\$6,542,000	\$6,542,000	\$170,000	\$0		0%	0%	0.59	0.76		\$0	\$0	\$0	\$0	\$170,000	\$0	\$0
San Jacinto	Unincorporated			SR-79 (San Jacinto Bypass)	Mid-County (Ramona)	SR-74 (Florida)	\$56,690,000	\$56,690,000	\$1,472,000	\$0		0%	0%	0.55	0.73		\$0	\$0	\$0	\$1,472,000	\$0	\$0	\$0
San Jacinto	Unincorporated			SR-79 (Sanderson)	Gilman Springs	Ramona	\$6,899,000	\$6,899,000	\$66,000	\$0	Between Ramona and Gilman Springs	100%	100%	1.18	1.34	37%	\$4,344,000	\$0	\$4,344,000	\$179,000	\$113,000	\$113,000	\$4,457,000
San Jacinto	Unincorporated			SR-79 (Sanderson)	San Jacinto River	bridge	\$19,488,000	\$7,651,000	\$264,000	\$0		0%	0%	1.21	1.41	39%	\$11,837,000	\$0	\$11,837,000	\$672,000	\$0	\$0	\$11,837,000
San Jacinto	Unincorporated			SR-79 (Winchester)	Domenigoni	Keller	\$65,022,000	\$65,022,000	\$483,000	\$0		0%	0%	0.55	0.82		\$0	\$0	\$0	\$0	\$483,000	\$0	\$0
Southwest	Canyon Lake			Goetz	Railroad Canyon	Newport	\$0	\$0	\$0	\$0		0%	0%	0.35	0.53		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Canyon Lake			Railroad Canyon	Canyon Hills	Goetz	\$0	\$0	\$0	\$0		0%	0%	0.71	0.94		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Lake Elsinore			Railroad Canyon	I-15	Canyon Hills	\$0	\$0	\$0	\$0	Between NB I-5 On Ramp and Summit Hill	2%	2%	0.86	1.12		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Lake Elsinore			Railroad Canyon	I-15	interchange	\$0	\$0	\$0	\$0		0%	0%	2.48	3.04	26%	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Lake Elsinore			SR-74	I-15	interchange	\$63,061,000	\$24,162,000	\$0	\$0		0%	0%	1.60	2.03	38%	\$38,899,000	\$0	\$38,899,000	\$0	\$0	\$0	\$38,899,000
Southwest	Murietta			Clinton Keith	Copper Craft	Toulon	\$0	\$0	\$0	\$0	Between California Oaks and Toulon	35%	35%	0.76	0.95		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Murietta			Clinton Keith	Toulon	I-215	\$2,076,000	\$2,076,000	\$54,000	\$0	Between Toulon and Thousand Oaks, and Duster and McIlwain	52%	52%	0.88	1.06		\$0	\$0	\$0	\$0	\$54,000	\$0	\$0
Southwest	Murietta			Clinton Keith	I-215	Whitewood	\$0	\$0	\$0	\$0		0%	0%	0.67	0.76		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Murietta			French Valley (Date)	Murietta Hot Springs	Winchester Creek	\$7,321,000	\$7,321,000	\$54,000	\$0		0%	0%	0.77	1.21		\$0	\$0	\$0	\$0	\$54,000	\$0	\$0
Southwest	Murietta			French Valley (Date)	Winchester Creek	Margarita	\$0	\$0	\$0	\$0		0%	0%	0.04	0.08		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Murietta			Whitewood	Menifee City Limit	Keller	\$0	\$0	\$0	\$0		0%	0%	0.39	0.74		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Murietta			Whitewood	Keller	Clinton Keith	\$0	\$0	\$0	\$0		0%	0%	0.54	0.84		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Southwest	Temecula			French Valley (Chery)	Jefferson	Diaz	\$3,929,000	\$3,929,000	\$29,000	\$0		0%	0%	0.00	0.58		\$0	\$0	\$0	\$0	\$29,000	\$0	\$0
Southwest	Temecula			French Valley (Chery)	Murietta Creek	bridge	\$5,846,000	\$5,846,000	\$202,000	\$0		0%	0%	0.00	0.58		\$0	\$0	\$0	\$0	\$202,000	\$0	\$0
Southwest	Temecula			French Valley (Date)	Margarita	Ynez	\$0	\$0	\$0	\$0		0%	0%	0.20	0.34		\$0	\$0	\$0	\$0	\$0	\$0	\$0

EXHIBIT H-2 TUMF Network Detailed Cost Estimate - Existing Need and Obligated Funding

Updated: July 23, 2024

AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE	MAX TUMF MSHCP SHARE	EXIST NEED	LOS E&F SEGMENT DESCRIPTION	% EXIST NEED	>2 LANE ADJST	EXIST V/C	FUTURE V/C	TUMF V/C SHARE	EXIST NEED	OBLIGATED	UNFUND EXIST NEED	MSHCP	MSHCP EXIST NEED	MSHCP UNFUND EXIST NEED	COMBINED UNFUND EXIST NEED
Central	Menifee	Newport	Scott	\$0	\$0	\$0	\$0		0%	0%	0.18	0.48		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Briggs	SR-74 (Pinacate)	\$2,991,000	\$2,991,000	\$78,000	\$0		0%	0%	0.05	0.23		\$0	\$0	\$0	\$0	\$78,000	\$0	\$0
Central	Menifee	Briggs	Simpson	\$5,430,000	\$5,430,000	\$141,000	\$0		0%	0%	0.35	0.78		\$0	\$0	\$0	\$0	\$141,000	\$0	\$0
Central	Menifee	Briggs	Salt Creek	\$8,352,000	\$8,352,000	\$288,000	\$0		0%	0%	0.41	0.74		\$0	\$0	\$0	\$0	\$288,000	\$0	\$0
Central	Menifee	Garbani	I-215	\$63,061,000	\$42,483,000	\$0	\$0		0%	0%	1.21	1.85	67%	\$20,578,000	\$0	\$20,578,000	\$0	\$0	\$0	\$20,578,000
Central	Menifee	Goetz	Juanita	\$11,378,000	\$11,378,000	\$295,000	\$0		0%	0%	0.70	0.94		\$0	\$0	\$0	\$0	\$295,000	\$0	\$0
Central	Menifee	Goetz	Newport	\$0	\$0	\$0	\$0		0%	0%	0.65	0.97		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Holland	Murrieta	\$15,708,000	\$15,708,000	\$117,000	\$0		0%	0%	0.52	0.87		\$0	\$0	\$0	\$0	\$117,000	\$0	\$0
Central	Menifee	Holland	Bradley	\$11,439,000	\$11,439,000	\$85,000	\$0		0%	0%	0.62	0.94		\$0	\$0	\$0	\$0	\$85,000	\$0	\$0
Central	Menifee	Hollan	Hau	\$9,456,000	\$9,456,000	\$70,000	\$0		0%	0%	0.74	0.96		\$0	\$0	\$0	\$0	\$70,000	\$0	\$0
Central	Menifee	Holland	I-215 overcrossing	\$9,744,000	\$9,744,000	\$336,000	\$0		0%	0%	0.76	0.96		\$0	\$0	\$0	\$0	\$336,000	\$0	\$0
Central	Menifee	Holland	Antelope	\$3,844,000	\$3,844,000	\$29,000	\$0		0%	0%	0.17	0.50		\$0	\$0	\$0	\$0	\$29,000	\$0	\$0
Central	Menifee	McCall	I-215	\$5,354,000	\$5,354,000	\$139,000	\$0		0%	0%	0.34	0.65		\$0	\$0	\$0	\$0	\$139,000	\$0	\$0
Central	Menifee	McCall	I-215	\$0	\$0	\$0	\$0		0%	0%	1.58	2.02	39%	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	McCall	Aspel	\$2,288,000	\$2,288,000	\$59,000	\$0		0%	0%	0.38	0.71		\$0	\$0	\$0	\$0	\$59,000	\$0	\$0
Central	Menifee	Murrieta	Ethanac	\$0	\$0	\$0	\$0		0%	0%	0.52	0.84		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	McCall	\$7,967,000	\$7,967,000	\$207,000	\$0		0%	0%	0.60	0.84		\$0	\$0	\$0	\$0	\$207,000	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Bundy Canyon	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.43	0.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central	Menifee	Murrieta	Newport	\$0	\$0	\$0	\$0		0%	0%	0.									

EXHIBIT H-2 TUMF Network Detailed Cost Estimate - Existing Need and Obligated Funding

Updated: July 23, 2024

AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE	MAX TUMF MSHCP SHARE	EXIST NEED LOS E&F SEGMENT DESCRIPTION	% EXIST NEED	>2 LANE ADJUST	EXIST V/C	FUTURE V/C	TUMF V/C SHARE	EXIST NEED	OBLIGATED	UNFUND EXIST NEED	MSHCP	MSHCP EXIST NEED	MSHCP UNFUND EXIST NEED	COMBINED UNFUND EXIST NEED	
Northwest	Eastvale	Archibald	Remington	\$3,382,000	\$3,382,000		River	24%		0.62	0.93		\$0	\$0	\$0		\$0	\$0	\$0	
Northwest	Eastvale	Hammer	Mission	\$0	\$0		Bellegrave	44%	44%	0.86	1.30		\$0	\$0	\$0		\$0	\$0	\$0	
Northwest	Eastvale	Hammer	Bellegrave	\$199,000	\$199,000		Amberhill	0%	0%	0.57	1.16		\$0	\$0	\$0		\$0	\$0	\$0	
Northwest	Eastvale	Hammer	Amberhill	\$2,787,000	\$2,787,000	\$72,000	Limonte	0%	0%	0.68	1.08		\$0	\$0	\$0	\$72,000	\$0	\$0	\$0	
Northwest	Eastvale	Hammer	Limonte	\$991,000	\$991,000		Schleisman	0%	0%	0.38	0.63		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Hammer	Schleisman	\$5,533,000	\$3,675,000	\$96,000	Santa Ana River	100%	50%	1.24	1.41	33%	\$1,858,000	\$0	\$1,858,000	\$144,000	\$48,000	\$48,000	\$1,906,000	
Northwest	Eastvale	Heliman	Walters	\$419,000	\$419,000		River	0%	0%	0.86	1.69		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Heliman	Walters	\$21,503,000	\$21,503,000	\$160,000	bridge	0%	0%	0.69	1.44		\$0	\$0	\$0	\$0	\$0	\$160,000	\$0	
Northwest	Eastvale	Heliman	Cucamonga Creek	\$3,828,000	\$3,828,000	\$132,000	I-15	100%	100%	0.93	1.32	92%	\$0	\$0	\$0	\$0	\$0	\$132,000	\$0	
Northwest	Eastvale	Limonte	I-15	\$289,000	\$289,000		Eastvale Gateway	0%	0%	0.67	1.07		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	I-15	\$0	\$0		interchange	0%	0%	0.67	1.07		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Eastvale Gateway	\$255,000	\$255,000		Hammer	100%	100%	0.95	1.36	90%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northwest	Eastvale	Limonte	Hammer	\$1,094,000	\$1,094,000	\$28,000	Sumner	50%	50%	0.80	1.16		\$0	\$0	\$0	\$0	\$0	\$28,000	\$0	
Northwest	Eastvale	Limonte	Sumner	\$497,000	\$497,000		Harrison	0%	0%	0.77	0.97		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Harrison	\$0	\$0		Archibald	0%	0%	0.55	0.70		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Archibald	\$2,208,000	\$2,208,000	\$57,000	Hellman (Keller SBD Co.)	0%	0%	0.00	0.35		\$0	\$0	\$0	\$0	\$0	\$57,000	\$0	
Northwest	Eastvale	Limonte	Hellman (Keller SBD Co.)	\$13,920,000	\$0	\$0	bridge	0%	0%	0.64	0.75		\$0	\$13,920,000	\$0	\$0	\$480,000	\$0	\$0	
Northwest	Eastvale	Limonte	Archibald	\$5,948,000	\$5,948,000	\$44,000	San Bernardino County	0%	0%	0.67	1.01		\$0	\$0	\$0	\$0	\$0	\$44,000	\$0	
Northwest	Eastvale	Limonte	San Bernardino County	\$6,192,000	\$6,192,000	\$176,000	Valley	33%	33%	0.83	1.14		\$0	\$0	\$0	\$0	\$0	\$176,000	\$0	
Northwest	Eastvale	Limonte	Valley	\$464,000	\$464,000	\$12,000	Canlu-Galleano Ranch	0%	0%	0.43	0.78		\$0	\$0	\$0	\$0	\$0	\$12,000	\$0	
Northwest	Eastvale	Limonte	Canlu-Galleano Ranch	\$793,000	\$793,000	\$21,000	Bellegrave	0%	0%	0.14	0.27		\$0	\$0	\$0	\$0	\$0	\$21,000	\$0	
Northwest	Eastvale	Limonte	Bellegrave	\$1,515,000	\$989,000	\$25,000	Philadelphia	100%	100%	1.11	1.49	65%	\$526,000	\$0	\$526,000	\$39,000	\$14,000	\$14,000	\$540,000	
Northwest	Eastvale	Limonte	Philadelphia	\$0	\$0		SR-60	12%	12%	0.61	0.84		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	SR-60	\$0	\$0		Limonte	15%	15%	0.82	0.90		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Limonte	\$0	\$0		Wineville	9%	9%	0.76	0.80		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Wineville	\$2,981,000	\$2,981,000	\$77,000	Etiwanda	23%	23%	0.80	0.91		\$0	\$0	\$0	\$0	\$0	\$77,000	\$0	
Northwest	Eastvale	Limonte	Etiwanda	\$0	\$0		Van Buren	0%	0%	0.67	0.84		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Van Buren	\$0	\$0		Clay	0%	0%	0.64	0.79		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Clay	\$5,181,000	\$0	\$0	Riverview	40%	40%	0.86	1.06		\$0	\$5,181,000	\$0	\$0	\$135,000	\$0	\$0	
Northwest	Eastvale	Limonte	Riverview	\$13,920,000	\$6,204,000	\$214,000	Santa Ana River	0%	0%	1.13	1.32	45%	\$7,716,000	\$0	\$7,716,000	\$480,000	\$0	\$0	\$7,716,000	
Northwest	Eastvale	Limonte	Santa Ana River	\$0	\$0		Market	58%	58%	0.90	1.06		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Market	\$0	\$0		Milliken	13%	13%	0.57	0.78		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Milliken	\$0	\$0		SR-60	0%	0%	0.55	0.56		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	SR-60	\$32,698,000	\$9,051,000	\$0	Mission	0%	0%	0.86	1.11		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Mission	\$0	\$0		interchange	100%	100%	1.22	1.47	28%	\$23,647,000	\$0	\$23,647,000	\$0	\$0	\$0	\$23,647,000	
Northwest	Eastvale	Limonte	interchange	\$0	\$0		Armstrong	0%	0%	0.75	0.89		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Armstrong	\$0	\$0		Valley	0%	0%	0.38	0.51		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Valley	\$0	\$0		Mountain	7%	7%	0.74	0.85		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Mountain	\$0	\$0		Hammer	9%	9%	0.68	0.76		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Hammer	\$32,698,000	\$3,489,000	\$0	California	0%	0%	2.57	2.77	11%	\$29,209,000	\$0	\$29,209,000	\$0	\$0	\$0	\$29,209,000	
Northwest	Eastvale	Limonte	California	\$4,342,000	\$4,342,000	\$113,000	Crestview	100%	100%	0.79	0.94		\$0	\$0	\$0	\$0	\$0	\$113,000	\$0	
Northwest	Eastvale	Limonte	Crestview	\$15,237,000	\$12,525,000	\$93,000	Fairhaven	78%	78%	0.96	1.14	77%	\$2,712,000	\$0	\$2,712,000	\$0	\$20,000	\$20,000	\$2,732,000	
Northwest	Eastvale	Limonte	Fairhaven	\$0	\$0		6th	0%	0%	0.52	0.78		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	6th	\$33,408,000	\$11,455,000	\$395,000	Arlington	0%	0%	1.41	1.67	34%	\$21,953,000	\$21,621,000	\$332,000	\$1,152,000	\$0	\$0	\$332,000	
Northwest	Eastvale	Limonte	Arlington	\$49,591,000	\$49,591,000	\$368,000	5th	6%	6%	0.65	0.80		\$0	\$0	\$0	\$0	\$0	\$368,000	\$0	
Northwest	Eastvale	Limonte	5th	\$0	\$0		SR-91	3%	3%	0.55	0.70		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	SR-91	\$0	\$0		Hidden Valley	100%	100%	1.14	1.23	27%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Hidden Valley	\$0	\$0		I-15	0%	0%	0.33	0.48		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	I-15	\$0	\$0		Hammer	100%	100%	0.96	1.19	80%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Hammer	\$1,743,000	\$1,109,000	\$8,000	Corydon	79%	79%	1.20	1.56	54%	\$634,000	\$0	\$634,000	\$13,000	\$5,000	\$5,000	\$639,000	
Northwest	Eastvale	Limonte	Corydon	\$0	\$0		Archibald	0%	0%	0.66	0.76		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Archibald	\$0	\$0		Market	0%	0%	0.24	0.50		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Market	\$1,941,000	\$1,941,000	\$14,000	Main	0%	0%	0.49	0.59		\$0	\$0	\$0	\$0	\$0	\$14,000	\$0	
Northwest	Eastvale	Limonte	Main	\$105,560,000	\$30,560,000	\$1,054,000	I-215	0%	0%	0.77	0.90		\$0	\$75,000,000	\$0	\$0	\$3,640,000	\$0		
Northwest	Eastvale	Limonte	I-215	\$0	\$0		SR-91	0%	0%	0.49	0.48		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	SR-91	\$0	\$0		Lincoln	0%	0%	0.44	0.64		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Lincoln	\$32,698,000	\$3,262,000	\$0	interchange	0%	0%	1.46	1.52	10%	\$29,436,000	\$935,000	\$28,501,000	\$0	\$0	\$0	\$28,501,000	
Northwest	Eastvale	Limonte	interchange	\$0	\$0		Fairhaven	0%	0%	0.68	0.77		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Fairhaven	\$0	\$0		Santa Ana River	0%	0%	0.83	1.17		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Santa Ana River	\$0	\$0		Redwood	0%	0%	0.83	1.17		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Redwood	\$0	\$0		Central	71%	71%	1.02	1.16	55%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Central	\$0	\$0		Canyon Crest	0%	0%	0.70	0.77		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Canyon Crest	\$4,996,000	\$1,593,000	\$45,000	Country Club	100%	100%	1.30	1.48	32%	\$3,403,000	\$0	\$3,403,000	\$142,000	\$97,000	\$97,000	\$3,500,000	
Northwest	Eastvale	Limonte	Country Club	\$0	\$0		Via Vista	0%	0%	0.59	0.72		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Via Vista	\$0	\$0		Alessandro	32%	32%	0.80	0.96		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Alessandro	\$0	\$0		Chicago	6%	6%	0.64	0.71		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Chicago	\$0	\$0		SR-91	5%	5%	0.75	0.87		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	SR-91	\$0	\$0		Central	0%	0%	0.43	0.53		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Central	\$0	\$0		Van Buren	43%	43%	0.85	0.99		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Northwest	Eastvale	Limonte	Van Buren	\$0	\$0		Alessandro	0%	0%	0.72	0.85		\$0	\$0	\$0					

EXHIBIT H-2 TUMF Network Detailed Cost Estimate - Existing Need and Obligated Funding

Updated: July 23, 2024

AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE	MAX TUMF MSHCP SHARE	EXIST NEED LOS E&F SEGMENT DESCRIPTION	% EXIST NEED	>2 LANE ADJST	EXIST V/C	FUTURE V/C	TUMF V/C SHARE	EXIST NEED	OBLIGATED	UNFUNDED EXIST NEED	MSHCP	MSHCP EXIST NEED	MSHCP UNFUNDED EXIST NEED	COMBINED UNFUNDED EXIST NEED
Northwest	Unincorporated Cantu-Galleano Ranch	Hamner	Wineville	\$0	\$0	\$0		0%	0%	0.47	0.95		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Dos Lagos (Weirick)	Temescal Canyon	I-15	\$0	\$0	\$0	Between I-15 and I-15 NB On Ramp	22%	22%	0.52	0.72		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated El Cerrito	I-15	Ontario	\$0	\$0	\$0		0%	0%	0.15	0.26		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated El Sobrante	Mockingbird Canyon	Cajalco	\$0	\$0	\$0		0%	0%	0.62	0.78		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Harley John	Washington	Scottsdale	\$0	\$0	\$0		0%	0%	0.38	0.65		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Harley John	Scottsdale	Cajalco	\$0	\$0	\$0		0%	0%	0.38	0.73		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated La Sierra	Victoria	El Sobrante	\$0	\$0	\$0	Between Victoria and Orchard View	40%	0%	0.85	1.03		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated La Sierra	El Sobrante	Cajalco	\$0	\$0	\$0		0%	0%	0.25	0.37		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Mockingbird Canyon	Van Buren	El Sobrante	\$20,871,000	\$20,871,000	\$593,000	Between Van Buren and Lindina	31%	31%	0.50	0.83		\$0	\$0	\$0	0%	\$593,000	\$0	\$0
Northwest	Unincorporated Temescal Canyon	El Cerrito	Tuscany	\$3,168,000	\$0	\$0		0%	0%	0.68	1.07		\$0	\$3,168,000	\$0	0%	\$90,000	\$0	\$0
Northwest	Unincorporated Temescal Canyon	Tuscany	Dos Lagos	\$0	\$0	\$0		0%	0%	0.72	1.08		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Temescal Canyon	Dos Lagos	Leroy	\$0	\$0	\$0		0%	0%	0.48	0.74		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Temescal Canyon	Leroy	Dawson Canyon	\$0	\$0	\$0		0%	0%	0.46	0.71		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Temescal Canyon	Dawson Canyon	I-15	\$0	\$0	\$0	Between I-15 NB On Ramp and 1000 ft North	43%	43%	0.66	1.01		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Temescal Canyon	I-15	interchange	\$32,698,000	\$32,698,000	\$0		0%	0%	0.85	1.35		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Temescal Canyon	I-15	Park Canyon	\$14,329,000	\$14,329,000	\$427,000	Between I-15 SB On Ramp and Squaw Mountain	27%	0%	0.69	1.02		\$0	\$0	\$0	0%	\$427,000	\$0	\$0
Northwest	Unincorporated Temescal Canyon	Park Canyon	Indian Truck Trail	\$0	\$0	\$0		0%	0%	0.02	0.12		\$0	\$0	\$0	0%	\$0	\$0	\$0
Northwest	Unincorporated Washington	Hermosa	Harley John	\$12,787,000	\$12,787,000	\$332,000		0%	0%	0.73	0.92		\$0	\$0	\$0	0%	\$332,000	\$0	\$0
Northwest	Unincorporated Wood	Krameria	Cajalco	\$12,537,000	\$12,537,000	\$325,000	Between Krameria and Matiposa	17%	17%	0.56	0.83		\$0	\$0	\$0	0%	\$325,000	\$0	\$0
Pass	Banning	8th	Wilson	\$0	\$0	\$0		0%	0%	0.25	0.37		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Lincaln	Sunset	\$0	\$0	\$0		0%	0%	0.14	0.16		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Ramsey	I-10	\$0	\$0	\$0		0%	0%	0.10	0.13		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Ramsey	8th	\$0	\$0	\$0		0%	0%	0.24	0.33		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	SR-243	I-10	\$0	\$0	\$0		0%	0%	0.31	0.46		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Sun Lakes	Highland Home	\$30,502,000	\$30,502,000	\$226,000		0%	0%	0.10	0.11		\$0	\$0	\$0	0%	\$226,000	\$0	\$0
Pass	Banning	Sun Lakes	Smith Creek	\$8,352,000	\$8,352,000	\$288,000		0%	0%	0.10	0.11		\$0	\$0	\$0	0%	\$288,000	\$0	\$0
Pass	Banning	Sun Lakes	Montgomery Creek	\$5,568,000	\$5,568,000	\$192,000		0%	0%	0.10	0.11		\$0	\$0	\$0	0%	\$192,000	\$0	\$0
Pass	Banning	Sun Lakes	Highland Springs	\$0	\$0	\$0		0%	0%	0.04	0.05		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Sunset	Ramsey	\$0	\$0	\$0		0%	0%	0.13	0.23		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Sunset	I-10	\$32,698,000	\$32,698,000	\$0		0%	0%	0.53	0.91		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Wilson	Highland Home	\$0	\$0	\$0		0%	0%	0.06	0.12		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Banning	Wilson	Highland Springs	\$0	\$0	\$0		0%	0%	0.14	0.24		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	1st	Pennsylvania	\$0	\$0	\$0		0%	0%	0.48	0.57		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	1st	Pennsylvania	\$0	\$0	\$0		0%	0%	0.51	0.71		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	6th	I-10	\$0	\$0	\$0		0%	0%	0.23	0.47		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	Desert Lawn	Champions	\$0	\$0	\$0		0%	0%	0.45	0.80		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	Highland Springs	\$0	\$0	\$0		0%	0%	0.05	0.11		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	Pennsylvania	\$0	\$0	\$0		0%	0%	0.14	0.26		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	Oak View	\$0	\$0	\$0		0%	0%	0.69	1.04		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (14th)	I-10	\$63,061,000	\$62,401,000	\$0		0%	0%	0.90	1.14		99%	\$660,000	\$0	\$660,000	\$0	\$0	\$660,000
Pass	Beaumont	Oak Valley (STC)	UP Railroad	\$0	\$0	\$0		0%	0%	0.01	0.23		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	Oak Valley (STC)	Tukwet Canyon	\$0	\$0	\$0		0%	0%	0.09	0.38		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Beaumont	Pennsylvania	6th	\$6,588,000	\$6,588,000	\$49,000		0%	0%	0.52	0.74		\$0	\$0	\$0	0%	\$49,000	\$0	\$0
Pass	Beaumont	Pennsylvania	I-10	\$0	\$0	\$0		0%	0%	0.51	0.63		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	Bryant	County Line	\$0	\$0	\$0		0%	0%	0.38	0.61		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	Calimesa	County Line	\$0	\$0	\$0		0%	0%	0.13	0.38		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	Calimesa	I-10	\$63,061,000	\$63,061,000	\$0		0%	0%	0.54	1.59		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	County Line	7th	\$0	\$0	\$0	Between I-10 NB On Ramp and Calimesa, and Park and 5th	13%	13%	0.54	0.71		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	County Line	I-10	\$32,698,000	\$32,698,000	\$0		0%	0%	0.88	1.26		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	Desert Lawn	Palmer	\$0	\$0	\$0		0%	0%	0.04	0.44		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	Singleton	Avenue L	\$0	\$0	\$0		0%	0%	0.43	0.64		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Calimesa	Singleton	Condit	\$12,972,000	\$12,972,000	\$96,000		0%	0%	0.74	1.14		\$0	\$0	\$0	0%	\$96,000	\$0	\$0
Pass	Calimesa	Singleton	Roberts	\$63,061,000	\$63,061,000	\$0		0%	0%	1.04	0.99		0%	\$63,061,000	\$0	\$63,061,000	\$0	\$0	\$63,061,000
Pass	Calimesa	Tukwet Canyon	Roberts Rd	\$0	\$0	\$0		0%	0%	0.71	1.37		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Unincorporated Live Oak Canyon	Oak Valley (STC)	San Bernardino County	\$0	\$0	\$0		0%	0%	0.36	0.47		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Unincorporated San Timoleo Canyon	San Bernardino County	UP Railroad	\$0	\$0	\$0	Between San Bernardino County and Redlands	22%	22%	0.31	0.66		\$0	\$0	\$0	0%	\$0	\$0	\$0
Pass	Unincorporated San Timoleo Canyon	UP Railroad	railroad crossing	\$52,780,000	\$52,780,000	\$1,820,000		0%	0%	0.08	0.48		\$0	\$0	\$0	0%	\$1,820,000	\$0	\$0
San Jacinto	Hemet	Sanderson	Acacia	\$0	\$0	\$0		0%	0%	0.74	0.92		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	Sanderson	Domenigoni	\$0	\$0	\$0	Between Station and Thomson	26%	26%	0.79	1.11		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	Sanderson	RR Crossing	\$0	\$0	\$0		0%	0%	0.82	0.97		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	Sanderson	Stetson	\$0	\$0	\$0		0%	0%	0.77	1.11		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	Sanderson	Menlo	\$0	\$0	\$0		0%	0%	0.72	0.95		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	SR-74 (Florida)	Warren	\$0	\$0	\$0		0%	0%	0.62	0.96		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	SR-74 (Florida)	Columbia	\$0	\$0	\$0		0%	0%	0.47	0.57		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	SR-74/SR-79 (Florida)	Cawston	\$0	\$0	\$0		0%	0%	0.38	0.63		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	State	Domenigoni	\$0	\$0	\$0		0%	0%	0.44	0.92		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	State	Chambers	\$0	\$0	\$0		0%	0%	0.51	0.93		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	State	Florida	\$0	\$0	\$0		0%	0%	0.33	0.53		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	State	Stetson	\$0	\$0	\$0		0%	0%	0.57	0.80		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	Stetson	Cawston	\$0	\$0	\$0		0%	0%	0.49	0.68		\$0	\$0	\$0	0%	\$0	\$0	\$0
San Jacinto	Hemet	Stetson	Warren	\$4,357,000	\$4,357,000	\$113,000		0%	0%	0.59	0.96		\$0	\$0	\$0	0%	\$113,000	\$0	\$0
San Jacinto	Hemet	Warren	Esplanade	\$19,926,000	\$19,926,000	\$517,000	Between Devonshire and Stetson	31%	31%	0.79	1.10		\$0	\$0	\$0	0%	\$517,000	\$0	\$0
San Jacinto	Hemet	Warren	Salt Creek	\$4,176,000	\$4,176,000	\$144,000		0%	0%	0.64	1.05		\$0	\$0	\$0	0%	\$144,000	\$0</	

EXHIBIT H-2 TUMF Network Detailed Cost Estimate - Existing Need and Obligated Funding

Updated: July 23, 2024

AREA PLAN DIST CITY	STREETNAME	SEGMENTFROM	SEGMENTTO	TOTAL COST	MAXIMUM TUMF SHARE	MAX TUMF MSHCP SHARE	EXIST NEED	LOS E&F SEGMENT DESCRIPTION	% EXIST NEED	>2 LANE ADJUST	EXIST V/C	FUTURE V/C	TUMF V/C SHARE	EXIST NEED	OBLIGATED	UNFUND EXIST NEED	MSHCP	MSHCP EXIST NEED	MSHCP UNFUND EXIST NEED	COMBINED UNFUND EXIST NEED
Southwest	Lake Elinore	Corydon	Grand	\$3,336,000	\$3,336,000	\$87,000	\$0		0%	0%	0.73	1.02		\$0	\$0	\$0		\$87,000	\$0	\$0
Southwest	Lake Elinore	Diamond	Mission	\$0	\$0	\$0	\$0		0%	0%	0.73	0.93		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Lake Elinore	Franklin (Integral to Railroad)	I-15 interchange	\$32,698,000	\$32,698,000	\$0	\$0		0%	0%	0.66	1.25		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Lake Elinore	Grand	Lincoln	\$0	\$0	\$0	\$0		0%	0%	0.47	0.65		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Lake Elinore	Grand	Toft	\$0	\$0	\$0	\$0		0%	0%	0.68	0.92		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Lake Elinore	Lake	SR-74 (Riverside)	\$3,512,000	\$3,512,000	\$91,000	\$0		0%	0%	0.68	0.92		\$0	\$0	\$0		\$91,000	\$0	\$0
Southwest	Lake Elinore	Lake	Lincoln	\$39,817,000	\$32,726,000	\$335,000	\$0	between Orange Grove and the I-15 SB On Ramp	76%	76%	0.99	1.28	77%	\$7,091,000	\$0	\$7,091,000	\$407,000	\$73,000	\$73,000	\$7,164,000
Southwest	Lake Elinore	Lake	I-15	\$32,698,000	\$15,771,000	\$0	\$0		0%	0%	1.08	1.25	48%	\$16,927,000	\$0	\$16,927,000	\$0	\$0	\$0	\$16,927,000
Southwest	Lake Elinore	Lake	Temescal Wash	\$2,506,000	\$1,150,000	\$39,000	\$0		0%	0%	1.12	1.31	46%	\$1,356,000	\$0	\$1,356,000	\$86,000	\$0	\$0	\$1,356,000
Southwest	Lake Elinore	Mission	Railroad Canyon	\$0	\$0	\$0	\$0		0%	0%	0.48	0.74		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Lake Elinore	Nichols	Lake	\$7,850,000	\$7,850,000	\$204,000	\$0		0%	0%	0.59	0.96		\$0	\$0	\$0		\$204,000	\$0	\$0
Southwest	Lake Elinore	Nichols	Temescal Wash	\$4,176,000	\$4,176,000	\$144,000	\$0		0%	0%	0.43	1.12		\$0	\$0	\$0		\$144,000	\$0	\$0
Southwest	Lake Elinore	Nichols	I-15	\$63,061,000	\$63,061,000	\$0	\$0		0%	0%	0.43	1.12		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Lake Elinore	SR-74 (Collier/Riverside)	I-15	\$24,303,000	\$24,303,000	\$180,000	\$0	between Strickland and Collier	31%	31%	0.86	1.05		\$0	\$0	\$0		\$180,000	\$0	\$0
Southwest	Lake Elinore	SR-74 (Grand)	Riverside	\$9,733,000	\$3,691,000	\$27,000	\$0	between Riverside and Ortega	100%	100%	1.19	1.37	38%	\$6,042,000	\$0	\$6,042,000	\$72,000	\$45,000	\$45,000	\$6,087,000
Southwest	Lake Elinore	SR-74 (Riverside)	Lakeshore	\$20,175,000	\$20,175,000	\$150,000	\$0	between Lakeshore and Raven	31%	31%	0.78	0.91		\$0	\$0	\$0		\$150,000	\$0	\$0
Southwest	Lake Elinore	Temescal Canyon	I-15	\$7,411,000	\$7,411,000	\$211,000	\$0		0%	0%	0.64	1.17		\$0	\$0	\$0		\$211,000	\$0	\$0
Southwest	Lake Elinore	Temescal Canyon	Temescal Wash	\$3,480,000	\$3,480,000	\$120,000	\$0		0%	0%	0.85	1.28		\$0	\$0	\$0		\$120,000	\$0	\$0
Southwest	Murietta	California Oaks	Jefferson	\$0	\$0	\$0	\$0		0%	0%	0.47	0.61		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	California Oaks	I-15	\$0	\$0	\$0	\$0		0%	0%	0.76	0.89		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	California Oaks	Jackson	\$0	\$0	\$0	\$0		0%	0%	0.65	0.77		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Jackson	Whitewood	\$0	\$0	\$0	\$0		0%	0%	0.32	0.62		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Jefferson	Palomar	\$1,562,000	\$1,562,000	\$44,000	\$0		0%	0%	0.07	0.10		\$0	\$0	\$0		\$44,000	\$0	\$0
Southwest	Murietta	Jefferson	Nutmeg	\$0	\$0	\$0	\$0		0%	0%	0.46	0.63		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Jefferson	Murietta Hot Springs	\$30,634,000	\$30,634,000	\$227,000	\$0		0%	0%	0.47	0.80		\$0	\$0	\$0		\$227,000	\$0	\$0
Southwest	Murietta	Keller	I-215	\$0	\$0	\$0	\$0		0%	0%	0.20	0.45		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Keller	I-215	\$0	\$0	\$0	\$0		0%	0%	0.09	0.06		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Los Alamos	Jefferson	\$0	\$0	\$0	\$0		0%	0%	0.24	0.38		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Murietta Hot Springs	Jefferson	\$0	\$0	\$0	\$0		17%	17%	0.62	0.90		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Murietta Hot Springs	I-215	\$0	\$0	\$0	\$0	between Hancock and I-215	11%	11%	0.82	1.08		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Murietta Hot Springs	Margarita	\$4,057,000	\$3,899,000	\$101,000	\$0	between I-215 and I-215 NB On Ramp, and Alta Murietta and St. Maria	57%	57%	0.93	1.33	93%	\$158,000	\$0	\$158,000	\$105,000	\$4,000	\$4,000	\$162,000
Southwest	Murietta	Nutmeg	SR-79 (Winchester)	\$0	\$0	\$0	\$0	between Margarita and Calle del Lago	0%	0%	0.45	0.69		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Whitewood	Clinton Keith	\$2,708,000	\$2,708,000	\$77,000	\$0		0%	0%	0.45	0.76		\$0	\$0	\$0		\$77,000	\$0	\$0
Southwest	Murietta	Whitewood	Los Alamos	\$0	\$0	\$0	\$0		0%	0%	0.45	0.75		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Murietta	Whitewood	Murietta Hot Springs	\$4,629,000	\$4,629,000	\$47,000	\$0		0%	0%	0.15	0.16		\$0	\$0	\$0		\$47,000	\$0	\$0
Southwest	Murietta	Ynez	Jackson	\$0	\$0	\$0	\$0		0%	0%	0.62	1.00		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Butterfield Stage	Murietta Hot Springs	\$816,000	\$816,000	\$0	\$0		0%	0%	0.61	1.15		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Butterfield Stage	Calle Chapas	\$696,000	\$696,000	\$0	\$0		0%	0%	0.58	0.93		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Butterfield Stage	La Serena	\$904,000	\$904,000	\$0	\$0	between La Serena and Rancho California	100%	100%	0.95	1.21	85%	\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Butterfield Stage	Rancho California	\$846,000	\$846,000	\$0	\$0	between Rancho California and Creek	5%	5%	0.55	0.88		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Butterfield Stage	Pauba	\$725,000	\$725,000	\$21,000	\$0		0%	0%	0.49	0.84		\$0	\$0	\$0		\$21,000	\$0	\$0
Southwest	Temecula	Jefferson	Cherry	\$2,285,000	\$2,285,000	\$0	\$0		0%	0%	0.34	0.92		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Margarita	Murietta Hot Springs	\$7,644,000	\$7,644,000	\$0	\$0	between Winchester and Campos Verdes, and Salana and 250 ft North of Ramsey	5%	5%	0.65	1.04		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Old Town Front	Rancho California	\$0	\$0	\$0	\$0		0%	0%	0.68	1.37		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Pechanga Pkwy	SR-79 (Temecula Pkwy)	\$0	\$0	\$0	\$0		0%	0%	0.72	1.02		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Pechanga Pkwy	Via Gilberto	\$0	\$0	\$0	\$0		0%	0%	0.42	0.52		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	Rancho California	Jefferson	\$18,254,000	\$18,181,000	\$101,000	\$0	between I-15 SB On Ramp and I-15, and Maraga and Coatic	40%	40%	0.90	1.37	99%	\$73,000	\$0	\$73,000	\$101,000	\$0	\$0	\$73,000
Southwest	Temecula	Rancho California	I-15	\$32,698,000	\$0	\$0	\$0		0%	0%	1.55	2.67	63%	\$12,098,000	\$32,698,000	\$0	\$0	\$0	\$0	\$0
Southwest	Temecula	Rancho California	Margarita	\$0	\$0	\$0	\$0		0%	0%	0.43	0.74		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	SR-79 (Temecula Pkwy)	I-15	\$0	\$0	\$0	\$0	between I-15 and Pechanga	100%	100%	1.08	1.42	65%	\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Temecula	SR-79 (Temecula Pkwy)	Pechanga Pkwy	\$3,065,000	\$3,065,000	\$0	\$0		0%	0%	0.65	0.88		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Unincorporated	Briggs	Scott	\$6,509,000	\$6,509,000	\$169,000	\$0		0%	0%	0.41	0.70		\$0	\$0	\$0		\$169,000	\$0	\$0
Southwest	Unincorporated	Butterfield Stage	Tucalata Creek	\$0	\$0	\$0	\$0		0%	0%	0.41	0.70		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Unincorporated	Butterfield Stage (Pourroy)	Auld	\$23,076,000	\$23,076,000	\$656,000	\$0	between Auld and Honey Pine	23%	12%	0.88	0.99		\$0	\$0	\$0		\$656,000	\$0	\$0
Southwest	Unincorporated	Grand	Ortega	\$68,025,000	\$68,025,000	\$505,000	\$0	between Zinck and Stoneman, and Ontario and Canyon	16%	16%	0.80	1.06		\$0	\$0	\$0		\$505,000	\$0	\$0
Southwest	Unincorporated	Horseshief Canyon	Temescal Canyon	\$0	\$0	\$0	\$0		0%	0%	0.81	0.64		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Unincorporated	Indian Truck Trail	Temescal Canyon	\$0	\$0	\$0	\$0		0%	0%	0.15	0.21		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Unincorporated	Murietta Hot Springs	SR-79 (Winchester)	\$0	\$0	\$0	\$0		4%	4%	0.46	0.86		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Unincorporated	Pala	Pechanga	\$0	\$0	\$0	\$0	between Winchester and Vane	48%	48%	0.88	1.48		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Unincorporated	Pourroy	SR-79 (Winchester)	\$2,236,000	\$2,236,000	\$64,000	\$0	between Pechanga and Rainbow Oaks	0%	0%	0.42	0.57		\$0	\$0	\$0		\$64,000	\$0	\$0
Southwest	Unincorporated	Rancho California	Butterfield Stage	\$87,369,000	\$87,369,000	\$482,000	\$0		0%	0%	0.65	0.93		\$0	\$0	\$0		\$482,000	\$0	\$0
Southwest	Unincorporated	Temescal Canyon	Horseshief Canyon Wash	\$3,340,000	\$3,340,000	\$115,000	\$0		0%	0%	0.66	0.86		\$0	\$0	\$0		\$115,000	\$0	\$0
Southwest	Unincorporated	Temescal Canyon	Indian Truck Trail	\$15,739,000	\$15,739,000	\$447,000	\$0		0%	0%	0.64	0.97		\$0	\$0	\$0		\$447,000	\$0	\$0
Southwest	Unincorporated	Temescal Canyon	Indian Wash	\$1,462,000	\$1,462,000	\$50,000	\$0		0%	0%	0.61	0.80		\$0	\$0	\$0		\$50,000	\$0	\$0
Southwest	Wildomar	Bundy Canyon	Mission	\$9,704,000	\$9,704,000	\$72,000	\$0		0%	0%	0.60	0.90		\$0	\$0	\$0		\$72,000	\$0	\$0
Southwest	Wildomar	Grand	Corydon	\$0	\$0	\$0	\$0		0%	0%	0.72	0.89		\$0	\$0	\$0		\$0	\$0	\$0
Southwest	Wildomar	M																		

EXHIBIT H-3 Regional Transit Existing Need Share

Summary of Transit Trip Change

Year	Western Riverside Daily Transit Trips
2023*	16,575
2045**	57,282
Growth 2023 - 2045	40,707
Existing Need Share:	28.9%
Future Growth Share:	71.1%

Notes: * - 2023 actual average weekday daily ridership provided by RTA staff December 1, 2023
 ** - 2045 forecast average weekday daily ridership obtained from SCAG 2020 RTP/SCS Model as provided by Fehr and Peers November

Maximum TUMF Transit Component Value

RTA Transit Full Mitigation Cost	Existing Need Cost	MAX TUMF TRANSIT VALUE
\$217,870,000	\$63,039,000	\$154,831,000
Total MAX TUMF VALUE		\$4,297,490,440
Transit Share of MAX TUMF VALUE		3.6%

Appendix I - Western Riverside County Regional Trip Distribution

In order to ensure an equitable regional/zonal distribution of potential TUMF revenues, the distribution of trips in the WRCOG region was analyzed to determine the distribution between local (intra-zonal) and regional (inter-zonal) trips. This analysis was completed using the Year 2040 No-Build scenario Origin-Destination (O-D) vehicle trip tables from RivCoM. The analysis of vehicle trips based on the respective trip ends as stratified by zone is considered sufficient to establish the rough proportionality between local (intra-zonal) and regional (inter-zonal) trips because this measure is intended to only serve as a guide in the distribution of potential TUMF revenues between regional and local projects, and is not intended to serve as the basis for quantifying the relative magnitude of the impacts of different types of new development on the TUMF network (as described in **Appendix J**)

The first step in the analysis was to create a correspondence table between the traffic analysis zones (TAZ's) in the RivCoM model and the five WRCOG TUMF zones: Northwest, Central, Pass Area, Hemet/San Jacinto, and Southwest. A table detailing the TAZ correspondence for each WRCOG TUMF zone is included as **Exhibit I-1** in this Appendix. The vehicle trip tables by TAZ were aggregated to obtain the trip summary between six districts (five WRCOG TUMF Zones and one for the rest of Southern California region included in the model analysis area)

Table 5.1 and **5.2** of the Nexus Study produce a matrix of total combined AM and PM peak period vehicle trips between the six districts. This information is subsequently weighted by TUMF future network lane miles in **Table 5.3** to determine the relative share of trips that can be allocated between the backbone network and secondary network. **Exhibits I-2** through **I-11** provide the corresponding peak period vehicle trip matrices for each of the four time periods analyzed by the RivCoM model (AM peak, midday, PM peak and overnight) as well as total daily trips between the six districts.

EXHIBIT I-2 - 2045 AM Peak Period Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	187,280	10,596	40,037	2,900	24,865	25,446	291,124
Hemet/San Jacinto	13,060	93,350	3,815	3,847	7,263	8,090	129,424
Northwest	26,655	1,189	333,593	1,239	4,956	86,710	454,342
Pass Area	3,663	3,372	2,768	49,166	402	14,458	73,828
Southwest	25,061	7,304	14,708	914	298,362	27,954	374,302
Outside WRCOG	15,413	3,353	86,546	11,208	14,949		131,469
TOTAL	271,131	119,163	481,467	69,274	350,797	162,658	1,454,490

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

EXHIBIT I-3 - 2045 AM Peak Period Percent Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	64.3%	3.6%	13.8%	1.0%	8.5%	8.7%	100%
Hemet/San Jacinto	10.1%	72.1%	2.9%	3.0%	5.6%	6.3%	100%
Northwest	5.9%	0.3%	73.4%	0.3%	1.1%	19.1%	100%
Pass Area	5.0%	4.6%	3.7%	66.6%	0.5%	19.6%	100%
Southwest	6.7%	2.0%	3.9%	0.2%	79.7%	7.5%	100%

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

EXHIBIT I-4 - 2045 PM Peak Period Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	230,328	12,878	49,743	3,401	30,237	32,112	358,698
Hemet/San Jacinto	16,341	115,656	4,833	4,586	8,818	9,988	160,221
Northwest	31,923	1,495	409,641	1,448	6,076	109,331	559,914
Pass Area	4,405	4,214	3,346	61,219	506	17,876	91,566
Southwest	30,752	8,928	18,144	1,062	368,893	34,759	462,537
Outside WRCOG	18,495	4,221	106,166	13,282	18,918		161,080
TOTAL	332,244	147,391	591,872	84,997	433,447	204,065	1,794,017

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

EXHIBIT I-5 - 2045 PM Peak Period Percent Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	64.2%	3.6%	13.9%	0.9%	8.4%	9.0%	100%
Hemet/San Jacinto	10.2%	72.2%	3.0%	2.9%	5.5%	6.2%	100%
Northwest	5.7%	0.3%	73.2%	0.3%	1.1%	19.5%	100%
Pass Area	4.8%	4.6%	3.7%	66.9%	0.6%	19.5%	100%
Southwest	6.6%	1.9%	3.9%	0.2%	79.8%	7.5%	100%

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

EXHIBIT I-6 - 2045 Off-Peak Period Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	313,691	17,511	64,577	3,948	39,446	41,718	480,890
Hemet/San Jacinto	21,579	162,035	5,659	6,318	10,987	11,533	218,110
Northwest	43,461	1,848	565,759	1,528	7,406	160,552	780,554
Pass Area	6,068	6,269	4,125	91,253	631	24,354	132,700
Southwest	40,442	11,861	22,506	1,132	508,327	40,698	624,964
Outside WRCOG	25,307	5,301	145,054	16,534	23,061		215,257
TOTAL	450,546	204,825	807,679	120,712	589,859	278,854	2,452,475

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

Table I-7 - 2045 Off-Peak Period Percent Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	65.2%	3.6%	13.4%	0.8%	8.2%	8.7%	100%
Hemet/San Jacinto	9.9%	74.3%	2.6%	2.9%	5.0%	5.3%	100%
Northwest	5.6%	0.2%	72.5%	0.2%	0.9%	20.6%	100%
Pass Area	4.6%	4.7%	3.1%	68.8%	0.5%	18.4%	100%
Southwest	6.5%	1.9%	3.6%	0.2%	81.3%	6.5%	100%

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

EXHIBIT I-8 - 2045 Daily Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	731,298	40,985	154,356	10,249	94,547	99,276	1,130,712
Hemet/San Jacinto	50,980	371,040	14,306	14,750	27,068	29,611	507,755
Northwest	102,039	4,532	1,308,993	4,215	18,439	356,593	1,794,811
Pass Area	14,136	13,855	10,239	201,638	1,539	56,688	298,095
Southwest	96,254	28,093	55,358	3,108	1,175,582	103,410	1,461,804
Outside WRCOG	59,214	12,874	337,766	41,024	56,927		507,806
TOTAL	1,053,921	471,379	1,881,018	274,984	1,374,103	645,578	5,700,982

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

EXHIBIT I-9 - 2045 Percent Daily Vehicle Trips by WRCOG Zone*

FROM \ TO	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central	64.7%	3.6%	13.7%	0.9%	8.4%	8.8%	100%
Hemet/San Jacinto	10.0%	73.1%	2.8%	2.9%	5.3%	5.8%	100%
Northwest	5.7%	0.3%	72.9%	0.2%	1.0%	19.9%	100%
Pass Area	4.7%	4.6%	3.4%	67.6%	0.5%	19.0%	100%
Southwest	6.6%	1.9%	3.8%	0.2%	80.4%	7.1%	100%

* Based on RIVCOM Year 2045 No-Build Scenario, February 2024

Appendix J - Western Riverside County Regional Trip Purpose

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law, fundamentally changing the way that transportation impacts are to be assessed pursuant to the California Environmental Quality Act (CEQA). The new law requires CEQA guidelines to be amended to provide an alternative to Level of Service for evaluating transportation impacts. The intent of the change is to introduce alternate criteria that “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” (New Public Resources Code Section 21099(b)(1).) The primary effect of the new law is to establish the use of vehicle miles of travel (VMT) as the preferred basis for measuring traffic impacts, in recognition of the fact that VMT more accurately reflects traffic impacts as it takes into account both the number of trips being made and the distance of those trips. Although CEQA and the specific provision of SB 743 do not generally apply directly to impact fee programs (which are governed by the provision of the Mitigation Fee Act), the reasoning behind SB 743 establishing VMT as the preferred basis for CEQA traffic impact measurement is sound and equally applicable for impact fee nexus determination.

Linking the TUMF to VMT does enable developers to continue to use TUMF participation as demonstration of partial mitigation for their cumulative regional transportation impacts under the new SB 743 requirements. Furthermore, consistent with SB 743, consideration of travel impacts in terms of peak period VMT more accurately reflects the realities of travel behavior as the basis for determining impacts on the regional transportation system by reflecting the peak demands on the system based on the number of trips and the cumulative distance these trips occupy facilities in the system. Variation in trip length for different trip purposes is important to quantify since the impact associated with a trip is not limited to whether a trip occurs or not. A longer distance trip occupies more roadways over a longer period of time (all else being equal), and therefore goes through more intersections and consumes more capacity, thus requiring greater levels of mitigation. As the purpose of the TUMF is to mitigate the cumulative regional traffic impacts of future growth, a VMT based approach to defining the rough proportionality of impacts resulting from various differing types of new development better aligns with this purpose.

RivCoM is the primary analytical tool used to forecast VMT in Riverside County. RivCoM was developed based on the SCAG regional travel demand model, whose underlying model travel characteristics were developed based on national and regional travel behavior surveys, including the U.S. Census and the California Household Travel Survey. The methodology for using travel demand models, including RivCoM, as the basis for calculating and measuring VMT is consistent with NEPA and CEQA guidance, and accepted transportation planning practice.

The RivCoM model produces person-trips (irrespective of mode choice) on the basis of five trip purposes including home-based-work (HBW), home-based-other (HBO), home-based-school (HBS), home-based-university (HBU), and non-home based (NHB). Peak period, off-peak period and daily vehicle trips and VMT are derived from the person-trip productions based on mode choice assignments and differing trip length

characteristics embedded on the model parameters. Daily VMT results were aggregated into home-based VMT and non-home-based VMT for each scenario to represent the level of travel demand and impact on the transportation system attributable to each trip purpose.

The attribution of VMT associated with home-based trip purposes to residential land uses and non-home-based trips to non-residential land uses is consistent with the provisions of NCHRP Report #187 Quick Response Urban Travel Estimation Techniques and Transferable Parameters User's Guide (Transportation Research Board, 1978), a widely-referenced source for travel estimation techniques used for travel demand modeling. Chapter 2 of this report, which details trip generation estimation, states that "HBW (Home Based Work) and HBNW (Home Based Non Work) trips are generated at the households, whereas the NHB (Non-Home Based) trips are generated elsewhere." Consistent with NCHRP Report #187, aggregating person trip productions and associated VMT into home-based (combining home-based-work, home-based-other and home-based-school) and non-home-based (combining work-based-other, and other-based-other) represents an appropriate way to allocate trip generation and associated impacts between residential and non-residential land uses for the purpose of estimating the rough proportionality of the TUMF fee.

Exhibits J-1 through **J-36** of this Appendix include the RivCoM model data aggregated for peak period, off-peak period and daily person VMT for each trip purpose between the respective TUMF zones, and for both model year scenarios. The growth in daily VMT for each trip purpose was calculated as the difference between the daily VMT in the 2018 Existing scenario and the daily VMT in the 2045 No Build scenario. The growth in home-based daily VMT represents 77.7% of the total growth in daily VMT, and the growth in non-home-based daily VMT represents 22.3% of the total growth in daily VMT, as shown in **Table 5.4**. The relative share of the growth in daily VMT summarized in **Table 5.4** provides the basis for estimating the rough proportionality of the TUMF network impacts and related mitigation costs (and associated fees) attributable to new residential and non-residential development, respectively.

**EXHIBIT J-1
VMT BY WRCOG TUMF ZONE
TOTAL PEAK PERIOD TRIPS FOR ALL PURPOSES - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		1,084,569	176,144	919,950	98,767	494,843	1,672,280	4,446,553
Hemet/San Jacinto		202,282	474,270	189,620	93,211	207,871	736,736	1,903,990
Northwest		471,239	62,909	3,082,883	69,489	235,185	3,500,199	7,421,903
Pass Area		86,956	66,611	120,609	230,246	31,017	531,753	1,067,192
Southwest		474,113	188,640	635,435	61,535	1,822,831	2,240,495	5,423,048
Outside WRCOG		833,664	293,941	3,584,150	403,303	1,245,556	129,717,014	136,077,627
TOTAL		3,152,824	1,262,514	8,532,646	956,551	4,037,302	138,398,477	156,340,314

Based on RivCOM Year 2018 Existing Scenario, November 2023

EXHIBIT J-2
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-WORK TRIPS ONLY - 2018 EXISTING

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		165,241	58,992	411,439	65,622	197,893	1,220,777	2,119,965
Hemet/San Jacinto		70,807	53,805	128,758	48,898	103,290	567,394	972,951
Northwest		143,340	37,259	674,676	53,185	136,185	1,920,635	2,965,279
Pass Area		25,983	15,665	65,646	34,287	18,981	304,632	465,194
Southwest		165,236	76,537	376,007	49,330	410,382	1,721,102	2,798,594
Outside WRCOG		420,948	169,433	1,777,239	260,161	753,400	45,139,830	48,521,011
TOTAL		991,555	411,691	3,433,764	511,483	1,620,131	50,874,369	57,842,994

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-3
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-OTHER TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		673,880	84,730	364,070	26,370	227,784	361,436	1,738,269
Hemet/San Jacinto		100,994	306,411	50,898	33,509	84,214	146,284	722,311
Northwest		239,023	20,386	1,679,367	13,441	81,648	1,178,130	3,211,995
Pass Area		45,133	33,006	42,321	129,128	10,013	167,567	427,168
Southwest		234,369	82,255	197,098	10,679	1,016,873	402,898	1,944,172
Outside WRCOG		326,013	98,751	1,241,409	108,093	389,492	54,404,000	56,567,758
TOTAL		1,619,412	625,538	3,575,162	321,221	1,810,024	56,660,315	64,611,673

Based on RivCOM Year 2018 Existing Scenario, November 2023

EXHIBIT J-4
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-SCHOOL TRIPS ONLY - 2018 EXISTING

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		110,735	3,642	21,950	387	16,486	6,055	159,255
Hemet/San Jacinto		8,004	43,231	162	666	2,726	70	54,859
Northwest		20,225	79	221,291	28	2,091	56,821	300,535
Pass Area		1,326	1,697	103	16,564	7	4,939	24,635
Southwest		19,735	3,035	4,593	7	138,861	1,084	167,315
Outside WRCOG		6,136	402	60,940	5,117	10,948	5,978,607	6,062,150
TOTAL		166,161	52,086	309,039	22,769	171,120	6,047,576	6,768,750

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-5
VMT BY WRCOG TUMF ZONE
PEAK PERIOD NON-HOME-BASED TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		116,617	17,407	82,092	6,004	49,146	58,568	329,833
Hemet/San Jacinto		20,422	60,529	6,881	9,918	17,117	18,684	133,551
Northwest		61,455	2,779	414,635	2,683	14,253	282,505	778,310
Pass Area		12,768	11,566	8,715	49,680	1,935	47,061	131,725
Southwest		40,694	13,037	27,856	1,225	237,362	49,558	369,732
Outside WRCOG		65,953	13,263	341,047	28,498	87,982	22,327,971	22,864,713
TOTAL		317,908	118,582	881,227	98,008	407,795	22,784,346	24,607,865

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-6
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-UNIVERSITY TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		18,096	11,373	40,399	384	3,534	25,445	99,231
Hemet/San Jacinto		2,056	10,293	2,922	220	523	4,304	20,318
Northwest		7,195	2,406	92,914	152	1,007	62,109	165,784
Pass Area		1,747	4,677	3,824	587	80	7,554	18,470
Southwest		14,080	13,775	29,881	293	19,353	65,853	143,236
Outside WRCOG		14,614	12,092	163,514	1,433	3,734	1,866,606	2,061,994
TOTAL		57,788	54,616	333,455	3,070	28,232	2,031,871	2,509,032

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-7
VMT BY WRCOG TUMF ZONE
TOTAL OFF PEAK TRIPS FOR ALL PURPOSES - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		801,662	128,869	640,224	56,860	339,965	988,339	2,955,918
Hemet/San Jacinto		140,692	363,274	109,533	65,159	132,656	415,778	1,227,093
Northwest		340,558	37,798	2,341,566	37,213	141,992	2,394,837	5,293,964
Pass Area		67,550	54,436	80,501	191,165	19,798	353,246	766,697
Southwest		330,176	130,997	414,647	31,788	1,358,749	1,284,306	3,550,663
Outside WRCOG		569,970	187,134	2,517,328	247,784	764,704	97,045,358	101,332,277
TOTAL		2,250,608	902,509	6,103,800	629,968	2,757,864	102,481,863	115,126,612

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-8
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-WORK TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		64,053	23,015	164,150	25,429	78,516	519,620	874,784
Hemet/San Jacinto		27,710	20,523	51,954	19,949	40,698	244,713	405,547
Northwest		57,811	15,473	261,251	21,801	56,354	811,368	1,224,059
Pass Area		10,592	6,429	27,063	12,994	8,220	128,530	193,828
Southwest		65,794	29,706	153,862	20,870	157,689	724,854	1,152,774
Outside WRCOG		187,105	76,293	763,815	115,048	322,353	17,962,924	19,427,539
TOTAL		413,065	171,439	1,422,095	216,091	663,831	20,392,010	23,278,531

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-9
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-OTHER TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		518,247	66,043	291,090	21,528	180,073	324,734	1,401,715
Hemet/San Jacinto		77,692	230,275	41,945	28,302	64,944	130,834	573,991
Northwest		181,766	15,629	1,296,905	11,001	63,383	1,010,885	2,579,569
Pass Area		35,416	25,064	34,290	99,409	8,287	138,571	341,037
Southwest		181,290	62,892	165,057	8,746	793,860	357,826	1,569,671
Outside WRCOG		262,051	76,387	1,010,627	87,034	296,373	42,030,568	43,763,040
TOTAL		1,256,461	476,289	2,839,914	256,020	1,406,920	43,993,419	50,229,023

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-10
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-SCHOOL TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		29,899	1,018	5,963	112	4,495	1,879	43,367
Hemet/San Jacinto		2,171	11,723	46	212	743	22	14,915
Northwest		5,315	22	59,984	8	572	16,387	82,287
Pass Area		367	460	31	4,489	2	1,358	6,707
Southwest		5,242	828	1,239	2	37,812	304	45,428
Outside WRCOG		1,679	106	16,999	1,337	2,522	1,608,845	1,631,488
TOTAL		44,671	14,158	84,261	6,159	46,147	1,628,796	1,824,191

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-11
VMT BY WRCOG TUMF ZONE
OFF PEAK NON-HOME-BASED TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		171,868	26,165	127,774	9,573	74,861	103,539	513,780
Hemet/San Jacinto		31,023	89,467	11,465	16,561	25,978	33,500	207,994
Northwest		88,808	4,136	620,263	4,317	21,165	472,709	1,211,397
Pass Area		19,327	17,223	13,991	73,960	3,239	74,839	202,580
Southwest		61,789	19,268	45,891	1,951	356,701	84,988	570,589
Outside WRCOG		103,831	20,636	536,313	43,581	141,283	33,374,718	34,220,361
TOTAL		476,647	176,895	1,355,697	149,943	623,228	34,144,292	36,926,701

Based on RivCOM Year 2018 Existing Scenario, November 2023

EXHIBIT J-12
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-UNIVERSITY TRIPS ONLY - 2018 EXISTING

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		17,594	12,628	51,247	218	2,019	38,566	122,272
Hemet/San Jacinto		2,097	11,286	4,124	136	292	6,709	24,645
Northwest		6,858	2,539	103,163	86	517	83,488	196,652
Pass Area		1,849	5,259	5,127	313	49	9,947	22,544
Southwest		16,062	18,302	48,598	219	12,688	116,334	212,202
Outside WRCOG		15,304	13,712	189,575	784	2,172	2,068,303	2,289,850
TOTAL		59,764	63,727	401,834	1,755	17,738	2,323,347	2,868,164

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-13
VMT BY WRCOG TUMF ZONE
TOTAL DAILY TRIPS FOR ALL PURPOSES - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		1,886,231	305,013	1,560,174	155,627	834,808	2,660,619	7,402,471
Hemet/San Jacinto		342,975	837,544	299,154	158,370	340,527	1,152,514	3,131,082
Northwest		811,797	100,707	5,424,449	106,702	377,177	5,895,035	12,715,867
Pass Area		154,507	121,047	201,110	421,411	50,814	884,999	1,833,889
Southwest		804,289	319,636	1,050,082	93,323	3,181,580	3,524,801	8,973,711
Outside WRCOG		1,403,634	481,075	6,101,478	651,086	2,010,260	226,762,371	237,409,905
TOTAL		5,403,432	2,165,023	14,636,446	1,586,519	6,795,166	240,880,340	271,466,925

Based on RivCOM Year 2018 Existing Scenario, November 2023

EXHIBIT J-14
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-WORK TRIPS ONLY - 2018 EXISTING

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		229,295	82,007	575,590	91,051	276,409	1,740,397	2,994,749
Hemet/San Jacinto		98,516	74,328	180,712	68,847	143,988	812,107	1,378,498
Northwest		201,151	52,731	935,927	74,986	192,540	2,732,003	4,189,337
Pass Area		36,574	22,095	92,709	47,281	27,201	433,163	659,022
Southwest		231,030	106,243	529,869	70,200	568,071	2,445,955	3,951,368
Outside WRCOG		608,054	245,727	2,541,054	375,209	1,075,753	63,102,754	67,948,550
TOTAL		1,404,620	583,131	4,855,859	727,574	2,283,962	71,266,379	81,121,525

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-15
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-OTHER TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		1,192,127	150,772	655,160	47,898	407,857	686,170	3,139,984
Hemet/San Jacinto		178,686	536,686	92,843	61,811	149,158	277,118	1,296,302
Northwest		420,789	36,015	2,976,272	24,442	145,031	2,189,015	5,791,564
Pass Area		80,549	58,070	76,610	228,537	18,300	306,138	768,205
Southwest		415,659	145,147	362,155	19,425	1,810,733	760,724	3,513,843
Outside WRCOG		588,064	175,138	2,252,036	195,127	685,865	96,434,568	100,330,798
TOTAL		2,875,873	1,101,828	6,415,076	577,241	3,216,945	100,653,734	114,840,696

Based on RivCOM Year 2018 Existing Scenario, November 2023

EXHIBIT J-16
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-SCHOOL TRIPS ONLY - 2018 EXISTING

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		140,634	4,660	27,913	499	20,981	7,934	202,622
Hemet/San Jacinto		10,175	54,954	207	877	3,469	92	69,775
Northwest		25,540	101	281,274	36	2,663	73,208	382,822
Pass Area		1,692	2,157	134	21,053	9	6,297	31,343
Southwest		24,977	3,864	5,832	9	176,673	1,388	212,743
Outside WRCOG		7,814	508	77,939	6,454	13,470	7,587,452	7,693,638
TOTAL		210,832	66,244	393,299	28,928	217,266	7,676,372	8,592,941

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-17
VMT BY WRCOG TUMF ZONE
DAILY NON-HOME-BASED TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		288,485	43,572	209,866	15,577	124,008	162,106	843,613
Hemet/San Jacinto		51,445	149,996	18,346	26,479	43,095	52,184	341,544
Northwest		150,263	6,915	1,034,898	7,000	35,418	755,213	1,989,708
Pass Area		32,095	28,790	22,706	123,641	5,174	121,900	334,305
Southwest		102,482	32,305	73,748	3,176	594,063	134,546	940,320
Outside WRCOG		169,784	33,899	877,360	72,079	229,264	55,702,689	57,085,075
TOTAL		794,554	295,477	2,236,924	247,951	1,031,023	56,928,638	61,534,566

Based on RivCOM Year 2018 Existing Scenario, November 2023

**EXHIBIT J-18
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-UNIVERSITY TRIPS ONLY - 2018 EXISTING**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		35,690	24,001	91,646	601	5,553	64,011	221,503
Hemet/San Jacinto		4,153	21,580	7,046	356	815	11,012	44,963
Northwest		14,054	4,945	196,077	238	1,525	145,596	362,435
Pass Area		3,596	9,936	8,951	900	129	17,502	41,014
Southwest		30,142	32,078	78,478	512	32,040	182,188	355,438
Outside WRCOG		29,918	25,804	353,089	2,217	5,906	3,934,909	4,351,844
TOTAL		117,553	118,344	735,288	4,825	45,970	4,355,218	5,377,197

Based on RivCOM Year 2018 Existing Scenario, November 2023

EXHIBIT J-19
VMT BY WRCOG TUMF ZONE
TOTAL PEAK PERIOD TRIPS FOR ALL PURPOSES - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		1,799,333	331,707	1,246,839	150,237	725,077	2,074,041	6,327,234
Hemet/San Jacinto		419,876	828,755	285,137	155,667	345,759	1,006,889	3,042,083
Northwest		719,180	87,427	3,652,429	90,736	283,636	3,816,550	8,649,959
Pass Area		166,143	123,928	189,122	408,274	39,950	805,993	1,733,411
Southwest		823,445	350,410	894,926	84,115	3,062,054	3,170,545	8,385,495
Outside WRCOG		1,208,763	420,070	4,001,373	598,622	1,482,553	151,663,404	159,374,786
TOTAL		5,136,740	2,142,297	10,269,827	1,487,652	5,939,029	162,537,422	187,512,968

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-20
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-WORK TRIPS ONLY - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		373,364	119,251	639,446	100,864	284,454	1,576,209	3,093,588
Hemet/San Jacinto		172,286	134,504	208,376	88,310	169,783	827,421	1,600,680
Northwest		244,964	48,849	905,169	66,860	143,376	2,007,531	3,416,748
Pass Area		69,297	34,601	118,258	72,874	25,101	465,215	785,345
Southwest		346,327	152,164	600,641	69,322	654,211	2,572,563	4,395,228
Outside WRCOG		627,554	220,846	2,057,129	369,322	678,800	52,699,890	56,653,540
TOTAL		1,833,791	710,214	4,529,019	767,551	1,955,725	60,148,829	69,945,130

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-21
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-OTHER TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		1,062,642	154,854	432,156	38,451	340,614	392,364	2,421,080
Hemet/San Jacinto		190,962	506,337	65,022	49,916	143,277	154,174	1,109,688
Northwest		352,592	31,203	1,941,227	19,896	116,947	1,347,877	3,809,741
Pass Area		73,295	60,143	56,197	230,606	12,927	245,844	679,013
Southwest		365,033	139,169	213,955	13,093	1,806,167	430,821	2,968,236
Outside WRCOG		473,253	165,371	1,354,389	176,377	669,783	64,072,996	66,912,168
TOTAL		2,517,777	1,057,076	4,062,946	528,338	3,089,715	66,644,076	77,899,927

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-22
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-SCHOOL TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		136,895	5,994	23,940	484	20,215	6,298	193,827
Hemet/San Jacinto		13,675	57,088	301	975	4,113	107	76,259
Northwest		23,198	110	237,602	33	2,279	66,566	329,788
Pass Area		1,880	2,406	139	26,717	7	9,600	40,749
Southwest		24,598	3,842	4,731	7	228,422	1,295	262,895
Outside WRCOG		6,723	624	64,150	5,947	16,481	6,271,751	6,365,676
TOTAL		206,969	70,065	330,863	34,163	271,517	6,355,617	7,269,194

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-23
VMT BY WRCOG TUMF ZONE
PEAK PERIOD NON-HOME-BASED TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		202,038	35,728	103,488	10,029	74,959	74,079	500,322
Hemet/San Jacinto		40,465	115,618	8,342	16,222	27,829	20,983	229,458
Northwest		89,752	4,817	459,879	3,793	19,949	335,223	913,414
Pass Area		19,244	20,136	9,751	77,216	1,839	73,705	201,892
Southwest		63,376	22,555	29,308	1,251	322,054	43,941	482,484
Outside WRCOG		88,138	21,358	372,582	45,519	113,947	26,519,796	27,161,341
TOTAL		503,012	220,212	983,351	154,031	560,578	27,067,727	29,488,911

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-24
VMT BY WRCOG TUMF ZONE
PEAK PERIOD HOME-BASED-UNIVERSITY TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		24,394	15,880	47,809	408	4,835	25,090	118,417
Hemet/San Jacinto		2,488	15,208	3,096	245	757	4,204	25,998
Northwest		8,674	2,448	108,552	155	1,085	59,353	180,268
Pass Area		2,428	6,642	4,777	861	76	11,629	26,412
Southwest		24,112	32,680	46,293	442	51,199	121,926	276,652
Outside WRCOG		13,096	11,872	153,123	1,456	3,543	2,098,971	2,282,060
TOTAL		75,191	84,731	363,649	3,568	61,494	2,321,174	2,909,807

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-25
VMT BY WRCOG TUMF ZONE
TOTAL OFF PEAK TRIPS FOR ALL PURPOSES - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		1,318,612	243,507	855,399	90,116	512,253	1,362,381	4,382,268
Hemet/San Jacinto		307,848	620,261	182,200	112,414	232,480	632,480	2,087,683
Northwest		514,466	58,795	2,686,245	50,935	187,731	2,945,148	6,443,318
Pass Area		125,325	101,371	126,342	322,595	27,752	586,766	1,290,151
Southwest		594,702	254,789	612,135	48,790	2,229,187	1,999,442	5,739,044
Outside WRCOG		857,986	292,176	2,897,700	380,089	960,617	114,223,362	119,611,929
TOTAL		3,718,939	1,570,899	7,360,021	1,004,939	4,150,019	121,749,579	139,554,395

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-26
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-WORK TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		139,109	48,317	252,879	40,263	116,636	745,260	1,342,464
Hemet/San Jacinto		68,574	47,643	92,129	35,673	67,839	402,851	714,710
Northwest		98,150	23,283	337,214	28,227	65,852	940,673	1,493,399
Pass Area		28,513	15,183	50,763	26,317	12,905	221,065	354,746
Southwest		143,010	60,883	254,955	32,890	244,955	1,155,616	1,892,308
Outside WRCOG		302,064	116,183	938,244	166,464	326,211	21,226,888	23,076,054
TOTAL		779,420	311,492	1,926,184	329,834	834,398	24,692,353	28,873,681

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-27
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-OTHER TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		817,753	121,802	362,911	33,093	271,714	415,042	2,022,315
Hemet/San Jacinto		161,868	374,441	65,747	46,266	116,874	172,568	937,763
Northwest		270,238	25,096	1,486,279	16,476	90,978	1,281,165	3,170,231
Pass Area		61,546	47,031	50,231	174,731	11,410	223,207	568,155
Southwest		303,367	111,492	202,017	12,889	1,405,767	465,133	2,500,666
Outside WRCOG		387,066	126,440	1,130,769	140,486	452,722	49,373,980	51,611,462
TOTAL		2,001,838	806,301	3,297,953	423,940	2,349,465	51,931,094	60,810,592

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-28
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-SCHOOL TRIPS ONLY - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		37,552	1,684	7,015	142	5,504	2,210	54,106
Hemet/San Jacinto		4,077	15,458	110	341	1,168	42	21,196
Northwest		6,276	32	64,909	10	605	20,422	92,254
Pass Area		563	684	47	7,234	2	2,659	11,190
Southwest		6,927	1,090	1,449	3	62,653	584	72,705
Outside WRCOG		2,040	166	19,074	1,704	3,185	1,683,458	1,709,627
TOTAL		57,435	19,114	92,604	9,433	73,117	1,709,376	1,961,079

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-29
VMT BY WRCOG TUMF ZONE
OFF PEAK NON-HOME-BASED TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		299,738	55,092	169,871	16,381	115,948	153,204	810,234
Hemet/San Jacinto		70,174	166,706	18,278	29,966	46,159	47,597	378,880
Northwest		131,414	7,633	681,134	6,136	29,764	610,663	1,466,744
Pass Area		31,940	31,225	18,232	113,898	3,385	123,898	322,577
Southwest		104,433	36,376	55,746	2,580	484,258	98,486	781,879
Outside WRCOG		151,333	34,517	620,329	70,600	176,455	39,604,640	40,657,873
TOTAL		789,032	331,549	1,563,590	239,561	855,969	40,638,488	44,418,188

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-30
VMT BY WRCOG TUMF ZONE
OFF PEAK HOME-BASED-UNIVERSITY TRIPS ONLY - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		24,461	16,612	62,722	237	2,451	46,666	153,148
Hemet/San Jacinto		3,155	16,013	5,936	169	440	9,422	35,134
Northwest		8,389	2,752	116,708	85	532	92,226	220,691
Pass Area		2,763	7,248	7,069	416	50	15,937	33,483
Southwest		36,965	44,949	97,968	427	31,554	279,623	491,486
Outside WRCOG		15,482	14,869	189,285	835	2,045	2,334,396	2,556,912
TOTAL		91,214	102,442	479,690	2,170	37,070	2,778,268	3,490,855

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-31
VMT BY WRCOG TUMF ZONE
TOTAL DAILY TRIPS FOR ALL PURPOSES - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		3,117,946	575,214	2,102,238	240,353	1,237,329	3,436,422	10,709,502
Hemet/San Jacinto		727,723	1,449,016	467,337	268,082	578,239	1,639,369	5,129,767
Northwest		1,233,645	146,222	6,338,674	141,671	471,367	6,761,699	15,093,278
Pass Area		291,468	225,299	315,464	730,869	67,702	1,392,759	3,023,562
Southwest		1,418,147	605,199	1,507,061	132,904	5,291,241	5,169,987	14,124,539
Outside WRCOG		2,066,749	712,246	6,899,073	978,711	2,443,170	265,886,766	278,986,715
TOTAL		8,855,679	3,713,196	17,629,848	2,492,590	10,089,048	284,287,001	327,067,363

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-32
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-WORK TRIPS ONLY - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		512,473	167,568	892,325	141,127	401,091	2,321,469	4,436,052
Hemet/San Jacinto		240,860	182,148	300,505	123,983	237,623	1,230,272	2,315,390
Northwest		343,114	72,132	1,242,383	95,087	209,228	2,948,204	4,910,147
Pass Area		97,810	49,784	169,021	99,191	38,005	686,279	1,140,090
Southwest		489,337	213,047	855,596	102,212	899,166	3,728,179	6,287,536
Outside WRCOG		929,618	337,029	2,995,373	535,786	1,005,010	73,926,778	79,729,594
TOTAL		2,613,211	1,021,707	6,455,203	1,097,385	2,790,123	84,841,182	98,818,811

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-33
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-OTHER TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		1,880,395	276,656	795,067	71,544	612,328	807,406	4,443,395
Hemet/San Jacinto		352,830	880,778	130,769	96,181	260,151	326,742	2,047,451
Northwest		622,829	56,299	3,427,506	36,372	207,925	2,629,041	6,979,972
Pass Area		134,842	107,173	106,427	405,337	24,337	469,052	1,247,168
Southwest		668,400	250,661	415,972	25,982	3,211,934	895,954	5,468,902
Outside WRCOG		860,319	291,810	2,485,158	316,863	1,122,505	113,446,976	118,523,630
TOTAL		4,519,614	1,863,377	7,360,898	952,278	5,439,180	118,575,170	138,710,519

Based on RivCOM Year 2045 No-Build Scenario, November 2023

EXHIBIT J-34
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-SCHOOL TRIPS ONLY - 2045 NO BUILD

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		174,447	7,678	30,955	627	25,718	8,507	247,933
Hemet/San Jacinto		17,752	72,546	411	1,316	5,281	149	97,455
Northwest		29,474	142	302,511	43	2,884	86,988	422,042
Pass Area		2,443	3,091	186	33,950	9	12,260	51,939
Southwest		31,524	4,932	6,180	10	291,076	1,879	335,600
Outside WRCOG		8,764	790	83,223	7,651	19,666	7,955,209	8,075,303
TOTAL		264,404	89,179	423,467	43,596	344,634	8,064,992	9,230,272

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-35
VMT BY WRCOG TUMF ZONE
DAILY NON-HOME-BASED TRIPS ONLY - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		501,776	90,820	273,360	26,410	190,907	227,284	1,310,557
Hemet/San Jacinto		110,639	282,324	26,620	46,188	73,988	68,580	608,338
Northwest		221,166	12,450	1,141,014	9,929	49,713	945,886	2,380,158
Pass Area		51,183	51,361	27,984	191,114	5,224	197,603	524,469
Southwest		167,809	58,931	85,053	3,831	806,312	142,426	1,264,363
Outside WRCOG		239,471	55,876	992,911	116,119	290,402	66,124,436	67,819,215
TOTAL		1,292,044	551,761	2,546,941	393,592	1,416,547	67,706,215	73,907,099

Based on RivCOM Year 2045 No-Build Scenario, November 2023

**EXHIBIT J-36
VMT BY WRCOG TUMF ZONE
DAILY HOME-BASED-UNIVERSITY TRIPS ONLY - 2045 NO BUILD**

From	To	Central	Hemet/San Jacinto	Northwest	Pass Area	Southwest	Outside WRCOG	TOTAL
Central		48,855	32,492	110,531	645	7,286	71,756	271,565
Hemet/San Jacinto		5,642	31,221	9,033	414	1,197	13,626	61,132
Northwest		17,063	5,200	225,260	240	1,617	151,579	400,959
Pass Area		5,191	13,890	11,846	1,278	126	27,566	59,896
Southwest		61,077	77,629	144,261	870	82,752	401,549	768,138
Outside WRCOG		28,578	26,741	342,408	2,292	5,587	4,433,366	4,838,972
TOTAL		166,406	187,172	843,339	5,738	98,564	5,099,442	6,400,662

Based on RivCOM Year 2045 No-Build Scenario, November 2023

Appendix K - Residential Fee Calculation

In general, the fee for the TUMF program is calculated based on the following formula:

$$\frac{\text{Unit Cost Assumptions} \times \text{Recommended Network Improvements}}{\text{Change in Residential and Non-Residential Development}} = \text{TUMF}$$

Applying this formula, Unit Cost Assumptions for the various eligible TUMF project types are used to estimate the overall cost to improve the TUMF Network as described in the TUMF Nexus Study. The resultant network improvement cost is then divided proportionally between various residential and non-residential development categories such that each new development type contributes its 'fair share' to the program. Any change in one formula variable has a related impact on the overall TUMF fee, although it is important to note that the resultant impact to the overall fee is not necessarily directly proportional to the formula variable change due to the intricacies of the fee calculation.

The residential fee was calculated by multiplying the estimated TUMF Network improvements cost attributable to mitigating the cumulative regional impacts of new development (**Section 4.0**) by the proportion of all regional trips that are generated by residential land uses (**Section 5.3**), and dividing this number by the projected increase in residential units between 2018 and 2045 (**Table 2.3**).

To account for the difference in trip generation rates between single-family residential units and multi-family residential units, the fee value was normalized for each of these housing types by first multiplying the proposed growth in households between 2018 and 2045 by the existing proportional share of each household type, and then multiplying the resultant values by the respective trip generation rate as published in the Institute of Traffic Engineers *Trip Generation Manual*, Eleventh Edition, 2021. The respective fee values are presented in **Section 6.1**. **Exhibit K-1** details the calculation of the residential fee (and non-residential fee).

EXHIBIT K-1 Western Riverside County TUMF Estimate
by Percent of TUMF Share Weighted by PM Peak Hour Trip Generation Rate
Based on Needed Improvements to the Regional System of Highways and Arterials

Updated: July 23, 2024

Residential	Dwelling Units			PM Peak Hour Trip Generation Rate	PM Peak Hour Trip Change	Percentage of PM Peak Hour Trip Change	Fee/DU
	2018	2045	Change				
Single Family Residential	397,407	564,898	167,491	0.99	165,816	78.6%	\$15,476
Multi Family Residential	157,166	247,501	90,335	0.50	45,168	21.4%	\$7,816
Total	554,573	812,399	257,826		210,984	100.0%	

Non-Residential	Employees			PM Peak Hour Trip Generation Rate	Peak Hour Trip Char	Percentage of PM Peak Hour Trip Change	Change in SF of GFA	Fee/SF of GFA
	2018	2045	Change					
Industrial	169,334	245,915	76,581	0.6	45,949	15.1%	61,489,565	\$2.33
Retail	73,814	86,929	13,115	1.8	23,607	7.8%	6,557,500	\$11.21
Service	308,703	482,958	174,255	1.2	209,106	68.8%	66,735,957	\$9.76
Government/Public Sector	18,569	30,640	12,071	2.1	25,349	8.3%	3,420,665	\$23.07
Total	570,420	846,442	276,022		304,011	100.0%	138,203,688	

Notes:

- trip generation rates based on ITE Trip Generation 11th Edition (2021) rates for weekday PM peak hour by generator trip ends
- residential formula: [(TUMF cost share)(residential share of VMT) / (change in housing units)] * (percentage of trip change)
- non-residential formula: [(TUMF cost share)(non-residential share of VMT) / (change in SF of GFA)] * (percentage of trip change)

Calculation Inputs:

residential share of daily VMT	77.7%
non-residential share of daily VMT	22.3%
total regional mitigation cost	\$5,283,909,000
existing obligated improvement funding	\$382,886,000
unfunded existing need cost	\$646,931,000
MAX TUMF VALUE	\$4,244,608,000
MAX TUMF SHARE	80.3%
Residential Value	\$3,298,060,000
Non-Residential Value	\$946,548,000

Appendix L - Non-Residential Fee Calculation

The non-residential fee was calculated by multiplying the estimated Regional System of Highways and Arterials improvements cost attributable to new development (**Section 4.0**) by the proportion of all regional trips that are generated by non-residential land uses (**Section 5.3**), and dividing this number by the projected increase in non-residential land use between 2018 and 2045 (**Table 2.3, Section 2.0**) and the proportional share of new employees in each sector.

In preparation for the fee calculation, SCAG 2020 RTP/SCS employment data by sector was first converted to land use as square feet of gross floor area (SF GFA). Non-residential employee to gross floor area conversion factors were derived from four sources. These sources are:

- Cordoba Corporation/Parsons Brinckerhoff Quade and Douglas, Inc. (PBQD), Land Use Density Conversion Factors For The Long-Range Corridor Study San Bernardino and Riverside Counties, August 20, 1990. Table 8.
- Orange County Transportation Authority (OCTA), Orange County Subarea Modeling Guidelines Manual, June 2001. Appendix C.
- Southern California Association of Governments (SCAG), Employment Density Study, October 31, 2001, Table IIB
- County of Riverside, General Plan, As Amended December 15, 2015, Appendix E: Socioeconomic Build-Out Projections Assumptions & Methodology, Table E-5

The employment conversion factors developed for use in the calculation of the non-residential fee are tabulated in **Exhibits L-1** through **L-4**. The relevant sections of these respective publications are included in this Appendix as **Exhibits L-5** through **L-8**.

To account for the difference in trip generation rates between the various employment sectors, the non-residential fee value for each sector was normalized by multiplying by the respective median trip generation rate for the range of associated land use types as published in the Institute of Traffic Engineers Trip Generation Manual, Eleventh Edition, 2021. The respective fee values are presented in **Section 6.2**. The table detailing the calculation of the non-residential fee (and residential fee) is included in **Appendix K** as **Exhibit K-1**.

EXHIBIT L-1 Employment Conversion Factors

Employment Sector	Business by Land Use Category (1)	Employees	Gross Floor Area (TSF)	Conversion Rate (Employees/TSF)	Land Use Category (2)	Minimum Range Conversion Rate (Employees/TSF)	Land Use Category (3)	SF per Employee based on Average Employees per Acre and Average FAR (Riverside County)	Employees/TSF	Land Use Category (4)	SF per Employee	Employees/TSF	TUMF Median Employment Conversion Factors (Employees/TSF)
Industrial	Heavy Manufacturing	6,379	5,117	1.25	R&D/LI/BP	2.50	R&D/Flex Space	867		Light Industrial	1030		
	General Manufacturing	11,403	4,103	1.90	Heavy Industr	2.00	Light Manufacturina	1548		Heavv Industr	1500		
	Light Manufacturing	8,624	3,962	2.18	Warehouse	1.00	Warehouse	1195					
	Manufacturing, Small Module	5,559	3,038	1.83									
	High Tech/Research	954	411	2.32									
	Wholesale, Trade Industry	6,120	4,140	1.48									
	Warehousing	119	279	0.43									
	General Industry	1,023	917	1.12									
	Median			1.65	Median	2.00	Median	1195.0	0.84	Median	1265.0	0.79	1.25
Retail	Retail Trade	34,821	20,125	1.73			Regional Retail	268		Commercial Retail	500		
	Personal, Rental and Repair	3,452	1,590	2.17			Other Retail/Service	629					
	Equipment Rental	1,080	453	2.38									
	General Commercial	12,978	17,023	0.76									
	Median			1.95			Median	448.5	2.23	Median	500.0	2.00	2.00
Service	Financial/Insurance/Real Estate	7,738	1,095	7.07	Office	3.00	Low-Rise Office	481		Commercial Office	300		
	Small Office	3,945	548	7.20	Medical/PO/Bank	3.50	Hotel/Motel	3476		Business Park	600		
	Professional Services	5,470	1,529	3.58	Hospital	2.50							
	Business Services	6,680	1,966	3.40	Restaurant	3.00							
	General Offices	8,900	3,886	2.29									
	Medical Services	9,006	3,201	2.81									
	Restaurant	23,345	4,061	5.75									
		Median			3.58	Median	3.00	Median	1978.5	0.51	Median	450.0	2.22
Government/Public Sector					Government/Civic	3.00	Government Offices	208					
					Librarv	1.50							
					Median	2.25	Median	208.0	4.81				3.53

- Notes:
- Business by Land Use Categories Wholesale Trade Commercial and Automotive Repair were excluded as there is inconsistencies between the Land Use Density Conversion Factors For Long Range Corridor Study San Bernardino and Riverside Counties categorization, and the NAICS Major Group categorization.
 - OCTA Typical Employment Conversion Factors for Commercial excluded as it potentially covers uses in both Retail and Service categories: Hotel/Motel, Schools, Golf Course, Developed Park, Park and Agricultural were excluded as they are calculated from units other than TSF.
 - TUMF Median Employment Conversion Factor is the median of (1) through (4) Conversion Rates
 - (1) Cordoba Corporation/PBQD, Land Use Density Conversion Factors For Long Range Corridor Study San Bernardino and Riverside Counties, August 20, 1990, Table 8.
 - (2) OCTA, Orange County Subarea Model Guidelines Manual, June 2001, Appendix C.
 - (3) SCAG, Employment Density Study, October 31, 2001, Table IIB
 - (4) County of Riverside, General Plan, As Amended December 15, 2015, Appendix E: Socioeconomic Build-Out Projections Assumptions & Methodology, Table E-5

EXHIBIT L-2 Population and Employment Estimates

Sector	2018	2045	Change	Employee Conversion Factor / ISF	Change in SF of GFA
Population	1,905,440	2,533,876	628,436		
Households					
Single-Family	397,407	564,898	167,491		
Multi-Family	157,166	247,501	90,335		
Totals	554,573	812,399	257,826		
Employees					
Industrial	169,334	245,915	76,581	1.25	61,489,565
Retail	73,814	86,929	13,115	2.00	6,557,500
Service	308,703	482,958	174,255	2.61	66,735,957
Government/Public Sector	18,569	30,640	12,071	3.53	3,420,665
Totals	570,420	846,442	276,022		138,203,688

Source: SCAG 2020 RTP/SCS; RivCOM

EXHIBIT L-3 Trip Generation Rate Comparison

Non-Residential		Employee Growth	SF Growth	ITE Median PM Peak Hour Trips Per Employee	ITE Median PM Peak Hour Trips per ISF	Trip Growth (SF Growth * ITE Median)	Calculated PM Peak Hour Trips per Employee	Weighted Median PM Peak Hour Trips Per Employee	Median Share PM Peak Period Pass By Trips (Retail and Service Uses)	Adjusted PM Peak Hour Trips Per Employee
Industrial	76,581	61,489,565	0.7	0.6	36,894	0.5	0.6		0.6	
Retail	13,115	6,557,500	3.3	5.0	32,788	2.5	2.9	37%	1.8	
Service	174,255	66,735,957	2.2	5.7	380,395	2.2	2.2	44%	1.2	
Government/Public Sector	12,071	3,420,665	3.3	3.2	10,946	0.9	2.1		2.1	
	276,022	138,203,688			461,022					

EXHIBIT L-4 Representative ITE Weekday PM Peak Hour Trip Generation Rates

RESIDENTIAL

Land Use Category	ITE Reference	PM Peak Hour Trip Ends per DU	PM Peak Hour Trip Ends per Residents
Single Family Residential			
Single Family Detached Housing	210	0.99	0.28
Multi Family			
Single-Family Attached Housing	215	0.61	0.44
Multifamily Housing (Low-Rise) Not Close to Rail Transit	220	0.57	0.27
Multifamily Housing (Mid-Rise) Not Close to Rail Transit	221	0.39	0.23
Multifamily Housing (High-Rise) Not Close to Rail Transit	222	0.40	
Affordable Housing - Income Limits	223	0.50	0.14
Average		0.49	0.27
Median		0.50	0.25

NON-RESIDENTIAL

Land Use Category	ITE Reference	PM Peak Hour Trip Ends per ISF*	PM Peak Hour Trip Ends per Employee*	PM Peak Period Pass by Trips**
Industrial				
Intermodal Truck Terminal	30	1.89	0.72	
General Light Industry	110	0.80	0.69	
Industrial Park	130	0.40	0.42	
Manufacturing	140	0.80	0.40	
Warehousing	150	0.23	0.68	
High-Cube Transload and Short-Term Storage	154	0.17		
High-Cube Fulfillment Center Warehouse - Non-Sort	155	0.27		
High-Cube Parcel Hib Warehouse	156	0.71		
Average		0.66	0.58	
Median		0.56	0.68	
Retail				
Building Materials and Lumber	812	2.65	3.30	
Free-Standing Discount Superstore	813	4.39	1.75	29%
Variety Store	814	7.42	12.65	34%
Free-Standing Discount Store	815	5.42	2.36	20%
Hardware/Paint Store	816	1.10	3.77	26%
Nursery (Garden Center)	817	8.37	2.55	
Nursery (Wholesale)	818	5.01	0.59	
Shopping Center	820	4.09	1.91	
Shopping Center (150K to 300K)	820			29%
Shopping Center (300K to 900 K)	820			19%
Shopping Plaza with Supermarket	821	9.72		
Shopping Plaza without Supermarket	821	5.40	1.80	
Shopping Plaza	821			40%
Strip Retail Plaza	822	13.24	10.15	
Factory Outlet Center	823	1.94		
Automobile Sales (New)	840	2.65	1.10	
Automobile Sales (Used)	841	4.92	4.27	
Automobile Parts Sales	843	5.88	4.27	43%
Tire Store	848	3.72	3.05	25%
Supermarket	850	9.19	3.37	24%
Convenience Store	851	53.51	34.33	
Convenience Market with Gasoline Pumps	853			
Discount Supermarket	854			
Discount Club	857	4.62	3.49	34%
Sporting Goods Superstore	861	2.58	0.93	
Home Improvement Superstore	862	3.21		42%
Electronics Superstore	863	4.48		40%
Pet Supply Superstore	866	2.19		
Book Superstore	868	14.00		
Department Store	875	2.81		
Apparel Store	876	4.20		
Pharmacy/Drugstore without Drive Through Window	880	8.62		53%
Pharmacy/Drugstore with Drive Through Window	881	11.23	7.79	49%
Marijuana Dispensary	882	24.57		
Furniture Store	890	0.70	1.01	53%
Liquor Store	899	17.00	5.98	
Gasoline/Service Station	944		28.39	57%
Convenience Store/Gas Station (none)	945		21.31	
Convenience Store/Gas Station (9 - 15 vehicle fueling positions)	945	56.38		75%
Average		9.54	6.87	38%
Median		4.97	3.30	37%
Service				
Data Center	160	0.13		
Specialty Trade Contractor	180	2.18	0.80	
Movie Theatre	445	14.06	9.56	
Health/Fitness Club	492	3.92		
Day Care Center	565	11.82	4.66	44%
Hospital	610	0.98	0.33	
Nursing Home	620	0.82	0.45	
Clinic	630	4.22	2.49	
Animal Hospital/Veterinary Clinic	640	3.83	2.26	
Free Standing Emergency Room	650	2.24		
Small Office Building	712	3.15	1.90	
Medical-Dentist Office Building (Stand-Alone)	720	4.79	1.26	
Medical-Dentist Office Building (Within/Near Hospital Campus)	720	3.78	1.03	
Walk-in Bank	911	26.40	6.18	
Drive-in Bank	912	20.92	4.36	35%
Hair Salon	918	1.94		
Copy, Print and Express Ship Store	920	12.30	6.63	
Fast Casual Restaurant	930	18.57		
Fine Dining Restaurant	931	8.28	1.79	44%
High Turnover (Sit-Down) Restaurant	932	16.35	3.66	43%
Fast Food Restaurant with Drive Through	934	50.94	5.45	55%
Fast Food Restaurant with Drive Through No Seating	935			31%
Coffee/Donut Shop with Drive Through	937	43.65		
Coffee/Donut Shop with Drive Through No Seating	938			98%
Quick Lube Vehicle Shop	941	9.42	2.17	
Automobile Care Center	942	3.51	1.43	
Automobile Parts and Service Center	943	2.61	1.80	
Wine Tasting Room	970	6.60		
Brewery Tap Room	971	10.93		
Drinking Place	975	15.53		
Average		10.85	3.06	50%
Median		5.70	2.17	44%
Government/Public Sector				
Recreational Community Center	495	2.53	2.71	
Elementary School	520		4.60	
Middle/Junior High School	522		4.83	
High School	525		3.32	
School District Office	528	2.37	0.84	
Private School (K-8)	530		5.72	
Private School (K-12)	532		2.82	
Private High School	534		2.49	
Charter Elementary School	536		10.64	
Charter School (K-12)	538		10.66	
Junior/Community College	540		1.63	
University/College	550		0.81	
Adult Detention Facility	571	0.94	0.51	
Library	590	8.53	6.81	
Government Office Building	730	3.19	0.91	
State Motor Vehicles Department	731	7.68	4.27	
Post Office	732	15.11	3.29	
Average		5.76	3.93	
Median		3.19	3.29	

* - Average weekday PM peak hour of generator trip end data derived from ITE Trip Generation Manual (11th Edition), September 2021
 ** - Average weekday PM peak pass-by trip rates derived from ITE Trip Generation Manual (11th Edition), September 2021

EXHIBIT L-5

Land Use Density Conversion Factors for the Long-Range Corridor Study San Bernardino and Riverside Counties, Table 8

Cordoba Corporation/Parsons Brinckerhoff Quade and Douglas, Inc. (PBQD), August 20, 1990.

**TABLE 8
EMPLOYEES PER ACRE
RIVERSIDE COUNTY**

BUSINESS BY LAND USE	Employees *	Floor Space Sq. Ft.	Square Feet Per Employee	Average F.A.R	Employees per Acre
Manufacturing/Industrial	40,383	23,968,000	594	0.25	18
Heavy Manufacturing	6,379	5,117,000	802	0.20	11
General Manufacturing	11,603	6,103,000	526	0.20	17
Light Manufacturing	8,624	3,962,000	459	0.25	24
Manufacturing, Small Module	5,559	3,038,000	547	0.25	20
High Tech Activity and Research	954	411,000	431	0.35	35
Wholesale Trade Industrial	6,120	4,140,000	676	0.25	16
Warehousing	119	279,000	2,345	0.25	5
General Industrial	1,023	917,000	896	0.20	10
Commercial	79,067	46,304,000	586	0.30	22
Retail Trade	34,821	20,125,000	578	0.30	23
Restaurants and Bars	23,345	4,061,000	174	0.30	75
Personnal, Rental and Repair Services	3,452	1,590,000	461	0.30	28
Automotive Repair Services	1,870	1,619,000	866	0.30	15
Equipment Rental	1,080	453,000	419	0.30	31
Wholesale, Trade Commercial	1,521	1,434,000	943	0.25	12
General Commercial	12,978	17,023,000	1,312	0.40	13
Office	41,740	12,226,000	293	0.50	74
Finance/Insurance/Real Estate	7,738	1,095,000	142	0.50	154
Finance/Insurance/RE/Small Office	3,945	548,000	139	0.50	157
Professional Services	5,470	1,529,000	280	0.50	78
Business Services	6,680	1,966,000	294	0.50	74
General Office	8,900	3,886,000	437	0.50	50
Medical Services	9,006	3,201,000	355	0.50	61

* Employment figures do not include government, military and sole proprietorships.

Source: Urban Decision Systems (1989), Census Zip Business Patterns (1986)

Filename: Trans rv

EXHIBIT L-6
Orange County Subarea Modeling Guidelines Manual, Appendix C
Orange County Transportation Authority (OCTA)
June 2001

**TYPICAL EMPLOYMENT CONVERSION FACTORS
(June 2001)**

Land Use Category	Conversion Rates Range	Employment Type (Percentate Ranges)		
		Retail	Service	Other
Commercial	2.25 - 2.75 employees/TSF ¹	60% - 90%	10% - 40%	0% - 5%
Office/Office Park	3.00 - 4.00 employees/TSF	0% - 5%	20% - 30%	65% - 80%
R&D/Light Industrial/Business Park	2.50 - 3.50 employees/TSF	0% - 5%	0% - 30%	60% - 100%
Heavy Industrial	2.00 - 2.50 employees/TSF	0%	0%	100%
Warehouse	1.00 - 2.00 employees/TSF	0%	0%	100%
Restaurant	3.00 - 5.00 employees/TSF	100%	0%	0%
Medical Office/Post-Office/Bank	3.50 - 4.50 employees/TSF	0% - 10%	70% - 100%	0% - 20%
Government Office/Civic Center	3.00 - 4.00 employees/TSF	0% - 5%	50% - 70%	25% - 50%
Hospital	2.50 - 3.00 employees/TSF	0%	70% - 80%	20% - 30%
Library/Museum	1.50 - 2.50 employees/TSF	0%	100%	0%
Hotel/Motel	0.75 - 1.25 employees/room	0% - 10%	70% - 80%	10% - 30%
Schools	0.08 - 0.12 employees/student	0%	0%	100%
Golf Course	0.50 - 0.70 employees/acre	0% - 10%	90% - 100%	0%
Developed Park/Athletic Fields	0.20 - 0.40 employees/acre	0%	80% - 100%	0% - 20%
Park	0.05 - 0.10 employees/acre	0%	80% - 100%	0% - 20%
Agricultural	0.01 - 0.05 employees/acre	0%	0%	100%

¹ Thousands of Square Feet

EXHIBIT L-7
Employment Density Study, Table IIB
Southern California, October 31, 2001

Table II-A
Derivation of Square Feet per Employee Based on:
--MEDIAN EMPLOYEES PER ACRE
--MEDIAN FAR

<u>Land Use Category</u>	Los		<u>Riverside</u>	San		<u>Imperial</u>	<u>Region</u>
	<u>Angeles</u>	<u>Orange</u>		<u>Bernardino</u>	<u>Ventura</u>		
Square Feet per Employee							
Regional Retail	--	2,322	165	1,392	990	--	1,023
Other Retail/Svc.	730	450	1,148	432	412	796	585
Low-Rise Office	471	352	598	1,014	659	415	466
High-Rise Office	377	235	--	--	--	--	300
Hotel/Motel	1,179	--	5,273	1,747	--	808	1,804
R & D/Flex Space	1,717	511	1,121	1,833	277	--	527
Light Manufacturing	1,214	786	2,221	1,538	202	2,230	924
Heavy Manufacturing	--	--	--	--	--	--	--
Warehouse	1,518	1,350	819	2,111	149	3,257	1,225
Government Offices	2,182	408	1,475	851	120	407	672

Table II-B
Derivation of Square Feet per Employee Based on:
--AVERAGE EMPLOYEES PER ACRE
--AVERAGE FAR

<u>Land Use Category</u>	Los		<u>Riverside</u>	San		<u>Imperial</u>	<u>Region</u>
	<u>Angeles</u>	<u>Orange</u>		<u>Bernardino</u>	<u>Ventura</u>		
Square Feet per Employee							
Regional Retail	--	704	268	1,009	1,165	--	857
Other Retail/Svc.	424	325	629	124	271	255	344
Low-Rise Office	319	287	481	697	389	632	288
High-Rise Office	440	218	--	--	--	--	311
Hotel/Motel	--	--	3,476	2,544	--	311	1,152
R & D/Flex Space	1,796	466	867	834	269	--	344
Light Manufacturing	829	558	1,548	705	189	994	439
Heavy Manufacturing	--	--	--	--	--	--	--
Warehouse	1,518	979	581	1,195	131	450	814
Government Offices	1,442	206	208	188	94	322	261

Notes:
"--" = Data not available.

EXHIBIT L-8

General Plan, As Amended December 15, 2015.

Appendix E: Socioeconomic Build-Out Projections Assumptions & Methodology,

Table E-5

County of Riverside, 2015



Table E-3: Net Parcel Acre Factors

Land Use Designation	Net Parcel Area
Commercial Retail (CR)	0.75
Commercial Tourist (CT)	0.75
Commercial Office (CO)	0.75
Light Industrial (LI)	0.80
Heavy Industrial (HI)	0.75
Business Park (BP)	0.75

Net Parcel Square Feet: To convert net acres to net square feet, net acres are multiplied by 43,560 feet per acre. For example, 50 net acres of Commercial Office (66.66 gross acres) equals 2,178,000 net square feet.

Floor Area Ratio (FAR): Floor Area Ratio, or FAR, indicates the ratio of gross building square footage permitted on a parcel to net square footage of the parcel. FAR's for Commercial, Industrial and Business Park land uses are identified, in Table E-4, below. See General Plan Glossary for full definition of FAR.

Table E-4: Development FAR Factors

Land Use Designation	FAR		
	Minimum	Probable*	Maximum
Commercial Retail (CR)	0.20	0.23	0.35
Commercial Tourist (CT)	0.20	0.25	0.35
Commercial Office (CO)	0.25	0.35	1.00
Light Industrial (LI)	0.25	0.38	0.60
Heavy Industrial (HI)	0.15	0.40	0.50
Business Park (BP)	0.25	0.30	0.60

*Factor used for theoretical planning estimates.

Building Square Footage: Building square footage for the land use designations listed in the table above are calculated by multiplying the Net Square Feet of each land use designation by the corresponding FAR. For instance, 20,000 square feet of Commercial Retail with an FAR of 0.23 would yield 4,600 square feet of building space.

Square Feet (SF)/Employee Factor: This factor indicates the number of employees typically associated with a given amount of square feet of building space per employee. It is used to estimate the number of jobs resulting for a given land use designation. These factors for the commercial land use designations are listed in Table E-5 below.

Table E-5: Commercial Employment Factors

Land Use Designation	SF/Employee
Commercial Retail (CR)*	500
Commercial Tourist (CT)	500
Commercial Office (CO)	300
Light Industrial (LI)	1,030
Heavy Industrial (HI)	1,500
Business Park (BP)	600

*It is assumed that CR designated lands will build out at 40% CR and 60% MDR.

Employment: Employment for commercial, industrial, and business park land uses is calculated by dividing the total number of building square feet by the SF/Employee factor. For example, 300,000 square feet of commercial office building space would yield 1,000 employees.

Attachment

WRCOG Responses to Public Comments



Building Industry Association of Southern California, Inc.

June 10, 2024

Mr. Cameron Brown
TUMF Program Manager
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, Ca. 92501

Via Email: Cbrown@wrcog.us

RE: 2024 Draft Nexus Study Comments

Dear Mr. Brown:

On behalf of the Riverside County Chapter of the Building Industry Association of Southern California and our hundreds of home builders, trade partners, and suppliers throughout our region we are writing today to provide initial comments on the 2024 Transportation Uniform Mitigation Fee (TUMF) Nexus Study.

First, we want to thank Western Riverside Council of Governments (WRCOG) for its early outreach to our industry regarding the 2024 TUMF Nexus Study. The two workshops held in advance of the close of the initial comment period were beneficial to our members and we appreciate the education and outreach efforts.

The proposed single-family residential fee of \$15,025 per dwelling is a 48% increase from the current fee level and will increase new home prices already burdened by a difficult interest rate environment. While we understand the costs of roadway design and construction have increased, we would respectfully ask WRCOG to carefully examine the scope and pricing of its roadway network proposal, to seek savings that will reduce the new fee as much as possible.

We appreciate WRCOG's attention to the new fee requirements under AB 602. The AB 602 analysis included as a part of this study was informative. The findings related to home square footage and trip generation resemble what our builders find anecdotally in the regional home marketplace. We believe additional refinement of the proposed Fee Tiers in the AB 602 proposed fee would be important. Home buyers in the lower Fee Tier homes, tend to be first time buyers and are more sensitive to even modest price increases. Additionally, our members might be able to assist WRCOG as you look at regional trends in home size looking forward and we would be pleased to assist you in this regard.

Finally, implementation timing of the proposed TUMF increase is of critical importance to our members. As you know, the pipeline to project approvals is often 3 to 4 years out given the challenge CEQA poses in the entitlement process. Economic assumptions of any given housing proposal have been fixed long before homes are built, so fee increases late in the process can burden or even render some projects infeasible. A TUMF increase of this magnitude will have significant economic impacts to projects currently in the development process. We would respectfully ask that WRCOG consider a phase in

approach to the new fee that is moderate and gradual. Additionally, we would ask that no new increase to the TUMF fee occur any earlier than July 1, 2025 to allow ample time for builders to prepare for the increase and factor it into their economic models moving forward.

We appreciate the opportunity to provide initial comments on the 2024 TUMF Nexus Study. We look forward to further dialogue and collaboration as the process moves forward. Our industry stands ready to assist WRCOG with market data and insights that might be helpful as you consider the new fee and its implementation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lou Monville". The signature is fluid and cursive, with a long horizontal stroke at the end.

Lou Monville
Senior Vice President, Riverside County Chapter
Building Industry Association of Southern California



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July 22, 2024

Lou Monville
Southern California Building Industry Association (BIA)
Senior Vice President, Riverside Chapter

Dear Mr. Monville,

Thank you for your thoughtful comments regarding the Transportation Uniform Mitigation Fee (TUMF) Nexus Study. We appreciate the Southern California BIA's involvement and your detailed feedback. We would like to address a few of the comments you made in your letter.

Comment: Fee Increase and Cost Savings

You expressed concern about the significant increase in fees and suggested looking for cost savings by eliminating other facilities.

Response: We have already taken steps to address this concern. Our team thoroughly analyzed the network and eliminated unneeded projects, ensuring that the TUMF only includes necessary and justified projects.

Comment: New Fee Requirements of AB 602

You thanked WRCOG for addressing the new fee requirements of AB 602 regarding home square footage and trip generation and suggested further refinement of the proposed Fee Tiers, particularly for lower Fee Tier homes that often attract first-time buyers.

Response: We would like to give a thorough response on AB-602 as this questions seems to arise often.

AB 602 has been in effect since January 1, 2022. This legislation imposes several requirements on mitigation programs and nexus studies. One of the most impactful changes was a requirement that fees for residential uses be assessed proportional to the size of the dwelling unit instead of a uniform fee. Like many fee programs, the TUMF program has historically assessed a consistent fee for all residential units with only a distinction between single-family homes and multi-family units.

Since 2022, WRCOG has evaluated the impacts of AB 602 and determined how best to comply with these requirements. This process has included a detailed analytical study regarding travel behavior in the WRCOG region, which determined that there was a relationship between the size of a single-family home and the number of trips generated by that home.

This data, combined with historical data regarding residential development patterns for the past three years, allowed WRCOG to develop a potential approach to comply with AB 602. This approach creates a series of 4 tiers which pivot off a standard single-family rate to account for homes which are both smaller and larger than the average new home in the WRCOG region.

One significant benefit to this approach is that it lessens the impact of any TUMF increase on first-time home buyers, who are often the most price-sensitive home buyers. These home buyers often purchase the least expensive homes, which are also the smaller homes.

It was also determined that the best approach to implement these tiers would be as follows:

1. Calculate the base single-family fee in the Nexus Study as is our traditional practice
2. Determine the appropriate tiers based on current data related to travel behavior and development trends. Homes smaller than the current average for new homes would pay less than the base single-family rate while homes larger than the current average would pay more than the base single-family rate
3. Implement these tiers through an update to the Fee Calculation Handbook, as is the case with any specialized fee calculation for TUMF applications
4. The fees would be paid for each single-family home based on the size of the dwelling unit, which is similar to how many of the non-residential TUMF fees are calculated. The fee payment portal maintained by WRCOG automatically calculates the fee based on the actual size of each single-family home. This approach ensures that there is no additional work required by our member agency staff or WRCOG staff.

This approach requires an update to the Fee Calculation Handbook, which is a routine activity that always follows any TUMF Nexus Study updates. This updated Fee Calculation Handbook will require review and approval by WRCOG's various staff and elected official committees prior to the implementation of any new fees.

Comment: Impact on Current Projects and Phased Implementation

You raised concerns that a significant TUMF increase could profoundly impact projects currently in development, given the extended timeline for project approvals due to CEQA challenges and prior economic projections for housing projects. You requested that WRCOG consider a phased and gradual approach to implementing the new fee, with no increase until at least July 1, 2025.

Response: The Executive Committee will determine the implementation approach for the fees, including the possibility of a phased introduction. The date of implementation will also be decided by our Executive Committee, but given the regulatory requirements for new fees, any changes will likely not take effect until February 2025 at the earliest, with a later implementation very likely.

Thank you again for your valuable input and for your continued collaboration. If you have any further questions or need additional information, please do not hesitate to reach out.

Sincerely,



Cameron Brown
Program Manager

Cameron Brown

From: A.I.M. <ianthe83@gmail.com>
Sent: Thursday, May 30, 2024 3:42 PM
To: Cameron Brown
Subject: TUMF Nexus Study Comments

Good afternoon,

I am a resident of Riverside County (Riverside City specifically) and in reviewing your PowerPoint Presentation of your study outcomes justifying the increase in building fees, I fail to see how retail, commercial, and warehouses should be paying the lowest fees. The majority of the presentation seems to focus on this. Warehouses, Commercial businesses, and developers cause significant impact to the roads and increase in traffic to the community and also make the most profit from the improvement of roads and transportation. They should incur fees that are significantly higher than home buyers. California is already an incredibly expensive place to live and we are losing our population as it ages or is priced out of the state. I realize these costs impact both the individual and businesses, but businesses are typically able to weather these cost of living increases if they are sustainable, non-exploitative businesses to begin with (this is often the case that they rather make exorbitant profits than care about the community they are impacting). The larger burden to make these important improvements should not be placed on the shoulders of individual community members who are barely surviving in these times. Do we need improved roads and transportation, yes. But we only need these improvements at the levels we need them due to an increase of traffic often spurred by business and big builders. The burden needs to land with them. Just my two cents as a concerned homeowner.

Thank you,
Alesha Marshall



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July 22, 2024

Dear Ms. Marshall

Thank you for sharing your concerns regarding the construction of warehouses in Jurupa Valley and the benefits provided to facilitate their development. We appreciate your engagement and the time you have taken to express your views.

You raised valid points about the potential negative impacts of warehouses, including congestion, air pollution, and general nuisance. These concerns are important and need to be addressed as part of our planning and community development processes.

Warehouse and all industrial development projects are required to pay their fair share based on the traffic they generate. By law, the Nexus Study cannot assign fees beyond what the development use generates in traffic congestion. It's important to note that the Nexus Study focuses on traffic-related impacts and does not mitigate other effects such as air pollution and public nuisance.

We understand the need for a balanced approach to development that considers all impacts, and we are committed to exploring additional measures to address the concerns you and other community members have raised.

Thank you again for your valuable input. If you have any further questions or need additional information, please feel free to reach out.

Sincerely,

Cameron Brown
Program Manager

Cameron Brown

From: Savat Khamphou <Savat.Khamphou@CoronaCA.gov>
Sent: Wednesday, May 15, 2024 7:46 AM
To: Chris Gray
Cc: Cameron Brown; Karla Felix; Pedro Cevallos; Kenny Nguyen; Brett Channing
Subject: RE: Draft TUMF Nexus Study

Good morning, Chris.

Thank you for sending the Draft Nexus study. I did notice that the City of Corona's project cost for the McKinley Grade Separation at BNSF is estimated at \$105 million, yet no TUMF share is associated with it. Could it be that the study is assuming the project is complete? Since the project is not yet completed and funds are still needed, I'd like to continue discussions with WRCOG about whether TUMF funds are still an option for our project.

Thank you.



Savat Khamphou
Public Works Director

P: (951) 279-3604 C: (951) 264-8907
400 South Vicentia Avenue
Corona, CA 92882
www.coronaca.gov



City Hall hours are Monday-Thursday, 7 AM-6 PM. Closed Fridays

From: Chris Gray <cgray@wrcog.us>
Sent: Tuesday, May 14, 2024 10:56 PM
To: Chris Gray <cgray@wrcog.us>
Cc: Cameron Brown <cbrown@wrcog.us>; Karla Felix <kfelix@wrcog.us>
Subject: Draft TUMF Nexus Study

You don't often get email from cgray@wrcog.us. [Learn why this is important](#)

[CAUTION] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Evening Everyone,

The Draft TUMF Nexus Study has been posted to WRCOG's website and can be found here:

<https://www.wrcog.us/201/Studies-Documents>

Please let Cameron Brown know if you have any questions or comments on the study.

WRCOG will be hosting two public informational meetings on the Draft Nexus Study over the next 3 weeks. The first meeting is on May 21st and you can access the meeting link here:

Join Zoom Meeting

<https://us02web.zoom.us/j/89591934134?pwd=dkJGdGo2d0d5OE1MUW53NkM1NIYzUT09>



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July 22, 2024
Savat Khamphou
Public Works Director
City of Corona
Corona, CA 92882
400 South Vicentia Avenue

Dear Mr. Khamphou,

Thank you for your comments regarding the Transportation Uniform Mitigation Fee (TUMF) Nexus Study. We appreciate the City of Corona's involvement and your attention to detail in reviewing the study.

The City of Corona noticed that the McKinley Grade Separation at BNSF is estimated at \$105 million, yet there is no TUMF share associated with it. The reason for this is that McKinley received funds from outside sources such as SB132, which provide more funding than the TUMF estimate for the project. Therefore, TUMF can provide no further funding as part of this Nexus Study. However, WRCOG has recently worked closely with the City to provide funding based on the previous study. The latest TIP reflects the additional funding that could be provided.

Thank you again for your valuable input and for the continued collaboration. If you have any further questions or need additional information, please do not hesitate to reach out.

Sincerely,

Cameron Brown
Program Manager

Cameron Brown

From: Stuart McKibbin <stuart@trilakeconsultants.com>
Sent: Monday, June 10, 2024 11:19 PM
To: Cameron Brown
Cc: Randel, Travis; 'rjohnson@sanjacintoca.gov'
Subject: RE: Deadline for TUMF Nexus Study Comments: June 10th - City of San Jacinto comments

Good evening Cameron,
For the City of San Jacinto, we have no comments to make on the WRCOG's proposed specific project costs or TUMF shares.

However, the City would request that WRCOG revisit our proposed additions to the TUMF Arterial Network: Seventh Street between its western terminus and Warren Road, and the Seventh Street Bridge over MWD's San Diego Canal. The two facilities are listed in Exhibit G-1 in Appendix G.

Exhibit G-1 states there is no v/c deficiency, but we believe the analysis does not take into account the increased pressure on the City's arterial system caused by the upcoming construction of the Mid-County Parkway widening to Warren Road. Moreover, by implementing a segment of Seventh Street that is currently non-existent, we believe the analysis should consider the additional benefits to the network's regional connectivity and continuity. As of now, residents would travel west to a dead end, but closing the gap on Seventh street would relieve pressure on the other arterials in the City, particularly Sanderson Ave and Ramona Expressway.

Thank you for your consideration. See you Thursday.

Stuart E. McKibbin, PE

*Contract City Engineer
City of San Jacinto*



A SAFEbuilt COMPANY

1221 S. San Jacinto Ave. | San Jacinto, CA 92583
office: 951.654.3592 | DIR: 909.645.0678
[website](#) | [linkedin](#) | [email](#)

From: Cameron Brown <cbrown@wrcog.us>
Sent: Monday, June 3, 2024 4:35 PM
To: Alvin Medina <ALMEDINA@RIVCO.ORG>; Amer Attar <amer.attar@temeculaca.gov>; Art Vela <avela@banningca.gov>; Bob Moehling <bmoehling@murrietaca.gov>; Cameron Luna <cluna@cityofwildomar.org>; Chad Blais <cblais@ci.norco.ca.us>; Chris Gray <cgray@wrcog.us>; Dan Fairbanks <fairbanks@marchjpa.com>; Darren Henderson <darren.henderson@ghd.com>; dchristensen@beaumontca.gov; Dennis Acuna <dacuna@rivco.org>; Gil



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July 22, 2024

Stuart McKibbin
Contract City Engineer
City of San Jacinto
1221 S. San Jacinto Ave.
San Jacinto, CA 92583

Dear Mr. McKibbin,

Subject: Response to Comments on TUMF Nexus Study

I trust this letter finds you well. Thank you for your recent feedback regarding the TUMF Nexus Study. We have carefully considered the City of San Jacinto's request to revisit the proposed TUMF Arterial Network project for Seventh Street between Warren Road and the Seventh Street Bridge over MWD's San Diego Canal.

At this time, we are not considering the evaluation of new projects as part of the current study. However, I want to assure you that your request has been noted, and we will reevaluate this project at the next update of the study at the City of San Jacinto's request.

Should you have any further questions or require additional information regarding this matter, please do not hesitate to contact me directly at cbrown@wrcog.us or 951-405-6712

Thank you for your ongoing collaboration and input into the TUMF Nexus Study. We value our partnership with the City of San Jacinto and look forward to addressing your concerns in future updates.

Sincerely,

Cameron Brown
Program Manager

Cameron Brown

From: Mustafa, Nathan <NMustafa@riversideca.gov>
Sent: Monday, June 10, 2024 7:35 PM
To: Cameron Brown
Cc: Hernandez, Gilbert; Scully, Chris
Subject: TUMF Nexus Study Comments

Cameron,

Please find below our comments on the draft TUMF Nexus Study, we are happy to discuss in additional detail at your convenience:

1. “Government/Public Sector” appears to be a new category and is \$22.40/SF, this appears to be excessive. It further appears that the study adds this category and removes “Class A/B Office” which used to be \$2.45/SF. Government/Public Sector appears to include schools, whereas schools used to be exempt, has WRCOG confirmed that the TUMF can be applied to all of the proposed public sector facilities? If schools are no longer exempt and they need to pay \$22.40/SF, which would pose a significant challenge for our educational facilities amongst other public buildings.
2. The state of California continues to contend with a housing crisis. A key barrier to housing is the cost of developing housing in our state. The below report documents increasing local exactions as a key contributor to the trend of higher costs to develop housing in CA: https://turnercenter.berkeley.edu/wp-content/uploads/pdfs/Hard_Construction_Costs_March_2020.pdf
2. Single Family Residential (SFR) is increasing almost 50% from \$10,104 to \$15,025 and Multi-Family is only increasing by 15% from \$6,580 to \$7,588. This does not appear to be proportional; the traffic impact would be more similar unless there is compelling evidence to demonstrate that Multi-Family would have lesser impacts from a VMT perspective. Is some of the discrepancy the result of the potential for SFRs to include Accessory Dwelling Units (ADUs)? If so, would a separate category for ADUs be an acceptable alternative?

2A. Could the fee instead be based off of actual building square footages for single family residential? This may help alleviate the impact on more affordable single family housing and help the City to meet RHNA objectives. This would align with the VMT-based approach used within the nexus study.

2B. Riverside Public Works staff suggest that proposed increases are exacted in greater proportion on industrial developments. While it is understood that the nexus study assigned proportional fees based on VMT, heavy vehicles associated with goods movement damage our local roadways and cause more congestion on a per-vehicle basis. The VMT for these developments should be appropriately weighted to account for the impacts attempting to be addressed using the VMT-based approach. Furthermore, it is unclear whether percentage of residential VMT occurring on the regional TUMF roadway network, was a key factor when assessing proportional impacts as many residential trips occur to and from schools, retail, etc. within a municipality. To expand on this notion, the specific location of a

development is a more significant determinant of its vehicle miles traveled as opposed to the anticipated trip generation. Why is all housing of a specific type treated equally?

2C. If retail and commercial developments were adjusted to account for ITE pass-by rates, were residential developments adjusted to account for internal capture within areas zoned as mixed use? (Page 11). Furthermore, if VMT is the basis of assigning TUMF fees, do developments found to fully mitigate their regional VMT impacts through a CEQA study or those who screen out using a VMT screening tool find themselves exempted from TUMF? Unlike Level of Service, when VMT is addressed at a local level it is simultaneously addressed at a regional level.

The nexus study references that the TUMF can be used to offset a development's VMT impact, is the opposite true? Housing, when located strategically, has the potential to reduce regional Vehicle Miles Traveled.

3. Section 1.3.1 subsection 6 references the RivTAM model, which precedes the updated RivCOM model. Was this intentional for the specific analysis needed, or an error?
4. The nexus study references that a primary tool in developing fee assignment is VMT per unit; however, it is unclear that the proposed improvements will reduce VMT. Rather, the approach appears to link VMT to Level of Service. Was the potential for TUMF network improvements to induce VMT accounted for? It merits restating that local serving facilities or strategically located housing have the potential to reduce regional-level vehicle miles traveled.

Sincerely,

Nathan Mustafa, PE, TE, AICP, MBA
Deputy Public Works Director / City Engineer
City of Riverside
Public Works Department, Administration
Main: 951.826.5670
Direct: 951.826.2251
RiversideCA.gov

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July 22, 2024

Nate Mustafa
Deputy Public Works Director/City Engineer
City of Riverside
Public Works Department, Administration

Dear Mr. Mustafa,

Thank you for your comments regarding the Transportation Uniform Mitigation Fee (TUMF) Nexus Study. We appreciate the City of Riverside's involvement and your detailed review of the study.

Regarding the proposed new category of "Government/Public Sector" and the concern about excessive fees, please note that this is not a new category in the study. The fees are shown to demonstrate that the trips caused by these uses still need to be mitigated from other sources. These uses remain exempt from paying TUMF fees.

We have noted the report attached to your comments about the current key barriers the state is facing in trying to develop housing. Thank you for sharing this valuable information.

Regarding the increase in Single Family Residential (SFR) fees compared to Multi-Family Residential (MFR) fees, SFR pays higher trip rates per unit than MFR. Each category pays its fair share of the impact being created from its specific use based on its trip generation rate and its proportional growth in the region. Accessory Dwelling Units (ADUs) are exempt under the TUMF program at the discretion of the Executive Committee. This exemption can be reevaluated by the committee at a later date.

Having the fee based on actual building square footage for SFRs could help with more affordable housing and be reflective of the analysis used in the Nexus Study. AB-602 requires a square foot calculation on SFR, which will be implemented in the next update of the Fee Calculation Handbook.

Regarding the locations of the project as a determinant for trip generation, the Nexus Study calculates fees based on a combination of trip generation rates and VMT. VMT is accounted for in the RIVCOM model as it takes into account trip length, which is a factor in identifying mitigation needs. VMT is also used to determine the split in proportional impact between residential and non-residential uses.

We do make an adjustment for Transit-Oriented Development (TOD) but not specifically for mixed-use areas. TUMF does not mitigate VMT impact and cannot be used as a mitigation for those impacts.

Thank you for pointing out the reference to the RivTAM model in Section 1.3.1 subsection 6. We have made the correction to reflect that RIVCOM, not RivTAM, was used in the transportation modeling for the study.

TUMF vs SB-743

Considering your questions regarding VMT, we would like to provide a thorough response to this as these questions frequently arise on VMT vs LOS mitigation.

SB 743 was signed into law in 2014 and went into effect on July 1, 2020. SB 743 requires that the CEQA documents analyze transportation impacts of a project using vehicle miles traveled (VMT) instead of level of service (LOS) or other delay-based metrics.

SB 743 had a significant impact by changing the way in which traffic studies were done for CEQA documents. Agencies had to determine appropriate analysis tools, impact thresholds, and potential mitigation measures as a VMT-centric approach is very different from an LOS-based approach.

Recognizing the potential impacts of SB 743, WRCOG completed the first regional study regarding SB 743 implementation which developed sample guidelines, thresholds, and analytical tools to assist WRCOG member agencies with the transition to VMT as a CEQA analysis metric. This study was completed in 2018.

In 2019, WRCOG commenced an effort to develop an approach to mitigation potential VMT mitigation impacts through a program separate from TUMF. At that time, a policy decision was made to maintain the focus of TUMF to mitigate congestion, which means that TUMF primarily funds expansions of roadways, interchanges, grade separations and other facilities. While TUMF does provide some funding to Riverside Transit Agency (RTA), over 90% of TUMF funds are allocated to roadway infrastructure projects.

The purpose of a VMT mitigation program is to identify programs and projects that reduce VMT which could include bicycle/pedestrian infrastructure, subsidized transit passes, contributions to affordable housing, and other similar efforts.

This policy decision reflects a clear demarcation between TUMF and any efforts to mitigate VMT. The following should be noted:

- SB 743 does not change any of the requirements of AB 1600 and therefore has no effect on the preparation of Nexus Studies such as the TUMF Nexus Study
- Payment of TUMF fees do not provide any VMT mitigation benefits since those are separate programs for development projects

- The TUMF Program does not provide any CEQA mitigation for any development or transportation project impacts
- Any transportation infrastructure project contained in the TUMF Nexus Study will be required to assess and mitigate all environmental impacts per the requirements of CEQA including any potential impacts related to VMT

It should be noted that the National Center for Sustainable Transportation (NCST)/Institute of Transportation Studies (ITS) at University of California, Davis released a white paper entitled From LOS to VMT: Repurposing Impact Fee Programs Since Adoption of SB 743 (November 2023). This document argues the SB 743 provides an opportunity for agencies for agencies to redirect their transportation impact fee programs towards more multi-modal improvements.

However, this white paper does not say that agencies are required to change their approach to impact fees and specifically states the following on Page ii:

Furthermore, even if they cannot do so for CEQA mitigation, cities can also still impose impact fees to improve/maintain LOS under provisions of the state's Mitigation Fee Act (MFA), so long as the fee program complies with requirements for demonstrating a "rational nexus" between the fee's purpose, the need for the fee, the cost of facilities for addressing the need, and the allocation of the fee to new development based on its contribution to the demonstrated need.

Therefore, this document acknowledges that WRCOG has the discretion to continue to develop and implement a fee program which funds roadway infrastructure projects as long as such a program complies with the requirements of AB 1600.

Thank you again for your valuable input and for the continued collaboration. If you have any further questions or need additional information, please do not hesitate to reach out.

Sincerely,



Cameron Brown
Program Manager

June 4, 2024

Mr. Cameron Brown, Program Manager
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501-3314

SUBJECT: Comments Concerning the Transportation Uniform Mitigation Fee Nexus Study, 2024 Update

Dear Mr. Brown,

The City of Moreno Valley (City) greatly appreciates the opportunity to review and provide comments concerning the Transportation Uniform Mitigation Fee (TUMF) Nexus Study, 2024 Update. The City acknowledges the ongoing collaboration and partnership necessary to develop the TUMF Program. As such, the City would like to take this opportunity to share our concerns about the recent 2024 Nexus Study update.

The draft update identifies State Route 60 (SR 60) interchanges within the City of Moreno Valley and the City's arterial roadways as adequate for the 2045 build-out. This designation eliminates funding, which is a significant shift from the 2016 Nexus Study, in which WRCOG partnered with the City as a key stakeholder to develop a comprehensive approach between our Development Impact Fee (DIF) and the regional TUMF.

The City of Moreno Valley is the second largest city in Riverside County. Nearly forty percent of the City consists of undeveloped territory, which is currently experiencing explosive growth, particularly in logistic facilities. This growth is set to establish the City as one of the largest logistic hubs in the State of California, providing freight transport to the entire Southern California region. This expected growth will drastically increase the freight transport and safety needs of the area. In addition, regional traffic emanating from growth in neighboring communities relies heavily on these critical connections.

The City respectfully requests that the 2024 Update be revised to include the following:

- Redlands Boulevard / SR 60 Interchange
- Theodore Street/WLC Parkway / SR 60 Interchange
- Theodore Street / World Logistic Center (WLC) Parkway – from Ironwood Avenue to Cactus Avenue
- Cactus Avenue – from World Logistics Center (WLC) Parkway/Alessandro Boulevard to Heacock Street
- Eucalyptus Avenue – from WLC Parkway to Gilman Springs
- Moreno Beach Drive – from Eucalyptus Avenue to Iris Avenue/ John F. Kennedy (JFK) Drive

The City strongly believes that the inclusion of these facilities will enhance the region's overall network connectivity, accomplishing the intent of the TUMF program.

Please feel free to contact me by phone at 951.413.3100 or by email at melissaw@moval.org to coordinate a time to discuss further.

Sincerely,

A handwritten signature in blue ink that reads "Melissa Walker". The signature is written in a cursive style with a large initial "M".

Melissa Walker, P.E.
Public Works Director/City Engineer



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July 29, 2024

Melissa Walker
Public Works Director/City Engineer
City of Moreno Valley
14177 Frederick St.
Moreno Valley, CA 92553

Dear Ms. Walker,

Thank you for your valuable comments on the Transportation Uniform Mitigation Fee (TUMF) Nexus Study and for acknowledging the collaboration and partnership needed to develop the TUMF Program. We appreciate the City of Moreno Valley's involvement and your continued support.

Comment: 2045 Build-Out and Funding

You mentioned that the 2024 Nexus Update identifies SR-60 Interchange and other arterial roadways as adequate for the 2045 build-out, eliminating significant funding.

Response: The TUMF Nexus Study has a 2040 future year and does not extend to local general plan buildout projections. This approach helps us align better with regional transportation planning.

Comment: Growth in Warehousing and Funding Needs

You highlighted the explosive growth in warehousing in Moreno Valley and the need for the Nexus Study to reflect the city's funding needs and the increased freight transportation and regional traffic it will create.

Response: A possible reevaluation of this concern will be considered in the next Nexus Study update. Currently, the forecast does not call for such mitigation in the World Logistics Center (WLC) plan area.

Comment: Requested Updates to Specific Road Segments

You requested that the update reflects changes to the following segments: Redlands Blvd/SR-60 Interchange, Theodore St/WLC Parkway/SR-60 Interchange, Theodore/WLC (Ironwood Ave. to Cactus Ave), Cactus Ave (WLC/Alessandro Blvd to Heacock St), Eucalyptus Ave (WLC Parkway to Gilman Springs), and Moreno Beach Drive (Eucalyptus Ave to Iris Ave/JFK Drive).

Response: We are adding the Theodore and Redlands Blvd Interchanges back into the study as they already have agreements in place. This will add an additional \$64,000,000 in potential funding for these projects. However, there is no justifiable reason for adding the other segments based on current needs, as there is no mitigation required based on the analysis.

Thank you again for your detailed feedback and for the continued collaboration. If you have any further questions or need additional information, please do not hesitate to reach out.

Sincerely,



Cameron Brown
Program Manager

Cameron Brown

From: Yurhi Choi <ychoi@eastvaleca.gov>
Sent: Wednesday, May 29, 2024 9:57 AM
To: Cameron Brown
Cc: Sandra Fernandez; Jimmy Chung
Subject: FW: Draft TUMF Nexus Study- Public Review Period

Hi Cameron,

The City had a chance to review the draft report and had some comments and questions on Exhibit H-1. Please see below:

- a. Schleisman from Scholar to Hamner (page 209 of 286): these segments of Schleisman are fully built out. There is no capacity for constructing additional lane(s). Therefore, New Lane cost and ROW cost are not applicable. Can we still get ITS cost allocated to these segments?
- b. Archibald from Remington (SB County) to 65th St (page 212 of 286): these segments of Archibald can accommodate additional northbound lane.
- c. Hamner from Mission to Bellegrave: the city limit is located at the center line of the street. West half is in City of Ontario, and the east half is in City of Eastvale. These segments of Hamner in Eastvale side are fully built out. There is no capacity for constructing additional lane(s).
- d. Hellman from Schleisman to Walters: the city limit is located at the center line of the street. West half is in City of Chino, and the east half is in City of Eastvale. There is one northbound lane, and future will accommodate two. Should the calculation be updated so it accounts for the improvements in the Eastvale side only?
- e. Hellman bridge: see comments in d above.
- f. Limonite from Harrison to Archibald: there are currently five lanes, and it can accommodate additional eastbound lane. Update the table to account for additional lane.
- g. River from Hellman and Archibald (page 212 of 286): the segment shall be updated to Hall Ave. River from Hall to Archibald already has four lanes.

There is a project that is eligible for TUMF credit. I worked on the credit amount with Chris Gray, and my colleague took over the coordination. I am not sure if the agreement is already in place, but if it is not, will the figures need to be updated per the new study? The max TUMF share seems low (i.e. Hamner from Amberhill to Limonite) when compared to 2016 Nexus Study.

Let me know if you have any questions.

Thanks!

Yurhi

From: Jimmy Chung <jchung@eastvaleca.gov>
Sent: Wednesday, May 15, 2024 10:58 AM
To: Yurhi Choi <ychoi@eastvaleca.gov>
Subject: FW: Draft TUMF Nexus Study- Public Review Period

Fyi.

From: Mark Orme <morme@eastvaleca.gov>
Sent: Wednesday, May 15, 2024 5:02 AM
To: Amanda Wells <awells@eastvaleca.gov>; Gustavo Gonzalez <ggonzalez@eastvaleca.gov>; Jimmy Chung <jchung@eastvaleca.gov>



July 22, 2024

Yurhi Choi
Senior Engineer
City of Eastvale
12363 Limonite Avenue, Suite 910
Eastvale, CA 91752

Subject: City of Eastvale – Nexus Study Comments

Dear Ms. Choi:

Thank you for adding your comment on the TUMF Nexus Study during our public comment review period. We appreciate the feedback received. We would like to provide feedback regarding your comments that we received.

- 1) Schleisman from Scholar to Hamner are fully built out. Can ITS costs be allocated to those segments?
 - a. *Schleisman along this segment is nearly 95% built out. There is only a small amount of funds remaining on the estimated cost. However, these funds can be used towards ITS, restriping to allow the max lanes, and other TUMF eligible expenses.*
- 2) Hamner from Mission to Bellegrave is divided with San Bernardino County. There is no longer any capacity.
 - a. *The Nexus Study already considers the piece outside of the City and County via a "Percent Complete" factor built into the Nexus Study project table. We also realize that the segment is built out on the Eastvale side and will revise the study to show that it is 100% complete.*
- 3) Hellman from Schleisman to Walters is divided with San Bernardino County. One additional NB lane with plans to make it into two.
 - a. *Same as answer for #2. Calculations already account for the work needed on the Eastvale side.*
- 4) Limonite from Harris to Archibald can accommodate an additional EB lane. Will the Nexus Study account for the lane.
 - a. *The Nexus Study analysis shows that no mitigation is needed beyond 4 lanes. The program can't justify adding funding for an additional lane.*
- 5) River from Hellman to Archibald already has 4 lanes
 - a. *This completion is accounted for in the Nexus Study as being 48% complete*
- 6) Please review the amount allocated to Hamner from Amberhill to Limonite as it seems like it is a decrease from 2016.
 - a. *The decrease is due to the percent completion in the Nexus Study update to what it was in the 2017 Nexus Study. 2017 had this at 14% complete while the new update has it at 55% complete.*

If you have any questions regarding this response, please contact me at (951) 405-6712 or by e-mail at cbrown@wrcog.us.

Regards,

A handwritten signature in blue ink, appearing to be 'Cameron Brown', with a long horizontal stroke extending to the right.

Cameron Brown
Program Manager

Cameron Brown

To: John Pourkazemi
Subject: Deadline for TUMF Nexus Study Comments: June 10th

From: John Pourkazemi <jpourkazemi@cityofperris.org>
Sent: Monday, June 10, 2024 10:56 AM
To: Cameron Brown <cbrown@wrcog.us>; Chris Gray <cgray@wrcog.us>
Cc: Clara Miramontes <CMiramontes@cityofperris.org>; Brad Brophy <bbrophy@CityofPerris.org>; Grace V. Alvarez <galvarez@cityofperris.org>; Habib Motlagh <habibtrilake@gmail.com>
Subject: FW: Deadline for TUMF Nexus Study Comments: June 10th

Hello Chris and Cameron,

In review of the draft 2024 Nexus as shown in the table below listing the TUMF share associated with the projects, we would like to verify that the requested amounts of TUMF share as allocated in the Central Zone TIP for the three Ethanac projects are confirmed and maintained per current max TUMF share, as previously discussed.

Existing Projects				
Street	From	To	Current Max TUMF Share	2024 DRAFT Nexus TUMF Max Share
11th/Case	Perris	Goetz	\$ 2,625,000.00	\$ 4,582,000.00
Case	Goetz	I-215	\$ 16,936,000.00	\$ 20,876,000.00
Case	(Bridge over SJ River)		\$ 534,000.00	\$ 1,740,000.00
Ethanac	SR-74	Keystone	\$ 6,414,000.00	\$ 4,666,000.00
Ethanac	Keystone	Goetz	\$ 8,324,000.00	\$ 6,056,000.00
Ethanac	(Bridge over SJ River)		\$ 7,958,000.00	\$ 5,568,000.00
Ethanac	I-215	Sherman	\$ 2,433,000.00	\$ 5,316,000.00
Goetz	(Bridge over SJ River)		\$ 2,077,000.00	\$ 3,398,000.00
Evans	Nuevo	Ellis	\$ 10,521,000.00	\$ 17,705,000.00
Evans	(Bridge over SJ River)		\$ 7,378,000.00	\$ 11,136,000.00
Ethanac/I-215 Interchange			\$ 15,766,000.00	\$ 32,698,000.00
SR-74/Case Rd/I-215 Interchange			\$ 8,815,000.00	\$ 21,835,000.00
New Projects				
Street	From	To	Current Max TUMF Share	2024 DRAFT Nexus TUMF Max Share
Ellis	Goetz	Evans	\$ -	\$ 9,526,000.00
Evans	(Bridge over I-215)		\$ -	\$ 8,352,000.00
Fees				
Land Use Type	Units	Fee Per Unit Current Nexus	Fee Per Unit 2024 DRAFT Nexus	
Single Family Residential	DU	\$ 9,418	\$ 15,025	
Multi Family Residential	DU	\$ 6,134	\$ 7,588	
Industrial	SF GFA	\$ 1.77	\$ 2.26	
Retail	SF GFA	\$ 12.31	\$ 10.88	
Service	SF GFA	\$ 4.56	\$ 9.47	
Government/Public	SF GFA	\$ 16.08	\$ 22.40	



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July 22, 2024

John Pourkazemi
City Engineer
City of Perris
101 N D St.
Perris, CA 92570

Dear Mr. Pourkazemi,

Subject: Response to Comments on TUMF Nexus Study

I hope this letter finds you well. Thank you for your comments regarding the TUMF Nexus Study. We appreciate the City of Perris's diligence in verifying the TUMF share of certain projects in the Central Zone TIP, specifically for the three Ethanac projects.

To address your concern, please note that these projects are "grandfathered" into the program based on the 2017 Nexus Study. The city already has allocations on the TIP and reimbursement agreements for these projects. Rest assured, this funding will not be removed, and the maximum share will remain unchanged.

Should you have any further questions or require additional information, please do not hesitate to contact me directly at [Your Phone Number] or [Your Email Address].

Thank you once again for your attention to the TUMF Nexus Study. We value our ongoing partnership with the City of Perris and look forward to continuing our collaboration.

Sincerely,

Cameron Brown
Program Manager

Cameron Brown

To: Chris Gray
Subject: RE: Draft TUMF Nexus Report

From: Jason Simpson <jsimpson@Lake-Elsinore.org>

Sent: Thursday, April 25, 2024 9:19 AM

To: Chris Gray <cgray@wrcog.us>

Subject: Draft TUMF Nexus Report

Hi Chris,

I hope this email finds you well. I am reaching out regarding the draft Nexus Study. Upon review, the City has some questions regarding segments listed in Table 4.4. I would appreciate clarity on the following:

- Franklin Interchange - listed as \$0
- Nichols Road Bridge - listed as \$0
- Lake Street Bridge listed as \$1.15M – Note: Lake Street would require widening to 6 lanes; the current bridge accommodates only 2 lanes
- Temescal Canyon from I-15 to Lake Street: Does this encompass Temescal Canyon in both City and County jurisdictions?
- In general: Are other segments with figures greater than \$0 updated to reflect their new Maximum TUMF share?

Could we schedule a meeting to discuss these segments at your earliest convenience? Addressing these points beforehand will be beneficial before meeting with any Council Members. Thank you for your time.

Best regards,

Jason Simpson
City Manager
PH:951-674-3124 x204





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July 29, 2024

Jason Simpson
City Manager
City of Lake Elsinore
130 S Main St.
Lake Elsinore, CA 92530

Dear Mr. Simpson,

Subject: Response to Comments on TUMF Nexus Study

I hope this letter finds you well. Thank you for your recent correspondence regarding the TUMF Nexus Study. We appreciate the City of Lake Elsinore's diligence in verifying the allocation of funds to specific projects listed in Table 4.4.

In response to your inquiry, we have carefully reviewed and adjusted the study to include allocations for the Franklin Interchange, Nichols Rd Bridge, and Lake St Bridge projects. These projects add an additional \$37,000,000 in potential funding to the city. Detailed information regarding the allocated amounts for each project can be found in Exhibit H-1 of the study document.

Should you require any further assistance or clarification regarding the adjustments made, please feel free to contact me directly at cbrown@wrcog.us.

Thank you once again for your interest and valuable feedback on the TUMF Nexus Study. We look forward to continuing our collaboration with the City of Lake Elsinore.

Sincerely,

Cameron Brown
Program Manager

Cc: Chris Gray <cgray@wrcog.us>

Subject: RE: TUMF: Winchester Road north of Keller Road

Hello Cameron,

I noticed a draft of the Nexus Study is available online. Do you know if the error has been addressed? I didn't see a line item for SR-79 (Winchester) north of Keller Road.

Thanks

From: Cameron Brown <cbrown@wrcog.us>

Sent: Monday, April 1, 2024 12:48 PM

To: Tsang, Kevin <KTSANG@RIVCO.ORG>

Cc: Chris Gray <cgray@wrcog.us>

Subject: RE: TUMF: Winchester Road north of Keller Road

CAUTION: This email originated externally from the **Riverside County** email system. **DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

Hi Kevin,

I looked over this and discussed with our consultant on the Nexus Study. This was indeed an error in the 2017 study and it is being revised in the updated study to a 4 lane facility with a future mitigation at 6 lanes. There is a portion of the segment that is already widened to 5 lanes and the Nexus Study will take that into consideration in determining the TUMF share.

Cameron Brown
Program Manager
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501-3314
Phone: (951) 405-6712
Mobile: (951) 836-2525
www.wrcog.us

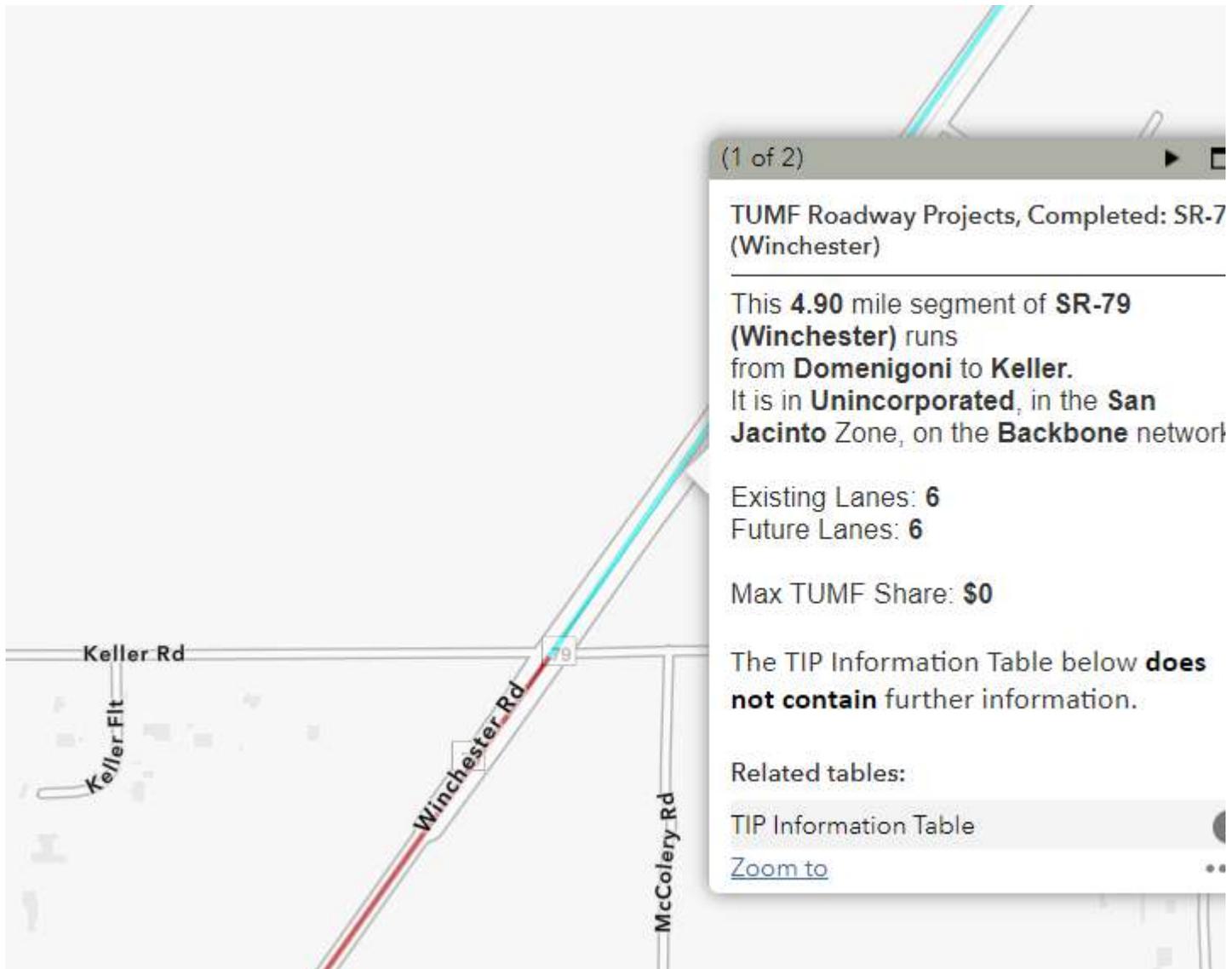
"Respect Local Control... Provide Regional Perspective... Make a Difference"



From: Tsang, Kevin <KTSANG@RIVCO.ORG>
Sent: Thursday, March 28, 2024 3:35 PM
To: Chris Tzeng <ctzeng@wrcog.us>
Cc: Williams, Russell <RUWILLIA@RIVCO.ORG>
Subject: TUMF: Winchester Road north of Keller Road

Hello Chris,

We had a developer ask for clarification on the segment of Winchester Road north of Keller Road. In TUMF, the GIS indicates it is constructed with 6-lanes, but in reality, it is only 4-lanes. Is there a need to correct this in the TUMF and would this yield any budget for TUMF to cover two additional lanes?



Thanks,

Kevin Tsang, P.E.
Riverside County, TLMA
Transportation Department
4080 Lemon Street, 8th Floor
Riverside, CA 92501
Tel: (951) 955-6828



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July 22, 2024

Kevin Tsang
Riverside County, TLMA
Transportation Department
4080 Lemon Street, 8th Floor
Riverside, CA 92501

Dear Mr. Tsang,

Thank you for your comments regarding the Transportation Uniform Mitigation Fee (TUMF) Nexus Study. We appreciate the County of Riverside's involvement and your attention to detail in reviewing the study.

We are currently making corrections to the Nexus Study Draft to list the correct number of lanes on Winchester. The segment will be updated to reflect it as a 4-lane segment with plans to expand to 6 lanes in the future. This adjustment will make it eligible for additional funding.

Thank you again for your valuable input and for the continued collaboration. If you have any further questions or need additional information, please do not hesitate to reach out.

Sincerely,

Cameron Brown
Program Manager

Cameron Brown

From: Dooley Family <ourk9nina@charter.net>
Sent: Friday, June 7, 2024 6:16 PM
To: Cameron Brown
Subject: 2024 TUMF Program Nexus Study

Dear Ms. Brown,

I have been a resident of Jurupa Valley since August of 1992, and as a family we've been utterly fed-up with the amount of warehouses that have been erected, and continue to be erected with little benefit to the community. They are the most harmful business entity in terms of congestion (especially for those of us that have to commute), air quality, job creation, being a nuisance and harmful to the overall health of the area. I am appalled when looking at the proposed increases that they will continue to over-populate and be unwelcome neighbors to the residents with impunity due to the galling lowest fees that they are afforded, yet they are the biggest burden to any community in the Inland Empire. I can't help but wonder how influential their lobby must be on the members to gain such favorable rates. Very infuriating and unacceptable! They need to do better!

Thank you for your time.

Sincerely,
Delilah Dooley



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July 22, 2024

Cameron Brown
Program Manager
Western Riverside Council of Governments (WRCOG)
3390 University Ave, Suite 200
Riverside, CA 94501
cbrown@wrcog.us

Dear Ms. Dooley,

Thank you for sharing your concerns regarding the construction of warehouses in Jurupa Valley and the benefits provided to facilitate their development. We appreciate your engagement and the time you have taken to express your views.

You raised valid points about the potential negative impacts of warehouses, including congestion, air pollution, and general nuisance. These concerns are important and need to be addressed as part of the planning and community development processes at the local jurisdiction level.

Warehouses and all industrial development projects are required to pay their fair share based on the traffic they generate. By law, the TUMF Nexus Study cannot assign fees beyond what the development use generates in traffic congestion. It's important to note that the Nexus Study only addresses traffic-related impacts and does not mitigate other effects such as air pollution and public nuisance.

We understand the need for a balanced approach to development that considers all impacts, and we are committed to exploring additional measures to address the concerns you and other community members have raised.

Thank you again for your valuable input.

Sincerely,

Cameron Brown
Program Manager



Now more than ever.
Help Build It!

Board of Directors

June 10, 2024

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Sothern California Association of Governements
Attention: Cameron Brown

Dear Cameron,

I am writing to advocate for the reduction of TUMF fees, specifically aimed at facilitating the construction of affordable housing within Western Riverside County. As we strive to address the pressing issue of housing affordability, it is imperative that we adopt measures that incentivize and enable the creation of housing options accessible to individuals and families across all income levels.

Candace Brewington
Jeannette Hartmann
Luanne Jobgen
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Impact fees, while intended to support the growth and improvement of our community's infrastructure, often serve as significant barriers to the development of affordable housing projects, such as those we build through Habitat for Humanity. These fees, which are levied on developers to mitigate the impact of new construction on public services and facilities, can substantially increase the overall cost of building affordable housing units. For every additional dollar that is added to the cost of developing affordable units, we need to find another dollar through donors, fundraising, grants, or loans. Consequently, this added financial burden can deter developers from pursuing such projects, exacerbating the shortage of affordable housing in our area.

Advisory Board

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By reducing or waiving TUMF fees for affordable housing developments, we can stimulate the creation of much-needed housing options for low- and moderate-income residents. Not only will this help alleviate the strain on our housing market, but it will also contribute to the overall health and diversity of our community.

Chief Executive Officer

Tammy Marine

Affordable housing is not just a social issue but also an economic one. Access to stable and affordable housing is a fundamental determinant of individual and family well-being, impacting everything from health outcomes to educational attainment and economic mobility. By prioritizing the reduction of development impact fees for affordable housing, we are investing in the long-term prosperity and vitality of our community. By working together to reduce the financial barriers to affordable housing development, we can take meaningful steps towards creating a more inclusive and equitable community for all residents.

Best regards,

Tammy Marine,
President/CEO

Federal Tax ID
33-0461804



27475 Ynez Road #390, Temecula, CA 92591
Phone: (951) 296-3362 Fax: (951) 296-3363
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Western Riverside Council of Governments

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July 22, 2024

Tammy Marine
Chief Executive Officer
Habitat for Humanity
41615 Winchester Road #214
Temecula, CA 92590

Dear Ms. Marine,

Subject: Response to Comments on TUMF Nexus Study

I hope this letter finds you well. Thank you for your thoughtful comments on the TUMF Nexus Study. We appreciate your dedication to affordable housing and the important work that Habitat for Humanity does in our community.

We understand your concerns that impact fees can serve as a significant barrier to the development of affordable housing projects, substantially increasing the overall cost of building these units. Your suggestion to waive the TUMF fee for affordable housing developments to stimulate the creation of housing options for low- and moderate-income residents is noted.

Affordable housing is indeed a critical social and economic issue in the region. To support this, low-income housing is exempt from the payment of TUMF fees. This exemption is designed to reduce the financial burden on affordable housing developments and to encourage the creation of housing options for those in need, thereby investing in the long-term growth and stability of our community.

Should you have any further questions or require additional information, please feel free to contact me directly at cbrown@wrcog.us or 951-405-6712.

Thank you once again for your valuable feedback and your ongoing efforts to improve housing affordability in our region.

Sincerely,

Cameron Brown
Program Manager

June 1, 2024

Cameron Brown – TUMF – Program Manager
Western Riverside Council of Governments
Email: cbrown@wrcog.us

Dear Mr. Brown,

Thank you for the opportunity to comment on the 2024 Draft TUMF Nexus Study. TUMF development impact fees are necessary and important to make growth pay its way. A Mitigation Fee is required to follow two basic rules

1. Establish a nexus or reasonable relationship between the development impact fee's use and the type of project for which the fee is required.
2. The fee must not exceed the project's proportional "fair share" of the proposed improvement and cannot be used to correct current problems or to make improvements for existing development.

The methodology to calculate the TUMF fees rely on inaccurate and out-of-date assumptions and relies almost exclusively on **Level-of-Service (LOS)** targets and ITE 11th edition trip rates for different land use categories. The current standard for all transportation analysis has been **Vehicle Miles Traveled (VMT)** since SB 743 was passed in 2013 and became the primary standard in 2020. Currently, the TUMF Nexus study only uses VMT to determine the 'relative distribution of traffic impacts between residential and non-residential uses'. This is not sufficient since capacity expansion will induce more VMT and VMT growth is a CEQA environmental impact. Moreover, the mindset that 'All new developments...cause an increase in travel demand. To meet the increased travel demand and **keep traffic flowing**, improvements to transportation facilities become necessary to sustain pre-development conditions.' This is 1960s era traffic analysis. The type and location of the development (i.e., location efficiency) shifts transportation demands from vehicle traffic to other transportation modes. A TUMF fee that shifts from an automobile centric peak period delay-centric analysis is needed.

In order to properly apportion the 'fair share' of regional VMT to different land-use categories and the reasonable relationship between the development impact fee, the following changes should be included in the Nexus study framework.

1. Include average VMT by land-use type to weight trip rates. VMT needs to be characterized by land-use type including differentials between SFR and MFR housing to capture location efficiency and housing density impacts on average trip length. The current methodology omits this location efficiency to focus on LOS metrics of peak capacity.
2. Include VMT and the weight class of the vehicles to accurately reflect road damage, highway planning, and capacity requirements for passenger, medium-duty, and heavy-duty trips. The fourth-power law clearly indicates that heavier vehicle axle loads do exponentially more damage and are therefore the bulk of the road development costs. Bin average trip rates by class (passenger, medium-duty, heavy-duty) and use passenger-class equivalents (PCE) weightings or a similar metric to apportion additional cost to heavier vehicle classes that consume additional capacity and have higher average VMT.¹

¹ <https://www.fhwa.dot.gov/reports/tswstudy/Vol3-Chapter9.pdf>

3. Apportion home-based-work trips equally between residential and non-residential land-use categories. As the definition implies, the home-based-work trip has an origin of home and a destination of work – thus the category should not be explicitly assigned to residential only trips. If half of non-work-based trips are assigned to the new employment categories, it will decrease costs of new home TUMF fees.
4. Avoid peak PM trip rates as the metric as this shifts burdens based on time-of-travel, rather than total usage via VMT metrics. Roadway capacity is an LOS metric and trip rates bias results in a manner that is not proportional to total use – inconsistent with nexus proportionality requirements.
5. Update WRCOG special requirements for calculating warehouse project gross square footage to reflect ITE 11th edition daily trip rates which include better parameterizations of high-cube warehouses than the ITE 9th edition trip rates used for that biased analysis

Given the significant changes requested it is possible that rerunning the modeling exercise will be required, during which time better assumptions should be made regarding model inputs of key factors including:

- Household growth projections (update to Connect SoCal 2024 rather than 2020)
- Employment growth projections (ditto)
- Apply different trip lengths based on type of trip
- Include vehicle weight as a factor impacting road usage for both capacity, stress, and traffic.
- Include accurate estimates of current and future industrial growth using CEQANET documentation of approved and planned projects

Given the programmatic goal of the TUMF nexus study fee, a wholesale re-evaluation of the purpose of the fee needs to be considered to better align with County climate adaptation and greenhouse gas emissions policy goals of reducing VMT. Alternative options for Mitigation Fees have been explored by other areas, as described by Barbour, 2022, ‘From LOS to VMT: Repurposing Impact Fee Programs Since Adoption of SB 743’.

- Apply a LOS-based approach but only for transit efficiency (San Francisco, El Cerrito). Roadway LOS under this nexus would only be applicable insofar as it slowed down transit access (bus, shuttle, rail)
- Apply a solely VMT-based metric and measures of need (San Mateo County, Culver City). The metric is VMT-focused (trip rates multiplied by trip lengths) rather than LOS-focused (measuring trips only and impacts on nearby roads/intersections). The VMT-based metric will necessarily capture ‘location efficiency’ of projects and make development fees cheaper in infill areas with more transit and mobility options, and thus reduce sprawl.
- VMT analysis in General Plan or Climate Action plan (San Diego, Vacaville). SB 743 compliance mechanisms were put in the General Plan with impact fees to fund VMT-reducing infrastructure. In Vacaville, VMT increases were considered a significant and overriding consideration and thus traditional auto-LOS were allowed to proceed.

Table 1 shows how the VMT scenarios would likely change based on better estimates of residential growth and warehouse growth within the region. Residential growth rate is based on Connect

SoCal 20202, Connect SoCal 20243, or CA Department of Finance Table P-24 Projections. Warehouse build out is based on 2018-2023 built industrial square footage from Riverside County Assessor Parcel database and future growth is based on CEQA environmental planning documents – see RivCo_warehouse_list.xlsx attachment, based on WarehouseCITY v1.19 open data product (McCarthy and Phillips, 2023).

Connect SoCal 2020 estimates of residential growth for Riverside County are 50% higher than Connect SoCal 2024 estimates and almost 200% higher than the California Department of Finance projects for the same 2018-2045 time period. Connect SoCal 2020 estimates of industrial build out are only 69 million square feet for the WRCOG region – over 91 million square feet of industrial projects (almost exclusively warehouses and distribution centers) were built from 2018 through 2023, another 117.8M SQ FT are approved for construction, and a further 148M SQ FT are undergoing CEQA Review. Connect SoCal 2020 is a useless projection of industrial development in the WRCOG region based on wildly inaccurate data.

Table 1 – VMT changes based on different input assumptions for TUMF nexus study inputs.

VMT Ratios 5 scenarios	Residential growth rate 2018-2045	Industrial build out (SQ FT) 2018-2045	VMT home-based	VMT non-home based	Total VMT growth	fraction home-based VMT
Connect SoCal 2020	34%	69,000,000	43,227,904	12,372,533	55,600,437	0.78
Connect SoCal 2024 Residential - Warehouse moratorium on new approvals	23%	208,800,000	29,242,406	13,463,424	42,705,830	0.68
Connect SoCal 2024 Residential - All warehouse projects approved	23%	357,700,000	29,242,406	14,553,613	43,796,018	0.67
CA DoF Residential - Warehouse moratorium	12%	208,800,000	15,256,907	10,065,353	25,322,261	0.60
CA DoF Residential - All warehouse projects approved	12%	357,700,000	15,256,907	17,951,683	33,208,591	0.46

In every scenario using the alternative inputs, the fraction of ‘home-based VMT’ declines substantially. In the most dramatic scenario with low residential growth and high warehouse growth, the VMT fraction from industrial is significantly higher than home-based trips. And I note

² <https://scag.ca.gov/read-plan-adopted-final-connect-social-2020>

³ <https://scag.ca.gov/connect-social>

⁴ <https://dof.ca.gov/forecasting/demographics/projections/>

that this is still using the existing assumption that home-based work trips are 100% due to residential trips; changing the fraction from 1 to 0.5 would drastically shift the fees to non-residential sectors since home-based work trips are the largest source of home-based VMT in the RIVCOM model outputs.

As a second example, I wanted to point out the inconsistency of the TUMF fee allocation of home-based-work trips compared to an emblematic warehouse project. The World Logistics Center was approved a few years ago and broke ground last year. In its Final EIR, it shows the following project trips table on p.4.15-47 - <https://www.moval.org/cdd/pdfs/projects/wlc/FEIR.pdf>

Table 4.15.O: Project Trips by Vehicle Type

Vehicle Type	AM Peak Hour			PM Peak Hour			Vehicles	Surface Street PCEs	Freeway PCEs
	In	Out	Total	In	Out	Total			
PHASE 1									
Autos	1,197	466	1,663	412	1,396	1,807	30,879	30,879	30,879
Light Trucks	97	55	152	77	90	167	1,340	2,009	2,009
Medium Trucks	130	74	204	103	121	223	1,792	3,585	2,689
Heavy Trucks	345	197	542	273	320	594	4,760	14,279	7,140
Total	1,769	792	2,561	866	1,927	2,792	38,771	50,753	42,717
PHASE 2									
Autos	923	356	1,279	313	1,075	1,388	23,835	23,835	23,835
Light Trucks	75	43	118	60	70	130	1,046	1,569	1,569
Medium Trucks	100	57	157	79	93	173	1,389	2,778	2,083
Heavy Trucks	266	151	418	211	248	459	3,680	11,040	5,520
Total	1,365	606	1,971	663	1,486	2,149	29,950	39,222	33,007
FULL PROJECT BUILD-OUT									
Autos	2,120	821	2,941	726	2,471	3,195	54,714	54,714	54,714
Light Trucks	172	98	271	137	160	297	2,385	3,578	3,578
Medium Trucks	230	131	361	182	214	396	3,181	6,363	4,772
Heavy Trucks	611	348	959	484	568	1,052	8,440	25,319	12,660
Total	3,134	1,398	4,532	1,529	3,413	4,941	68,721	89,975	75,724

PCE = passenger car equivalent.

Source: Traffic Impact Analysis Report for the World Logistics Center, Parsons Brinckerhoff, September 2014.

Total number of vehicle trips is 68,721 vehicles per day. This exceeds the total number of non-home-based vehicle VM daily projected by the TUMF nexus study of 45,949 trips in Table 6.2 of the TUMF Nexus study by over 20,000 daily trips. Does a project like the World Logistics Center act as a node for trips? It is preposterous to claim that it does not, yet the TUMF nexus study says only the home growth matters and projects like the WLC should not pay TUMF fees for even half of the home-based-work trips they generate.

Given that the total square footage of warehouse growth in the WRCOG region is between 5-7 times larger than the WLC, this assumptions has huge distributional implications on what type of development pays proportional TUMF fees.

WRCOG has a key opportunity its TUMF program to better serve the needs of the region in addressing the housing crisis. Please consider significant revisions to TUMF nexus study fees to stop subsidizing warehouse growth.

Sincerely,
Mike McCarthy, PhD - 92508



July 22, 2024

Dear Mr. McCarthy,

Subject: Response to Comments on TUMF Nexus Study

Thank you for your detailed comments regarding the TUMF Nexus Study. We appreciate your insights on the use of Vehicle Miles Traveled (VMT) and Level-of-Service (LOS) targets, and the recommendations for adjusting the TUMF fee structure.

Considering your comments based around SB-743 and VMT, we would like to give a detailed response to the relationship between SB-743 and VMT.

SB 743 was signed into law in 2014 and went into effect on July 1, 2020. SB 743 requires that the CEQA documents analyze transportation impacts of a project using vehicle miles traveled (VMT) instead of level of service (LOS) or other delay-based metrics.

SB 743 had a significant impact by changing the way in which traffic studies were done for CEQA documents. Agencies had to determine appropriate analysis tools, impact thresholds, and potential mitigation measures as a VMT-centric approach is very different from an LOS-based approach.

Recognizing the potential impacts of SB 743, WRCOG completed the first regional study regarding SB 743 implementation which developed sample guidelines, thresholds, and analytical tools to assist WRCOG member agencies with the transition to VMT as a CEQA analysis metric. This study was completed in 2018.

In 2019, WRCOG commenced an effort to develop an approach to mitigation potential VMT mitigation impacts through a program separate from TUMF. At that time, a policy decision was made to maintain the focus of TUMF to mitigate congestion, which means that TUMF primarily funds expansions of roadways, interchanges, grade separations and other facilities. While TUMF does provide some funding to Riverside Transit Agency (RTA), over 90% of TUMF funds are allocated to roadway infrastructure projects.

The purpose of a VMT mitigation program is to identify programs and projects that reduce VMT which could include bicycle/pedestrian infrastructure, subsidized transit passes, contributions to affordable housing, and other similar efforts.

This policy decision reflects a clear demarcation between TUMF and any efforts to mitigate VMT. The following should be noted:

- SB 743 does not change any of the requirements of AB 1600 and therefore has no effect on the preparation of Nexus Studies such as the TUMF Nexus Study

- Payment of TUMF fees do not provide any VMT mitigation benefits since those are separate programs for development projects
- The TUMF Program does not provide any CEQA mitigation for any development or transportation project impacts
- Any transportation infrastructure project contained in the TUMF Nexus Study will be required to assess and mitigate all environmental impacts per the requirements of CEQA including any potential impacts related to VMT

It should be noted that the National Center for Sustainable Transportation (NCST)/Institute of Transportation Studies (ITS) at University of California, Davis released a white paper entitled From LOS to VMT: Repurposing Impact Fee Programs Since Adoption of SB 743 (November 2023). This document argues the SB 743 provides an opportunity for agencies for agencies to redirect their transportation impact fee programs towards more multi-modal improvements.

However, this white paper does not say that agencies are required to change their approach to impact fees and specifically states the following on Page ii:

Furthermore, even if they cannot do so for CEQA mitigation, cities can also still impose impact fees to improve/maintain LOS under provisions of the state’s Mitigation Fee Act (MFA), so long as the fee program complies with requirements for demonstrating a “rational nexus” between the fee’s purpose, the need for the fee, the cost of facilities for addressing the need, and the allocation of the fee to new development based on its contribution to the demonstrated need.

Therefore, this document acknowledges that WRCOG has the discretion to continue to develop and implement a fee program which funds roadway infrastructure projects as long as such a program complies with the requirements of AB 1600.

You recommended adjusting the TUMF fee based away from an automobile-centric peak period delay-centric analysis. TUMF addresses issues beyond CEQA, and peak period delay is the most prominent on the network in terms of LOS and VMT impact.

Moving on to your other comments, you suggested several changes to the Nexus study framework:

1. Include average VMT by land-use type to weight trip rates.
2. Include VMT and the weight class of vehicles to reflect road damage, highway planning, and capacity requirements.
3. Apportion home-based-work trips equally between residential and non-residential categories.
4. Avoid peak PM trip rates as the metric.
5. Update the special requirement for calculating warehouse project gross square footage to reflect ITE 11th edition daily trip rates.

Our responses to these suggestions are as follows:

1. Including average VMT by land-use type and weighting trip rates can be considered if the necessary tools and data are available. Presently, these tools do not exist in a way to quickly analyze every development.
2. Including VMT and vehicle weight class for accurate reflection of road damage and planning needs will also depend on the availability of appropriate tools and data.
3. Home-based trips should be apportioned to the home-based end since residential trip ends are the main factor in generating trips.
4. The concern about peak PM trip rates has been addressed in our approach to balancing LOS and VMT impacts.
5. Once the Nexus Study is adopted, the fee calculation handbook will be updated to reflect the latest fee and current ITE trip generation rates for warehouse projects.

You also suggested re-evaluating the purpose of the TUMF fee to better align with County objectives and looking at alternatives used in other areas. Regarding this, the TUMF program is overseen by elected officials from the WRCOG Executive Committee, who provide direction on the program's purpose and fee implementation. These elected officials make the final determination on the County's objectives regarding traffic mitigation.

Regarding the review of Table 1 and VMT scenarios, the Nexus Study uses data available at the start of the analysis. For this update, Connect SoCal was adopted years after the study commenced. This is why we regularly update the Nexus Study every four years to incorporate new demographics and trip behavior.

Finally, you mentioned that the TUMF fee is inconsistent with home-based-work trips compared to warehouse projects and used WLC as an example. This comparison involves disparate data pieces. The WLC table presents total peak hour trip generation at build-out, while Table 6.2 is used to apportion the fee between different non-residential land uses based on employment changes and median trip generation rates, not representing total trip numbers.

Thank you again for your valuable feedback and suggestions. We update the Nexus Study on a regular basis. While we are not considering any significant revisions to the Nexus Study at this time, many of your suggestions will be considered as we undertake this effort again in the future.

Sincerely,



Cameron Brown
Program Manager

Attachment

Recommended Fee Schedule

Land Use Type	Units	Fee Per Unit
Single Family Residential	DU	\$15,476
Multi Family Residential	DU	\$7,816
Industrial	SF	\$2.33
Retail	SF	\$7.72
Service	SF	\$9.76



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: WRCOG 2024 General Assembly & Leadership Address Recap and 2025 Speaker Selection by the WRCOG Supporting Foundation

Contact: Bonnie Woodrome, Manager of Communications and External Affairs,
bwoodrome@wrcog.us, (951) 405-6752

Date: September 9, 2024

Recommended Action(s):

1. Authorize the Supporting Foundation Secretary to execute a speaker agreement between the Supporting Foundation and the Washington Speakers Bureau to engage Admiral William H. McRaven for the 2025 General Assembly & Leadership Address in an amount not to exceed \$76,000 plus travel, meal, and lodging expenses.
2. Authorize the Supporting Foundation Secretary to take any necessary actions to carry out the purpose and intent of this authorization.

Summary:

WRCOG's General Assembly & Leadership Address on June 20, 2024, saw a significant increase in attendance and sponsorship, with 938 registrants and \$404,295 secured from 68 sponsors and in-kind contributions, leading to enhanced event features and high attendee engagement through an event app. The General Assembly Ad Hoc Committee, adhering to current procurement processes, has consulted the Washington Speakers Bureau (WSB) to assist in selecting a speaker for next year's event.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to provide an update on the outcomes of the 2024 General Assembly & Leadership Address event and request approval for the Executive Director to enter a contract with the WSB and speaker for the 2025 event. This item aligns with WRCOG's 2022-2027 Strategic Plan Goal #4 (Communicate proactively about the role and activities of the Council of Governments).

Discussion:

Background

On June 20, 2024, WRCOG hosted one of its most successful General Assembly & Leadership Addresses to date. The event saw a significant increase in attendance, with 938 registrants compared to

731 the previous year. The WRCOG Supporting Foundation secured \$404,295 in sponsorships from 68 sponsors and in-kind donations, allowing an expansion of the initial \$325,000 budget to accommodate the additional attendees. The total cost for this year's event was \$380,996 and was fully funded by sponsors for a net increase to the WRCOG Supporting Foundation fund balance of \$23,299.

Attendance Breakdown:

- 47% Sponsors
- 27% Member agencies
- 17% Individual ticket buyers
- 9% Volunteers / staff

This year, WRCOG introduced an event app, which was utilized by approximately 40% of attendees. The app enhanced engagement through push notifications, document sharing, and networking opportunities. Key app statistics include:

- 79 communication threads on the message board
- Over 700 profile shares
- Approximately 200 private messages exchanged
- 3 push notifications sent regarding receptions and the silent auction
- 141 responses to live polls conducted during the event

Sponsorship Overview:

- 3 Platinum
- 3 Gold
- 10 Silver
- 37 Bronze
- 9 ad sponsors
- 6 custom sponsors

WRCOG extends a special thanks to member agencies Eastern Municipal Water District and Western Water for serving as centerpiece sponsors, and to Pechanga for serving as the Title Sponsor. New sponsor benefits included app features with video highlights and sponsor website access, lit logo displays in the ballroom, and promotional spots in WRCOG's outreach and skit video, resulting in over 190,000 views.

Attendee Feedback:

- Positive feedback highlighted the speaker selection, the venue and networking opportunities.
- Suggestions for improvement included hosting the post-event reception outdoors for better networking, addressing the temperature and size of the VIP reception.

Present Situation

Following the success of the 2024 event, planning for the 2025 event is underway. The 2025 event is scheduled for June 12, 2025, at Pechanga Resort Casino. Historically, before the event funding was assigned to the WRCOG Supporting Foundation, the speaker selection was driven by the Administration

& Finance (A&F) Committee before final consideration by the Executive Committee. Despite having no formal role with the Supporting Foundation, the A&F Committee is able to provide input into the process; however, this item was not considered by the A&F Committee based on timing recommendations from the Speaker Bureau. An Ad Hoc Committee consisting of Chair Rita Rogers, Vice-Chair Brenda Dennstedt, 2nd Vice-Chair Jacque Casillas, and immediate Past Chair Chris Barajas have reviewed feedback and requests from sponsors, Executive Committee members, and staff. They also reviewed the list of previous speakers.

Securing a speaker is typically done through a process that includes engaging a speaker bureau. WRCOG has used multiple bureaus in the past and have no ongoing contractual obligations with any of them. In recent years, the Ad Hoc Committee has evaluated the merits of various bureaus on an annual basis. This year, the Ad Hoc Committee consulted the Washington Speakers' Bureau (WSB) for assistance in selecting and securing a speaker for 2025. They have discussed the merits of speakers spanning a range of industries, topics, personalities, and price range. That process yielded a recommendation of Admiral William H. McRaven who was sought by the A&F Committee for the 2024 event but was unable to confirm the date. WSB has verified scheduling availability for 2025; however, only an executed agreement secures the speaker.

Admiral William H. McRaven, a retired U.S. Navy, Four-Star admiral, best-selling author, and former Chancellor of the University of Texas System, draws on his extraordinary experiences to offer audiences' insight on U.S. foreign policy, the current geopolitical environment, authority amidst uncertainty, overcoming adversity, and the determination to succeed.

Costs to invite ADM McRaven to speak are approximately \$76,000.00 plus fully refundable, unrestricted first-class airfare, professional commercially insured round trip ground transportation, hotel accommodations, and meals and incidentals. By comparison, the costs for the 2024 speaker was \$125,000.00 + \$1,685.25 for additional costs for a total of \$126,685.25.

This item requests authority and direction to execute an agreement to secure the selected speaker for the 2025 General Assembly with the associated price constraints.

Prior Action(s):

None.

Financial Summary:

The Fiscal Year 2024/2025 budget anticipates \$305,000 in revenues against \$303,250 in expenditures; however, a budget amendment will be brought forward once certain expenditures have been finalized. As of June 30, 2024, the Supporting Foundation has a fund balance of approximately \$77k. The total fund balance serves as a useful measure of the Foundation's net resources available for spending at the end of the fiscal year. The anticipated ending fund balance assigned to the General Assembly, under the Supporting Foundation, is approximately \$100k.

Attachment(s):

None.



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Increase Maximum Bond Authorization for Greenworks / Nuveen Green Capital (NGC) C-PACE Program

Contact: Casey Dailey, Director of Energy & Environmental Programs, cdailey@wrcog.us, (951) 405-6720

Date: September 9, 2024

Recommended Action(s):

1. Adopt Resolution Number 25-24, A Resolution of the Executive Committee of the Western Riverside Council of Governments increasing maximum bond authorization for the Greenworks PACE Program and making certain required disclosures; **OR**
2. Adopt Resolution Number 29-24, A Resolution of the Executive Committee of the Western Riverside Council of Governments increasing maximum bond authorization for the Greenworks PACE Program with certain limitations and making certain required disclosures.

Summary:

WRCOG has established a Commercial PACE Program involving multiple program partners, i.e., program administrators. WRCOG's primary role is the issuance of limited obligation bonds. These bonds are distinct from general obligation bonds in several ways but most notably is the absence of risk to the WRCOG Treasury in the event of a default in the assessment or project collapse.

The program is administered in accordance with a set of agreements between WRCOG and each program partner which outline the rights and obligations of each party. Consistent with the Program Agreement, WRCOG is obligated to issue bonds if a strict set of conditions has been met. Each assessment contract and the bonds, which must conform to the conditions established by the WRCOG Executive Committee in WRCOG's Program Reports and must also conform to maximum bond indebtedness limits.

Each program administrator has a separate agreement with WRCOG and is afforded a separate bond limit. The bond limits and capacities for each provider are listed in Table 1.

One of the program administrators has a robust set of projects in various stages of completion. Their projected project list for the next 12 months would require bond issuances that far exceed their current capacity. In order to engage WRCOG in the Commercial PACE financing of those projects, they have identified a need for a higher level of maximum bond indebtedness.

This action requests authority to raise the maximum bond indebtedness level in order to achieve sufficient capacity for the issuance of limited obligation bonds for conforming Commercial PACE projects.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to increase the maximum bond authorization for a provider in the C-PACE Program. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #5 (To develop projects and programs that improve infrastructure and sustainable development in the subregion).

Discussion:

Background

WRCOG's Energy Efficiency and Water Conservation Program for Western Riverside County (commonly referred to as the "WRCOG Program") and its statewide Property Assessed Clean Energy (PACE) Program (the "California Program," collectively with the WRCOG Program, the "Programs") serves to finance the installation of certain authorized improvements ("Authorized Improvements") on residential and commercial properties located within the Program area (the "Program Area"). These improvements are ultimately financed by limited obligation bonds issued by WRCOG. In order to issue these bonds, the WRCOG Executive Committee must determine the maximum portfolio amounts associated with each PACE Program providers.

When the Program was established in 2011, this amount was identified to be \$900 million. As the Programs grew, the amount was increased to \$3 billion in 2016 and currently reads, "the maximum aggregate dollar amount of contractual assessments available under the Program is \$3 billion. If this amount is exceeded, WRCOG may, in its sole discretion, pass a resolution to increase the maximum aggregate dollar amount of contractual assessments." Subsequently, the WRCOG Executive Committee authorized the addition of Renew Financial, PACE Funding, and Ygrene as additional residential PACE providers and Renew Financial, Greenworks Lending, CleanFund Commercial PACE Capital, Twain Financial, and Ygrene Energy Fund as commercial PACE providers.

WRCOG previously authorized the Programs to issue bonded indebtedness to finance Authorized Improvements within the Program Area in one or more series of bonds (Resolution Number 08-13, as amended). The Executive Committee authorized Greenworks Lending, LLC, ("Greenworks") to serve as a commercial program administrator for the Programs (the "Greenworks Program") and the issuance of bonds for the Greenworks Programs (Resolution Number 02-18). Resolution Number 02-18 originally authorized the issuance of one or more series of limited obligation improvement bonds for the Greenworks Program in the maximum aggregate principal amount not to exceed \$150,000,000. Resolution Number 27-19 authorized the increase of the maximum aggregate principal amount of Greenworks Program bonds to \$200,000,000.

On August 5, 2019, the WRCOG Executive Committee approved an amended California HERO Program Report and the WRCOG Energy Efficiency and Water Conservation Program Report to increase the maximum bond indebtedness for all the PACE Programs. The table (Table 1) shown below includes the maximum bond authorization for each of the PACE Program partners, the value of bonds issued to date and the remaining capacity for each of the Program partners:

Table 1

	Maximum Bond Authorization	Bonds Issued to Date	Remaining Capacity
Residential:			
HERO	\$3,000,000,000	\$1,992,335,950	\$1,007,664,050
CaliforniaFIRST (Renew Financial)	\$150,000,000	\$8,969,826	\$141,030,174
PACE Funding Group	\$100,000,000	\$21,249,777	\$78,750,223
Ygrene	\$50,000,000	N/A	N/A
Commercial:			
Greenworks/Nuveen Green Capital	\$200,000,000	\$164,652,708	\$35,347,292
CleanFund	\$200,000,000	N/A	N/A
Twain	\$150,000,000	\$86,408,440	\$63,591,560
SAMAS	\$250,000,000	\$8,724,186	\$241,275,814

Present Situation:

Since 2019, WRCOG has issued 34 limited obligation C-PACE bonds for the Greenworks Program, valued at approximately \$86,247,273. There are an additional \$78,405,434 in completed and unbonded projects that Greenworks has yet to request a bond be issued by WRCOG. These combined amounts, \$164,652,708, represent the capacity that has been used since 2019, and leaves approximately \$35,347,292 in remaining bonding capacity for the Greenworks Program.

WRCOG staff and Greenworks meet regularly to review and discuss the upcoming pipeline of projects that are anticipated to close. Greenworks has informed WRCOG that it has approximately \$417,269,000 in projects that it anticipates closing in the next one to twelve months. In order for WRCOG to continue issuing bonds for Greenworks, the limit needs to be raised to at least \$583,000,000 to allow for sufficient bond capacity when a new bond is requested to be issued. Increasing authorized bonding capacity does not authorize the issuance of new bonds; WRCOG issues bonds at the request of Greenworks, in accordance with the Program Administration Agreement between Greenworks and WRCOG.

If the maximum bond authorization for the Greenworks Program is not raised from its current amount of \$200,000,000, issuing a bond in excess of \$35,347,292 would not be possible because it would place WRCOG out of compliance with the associated Master Indenture and the Program Administration Agreement. The Master Indenture states, "WRCOG shall be in compliance with all covenants set forth in this Indenture, and issuance of the Bond will not cause WRCOG to exceed the bonded indebtedness limit established for the Program or the maximum Bond authorization set forth in the Resolution of Issuance or as such maximum authorization may be amended by a resolution of the Executive Committee of WRCOG." Raising the maximum bond authorization would allow for projects to close and for WRCOG to remain in compliance. The Program Administration Agreement requires "WRCOG shall respond to Greenworks requests and submittals as set forth in the Schedule of Responsibilities, or otherwise in a prompt and timely manner including reviewing, approving, acting upon and/or executing documents listed in the Schedule of Responsibilities." One such responsibility is to issue bonds so long as Greenworks has complied with the requirements of the Program Agreement and Program Reports.

On August 5, 2024, the Executive Committee discussed increasing the maximum bond authorization for the Greenworks / Nuveen C-PACE program from \$200 million (the current limit) to \$1 billion (the

proposed limit). The robust discussion did not result in a final action, however, it made clear that the complexity of the item warranted additional discussion. The PACE Ad Hoc Committee was convened and has provided an additional recommendation. That convening took place just prior to the publishing of this agenda so the recommendation is included but the management and legal analysis of the recommendation were in process at the time of publishing. Additional information will be available at the September Executive Committee meeting.

The items noted for additional clarification or discussion focused largely on the role, process, and risk of bond issuance.

The current request is the result of a high level of anticipated projects. The timing of the request is based on one of those projects whose maturity creates a narrow time window for including C-PACE funding. WRCOG's role as bond issuer for the PACE Program does not include the underwriting of individual projects. While the bonding level decision is distinct from the evaluation of the merits of a particular project, the conversation took a natural path of vetting that particular project. Staff didn't anticipate that detour in advance of the August meeting and now has a more accurate description of the project.

WRCOG staff contacted Greenworks to obtain information about the project in question. The project is a 19-story, 941,000 square foot office building in downtown San Jose. It was completed in 2023, so the C-PACE financing represents a refinancing of existing debt into a C-PACE assessment.

C-PACE eligible products:

- HVAC (20 year Equipment Useful Life (EUL)*) - \$25,308,956.
- Plumbing (25 year EUL) - \$10,807,648.
- Lighting (20 year EUL) - \$43,373,368.
- Elevators (25 year EUL) - \$14,072,645.
- Building Envelope:
 - Insulation and exterior wall assemblies (50 year EUL) - \$10,744,955.
 - Roofing (20 year EUL) - \$3,605,578.
 - Windows and doors (30 year EUL) - \$81,005,430.
 - Seismic (50 year EUL) - \$184,554,023
- The cost weighted expected equipment useful life (EUL) is 38.2 years, which exceeds loan repayment term of 30 years.

The total construction cost of this project was approximately \$797,000,000. Since the last WRCOG Executive Committee meeting, Greenworks has informed WRCOG that the proposed C-PACE financing has been reduced to \$220,000,000, which places the percentage of C-PACE financing relative to the overall construction cost at approximately 28%.

August Recommendation (Resolution Number 25-24): The initial recommendation for this item was to increase \$200,000,000 to \$1 billion. Resolution Number 25-24 has been modified to reduce the initial recommendation from \$1,000,000,000 to \$583,000,000 consistent with the bonding capacity identified earlier in this staff report and to support the ability for WRCOG to issue bonds for Greenworks based on its current pipeline of projects.

Section 5852.1 of the Government Code of the State of California provides that WRCOG obtain from an

underwriter, financial advisor, or private lender, and disclose, in a meeting open to the public, prior to authorization of the issuance of the bonds, good faith estimates of: (a) the true interest cost of the bonds, (b) the finance charge of the bonds, meaning the sum of all fees and charges paid to third parties, (c) the amount of proceeds of the bonds received less the finance charge described above and any reserves or capitalized interest paid or funded with proceeds of the bonds, and (d) the sum total of all debt service payments on the bonds calculated to the final maturity of the bonds plus the fees and charges paid to third parties not paid with the proceeds of the bonds. WRCOG's municipal advisor, PFM Financial Advisors, prepared the good faith estimate, which is included as Section 3 in the attached resolution.

Included in Resolution 25-24, the Executive Committee does hereby determine that WRCOG will not obligate itself to advance funds from the WRCOG treasury to cure any deficiency in the redemption fund established pursuant to any master indenture entered into in connection with the Bonds. The Executive Committee further declares and determines that no Regular Member or Associate Member shall be obligated to advance funds from the treasury of such Regular Member or Associate Member to cure any such deficiency in such redemption funds.

Ad Hoc Recommendation (Resolution Number 29-24): The Ad Hoc Committee is recommending an increase from \$200 million to \$500 million along with the addition of exclusionary language that would prohibit bond issuance for projects of this size. The Ad Hoc Committee is also requesting the item be referred back to the Ad Hoc to discuss the merits of changing the current WRCOG fee of 70 basis points, the current fee cap of \$250,000, and the current process of staff-level approval of projects that conform to the Executive Committee's guidelines but are of a high dollar amount.

Prior Action(s):

August 5, 2024: The Executive Committee requested this item to be brought back to the next Executive Committee meeting.

August 5, 2019: The Executive Committee adopted Resolution Number 27-19; A Resolution of the Executive Committee of the Western Riverside Council of Governments increasing maximum bond authorization for its PACE Programs and making certain required disclosures.

Financial Summary:

While WRCOG acts as the bond issuer, it does not carry the liability for the bonds on its financial statements, as these are considered a fiduciary activity of the Agency, and is reported as a custodial fund in accordance with GASB 84.

Attachment(s):

[Attachment 1 - Resolution Number 25-24 Authorizing an Increase in Maximum Bond Authorization for the Greenworks PACE Program making certain required disclosures](#)

[Attachment 2 - Resolution Number 29-24 Authorizing an Increase in Maximum Bond Authorization for the Greenworks PACE Program with certain limitations and making certain required disclosures](#)

Attachment 1

Resolution Number 25-24;
A Resolution of the Executive
Committee of the Western Riverside
Council of Governments increasing
maximum bond authorization for
Greenworks PACE program making
certain required disclosures

RESOLUTION NUMBER 25-24

**A RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
INCREASING MAXIMUM BOND AUTHORIZATION FOR GREENWORKS PACE
PROGRAM AND MAKING CERTAIN REQUIRED DISCLOSURES**

WHEREAS, the Executive Committee of the Western Riverside Council of Governments (“WRCOG”) has established the Energy Efficiency and Water Conservation Program for Western Riverside County (commonly referred to as the “WRCOG Program”) and its statewide Property Assessed Clean Energy Program (the “California Program,” collectively with the WRCOG Program, the “Programs”) for the purpose financing the installation of certain authorized improvements (“Authorized Improvements”) on residential and commercial properties located within the program area of each of the Programs (collectively the “Program Areas” each individually a “Program Area”); and

WHEREAS, by adoption of the Resolution Numbers 08-11 and 03-12, as amended, the Executive Committee provided that one or more series of improvement bonds would be issued under the Improvement Bond Act of 1915, Division 10 of the Streets and Highways Code of California (the “1915 Act”) or other financing relationships would be entered; and

WHEREAS, Resolution Number 08-13 initially authorized the Programs to issue bonded indebtedness to finance Authorized Improvements within the Program Area for both residential and commercial parcels in one or more series of bonds pursuant to Chapter 29 and the 1915 Act; and

WHEREAS, Resolution Number 02-18 authorized Greenworks Lending LLC to serve as a commercial program administrator for the Programs (the “Greenworks Program”) and the issuance of bonds for the Greenworks Program; and

WHEREAS, Resolution Number 08-13 was subsequently amended by Resolution Numbers 24-13, 22-14, 26-14, 39-15, 04-17, 10-17, 43-17, 02-18, 46-18, 05-19, and 27-19 which collectively authorized the issuance of one or more series of bonds to finance the Authorized Improvements and provided a maximum amount of aggregate principal amount of bonds that maybe issued for the Greenworks Program; and

WHEREAS, the current maximum amount of aggregate principal amount of bonded indebtedness that maybe issued pursuant to the Greenworks Program is \$200,000,000; and

WHEREAS, the Greenworks Program is anticipated to finance Authorized Improvements in excess of such amount and an increase in the maximum amount of aggregate principal amount of bonds that maybe issued for the Greenworks Program is required; and

WHEREAS, Section 5852.1 of the Government Code of the State of California provides that WRCOG obtain from an underwriter, financial advisor or private lender and disclose, in a meeting open to the public, prior to authorization of the issuance of the bonds, good faith estimates of: (a) the true interest cost of the bonds, (b) the finance charge of the bonds, meaning the sum of all fees and charges paid to third parties, (c) the amount of proceeds of the bonds received less the finance charge described above and any reserves or capitalized interest paid or funded with proceeds of the bonds and (d) the sum total of all debt service payments on the bonds calculated to the final maturity of the bonds plus the fees and charges paid to third parties not paid with the proceeds of the bonds; and

WHEREAS, WRCOG desires to increase the aggregate maximum amount of indebtedness authorization for the Greenworks Programs and make the disclosures required pursuant to Section 5852.1;

NOW, THEREFORE, BE IT RESOLVED, by the Executive Committee of the Western Riverside Council of Governments as follows:

Section 1. Authorizing Resolutions. The Resolutions listed in the recitals above are hereby collectively referred to herein as the “Authorizing Resolutions.”

Section 2. Authorization of the Issuance of the Bonds. The Executive Committee hereby authorizes the issuance of one or more series of bonds of the Greenworks Program under and pursuant to the Chapter 29, the 1915 Act, the Resolutions cited in the recitals and this Resolution in the following maximum aggregate principal amount:

- a. Greenworks Program bonds (the “Bonds”) secured by assessments levied on participating commercial parcels located in the Program Areas: \$583,000,000.

Such amount is the aggregate amount since the inception of the Greenworks Program and such authorization shall apply retroactively since that date.

Section 3. Good Faith Estimate. The good faith estimates set forth herein are provided with respect to the Bonds in accordance with California Government Code Section 5852.1. Such good faith estimates have been provided to the WRCOG by the Municipal Advisor in consultation with the Underwriter.

Principal Amount. The Municipal Advisor has informed the WRCOG that, based on the financing plan and current market conditions, its good faith estimate of the aggregate principal amount of the Bonds to be sold is \$583,000,000 (the “Estimated Principal Amount”), which excludes approximately \$0 (of net premium estimated to be generated based on current market conditions). Net premium is generated when, on a net aggregate basis for a single issuance of bonds, the price paid for such bonds is higher than the face value of the bonds.

True Interest Cost of the Bonds. The Municipal Advisor has informed WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold, and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimate of the true interest cost of the Bonds, which means the rate necessary to discount the amounts payable on the respective principal and interest payment dates to the purchase price received for the Bonds, is 8.274628%.

Finance Charge of the Bonds. The Municipal Advisor has informed the WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimates of the finance charge for the Bonds, which means the sum of all fees and charges paid to third parties (or costs associated with the Bonds), is \$13,160,000.

Amount of Proceeds to be Received. The Municipal Advisor has informed WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold, and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimate of the amount of proceeds expected to be received by WRCOG, for the sale of the Bonds, less the finance charge of the Bonds, as estimated above, and any reserves or capitalized interest paid or funded with proceeds of the Bonds, is \$569,840,000.

Total Payment Amount. The Municipal Advisor has informed WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold, and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimate of the total payment amount, which means the sum total of all debt service payments on the Bonds, plus the finance charge for the Bonds, as described above, not paid with the proceeds of the Bonds, calculated to the final maturity of the Bonds, is \$1,180,665,155.56 (excluding any offsets from reserves or capitalized interest).

The foregoing estimates constitute good faith estimates only. The actual principal amount of the Bonds issued and sold, the true interest cost thereof, the finance charges thereof, the amount of proceeds received therefrom and total payment amount with respect thereto may differ from such good faith estimates due to (a) the actual date of the sale of the Bonds being different than the date assumed for purposes of such estimates, (b) the actual principal amount of Bonds sold being different from the Estimated Principal Amount, (c) the actual amortization of the Bonds being different than the amortization assumed for purposes of such estimates, (d) the actual market interest rates at the time of sale of the Bonds being different than those estimated for purposes of such estimates, (e) other market conditions, or (f) alterations in the financing plan or finance charges, or a combination of such factors. The actual date of sale of the Bonds and the actual principal amount of Bonds sold will be determined by WRCOG, based on the timing of the need for proceeds of the Bonds and other factors. The actual interest rates borne by the Bonds will depend on market interest rates at the time of sale thereof. The actual amortization of the Bonds will also depend, in part, on market interest rates at the time of sale thereof. Market interest rates are affected by economic and other factors beyond the control of the WRCOG.

Section 4. No Obligation of WRCOG, its Regular Members or Associate Members. Pursuant to Streets and Highways Code Section 8769, this Executive Committee does hereby determine that WRCOG will not obligate itself to advance funds from the WRCOG treasury to cure any deficiency in the redemption fund established pursuant to any master indenture entered into in connection with the Bonds. The Executive Committee further declares and determines that no Regular Member or Associate Member shall be obligated to advance funds from the treasury of such Regular Member or Associate Member to cure any such deficiency in such redemption funds.

Section 5. Conditions of Approval. The approvals, authorization and direction given by this Resolution are conditioned upon the satisfaction of the requirements of the requirements set forth in the Authorizing Resolutions without the further approval or action of the Executive Committee.

Section 6. Official Actions. The Executive Director or his delegate is hereby authorized and directed, for and in the name and on behalf of WRCOG, to do any and all things and take any and all actions, including execution and delivery of any and all assignments, certificates, requisitions, agreements, notices, consents, instruments of conveyance, warrants and other documents, which they, or any of them, may deem necessary or advisable in order to consummate the issuance and sale of the Bonds and any of the other transactions contemplated by the documents approved pursuant to this Resolution. All actions heretofore taken by the officers and agents of WRCOG with respect to the sale and issuance of the Bonds are hereby approved, confirmed and ratified.

Section 7. Effective Date. This Resolution shall take effect upon the date of its adoption.

PASSED AND ADOPTED by the Executive Committee of the Western Riverside Council of Governments on September 9, 2024.

Rita Rogers, Chair
WRCOG Executive Committee

Dr. Kurt Wilson, Secretary
WRCOG Executive Committee

Approved as to form:

Best Best & Krieger LLP
WRCOG Bond Counsel

AYES: _____ NAYS: _____ ABSENT: _____ ABSTAIN: _____

Attachment 2

Resolution Number 29-24;
A Resolution of the Executive
Committee of the Western Riverside
Council of Governments increasing
maximum bond authorization for
Greenworks PACE program with
certain limitations and making certain
required disclosures

RESOLUTION NO. 29-24

**RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
INCREASING MAXIMUM BOND AUTHORIZATION FOR
GREENWORKS PACE PROGRAM WITH CERTAIN LIMITATIONS AND
MAKING CERTAIN REQUIRED DISCLOSURES**

WHEREAS, the Executive Committee of the Western Riverside Council of Governments (“WRCOG”) has established the Energy Efficiency and Water Conservation Program for Western Riverside County (commonly referred to as the “WRCOG Program”) and its statewide Property Assessed Clean Energy Program (the “California Program,” collectively with the WRCOG Program, the “Programs”) for the purpose financing the installation of certain authorized improvements (“Authorized Improvements”) on residential and commercial properties located within the program area of each of the Programs (collectively the “Program Areas” each individually a “Program Area”); and

WHEREAS, by adoption of Resolution Numbers 08-11 and 03-12 of the Executive Committee, as amended, the Executive Committee provided that one or more series of improvement bonds would be issued under the Improvement Bond Act of 1915, Division 10 of the Streets and Highways Code of California (the “1915 Act”) or other financing relationships would be entered; and

WHEREAS, Resolution Number 08-13 of the Executive Committee initially authorized the Programs to issue bonded indebtedness to finance Authorized Improvements within the Program Area for both residential and commercial parcels in one or more series of bonds pursuant to Chapter 29 and the 1915 Act; and

WHEREAS, Resolution Number 02-18 of the Executive Committee authorized Greenworks Lending, LLC, to serve as a commercial program administrator for the Programs (the “Greenworks Program”) and the issuance of bonds for the Greenworks Program; and

WHEREAS, Resolution Number 08-13 was subsequently amended by Resolution Numbers 24-13, 22-14, 26-14, 39-15, 04-17, 10-17, 43-17, 02-18, 46-18, 05-19, and 27-19 which collectively authorized the issuance of one or more series of bonds to finance the Authorized Improvements and provided a maximum amount of aggregate principal amount of bonds that maybe issued for the Greenworks Program; and

WHEREAS, the current maximum amount of aggregate principal amount of bonded indebtedness that maybe issued pursuant to the Greenworks Program is \$200,000,000; and

WHEREAS, the Greenworks Program is anticipated to finance Authorized Improvements in excess of such amount and an increase in the maximum amount of aggregate principal amount of bonds that maybe issued for the Greenworks Program is required; and

WHEREAS, WRCOG’s PACE Ad Hoc Committee has recommended that assessment contracts originated by the Greenworks Program in excess of \$36,000,000 be required to be approved by the Executive Committee prior to staff approval of such assessment contracts; and

WHEREAS, WRCOG's PACE Ad Hoc Committee has requested that the it formally review the current fee structure for WRCOG's fees which is currently 70 basis points of the project size for each bond financing with a cap of \$250,000 as well as the current procedure for allowing staff approval of each project; and

WHEREAS, Section 5852.1 of the Government Code of the State of California ("Section 5852.1") provides that WRCOG obtain from an underwriter, financial advisor or private lender and disclose, in a meeting open to the public, prior to authorization of the issuance of the bonds, good faith estimates of: (a) the true interest cost of the bonds, (b) the finance charge of the bonds, meaning the sum of all fees and charges paid to third parties, (c) the amount of proceeds of the bonds received less the finance charge described above and any reserves or capitalized interest paid or funded with proceeds of the bonds and (d) the sum total of all debt service payments on the bonds calculated to the final maturity of the bonds plus the fees and charges paid to third parties not paid with the proceeds of the bonds; and

WHEREAS, WRCOG desires to increase the aggregate maximum amount of indebtedness authorization for the Greenworks Programs and make the disclosures required pursuant to Section 5852.1.

NOW, THEREFORE, BE IT RESOLVED, by the Executive Committee of the Western Riverside Council of Governments as follows:

Section 1. Authorizing Resolutions. The resolutions listed in the recitals above are hereby collectively referred to herein as the "Authorizing Resolutions."

Section 2. Authorization of the Issuance of the Bonds. The Executive Committee hereby authorizes the issuance of one or more series of bonds of the Greenworks Program under and pursuant to the Chapter 29, the 1915 Act, the Resolutions cited in the recitals and this Resolution in the following maximum aggregate principal amount:

- a. Greenworks Program bonds (the "Bonds") secured by assessments levied on participating commercial parcels located in the Program Areas: \$500,000,000; provided that any one assessment contract with a principal amount in excess of \$36,000,000 shall be submitted to the Executive Committee for approval

Such amount is the aggregate amount since the inception of the Greenworks Program and such authorization shall apply retroactively since that date.

Section 3. Review of Current Fee and Practices. The PACE Ad Hoc Committee is hereby instructed to formally review the current fee structure for WRCOG's fees as well as the current procedure for approval of assessment contracts.

Section 4. Good Faith Estimate. The good faith estimates set forth herein are provided with respect to the Bonds in accordance with California Government Code Section 5852.1. Such good faith estimates have been provided to the WRCOG by the Municipal Advisor in consultation with the Underwriter.

Principal Amount. The Municipal Advisor has informed the WRCOG that, based on the financing plan and current market conditions, its good faith estimate of the aggregate principal amount of the Bonds to be sold is \$500,000,000 (the "Estimated Principal Amount"), which excludes approximately \$0 (of net premium estimated to be generated based on current market conditions. Net premium is

generated when, on a net aggregate basis for a single issuance of bonds, the price paid for such bonds is higher than the face value of the bonds.

True Interest Cost of the Bonds. The Municipal Advisor has informed WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold, and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimate of the true interest cost of the Bonds, which means the rate necessary to discount the amounts payable on the respective principal and interest payment dates to the purchase price received for the Bonds, is 8.274629%.

Finance Charge of the Bonds. The Municipal Advisor has informed the WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimates of the finance charge for the Bonds, which means the sum of all fees and charges paid to third parties (or costs associated with the Bonds), is \$11,500,000.

Amount of Proceeds to be Received. The Municipal Advisor has informed WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold, and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimate of the amount of proceeds expected to be received by WRCOG, for the sale of the Bonds, less the finance charge of the Bonds, as estimated above, and any reserves or capitalized interest paid or funded with proceeds of the Bonds, is \$488,500,000.

Total Payment Amount. The Municipal Advisor has informed WRCOG that, assuming that the Estimated Principal Amount of the Bonds is sold, and based on market interest rates prevailing at the time of preparation of such estimate, its good faith estimate of the total payment amount, which means the sum total of all debt service payments on the Bonds, plus the finance charge for the Bonds, as described above, not paid with the proceeds of the Bonds, calculated to the final maturity of the Bonds, is \$1,012,575,111.11 (excluding any offsets from reserves or capitalized interest).

The foregoing estimates constitute good faith estimates only. The actual principal amount of the Bonds issued and sold, the true interest cost thereof, the finance charges thereof, the amount of proceeds received therefrom and total payment amount with respect thereto may differ from such good faith estimates due to (a) the actual date of the sale of the Bonds being different than the date assumed for purposes of such estimates, (b) the actual principal amount of Bonds sold being different from the Estimated Principal Amount, (c) the actual amortization of the Bonds being different than the amortization assumed for purposes of such estimates, (d) the actual market interest rates at the time of sale of the Bonds being different than those estimated for purposes of such estimates, (e) other market conditions, or (f) alterations in the financing plan or finance charges, or a combination of such factors.

The actual date of sale of the Bonds and the actual principal amount of Bonds sold will be determined by WRCOG, based on the timing of the need for proceeds of the Bonds and other factors. The actual interest rates borne by the Bonds will depend on market interest rates at the time of sale thereof. The actual amortization of the Bonds will also depend, in part, on market interest rates at the time of sale thereof. Market interest rates are affected by economic and other factors beyond the control of the WRCOG.

Section 5. No Obligation of WRCOG, its Regular Members or Associate Members. Pursuant to Streets and Highways Code Section 8769, this Executive Committee does hereby determine that WRCOG will not obligate itself to advance funds from the WRCOG treasury to cure any deficiency in the redemption fund established pursuant to any master indenture entered into in connection with the Bonds. The Executive Committee further declares and determines that no Regular Member or

Associate Member shall be obligated to advance funds from the treasury of such Regular Member or Associate Member to cure any such deficiency in such redemption funds.

Section 6. Conditions of Approval. The approvals, authorization and direction given by this Resolution are conditioned upon the satisfaction of the requirements of the requirements set forth in the Authorizing Resolutions without the further approval or action of the Executive Committee.

Section 7. Official Actions. The Executive Director or his delegate is hereby authorized and directed, for and in the name and on behalf of WRCOG, to do any and all things and take any and all actions, including execution and delivery of any and all assignments, certificates, requisitions, agreements, notices, consents, instruments of conveyance, warrants and other documents, which they, or any of them, may deem necessary or advisable in order to consummate the issuance and sale of the Bonds and any of the other transactions contemplated by the documents approved pursuant to this Resolution. All actions heretofore taken by the officers and agents of WRCOG with respect to the sale and issuance of the Bonds are hereby approved, confirmed and ratified.

Section 8. Effective Date. This Resolution shall take effect upon the date of its adoption.

PASSED AND ADOPTED at a meeting of the Executive Committee of the Western Riverside Council of Governments held on September 9, 2024.

Rita Rogers, Chair
WRCOG Executive Committee

Dr. Kurt Wilson, Secretary
WRCOG Executive Committee

Approved as to form:

Best Best & Krieger, LLP
WRCOG Bond Counsel

AYES: _____ NAYS: _____ ABSENT: _____ ABSTAIN: _____



Western Riverside Council of Governments Joint Meeting of the WRCOG Executive Committee and Supporting Foundation

Staff Report

Subject: Policy Setting the Parameters for Adding Agencies to the WRCOG Structure
Contact: Dr. Kurt Wilson, Executive Director, kwilson@wrcog.us, (951) 405-6701
Date: September 9, 2024

Recommended Action(s):

1. Adopt Resolution Number 26-24, a Resolution of the Executive Committee of the Western Riverside Council of Governments adopting a policy statement for consideration of new voting representatives.

Summary:

This item is being presented for discussion of language regarding the WRCOG governance structure.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to consider a policy for adding agencies to the WRCOG structure. This item aligns with WRCOG's 2022-2027 Strategic Plan Goal #4 (Communicate proactively about the role and activities of the Council of Governments).

Discussion:

Background

Periodically, other public agencies from within WRCOG's subregion have inquired about their ability to join WRCOG. Currently, there is no formal process for evaluating such a request. A priority of past Chair Chris Barajas was to establish a set of criteria for evaluating such requests in order to maximize the value each member provides and receives by being part of WRCOG.

A New Member Ad Hoc Committee, consisting of Executive Committee members Brian Tisdale, Brenda Dennstedt, and Jacque Casillas, was convened to examine whether, and under what circumstances, new agencies should be admitted to the WRCOG governance structure. The Ad Hoc Committee met on multiple occasions, reviewed the history of membership within WRCOG, and the status of membership for other Councils of Government. After reviewing the information and discussing the merits of new members, the Ad Hoc Committee recommended the item be brought to the Administration & Finance Committee for further discussion. The Administration & Finance Committee met on June 12, 2024, and

discussed the recommendations from the Ad Hoc Committee.

Present Situation

Based on the Ad Hoc Committee discussion, the initial policy proposal would be:

"WRCOG values its partnerships with public agencies throughout the region and wants to continue to strengthen those relationships in whichever way is appropriate. That generally does not include admittance of new voting members to the WRCOG governance structure unless one of two conditions is met: 1) the proposed member is a newly incorporated city within the WRCOG boundaries, or 2) there is a clear nexus between the core mission of WRCOG and the proposed agency along with a clear benefit to existing WRCOG agencies."

There was additional discussion of some sort of tiered membership level that would support continued partnerships without including voting privileges. The term Associate Member is currently used to identify cities and counties outside of the WRCOG boundary which participate in the PACE financing Program. In addition to these Associate Members which have minimal engagement with WRCOG committees, we currently have participation from RCTC, RTA, and March JPA on various staff-level committees.

If desired, the policy could include some other criteria for having those agencies participate solely in staff-level committees with or without voting privileges. In that case, similar criteria could be applied on a more focused scale. A special district with a scope that only overlaps with Public Works, for example, could be considered for some level of inclusion only with the Public Works Committee.

During discussions at the Administration & Finance Committee, the policy was slightly modify to replace the words "voting member" with "voting representative". With that change, the policy was updated to read:

"WRCOG values its partnerships with public agencies throughout the region and wants to continue to strengthen those relationships in whichever way is appropriate. That generally does not include admittance of new voting representatives to the WRCOG governance structure unless one of two conditions is met: 1) the proposed member is a newly incorporated city within the WRCOG boundaries, or 2) there is a clear nexus between the core mission of WRCOG and the proposed agency along with a clear benefit to existing WRCOG agencies."

Based on discussion with WRCOG Legal Counsel, it was determined that the most appropriate mechanism to implement this policy this language was to adopt a resolution, which is typical for many WRCOG policies. The proposed resolution incorporating the language above is attached to this staff report and the Executive Committee will be asked to approve the resolution.

Prior Action(s):

August 14, 2024: The Administration & Finance Committee recommended that the Executive Committee adopt a policy that states "WRCOG values its partnerships with public agencies throughout the region and wants to continue to strengthen those relationships in whichever way is appropriate. That generally does not include admittance of new voting representatives to the WRCOG governance structure unless one of two conditions is met: 1) the proposed member is a newly incorporated city within the WRCOG boundaries, or 2) there is a clear nexus between the core mission of WRCOG and the

proposed agency along with a clear benefit to existing WRCOG agencies."

June 12, 2024: The Administration & Finance Committee discussed and requested language be brought back for review.

Financial Summary:

Adopting this policy has no direct fiscal impact on WRCOG. A fiscal impact resulting from this new policy would only occur if an agency were to be added to WRCOG, which might increase the amount of revenue generated through the annual assessment on member dues.

Attachment(s):

[Attachment 1 - June 2024 A&F discussion regarding criteria for adding additional agencies to WRCOG](#)

[Attachment 2 - Resolution Number 30-24 Approving Policy for Admitting New Voting Representatives](#)



Western Riverside Council of Governments Administration & Finance Committee

Staff Report

Subject: Discussion Regarding Criteria for Adding Additional Agencies to WRCOG
Contact: Dr. Kurt Wilson, Executive Director, kwilson@wrcog.us, (951) 405-6701
Date: June 12, 2024

Recommended Action(s):

1. Discuss whether or not new agencies should be included in the WRCOG Governance structure and provide direction to the Executive Director related to any criteria or process desired to carry out the Committee's policy decision.

Summary:

This item is intended to facilitate a discussion about the WRCOG governance structure and whether or not additional agencies should be included.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to discuss the potential of adding other agencies to WRCOG. This item aligns with WRCOG's 2022-2027 Strategic Plan Goal #4 (Communicate proactively about the role and activities of the Council of Governments).

Discussion:

Background

Periodically, other public agencies from within our subregion have inquired about their ability to join WRCOG. Currently, there is no formal process for evaluating such a request. A priority of Chair Barajas was to establish a set of criteria for evaluating such requests in order to maximize the value each member provides and receives by being part of WRCOG.

Present Situation

Chair Barajas established an Ad Hoc Committee consisting of Brian Tisdale, Brenda Dennstedt, and Jacque Casillas. The Ad Hoc Committee met on multiple occasions, reviewed the history of membership within WRCOG and the status of membership for other Councils of Government. After reviewing the information and discussing the merits of new members, the Ad Hoc Committee recommended the item be brought to the A&F Committee for further discussion.

If a recommendation emerges from this Committee, it would be forwarded to the Executive Committee for final approval. Depending on the nature of any recommendation, an additional step would be a legal analysis to determine the conformity with any applicable laws or procedures including the WRCOG JPA and Bylaws.

Prior Action(s):

None.

Financial Summary:

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

Attachment(s):

None.

Attachment

Resolution Number 30-24 Adopting a
Policy Statement for consideration of
new voting representatives

RESOLUTION NUMBER 30-24

**A RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
ADOPTING A POLICY STATEMENT FOR CONSIDERATION OF
NEW VOTING REPRESENTATIVES**

WHEREAS, WRCOG has valued relationships with community stakeholders including special districts and other local governmental entities throughout the region; and

WHEREAS, from time to time, public agencies in western Riverside County who are not members of WRCOG and are not otherwise voting representatives inquire about whether they can become voting representatives of WRCOG; and

WHEREAS, there is currently no formal process for evaluating requests for voting representation; and

WHEREAS, establishing a policy for evaluating requests for voting representation will enable the Executive Committee, and existing WRCOG voting representatives, to give more clear guidance and understanding to other stakeholders who may express an interest; and

WHEREAS, the Executive Committee desires to establish clear and straightforward guiding principles for considering such a requests.

NOW, THEREFORE, BE IT RESOLVED by the Executive Committee of the Western Riverside Council of Governments as follows:

Section 1. The above recitals are true and correct.

Section 2. The Executive Committee of WRCOG hereby adopts the following policy statement for considering requests for voting representation:

"WRCOG values its partnerships with public agencies throughout the region and wants to continue to strengthen those relationships in whichever way is appropriate. That generally does not include admittance of new voting representatives to the WRCOG governance structure unless one of two conditions is met: 1) the proposed member is a newly incorporated city within the WRCOG boundaries, or 2) there is a clear nexus between the core mission of WRCOG and the proposed agency along with a clear benefit to existing WRCOG agencies."

Section 3. This Resolution is intended to be consistent with the Joint Powers Agreement forming WRCOG; nothing herein is intended to modify any terms or provisions of the Joint Powers Agreement.

Section 4. This Resolution does not preclude the Executive Committee, or another authorized body or official of WRCOG, from including, or establishing criteria for including, stakeholders from participating in WRCOG through other means that do not include voting rights.

PASSED AND ADOPTED at a meeting of the Executive Committee of the Western Riverside Council of Governments held on September 9, 2024.

Rita Rogers, Chair
WRCOG Executive Committee

Dr. Kurt Wilson, Secretary
WRCOG Executive Committee

Approved as to form:

Best Best & Krieger, LLP
WRCOG General Counsel

AYES: _____ NAYS: _____ ABSENT: _____ ABSTAIN: _____

EXHIBIT "A"

Purchase and Sale Agreement