



Western Riverside Council of Governments Public Works Committee

AGENDA

**Thursday, April 11, 2019
2:00 p.m.**

**Western Riverside Council of Governments
Citrus Tower
3390 University Avenue, Suite 450
Riverside, CA 92501**

In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if special assistance is needed to participate in the Public Works Committee meeting, please contact WRCOG at (951) 405-6703. Notification of at least 48 hours prior to meeting time will assist staff in assuring that reasonable arrangements can be made to provide accessibility at the meeting. In compliance with the Government Code Section 54957.5, agenda materials distributed within 72 hours prior to the meeting, which are public records relating to an open session agenda items, will be available for inspection by members of the public prior to the meeting at 3390 University Avenue, Suite 450, Riverside, CA, 92501.

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

- 1. CALL TO ORDER (Patty Romo, Chair)**
- 2. SELF INTRODUCTIONS**
- 3. PLEDGE OF ALLEGIANCE**
- 4. PUBLIC COMMENTS**

At this time members of the public can address the Public Works Committee regarding any items with the subject matter jurisdiction of the Committee that are not separately listed on this agenda. Members of the public will have an opportunity to speak on 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. MINUTES

- A. Summary Minutes from the March 14, 2019, Public Works Committee Meeting
are Available for Consideration.**

P. 1

Requested Action: 1. *Approve the Summary Minutes from the March 14, 2019, Public Works Committee meeting.*

6. 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. WRCOG Committees and Agency Activities Update Christopher Gray P. 5

Requested Action: 1. Receive and file.

B. TUMF Revenue and Expenditures Update Andrew Ruiz P. 21

Requested Action: 1. Receive and file.

C. High Cube Warehouse Trip Generation Study Update Daniel Ramirez-Cornejo P. 29

Requested Action: 1. Receive and file.

D. Resilient IE Activities Update – Evacuation Network Andrea Howard P. 55

Requested Action: 1. Discuss and provide input on the Draft Community Outreach & Engagement Plan and Draft Evacuation Network.

7. REPORTS / DISCUSSION

A. Small Cell Deployment Activities Update George Wentz, HR Green P. 133

Requested Action: 1. Receive and file.

B. UrbanLeap Innovation Platform Arik Bronshtein, UrbanLeap P. 135

Requested Action: 1. Receive and file.

C. 2019 TUMF Construction Cost Index Adjustment Daniel Ramirez-Cornejo, WRCOG P. 147

Requested Action: 1. Discuss and provide input.

D. TUMF Regional Arterial Program Shirley Medina, RCTC P. 151

Requested Action: 1. Discuss and provide input.

8. REPORT FROM THE DIRECTOR OF TRANSPORTATION & PLANNING Christopher Gray

9. ITEMS FOR FUTURE AGENDAS Members

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

10. GENERAL ANNOUNCEMENTS *Members*

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

11. NEXT MEETING: The next Public Works Committee meeting will be held on Thursday, May 9, 2019, at 2:00 p.m., at WRCOG's office located at 3390 University Avenue, Suite 450, Riverside.

12. ADJOURNMENT

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1. CALL TO ORDER

The meeting of the Public Works Committee was called to order at 2:04 p.m. by Chair Patty Romo at WRCOG's office, Citrus Conference Room.

2. ROLL CALL

Members present:

Art Vela, City of Banning
Lori Askew, City of Calimesa
Rosalva Ureno, City of Corona
Craig Bradshaw, City of Eastvale
Kristen Jensen, City of Hemet
Mike Myers, City of Jurupa Valley
Michael Wolfe, City of Moreno Valley
Bob Moehling, City of Murrieta
Sam Nelson, City of Norco
Brad Brophy, Cities of Perris and San Jacinto
Gilbert Hernandez, City of Riverside
Amer Attar, City of Temecula
Dan York, City of Wildomar (2:12pm arrival)
Patty Romo, County of Riverside (Chair)
Shirley Medina, Riverside County Transportation Commission

Staff present:

Christopher Gray, Director of Transportation & Planning
Daniel Ramirez-Cornejo, Program Manager
Christopher Tzeng, Program Manager
Tyler Masters, Program Manager
Anthony Segura, Staff Analyst
Jessica May, Staff Analyst
Suzy Nelson, Administrative Assistant

Guests present:

Darren Henderson, WSP / WRCOG consultant
Paul Rodriguez, Rodriguez Consulting Group
Dennis Ralls, City of Corona
Jeff Hart, City of Riverside
Chris Scully, City of Riverside
Lane Garcia, Southern California Air Quality Management District (AQMD)
Erik Ruehr, VRPA Technologies
Jason Pack, Fehr & Peers

3. PLEDGE OF ALLEGIANCE

Chair Patty Romo led the members and guests in the Pledge of Allegiance.

4. PUBLIC COMMENTS

There were no public comments.

5. MINUTES (*Murrieta / Eastvale*) 14 yes; 0 no; 1 abstention. Item 5.A was approved. The Cities of Beaumont, Canyon Lake, Lake Elsinore, Menifee, and Wildomar, the March Joint Powers Authority, and the Riverside Transit Agency were not present. The City of Banning abstained.

A. Summary Minutes from the February 14, 2019, Public Works Committee Meeting are Available for Consideration.

Action: 1. Approved Summary Minutes from the February 14, 2019, Public Works Committee meeting.

6. CONSENT CALENDAR (*County / Murrieta*) 15 yes; 0 no; 0 abstention. Items 6.A and 6.B were approved. The Cities of Beaumont, Canyon Lake, Lake Elsinore, Menifee, and Wildomar, the March Joint Powers Authority, and the Riverside Transit Agency were not present.

A. WRCOG Committees and Agency Activities Update

Action: 1. Received and filed.

B. TUMF Revenue and Expenditures Update

Action: 1. Received and filed.

7. REPORTS / DISCUSSION

A. Regional Energy Network Development Update

Anthony Segura provided background information on Local Government Partnerships (LGP), in particular the Western Riverside Energy Partnership (WREP), which is comprised of fifteen WRCOG member agencies, Southern California Edison, and the Southern California Gas Company. Due to recent structure changes of LGPs that have led to decreased funding and elimination of programs, WRCOG is exploring the potential of developing a Regional Energy Network (REN). The REN is currently being explored in collaboration with the Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). A REN would focus on programs that are not offered by the utility groups and low income / disadvantaged communities. On January 31, 2019, WRCOG released a Request for Proposals to retain a consultant for REN development and will be providing updates through the WRCOG Committee structure as progress is made.

Chair Patty Romo asked if WRCOG would be the lead agency for the administration and management of the REN.

Anthony Segura responded that WRCOG would be the lead agency for the REN. Both CVAG and SBCOG would have equal input in both program development and the decision-making process.

Tyler Masters stated that the programs provided by the REN would not duplicate any efforts currently being conducted by the utility companies.

Committee member Mike Myers asked if the REN would operate separately from the WREP.

Christopher Gray mentioned that in the future, the REN could potentially replace the WREP that currently exists. It is currently unknown, but funding for the WREP could be significantly reduced in the near future.

Committee member Kristin Jensen requested that staff distribute a survey to the Committee members for input on the types of programs the REN would offer.

Action: 1. *Received and filed.*

B. Assembly Bill 2766 Report and Available Funding to Local Jurisdictions

Lane Garcia, AQMD Air Quality Specialist, provided annual report data from the Motor Vehicle Subvention Fund Program, which provides revenue to reduce mobile source emissions from motor vehicles. Projects that are preferred for use of funds from the Program include purchase / lease of alternative fuel / electric vehicles and installation of infrastructure to support fleet turnover.

Action: 1. *Received and filed.*

C. 2019 TUMF Network Administrative Amendment

Daniel Ramirez-Cornejo presented an amendment to the TUMF Network which would adjust TUMF Network to add the I-10 Bypass, Cherry Valley Boulevard Interchange, and Highland Springs Avenue Interchange as backbone projects in the TUMF Program. The amendment is being made to provide equity among the TUMF Zones that have projects which can qualify for Regional Arterial TUMF funds. The projects meet the criteria to be designated as backbone projects and the resulting designation does not have an effect on the Nexus Study. The project type, land use type, and/or topography type of these projects in the TUMF Network remains the same. As such the fee levels that are currently being assessed on new development in Western Riverside County do not change.

Action: 1. *Recommended that the Executive Committee approve the 2019 TUMF Network Administrative Amendment.*

(Calimesa / Banning) 16 yes; 0 no; 0 abstention. Item 7.C was approved. The Cities of Beaumont, Canyon Lake, Lake Elsinore, and Menifee, the March Joint Powers Authority, and the Riverside Transit Agency were not present.

D. Understanding the Transportation Analysis Implications of Senate Bill 743

Christopher Tzeng presented a summary of the study WRCOG prepared to develop localized guidelines, thresholds, and mitigation measures related to SB 743. Funded through the Southern California Association of Governments' Sustainability Planning Grant Program, the study's goal is to minimize SB 743 implementation costs for member agencies.

Jason Pack, Fehr & Peers, presented a website (<http://www.fehrandpeers.com/wrcog-sb743/>) developed to assist with SB 743 analyses.

Action: 1. *Received and filed.*

E. Fee Comparison Analysis – Final Report

Christopher Tzeng provided the findings of the update to the 2016 Fee Comparison Analysis, which reviewed development costs / returns for prototype projects of the five TUMF land uses (single-family and multi-family residential, industrial, retail, and service). Key findings of the update include 1) average development impact fees in WRCOG member jurisdictions are within the regional average range; 2) TUMF represents between 0.7% and 2.2% of total development costs and returns for the development prototypes analyzed; and 3) average residential development impact fees for WRCOG jurisdictions are

lower than the average of selected San Bernardino County cities and higher than the average of selected Coachella Valley cities.

Mr. Tzeng mentioned that staff is available to provide presentations to Council meetings upon request.

Action: 1. *Received and filed.*

8. REPORT FROM THE DIRECTOR OF TRANSPORTATION & PLANNING

Christopher Gray announced that WRCOG has selected a consultant to develop an online web portal for developers to make TUMF payments.

9. ITEMS FOR FUTURE AGENDAS

There were no items for future agendas.

10. GENERAL ANNOUNCEMENTS

Christopher Tzeng announced that several workshops will be held to share information on SB 743 implementation.

Committee member Shirley Medina announced that RCTC's Technical Advisory Committee meeting is scheduled for Monday, March 18, 2019, at CVAG.

11. NEXT MEETING

The next Public Works Committee meeting is scheduled for Thursday, April 11, 2019, at 2:00 p.m., at WRCOG's office located at 3390 University Avenue, Suite 450, Riverside.

12. ADJOURNMENT

The meeting of the Public Works Committee adjourned at 3:32 p.m.



Western Riverside Council of Governments Public Works Committee

Staff Report

Subject: WRCOG Committees and Agency Activities Update

Contact: Christopher Gray, Director of Transportation & Planning, cgray@wrcog.us, (951) 405-6710

Date: April 11, 2019

The purpose of this item is to provide updates on noteworthy actions and discussions held in recent standing Committee meetings, and to provide general project updates.

Requested Action:

1. Receive and file.

Attached are a summary of actions and activities from recent WRCOG standing Committee meetings that have taken place for meetings which have occurred during the month of March.

Prior Action:

April 1, 2019: The Executive Committee received and filed.

Fiscal Impact:

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

Attachments:

1. WRCOG March Committees Activities Matrix (Action items only).
2. Summary recaps from March Committee meetings.

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Item 6.A

WRCOG Committees and Agency
Activities Update

Attachment 1

WRCOG March Committees Activities
Matrix (Action items only)

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<u>WRCOG Committees</u> <u>Activities Matrix</u> <u>(Action Items Only)</u>	<u>Executive Committee</u>	<u>Administration & Finance</u> <u>Committee</u>	<u>Technical Advisory Committee</u>	<u>Planning</u> <u>Directors</u> <u>Committee</u>	<u>Public Works</u> <u>Committee</u>	<u>Finance Directors</u> <u>Committee</u>	<u>Solid Waste</u> <u>Committee</u>
Date of Meeting:	3/4/19	3/13/19	Did not meet	3/14/19	3/14/19	Did not meet	Did not meet
Current Programs / Initiatives:							
Regional Streetlights Program	Received and filed.	n/a		n/a	n/a		
Property Assessed Clean Energy (PACE) Programs	1) Adopted WRCOG Resolution Number 03-19; A Resolution of the Executive Committee of the Western Riverside Council of Governments Confirming Modification of the California HERO Program Report so as to Expand the Program Area within Which Contractual Assessments May be Offered; 2) directed and authorized the Executive Director to enter into contract negotiations and execute any necessary documents to include Lever Energy Capital under WRCOG's statewide PACE umbrella.	1) Recommended that the Executive Committee allow refinancing on Commercial PACE projects; and 2) recommended that the Executive Committee approve a 30-year Term for Commercial PACE Projects that have met certain conditions.		n/a	n/a		
TUMF	1) Approved the 2019 Pass Zone TIP; 2) approved the amended 2018 Southwest Zone TIP; 3) authorized the Executive Director to execute a TUMF Reimbursement Agreement with the Cities of Eastvale and Norco for the Planning and Engineering Phases of the Hamner Avenue Widening Project in an amount not to exceed \$1,313,000; 4) authorized the Executive Director to execute a TUMF Reimbursement Agreement with the County of Riverside for the Planning, Right-of-Way, and Construction Phases of the Sunset Avenue Grade Separation Project in an amount not to exceed \$777,283; and 5) approved the proposed revisions to the TUMF Fee Calculation Handbook to include language for the 3,000 square foot reduction policy and credit for existing uses.	n/a		n/a	Recommended that the Executive Committee approve the 2019 TUMF Network Administrative Amendment.		
Fellowship	n/a	n/a		Received and filed.	n/a		
New Programs / Initiatives:							
EXPERIENCE	n/a	n/a		n/a	n/a		

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Item 6.A

WRCOG Committees and Agency
Activities Update

Attachment 2

Summary recaps from March
Committee meetings

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**Western Riverside Council of Governments
Executive Committee
Meeting Recap
March 4, 2019**

Following is a summary of key items discussed at the last Executive Committee meeting. To review the full agenda and staff reports for all items, please click [here](#). To review the meetings PowerPoint presentation, please click [here](#).

TUMF Program Update

- The Executive Committee approved the following updates to the TUMF Program:
 - The 2019 Pass Zone Transportation Improvement Program (TIP)
 - The amended 2018 Southwest Zone TIP
 - TUMF Reimbursement Agreements with the Cities of Eastvale and Norco for the Hamner Avenue Widening Project, and with the County of Riverside for the Sunset Avenue Grade Separation Project
 - Language in the TUMF Fee Calculation Handbook to incorporate the 3,000 square foot reduction policy and credit for existing uses

2nd Quarter Draft Budget Amendment for Fiscal Year 2018/2019

- The amendment reflects increases and/or decreases to both revenue and expenditures for various departments in the 2nd Quarter for Fiscal Year 2018/2019.
- For the 2nd Quarter, WRCOG experienced a total increase in expenditures of \$19,064, which is predominantly related to the ATP and RIVTAM update, and will be reimbursed to WRCOG.

PACE Program Update

- The Executive Committee approved the addition of Lever Energy Capital, LLC as a commercial PACE provider to operate within the statewide footprint.
- A total of seven commercial PACE projects have been completed to date for a total project value of \$7.1 million, including 3 projects completed in February 2019 alone.
- Residential PACE activity has experienced a significant decline in 2018, likely due in part to increased competition among PACE providers and new legislation/regulations.

Options for Potential WRCOG Assistance for Regional Housing Needs Assessment (RHNA)

- RHNA is a planning process, based on projected population growth, which determines the number of housing units at each affordability level a jurisdiction must plan for.
- SCAG is currently developing the 6th cycle RHNA which will cover October 2021-October 2029.
- WRCOG has identified three levels of support it could offer members to assist with the 6th cycle RHNA. WRCOG could: (1) serve in an informational capacity—augmenting SCAG's role to keep members fully informed throughout the process; (2) provide assistance with SCAG data review; or (3) take on subregional delegation, wherein WRCOG would administer the RHNA for the subregion.
- WRCOG is assessing costs and benefits of subregional delegation. Primary considerations include out-of-pocket costs, the extent to which subregional delegation would yield better results, and potential liability to WRCOG assumed through subregional delegation. A final decision must be made by June 2019.
- SCAG and/or WRCOG staff are available to provide RHNA presentations to members upon request.

WRCOG's 2019/2020 Legislative Platform

- Every two years, WRCOG adopts a set of legislative priorities that guide WRCOG's actions related to monitoring, tracking, and positioning on applicable issues.
- The 2019/2020 Platform includes minor updates to eight General Platform Components: General Advocacy, Economic Development, Education, Energy & Environment, Health, Transportation, Water, and Other Local Government Issues.
- Additionally, the 2019/2020 Platform establishes Housing as a Priority Issue Area and empowers WRCOG, to the extent possible, to engage in more targeted lobbying efforts to address the challenges member jurisdictions experience producing sufficient housing and complying with new State housing legislation which, in the WRCOG subregion, is not anticipated to yield intended results.

General Assembly and Leadership Conference Details

- WRCOG's Annual General Assembly will be held on Thursday, June 20, 2019 at the Pechanga Resort and Casino.
- This year's event be a full-day affair, with a morning "Future of Cities" Symposium focused on how local cities should plan for changes that will be brought on with autonomous vehicles, automation of jobs, and other challenges to suburbia. The evening General Assembly Keynote Speaker will be Josh Earnest, who served as the nation's Press Secretary from 2014 – 2017, and currently serves as Senior Vice President and Chief Communications Officer for United Airlines. Mr. Earnest's experience in communicating with the public at the highest levels in the private and public sectors will be a focus of the evening.

Next Meeting

The next Executive Committee meeting is scheduled for Monday, April 1, 2019, at 2:00 p.m., at the County of Riverside Administrative Center, 1st Floor Board Chambers.



**Western Riverside Council of Governments
Administration & Finance Committee
Meeting Recap
March 13, 2019**

Following is a summary of key items discussed at the last Administration & Finance Committee meeting. To review the full agenda and staff reports, please click [here](#). To review the meeting PowerPoint presentation, please click [here](#).

PACE Program Activities Update

- In an effort to mirror typical development financing terms, the Committee approved the option for a 30-year financing term for commercial PACE projects, increasing the previous maximum financing term for commercial PACE by five years.
- The Committee moved to allow refinancing for commercial PACE (C-PACE) projects so long as there is demonstrated savings to the owner and that the financing term does not outlast the estimated useful life of the product.

PACE Financial Update

- The WRCOG PACE Program has generated approximately \$34 million since launching in 2011, with \$12.5 million used to fund regionally supportive programs and Agency reserves.
- PACE Program revenues began to decline in FY 2017/2018.
- Though residential PACE has experienced significant decline in activity, C-PACE has the potential to grow, as evidenced by the variety of commercial PACE providers interested in operating under WRCOG's umbrella. Since 2018, WRCOG has added five C-PACE providers.
- The Fellowship, Beyond, Grant Writing, and Experience Programs are being impacted by the reduction in revenue generated by PACE.

28th Annual General Assembly & Leadership Address Update

- The 28th Annual General Assembly and Leadership Conference will be held on Thursday, June 20, 2019, at Pechanga Resort Casino, featuring keynote speaker, Josh Earnest, White House Press Secretary under President Barak Obama (2014-2017).
- This year the General Assembly and Leadership Conference will be a full day event, to include the Future of Cities Symposium with panel discussions in the morning, followed by the traditional evening festivities.
- Staff announced that the nomination period is now open for the annual Community Service Award. Nominations for the award are due Friday, March 29, 2019.

Transportation Analysis Implications of Senate Bill (SB) 743

- SB 743, which takes effect July 1, 2020, changes how transportation impacts are measured under the California Environmental Quality Act from the current practice of measuring level of service to utilizing vehicle miles traveled (VMT).
- VMT is the new analysis metric for transportation that measures the miles driven in a car regardless of passengers.
- WRCOG prepared a regional study to help agencies implement SB 743, which includes a recommended methodology, thresholds, and tools that agencies can choose to adopt in their preparation.

Next Meeting

The next Administration & Finance Committee meeting is scheduled for Wednesday, April 10, 2019, at 12:00 p.m. in WRCOG's office, located at 3390 University Avenue, Suite 450, Riverside.



**Western Riverside Council of Governments
Planning Directors Committee
Meeting Recap
March 14, 2019**

Following is a summary of key items discussed at the last Planning Directors Committee meeting. To review the full agenda and staff reports, please click [here](#). To review the meeting PowerPoint presentation, please click [here](#).

Riverside Transit Agency Activities Update

- RTA Director of Planning, Rohan Kuruppu, provided an update to Committee members regarding RTA activities with a focus on TUMF-supported activities. RTA receives approximately 3% of TUMF funds for a variety of transit projects and improvements including; studies, bus stop and shelter improvements, and mobility hubs.
- Transit improvements RTA has recently or will soon facilitate include:
 - 80 shelter improvements completed since FY2017 and an additional 24 to be completed in FY 2019.
 - A mobility hub—a place where all modes of transportation, technology, and transit supportive land use come together—in Temecula with \$1.6 million TUMF funding.
 - Plans for a mobility hub in Hemet will use \$4.3 million in TUMF funding in addition to a UCR mobility hub, which will use \$3.5 million in TUMF funding and be completed in fall 2020.

Regional Energy Network Activates Update

- The Western Riverside Energy Partnership (WREP) is a collaborative including Southern California Edison (SCE), Southern California gas Company (SoCal Gas), WRCOG and 15 participating member cities. WREP works to achieve energy savings and reduce utility bills in municipal, commercial, and residential buildings through education, technical assistance, and incentive programs.
- Recent changes have imposed challenges for continuing WREP, including decreased funding, elimination of programs and elimination of strategic plan funding.
- In response to these challenges WRCOG is exploring possible alternatives, including a Regional Energy Network (REN). Similar to WREP, RENs offer support with energy efficiency and Program Administrators have a voice in program creation and implementation.
- In December 2018, the WRCOG's Executive Committee approved the release of an RFP for REN development in coordination with CVAG and SBCOG.
- To support an optimized REN for the subregion, members are asked to complete a survey that staff will be sending out to committee members by providing input on preferred program sectors for a regional REN, by Thursday, April 4th.

Commercial PACE Workshop

- WRCOG's Commercial PACE (C-PACE) Program includes two providers, GreenWorks Lending and CleanFund. With C-PACE, commercial property owners can finance seismic, energy efficient, and water conservation improvements, often for less money than traditional financing.

- WRCOG will be hosting a workshop on March 21, 2019, with presentations from GreenWorks Lending, K2 Clean Energy Capital and CleanFund, to explain the value and logistics of C-PACE and how it can be used to finance seismic improvements with no upfront costs to the building owner. PDC members are encouraged to attend the workshop.

Fee Comparison Analysis

- WRCOG has finalized the update to the 2016 Fee Comparison Analysis, which examined fees required of development projects, the effect of other development costs, and the economic benefits of transportation investment in local jurisdictions within and outside of the WRCOG subregion.
- Average development impact fees in WRCOG member jurisdictions are within the regional average range.
- Average residential development impact fees for WRCOG jurisdictions are lower than the average of selected San Bernardino County cities and higher than the average of selected Coachella Valley cities.
- Total development impact fees represent between 3.8% and 8.9% of total development costs and returns for the samples analyzed. Total development costs and returns include development impact fees, construction, land, engineering and architecture, and the developer's expected returns.
- TUMF represent between 0.7% and 2.2% of total development costs and returns for the development prototypes analyzed.
- Staff will return with data comparing WRCOG member jurisdictions' fees on a city-by-city basis.

Subregional Cannabis Ordinance Survey Results

- Staff provided a summary of results from a recent survey of member jurisdictions regarding local policies on cannabis activity.
- 17 jurisdictions participated; 10 out of 17 do not allow any cannabis activity.
- The 7 jurisdictions which do allow any activity predominantly allow cultivation and manufacturing.

Announcements

- SCAG has distributed a survey packet to local jurisdictions with three surveys about local planning factors related to RHNA methodology. Surveys are due by April 30, 2019.
 - If your jurisdiction has not received survey materials contact Ma'Ayn Johnson, johnson@scag.ca.gov.
- WRCOG is currently exploring the pros and cons of Subregional Delegation, to assume responsibility for preparing the subregional housing needs allocation in place of SCAG for the sixth cycle of RHNA. Staff will be bringing the option forward for consideration by the WRCOG committee structure over the next few months. A final decision must be made by June 28, 2019.

Next Meeting

The next Planning Directors Committee meeting is scheduled for Thursday, April 11, 2019 at WRCOG's office, located at 3390 University Avenue, Suite 450, Riverside.



**Western Riverside Council of Governments
Public Works Committee
Meeting Recap
March 14, 2019**

Following is a summary of key items discussed at the last Public Works Committee meeting. To review the full agenda and staff reports, please click [here](#). To review the meeting PowerPoint presentation, please click [here](#).

Regional Energy Network Development Update

- Staff provided a summary of Local Government Partnerships (LGPs), such as the Western Riverside Energy Partnership (WREP), and announced that WRCOG is in the process of selecting a firm to explore the potential benefits of evolving WREP into a Regional Energy Network (REN) with the San Bernardino Council of Governments and Coachella Valley Association of Governments to better serve the region.
- Staff will circulate a survey to member agencies to identify potential program ideas and will periodically return to the Committee with updates once a consultant has been selected and the project is underway.

Assembly Bill 2766 Report and Available Funding to Local Jurisdictions

- South Coast Air Quality Management District (SCAQMD) staff presented an overview of the most recent AB 2766 annual report data, eligible items for funding with AB 2766 funds, and WRCOG local government activities funded with AB 2766 funds.

2019 TUMF Network Administrative Amendment

- Staff presented an administrative amendment to the TUMF Network which would designate the Cherry Valley Boulevard Interchange, Highland Springs Avenue Interchange, and I-10 Bypass as regional projects.
- The Committee recommended that the Executive Committee approve the 2019 TUMF Network Administrative Amendment.

Understanding the Transportation Analysis Implications of Senate Bill 743

- Staff presented a summary of the study WRCOG undertook to develop localized guidelines, thresholds, and mitigation measures related to SB 743. This study was funded through the Southern California Association of Governments' Sustainability Planning Grant Program.
- Fehr and Peers staff presented an online tool that is in development to serve as a screening tool for potential VMT impacts associated with select land use projects in the WRCOG subregion.
- Staff announced a series of workshops that will be held to share information on implementation of SB 743 and strategies of VMT analysis.

Fee Comparison Analysis

- WRCOG has finalized the update to the 2016 Fee Comparison Analysis, which examined fees required of development projects, the effect of other development costs, and the economic benefits of transportation investment in local jurisdictions within and outside of the WRCOG subregion.

- Average development impact fees in WRCOG member jurisdictions are within the regional average range.
- Average residential development impact fees for WRCOG jurisdictions are lower than the average of selected San Bernardino County cities and higher than the average of selected Coachella Valley cities.
- Total development impact fees represent between 3.8% and 8.9% of total development costs and returns for the development prototypes analyzed. For the purposes of this analysis, total development costs and returns include costs such as development impact fees, construction, land, engineering and architecture, and the developer's expected returns.
- TUMF represent between 0.7% and 2.2% of total development costs and returns for the development prototypes analyzed.
- Staff will return with data comparing WRCOG member jurisdictions' fees on a city-by-city basis.

Next Meeting

The next Public Works Committee meeting is scheduled for Thursday, April 11, 2019, at 2:00 p.m., in WRCOG's office, located at 3390 University Avenue, Suite 450, Riverside.



Western Riverside Council of Governments Public Works Committee

Staff Report

Subject: TUMF Revenue and Expenditures Update

Contact: Andrew Ruiz, Interim Chief Financial Officer, aruiz@wrcog.us, (951) 405-6741

Date: April 11, 2019

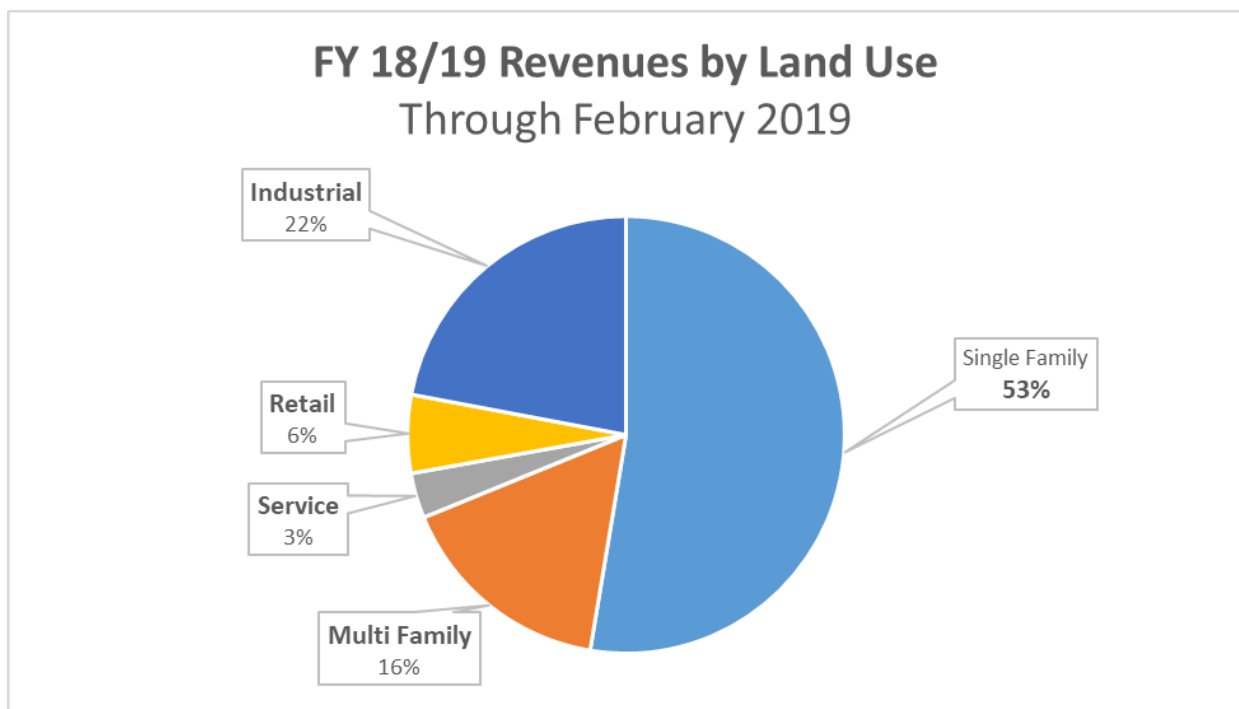
The purpose of this item is to provide an update on the TUMF revenues, expenditures, and reimbursements for the current month and since Program inception.

Requested Action:

1. Receive and file.
-

February 2019 Remittances

For the month of February 2019, the TUMF Program collected \$4,914,210. As shown in the chart below, of the \$40 million collected this fiscal year to date, approximately 53%, or \$21 million, has been from single-family residential projects, followed by approximately 22%, or \$9 million, from industrial projects.



March 2019 Reimbursements

TUMF reimbursements were made for the following projects during March 2019:

- Central Zone: Scott Road / I-215 Interchange
- Central Zone: Moreno Beach Drive Interchange Phase II
- Northwest Zone: Temescal Canyon Road Widening
- Southwest Zone: Clinton Keith Road Extension

Member agencies are encouraged to submit reimbursement requests as project costs are incurred for projects that have available funding on the appropriate, approved Transportation Improvement Program (TIP) for the current fiscal year. Staff preference is that reimbursement requests generally be submitted in increments of no less than \$10,000.

Historic Payments and Collections

To date, revenues received into the TUMF Program total \$819,722,857. Interest amounts to \$33,618,427, for a total collection of \$853,341,284.

WRCOG has dispersed a total of \$396,470,143 primarily through project reimbursements and refunds, and \$25,244,216 in administrative expenses.

The Riverside County Transportation Commission shared payments have totaled \$368,997,965 through March 31, 2019.

Prior Action:

None.

Fiscal Impact:

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

Attachment:

1. Summary TUMF Program revenues.

Item 6.B

TUMF Revenue and Expenditures
Update

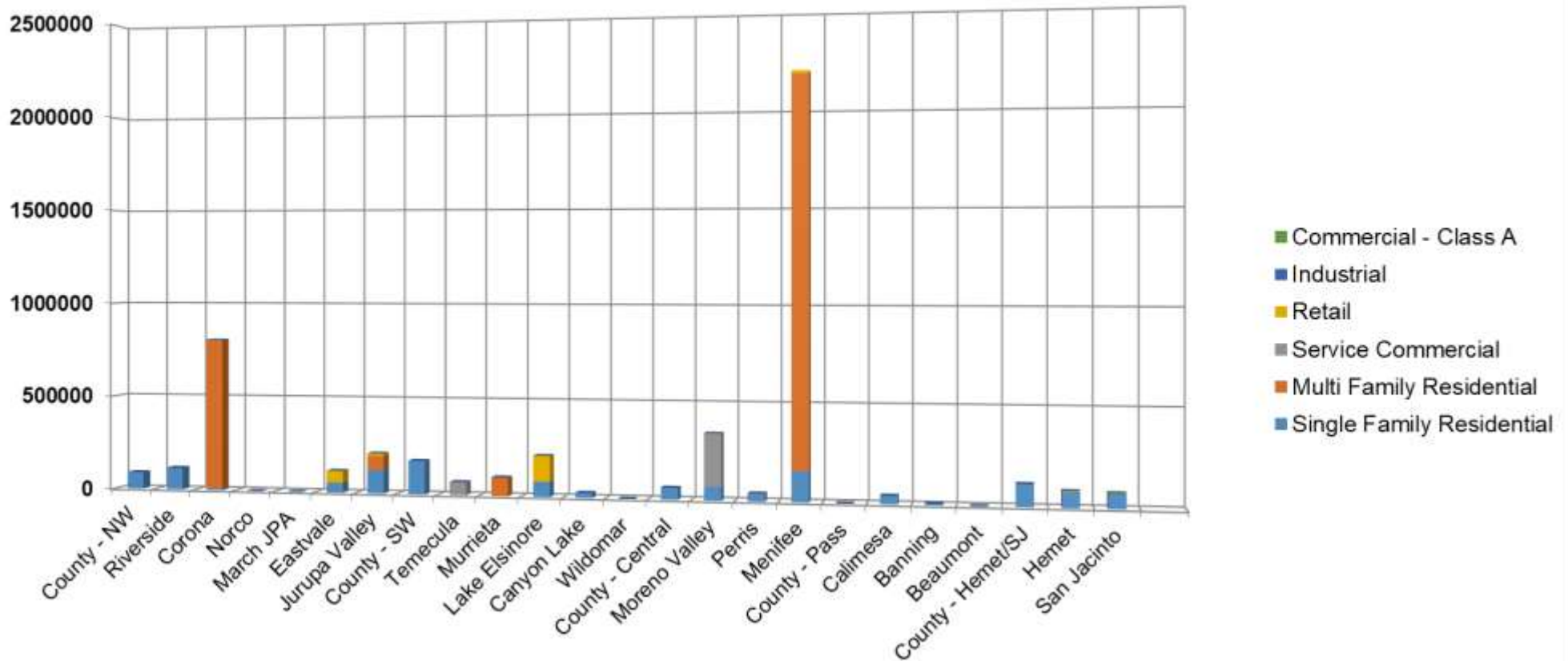
Attachment 1

Summary TUMF Program revenues

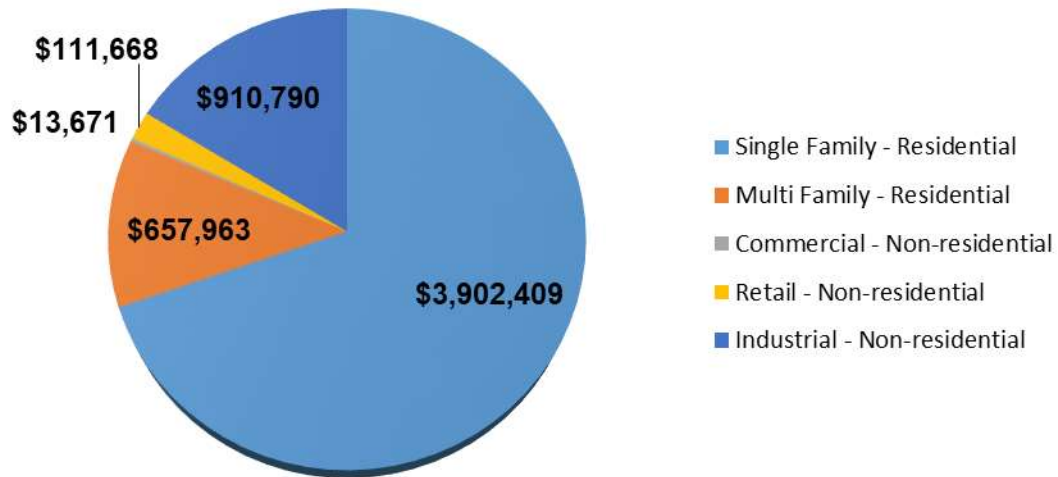
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February 2019 TUMF Revenues by Jurisdiction

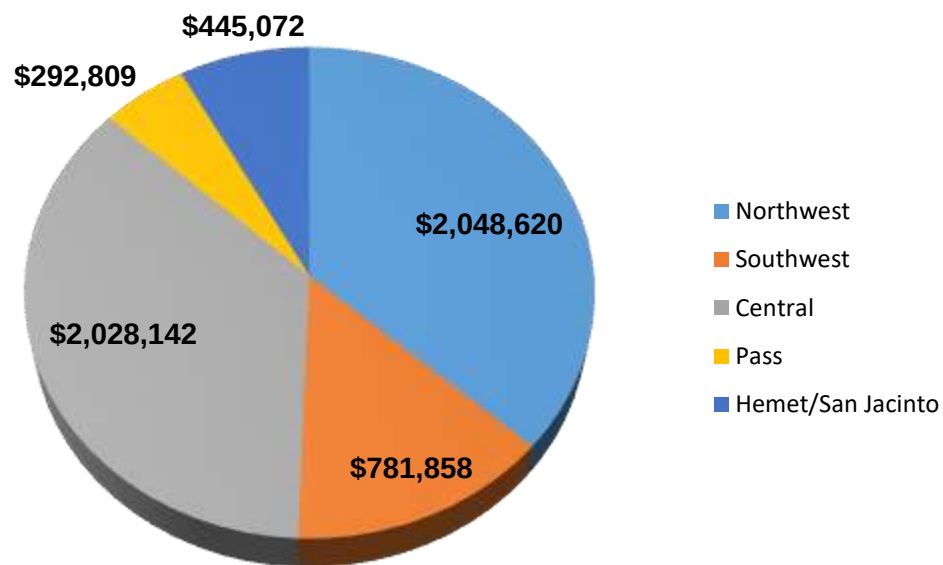
Total Revenue - \$4,914,210



February 2019 TUMF revenues by land-use type



February 2019 TUMF Revenues by Zone



	Fiscal Year	2018						2019		Fiscal Year
Jurisdiction	17-18	July	August	September	October	November	December	January	February	18-19
Banning	\$34,831	\$0	\$0	\$0	\$0	\$8,873	\$0	\$0	\$8,873	\$26,619
Beaumont	\$1,122,229	\$266,190	\$177,460	\$640,153	\$0	\$204,079	\$150,841	\$292,809	\$0	\$1,731,532
Calimesa	\$17,782	\$8,873	\$0	\$8,873	\$8,873	\$0	\$0	\$57,722	\$44,365	\$128,706
Canyon Lake	\$84,301	\$17,746	\$0	\$8,873	\$0	\$8,873	\$0	\$0	\$26,619	\$62,111
Corona	\$1,789,431	\$133,095	\$62,111	\$86,141	\$754,985	\$797,314	\$141,968	\$352,770	\$807,820	\$3,490,205
Eastvale	\$4,234,019	\$0	\$62,111	\$88,010	\$0	\$246,082	\$0	\$128,176	\$116,666	\$641,044
Hemet	\$655,213	\$18,292	\$4,359	\$24,770	\$141,968	\$34,365	\$0	\$71,557	\$85,460	\$380,771
Jurupa Valley	\$5,613,221	\$283,936	\$603,364	\$882,363	\$480,879	\$440,450	\$141,968	\$178,772	\$212,140	\$3,640,313
Lake Elsinore	\$4,042,675	\$53,238	\$115,349	\$452,523	\$17,746	\$60,551	\$125,560	\$143,578	\$215,307	\$1,183,851
March JPA	\$2,009,269	\$0	\$0	\$154,348	\$742,413	\$0	\$0	\$0	\$0	\$896,761
Menifee	\$3,221,139	\$0	\$460,096	\$342,134	\$285,916	\$296,045	\$355,151	\$251,990	\$2,200,434	\$4,191,765
Moreno Valley	\$6,971,308	\$523,507	\$1,125,812	\$194,029	\$1,594,874	\$1,767,561	\$0	\$478,630	\$345,642	\$6,030,054
Murrieta	\$3,142,420	\$354,034	\$259,801	\$257,317	\$150,841	\$70,984	\$0	\$112,370	\$98,144	\$1,303,492
Norco	\$253,632	\$5,424	\$205,656	\$0	\$748,545	\$0	\$8,873	\$168,456	\$0	\$1,136,954
Perris	\$769,084	\$301,682	\$17,746	\$593,560	\$0	\$35,492	\$146,897	\$141,968	\$41,412	\$1,394,106
Riverside	\$3,567,176	\$1,564,054	\$280,738	\$146,047	\$647,399	\$1,426,528	\$115,349	\$127,141	\$116,431	\$4,423,686
San Jacinto	\$2,445,168	\$409,034	\$70,984	\$177,460	\$292,809	\$120,681	\$35,492	\$452,523	\$79,857	\$1,638,840
Temecula	\$1,822,548	\$91,212	\$259,701	\$1,267	\$177,329	\$65,991	\$21,905	\$62,111	\$69,622	\$749,138
Wildomar	\$1,309,894	\$35,492	\$8,873	\$8,873	\$67,119	\$0	\$110,882	\$0	\$0	\$231,239
County Central	\$3,779,337	\$1,202,953	\$239,571	\$44,365	\$150,841	\$26,619	\$186,333	\$26,619	\$62,111	\$1,939,412
County Hemet/S.J.	\$515,274	\$17,746	\$12,092	\$380,390	\$44,953	\$74,532	\$8,873	\$159,708	\$117,118	\$815,412
County Northwest	\$2,169,944	\$62,111	\$106,476	\$177,460	\$17,746	\$416,033	\$80,583	\$354,920	\$88,730	\$1,304,059
County Pass	\$144,898	\$17,746	\$8,873	\$0	\$0	\$26,619	\$0	\$26,619	\$0	\$79,857
County Southwest	\$3,700,525	\$230,136	\$366,272	\$737,857	\$834,498	\$116,277	\$384,733	\$706,435	\$177,460	\$3,553,668
Total	\$ 53,415,318	\$ 5,596,500	\$4,447,445	\$ 5,406,812	\$ 7,159,735	\$6,243,949	\$2,015,407	\$ 4,294,872	\$4,914,210	\$ 40,973,593

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Western Riverside Council of Governments

Public Works Committee

Staff Report

Subject: High Cube Warehouse Trip Generation Study Update

Contact: Daniel Ramirez-Cornejo, Program Manager, dramirez-cornejo@wrcog.us, (951) 405-6712

Date: April 11, 2019

The purpose of this item is to provide updated information regarding a proposed adjustment to the TUMF Fee Calculation Handbook based on data from the Trip Generation Study.

Requested Action:

1. Receive and file.

WRCOG's Transportation Uniform Mitigation Fee (TUMF) Program is a regional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in Western Riverside County. Each of WRCOG's member jurisdictions and the March JPA participates in the Program through an adopted ordinance, collects fees from new development, and remits the fees to WRCOG. WRCOG, as administrator of the TUMF Program, allocates TUMF to the Riverside County Transportation Commission (RCTC), groupings of jurisdictions – referred to as TUMF Zones – based on the amounts of fees collected in these groups, the Western Riverside County Regional Conservation Authority (RCA) and the Riverside Transit Agency (RTA).

High Cube Warehouse Trip Generation Study

During the 2016 TUMF Nexus Study update process, staff received questions from several stakeholders regarding the TUMF calculation for industrial uses. These commenters questioned whether the TUMF Nexus Study accurately reflected the impact of various types of industrial uses on the Regional Network.

In spring 2018, the Public Works Committee (PWC) requested that staff review the available data and undertake a study to provide additional information to address this issue. Based on current development patterns, it was determined that one of the most common type of industrial projects currently being built in Western Riverside County are distribution or fulfillment centers. These types of projects involve the delivery of packages on trucks, which are then sorted and then delivered to individual homes. The prototypical type of this project is operated by Amazon, for example, though they are becoming increasingly common as various retailers focus more on internet sales as opposed to traditional brick and mortar operations.

Currently, these types of uses are treated as high-cube warehouses, similar to the Sketchers facility in Moreno Valley. For the purpose of determining the TUMF obligation, high-cube warehouses and distribution centers are defined as follows:

Very large shell buildings commonly constructed using steel framed and/or concrete tilt-up techniques with a minimum gross floor area of 200,000 square feet, a minimum ceiling height of 24 feet, and a minimum dock-high door loading ratio of 1 door per 10,000 square feet.

A previous study of high-cube warehouses determined that these types of uses have fewer employees and

generate few trips per square foot than traditional warehouses, mainly because the majority of the building is dedicated to the storage of goods. Because of this previous study, WRCOG developed a specific calculation to determine the TUMF fee for these high-cube warehouses.

This new analysis focused primarily on whether distribution and fulfillment centers generate similar levels of traffic to other high-cube warehouses or have significant different travel patterns. During our initial review, WRCOG identified that there had been some data previously collected for a distribution center, which showed traffic levels were substantially higher than other warehouse uses. After reviewing this data, it was determined that this conclusion was based on a single site and WRCOG needed to collect additional data to reflect a broad cross-section of facilities to more accurately address this issue. This data collection had two primary questions to address:

1. Do fulfillment and distribution centers generate significant higher numbers of trips than our current estimates for high-cube warehouses?
2. If there is a difference in trip generation, does it justify creating an entire new category for these facilities in our Fee Calculation Handbook?

WRCOG consulted several members of the PWC, including representatives from the Cities of Eastvale, Jurupa Valley, Moreno Valley, Perris, and Riverside, and met to identify locations to collect data at distribution and fulfillment centers within and around Western Riverside County. WRCOG also asked these agencies to review any data collected and to also make recommendations on how to proceed.

WRCOG retained WSP to conduct the study; traffic counts were collected at 16 sites over a 72-hour period for three midweek days beginning on June 26, 2018. In December 2018, staff provided a presentation on the findings of the study to the PWC. Since the presentation on this item to the PWC, staff has received comments from stakeholders. Staff would note that the land uses selected represent high-cube warehouses in the region and, for TUMF calculation purposes, this is generally the only information provided when a fee obligation is calculated. Since TUMF is assessed and/or collected at issuance of building permit, the end use of the development project is not known. The data collection at the 16 sites represented the type of development that is continuing to occur in the region.

The study is included as Attachment 1 to this Staff Report. The conclusions of the study are as follows:

1. Fulfillment and distribution centers do generate more trips per square footage than other high-cube warehouses. This higher trip generation is associated with higher numbers of employees and also passenger cars making package deliveries to customers.
2. The level of difference is not sufficiently large enough to justify the creation of entire new category in the Fee Calculation Handbook

Proposed Adjustment to High Cube Warehouse Calculation Worksheet

Based on the findings of the study, staff recommends an adjustment to the current High-Cube Warehouse TUMF calculation component in the TUMF Fee Calculation Handbook to better to address the higher numbers of trips generated by large fulfillment centers as opposed to traditional high-cube warehouses. This approach would recognize that fulfillment centers are a subset of the general High-Cube Warehouse Fee calculation category.

The proposed adjustment to the calculation worksheet for high-cube warehouses would increase the multiplier from 0.32 to 0.36 and is as follows:

Worksheet A.2.8 High-Cube Warehouse TUMF Calculation Worksheet

Enter Gross Floor Area of Qualifying Building(s) (in square feet)	- 200,000 =		← Total A
Enter Total A	x 0.36 =		← Total B
Enter Total B	+ 200,000 =		Enter this value as (part of) the <u>Total Gross Floor Area of Industrial Buildings</u> in Worksheet A.2.1

For High-Cube warehouses that are approximately 250,000 square feet, this update would result in an approximate \$3,500 difference, or approximately 1%, increase in fees. For larger projects, such as a one million square foot warehouse, this update would increase fees by approximately \$56,000, representing an approximate 7% increase based on current fees. It should be noted that the total TUMF assessment on a building of this size is approximately \$1.8 Million. Based on the findings of staff review of Development Impact Fees throughout the WRCOG subregion, staff concludes that the likely cost to develop a project of this size would be in excess of \$100 Million, indicating that the overall impact on this type of project with the highest level of fee increase would be nominal (0.05% of total development cost).

For reference, attached to this Staff Report is a version of the TUMF Fee Calculation Handbook showing these proposed revisions (Attachment 2).

At the February 21, 2019, Technical Advisory Committee meeting, several Committee members asked whether WRCOG reviewed the offset of trips generated by the uses job creation for residents and requested that WRCOG review the impacts of these uses on the transportation network with regard to job creation for residents of the agencies in which these facilities are located. Several Committee members stated that these projects are beneficial to the region in terms of local job creation and any change in the fee should reflect this benefit.

Because of these comments, staff conducted further analysis from two areas in the Cities of Jurupa Valley and Moreno Valley where these uses are located. The analysis collected data from a vendor called Streetlight, which uses cell phone, GPS, fleet data, and other sources, to track personal and vehicular travel throughout a region. This analysis determined that the average work trip length for these projects was in excess of 15 miles one-way, which is consistent with the average trip length for the WRCOG region. Additionally, this analysis also demonstrated that the traffic from these traveled through the WRCOG region, similar to other uses studied previously. As such, WRCOG can conclude that these types of uses do not behave differently than other employment uses within the Region and therefore, it would be appropriate to proceed with this adjustment to the TMF Fee Calculation Handbook.

Prior Actions:

February 21, 2019: The Technical Advisory Committee received and filed.

February 14, 2019: The Public Works Committee recommended that 1) the Executive Committee approve the proposed revisions to the High Cube Warehouse section of the TUMF Fee Calculation Handbook; 2) the Executive Committee approve the proposed revisions to

the TUMF Fee Calculation Handbook to include clarification language on the 3,000 square foot deduction policy for retail and service uses; and 3) staff continue the policy of calculating credit for existing uses utilizing fee rates in effect at the time a projects TUMF obligation is assessed.

December 13, 2018: The Public Works Committee directed staff to adjust the High-Cube Warehouse component of the TUMF Fee Calculation Handbook with the data from the Trip Generation Study.

Fiscal Impact:

Transportation Department activities are included in the Agency's adopted FY 2018/2019 Budget under the Transportation Department.

Attachments:

1. Trip Generation Study Technical Memorandum.
2. Section 1.1., High-Cube Warehouses, of the TUMF Fee Calculation Handbook.

Item 6.C

High Cube Warehouse Trip
Generation Study Update

Attachment 1

Trip Generation Study Technical
Memorandum

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To: Daniel Ramirez-Cornejo, Program Manager, WRCOG

From: Billy Park, Supervising Transportation Planner, WSP

Subject: TUMF High-Cube Warehouse Trip Generation Study

Date: January 29, 2019

Background

High-cube warehousing is emerging as an important development type in the Inland Empire. Studies such as *Logistics & Distribution: An Answer to Regional Upward Social Mobility*¹ and *Multi-County Goods Movement Action Plan*² suggests that this trend is likely to increase over time due to the Inland Empire's relative abundance of suitable sites compared to coastal counties.

A recurring analytical problem for the analyses of traffic impacts associated with proposed high-cube warehouses is the lack of reliable data regarding the number and vehicle mix of trips generated by this land development type. Specifically:

- The 2003 *Fontana Truck Trip Generation Study*, which has been used for years by agencies in the Inland Empire, is based on the older type of high-cube warehouse. Newer warehouses generally are larger (often over 1 million square feet), much more automated, and generate far fewer trips per square foot.
- The use of overly-conservative estimates has produced results that were unreasonable when compared to actual field conditions. For example, the Environmental Impact Report (EIR) for the Skechers high-cube warehouse building in Moreno Valley included traffic forecasts that were substantially higher than the actual post-construction trip generation for both cars and trucks. Overstated forecasts are misleading to decision makers and could result in oversized infrastructure that could itself have environmental consequences, creates an undue burden on development, and could even have adverse legal consequences for the agencies involved.
- In 2011 the Commercial Real Estate Development Association, also known by its former acronym NAIOP, commissioned a trip generation study of high-cube warehouses focused on large highly-automated warehouses in the Inland Empire. NAIOP had hoped that their study, which found trip-gen rates considerably lower than previous studies, would be used in CEQA analyses going forward. However, concerns about potential bias by the sponsoring party have placed into question the validity of the study results. Similarly, a study commissioned by SCAQMD was viewed as possibly having an anti-development bias.
- Finally, in 2015 NAIOP and SCAQMD jointly sponsored a trip-gen study for high-cube warehouses through a respected neutral party, the Institute of Transportation Engineers (ITE). The report for this study, *High-Cube Warehouse Vehicle Trip Generation Analysis*, was completed in 2016.

The joint NAIOP/SCAQMD/ITE study resulted in a consensus on the trip generation rates to be used for the most common type of high-cube warehouse, a category they call "transload and short-term storage". The findings of the joint study generally indicated the trip generation rates for this use as being consistent with the trip generation rates for the broader category of high-cube warehouses as described by ITE in the 9th Edition of the *Trip*

¹ *Logistics & Distribution: An Answer to Regional Upward Social Mobility*, Dr. John Husing for SCAG, June 2004

² *Multi-County Goods Movement Action Plan*, Wilbur Smith Associates, August 2008

Generation Manual. However, the report did not settle the issue of trip generation rates for two other specific types of high-cube warehouses:

“The single data points for fulfillment centers and parcel hubs indicate that they have significantly different vehicle trip generation characteristics compared to other HCWs. However, there are insufficient data from which to derive useable trip generation rates.”

The purpose of this technical memorandum is to gather sufficient data to develop reliable trip generation rates for fulfillment centers and parcel hubs for use in traffic impact studies in the Inland Empire.

Methodology

Number of Sites: The study team reviewed ITE’s *Trip Generation Handbook 2nd Edition*, Chapter 4 of which describes how to perform a trip generation study that meets ITE’s standards (which improves the defensibility of the results if they are used for CEQA analyses). ITE recommends that at least three sites, and preferably five, be surveyed for a given land use category. Based on the review of candidate sites identified by Western Riverside Council of Governments (WRCOG) staff, it was recommended that data be collected at a total of 16 sites for the purposes of this study.

Independent Variables: ITE’s *Trip Generation Manual* measures the size of proposed developments using more than a dozen different independent variables, such as students (for schools), acres (for parks), etc. All High-Cube related categories in both 9th and 10th Editions of the *Trip Generation Manual* are reported in Square Foot Gross Floor Area (GFA) measured in thousands of square feet (TSF), which is also the independent variable used for the TUMF program. Some other ITE employment categories use employment as the independent variable, as does SCAG in its Sustainable Communities Strategy. WRCOG provided GFA for all sites and employment data for eight fulfillment centers and one parcel hub site.

The ITE *Trip Generation Manual* typically reports trip generation rates two ways; namely as the average rate and using the “best fit” mathematical relationship between the number of trips generated and the independent variable. R-squared, also known as the coefficient of determination, is used to measure how well the best fit equations match the surveyed traffic counts. The *Trip Generation Manual* recommends that the best fit equation only be used when the R^2 is greater than or equal to 0.50 and certain other conditions being met; otherwise the average rate should be used.

Data Collection

WRCOG provided a list of recommended trip generation study sites after reviewing potential sites within the Inland Empire with its member agencies. The list included 11 fulfillment centers and 5 parcel hub sites as follows:

Fulfillment Centers

1. Walmart: 6750 Kimball Ave, Chino, CA 91708
2. Amazon: 24208 San Michele Rd, Moreno Valley, CA 92551
3. Lineage Logistics: 1001 Columbia Ave Riverside, CA 92507
4. P&G: 16110 Cosmos Street, Moreno Valley, CA 92551
5. Big 5: 6125 Sycamore Canyon Blvd, Riverside, CA 92507
6. Nestle USA: 3450 Dulles Drive, Jurupa Valley, CA
7. Home Depot: 11650 Venture Drive, Jurupa Valley, CA
8. ACT Fulfillment Center: 3155 Universe Drive, Jurupa Valley, CA
9. Petco: 4345 Parkhurst Street, Jurupa Valley, CA
10. Komer: 11850 Riverside Drive, Jurupa Valley, CA
11. Ross: 3404 Indian Ave Perris, CA 92571

Parcel Hubs

12. UPS: 15801 Meridian Pkwy, Riverside, CA 92518
13. FedEx: 330 Resource Dr, Bloomington, CA 92316
14. FedEx Freight: 12100 Riverside Drive, Jurupa Valley, CA
15. UPS Chain Logistics: 11811/11991 Landon Drive, Jurupa Valley, CA
16. DHL: 12249 Holly St N, Riverside, CA 92509

Traffic counts were collected at all of these sites. These were 72-hour driveway counts collected using video cameras for three-midweek days starting June 26, 2018. Video collection was determined to be preferable to collection data by means of machine counts, which can be problematic for driveways where vehicles are maneuvering at slow speeds. Video counts provide the ability for human viewers to review the captured footage to classify vehicles into 5 types (car, large 2-axle, 3-axle, 4-axle, and 5+ axle truck). The three-day average was calculated and used for the purposes of this study.

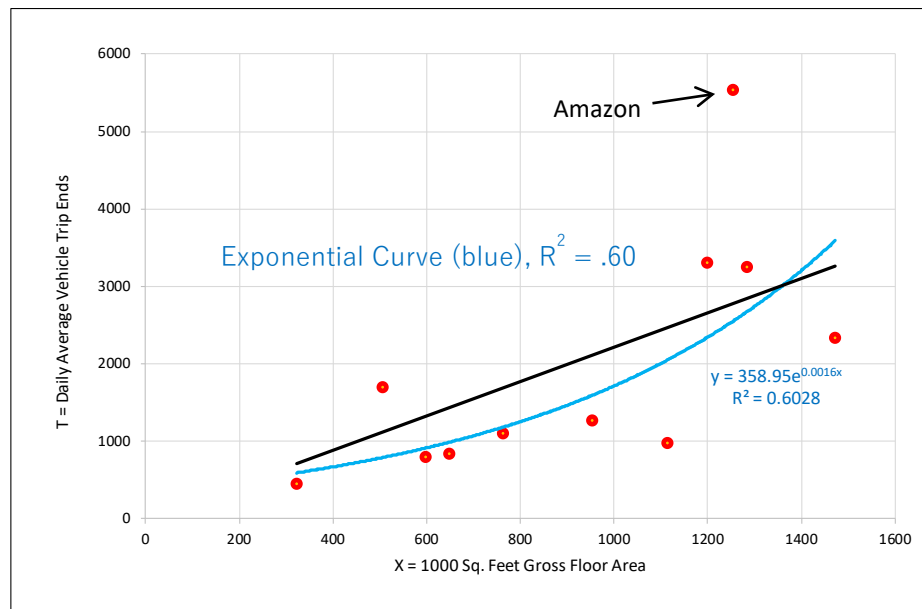
Fulfillment Centers

By Building Size

Exhibit 1 displays a data plot of daily vehicle trips for the 11 fulfillment centers against building size as the independent variable. The average trip generation rate for fulfillment centers (see black line in Exhibit 1) was found to be 2.2 trips/TSF, compared to the 1.4 trips/TSF found for conventional high-cube warehouses in the ITE/SCAQMD/NAIOP study (i.e. about 50% higher).

Exhibit 1 denotes one outlier data point representing the Amazon site in the upper right of the chart. As shown, the average daily trips generated at this facility is over 50% higher than the trips generated at the two sites of similar size (Walmart and Ross), which appears indicative of a greater frequency of same day e-commerce deliveries from Amazon to individual consumers.

Exhibit 1: Data Plot for Daily Total Vehicle Trip Ends against Building Size (Fulfillment Center)



The best fit equation was an exponential relationship with R^2 of 0.60 (i.e. high enough to meet the criteria of acceptability). This is shown as a blue line in Exhibit 1. An exponential relationship, meaning that the larger the

building the higher the trip generation rate, is quite unusual. Exhibit 2 takes a deeper look at this by showing the daily vehicle trip generation rates for each of the 11 surveyed fulfillment centers sorted by the smallest to the largest building size from left to right. As shown, small sites tend to generate fewer trips per thousand square feet, but higher percentage of trucks. On the other hand, largest sites tend to generate a higher number of car trips, but fewer truck trips. So not only is the overall trip generation rate affected by building size, the vehicle mix is affected as well.

Exhibit 2: Daily Vehicle Trip Generation Rates by Building Size for Each Fulfillment Center

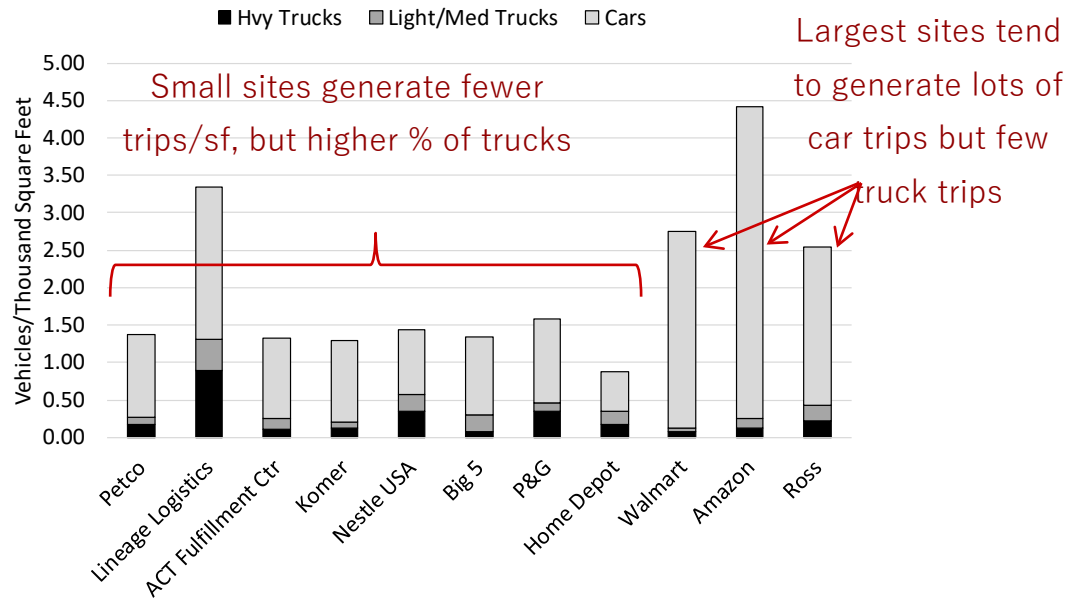


Exhibit 3 and Exhibit 4 show data plots for AM and PM peak hour vehicle trip ends against building size (respectively). The fitted curves had a low R^2 , and so we recommend using the average rate.

Exhibit 3: Data Plot for AM Peak Hour Vehicle Trip Ends against Building Size (Fulfillment Center)

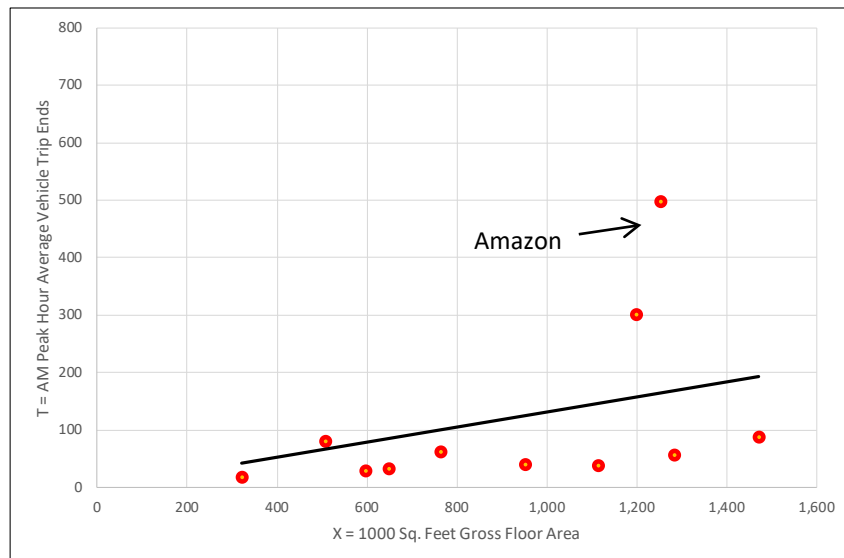


Exhibit 4: Data Plot for PM Peak Hour Vehicle Trip Ends against Building Size (Fulfillment Center)

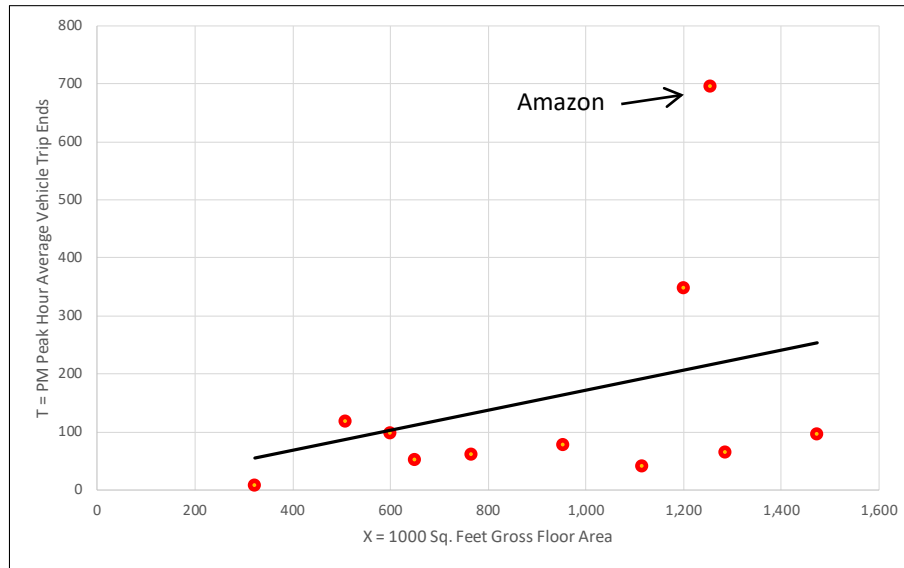
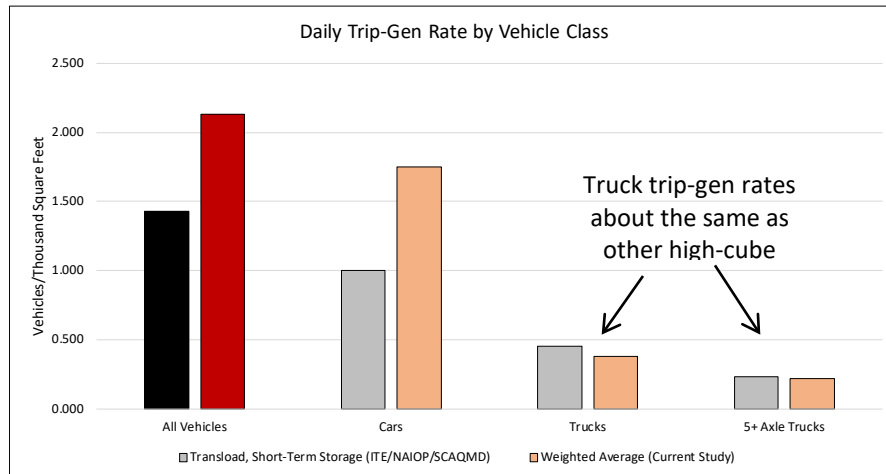


Exhibit 5 compares the average trip generation rates of 11 fulfillment centers with the rates found for conventional transload and short-term storage warehouses in the 2016 high-cube warehouse trip generation study³ by SCAQMD/NAIOP/ITE. As shown, the fulfillment centers generate more daily vehicle trips than conventional warehouse facilities although trucks are roughly the same. This means that the additional trips by fulfillment centers are entirely due to additional car traffic, which is almost double the rate of car trips generated by conventional warehouses.

Exhibit 5: Conventional Warehouse vs Fulfillment Centers



Visual observation of the fulfillment center sites indicates the higher trip generation rates for cars appears to be mostly due to the use vans and passenger cars as delivery vehicles, particularly for the larger facilities operated by retailers such as Amazon and Walmart.

³ *High-Cube Warehouse Vehicle Trip Generation Analysis*, Institute of Transportation Engineers, 2016

Exhibit 6 summarizes the AM and PM peak hour trip rates and the daily rates for fulfillment centers based on the findings of this study, and compares the results to rates for conventional transload and short-term storage warehouses.

Exhibit 6: Summary of Trip Generation Rates per Thousand Square Feet of Gross Floor Area for Fulfillment Centers

Vehicle Class	AM Peak Hour		PM Peak Hour		Daily	
	Conventional Warehouse*	Fulfillment Center	Conventional Warehouse	Fulfillment Center	Conventional Warehouse	Fulfillment Center
Cars	0.057	0.103	0.086	0.144	1.000	1.750
2-4 Axle Trucks	0.009	0.008	0.013	0.011	0.221	0.162
5-Axle Trucks	0.015	0.011	0.010	0.010	0.233	0.217
Total	0.082	0.122	0.108	0.165	1.432	2.129
% Higher than Conventional	49%		52%		49%	

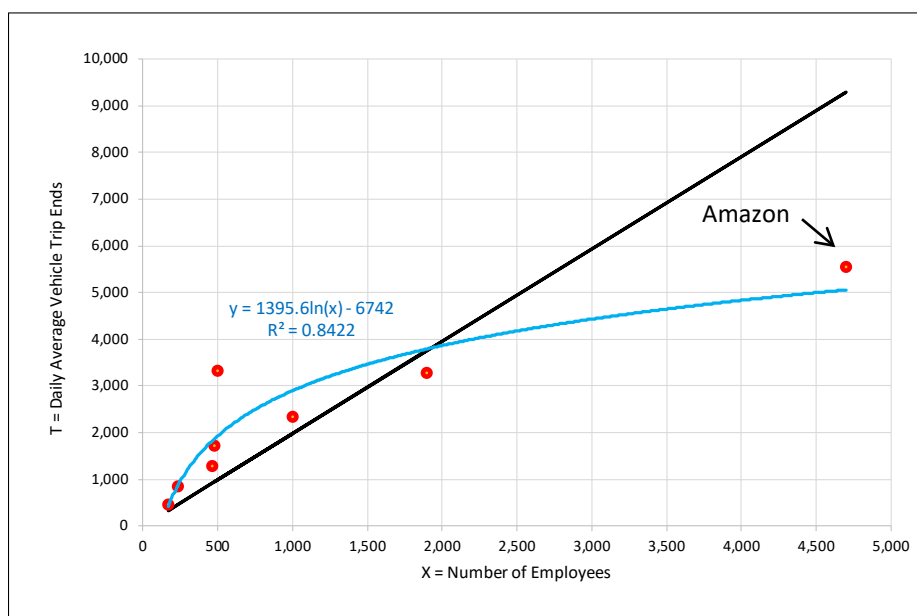
* Transload, Short-Term Storage category in 2016 TIE/ NAIOP/ SCAQMD study

By Employee

The WRCOG contacted the surveyed fulfillment centers and obtained employment data for eight of the eleven sites. Exhibit 7 shows a data plot for those eight sites for daily total vehicle trip ends against the number of employees. The best fit equation was logarithmic function which had an R^2 of 0.84, indicating a very good fit. Notably, the Amazon site, which was an outlier for trip generation based on floor area (see Exhibit 1), correlates more closely to other sites when employment is used instead. The average trip generation rate for fulfillment centers (represented by the black line in Exhibit 7) was found to be 2.0 trips/TSF

No comparison was made to any previous rates per employees because none of the previous high-cube warehouse related trip generation studies included correlation of trips with employment data.

Exhibit 7: Data Plot for Daily Total Vehicle Trip Ends against Employee (Fulfillment Center)



The data plots for the AM and PM peak hour total vehicle trip ends against the number of fulfillment center employees are shown in Exhibit 8 and Exhibit 9. The best fit equations are linear regressions (shown with black lines) which show a good R^2 for both the AM and PM peak periods.

Exhibit 8: Data Plot for AM Peak Hour Total Vehicle Trip Ends against Employee (Fulfillment Center)

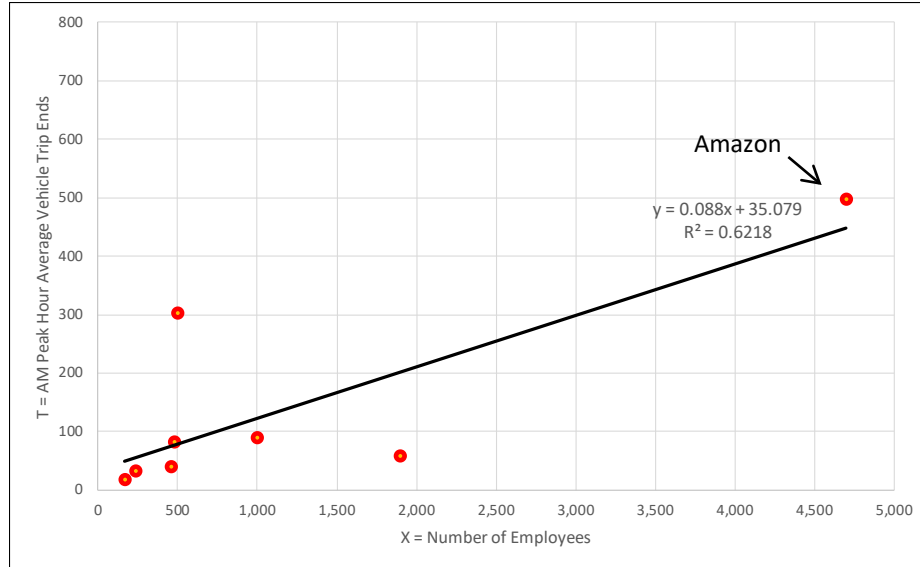


Exhibit 9: Data Plot for PM Peak Hour Total Vehicle Trip Ends against Employee (Fulfillment Center)

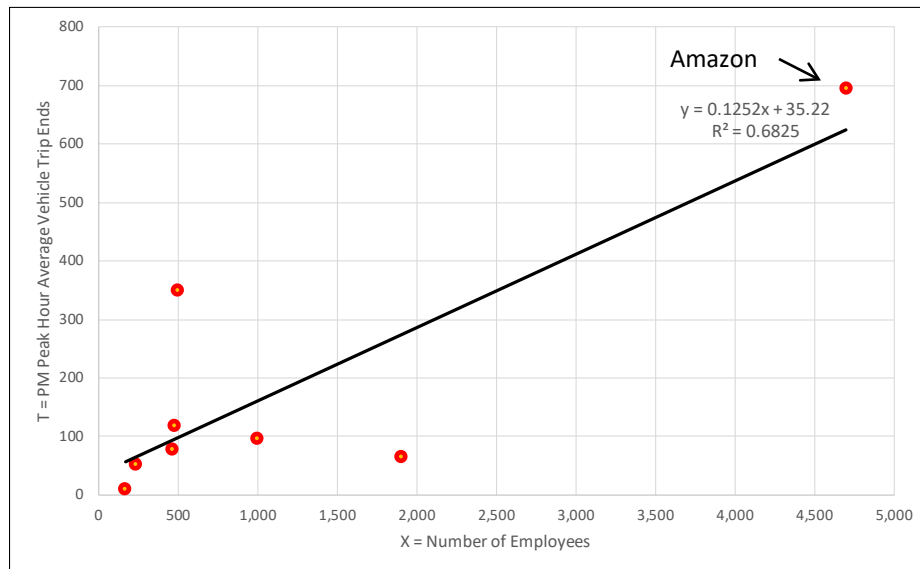


Exhibit 10 summarizes the AM and PM peak hour trip rates and the daily rates for trip generation per employee at fulfillment centers based on the findings of this study.

Exhibit 10: Summary of Trip Generation Rates per Employee for Fulfillment Centers

Vehicle Class	AM Peak Hour	PM Peak Hour	Daily
Cars	0.102	0.139	1.673
2-4 Axle Trucks	0.006	0.008	0.125
5-Axle Trucks	0.009	0.008	0.178
Total	0.118	0.155	1.977

Parcel Hubs

By Building Size

Exhibit 11 displays daily vehicle trip generation rates by building size for each of five parcel hub sites. They are sorted by the smallest to the largest building size from left to right. In this case the small sites generate significantly more trips of every kind than the larger sites, which is the opposite to the pattern observed for fulfillment centers.

Exhibit 11: Daily Trip Generation Rates at Parcel Hubs

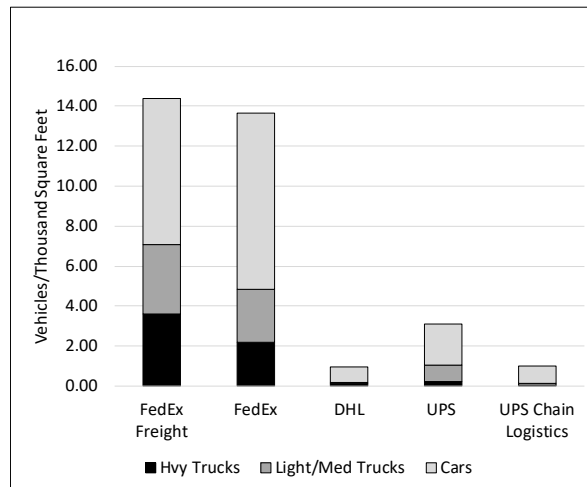


Exhibit 12 shows a data plot of daily vehicle trips of five parcel hubs against building size. As shown, a linear best fit was negative. During the collection of traffic data, construction activity was observed at the FedEx site potentially tainting the validity of these data to represent typical trip generation characteristics. To determine if the trip generation at this site was contributing to the poor data correlation, Exhibit 13 displays the same daily data plot without the FedEx site. The linear best fit shows a positive slope, but remains almost flat effectively indicating no correlation between the daily trips and building size based on the analysis of these sites.

The basic premise of the ITE trip generation approach is that the number of trips generated by a project is proportional to its size. That premise does not hold true for the parcel hubs in this sample and so no meaningful trip generation rates could be determined based on the data collected in support of this study. It should be recognized that a sample size of four or five sites represents the minimum recommended by ITE for valid trip generation studies, and for this reason, it is recommended that additional sites would need to be investigated and included in the data set to develop a more definitive finding on trip generation rates. Furthermore, it may be appropriate to determine the specific function at each site, due to the disparity between the rates observed at the FedEx sites versus the other three sites. It is likely that the function served by the respective sites is significantly different, as reflected in the trip generation rates, thereby necessitating reclassification of these uses for comparative purposes.

Exhibit 12: Data Plot for Daily Total Vehicle Trip Ends against Building Size (Parcel Hubs)

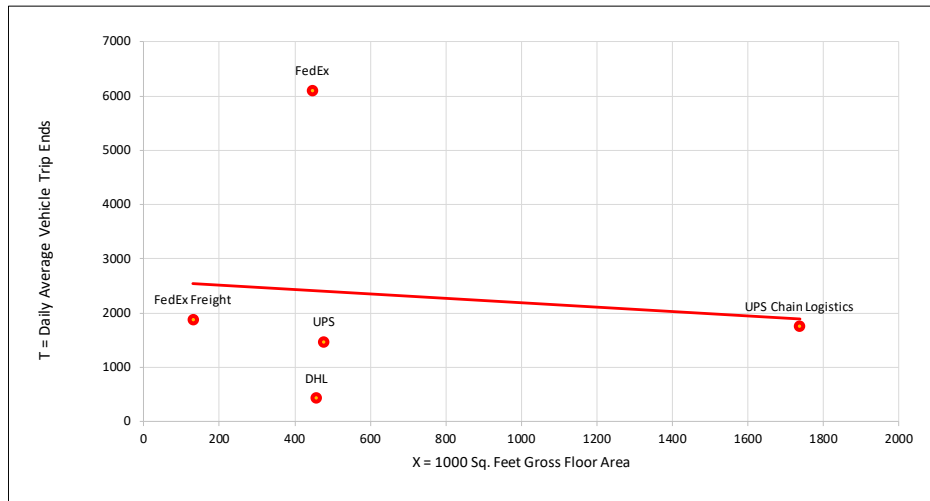
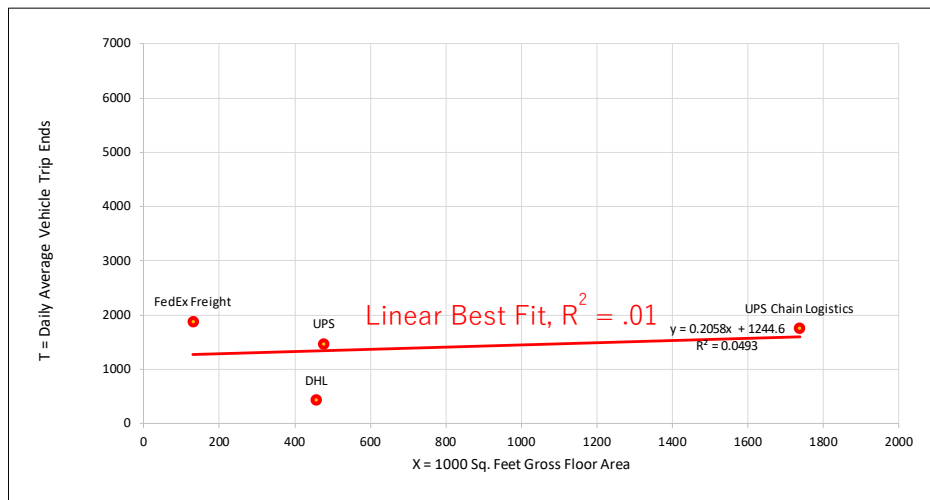


Exhibit 13: Data Plot for Daily Vehicle Trip Ends against Building Size without Construction Site



Conclusions

Our survey of 11 fulfillment centers produced trip generation rates based on the gross floor area of the sites that satisfies ITE's standards for use. The findings of the study indicate that the daily trip generation rates for fulfillment centers is approximately 2.1 trips per thousand square feet of gross floor area, which is roughly 50% higher than the comparable rate for conventional transload and short term storage warehouses previously defined in the ITE *Trip Generation Manual* Version 10. The results of the study further indicate that the higher rates were entirely due to more cars traffic at these sites; the trip generation rates for trucks was found to comparable to those at conventional warehouses.

Employment data were available for eight out of 11 fulfillment center sites. This provided the ability to determine trip generation rates per employee. The study results indicate that that trip generation for fulfillment centers is approximately 2.0 trips per employee. The study also found that the trip generation rate per employee correlated more closely that the trip generation rate per thousand square feet of gross floor area.

The data from the five parcel hubs did not show any statistically meaningful relationship between trips and building size. Therefore, no trip generation rate could be calculated. However, the data collected at these sites may provide a useful basis for further comparison with additional sites to provide more data points for analysis.

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Item 6.C

High Cube Warehouse Trip
Generation Study Update

Attachment 2

Section 1.1., High-Cube Warehouses,
of the TUMF Fee Calculation
Handbook

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1.1. High-Cube Warehouses

1.1.1. Summary

For the purpose of determining the TUMF obligation, all types of high-cube warehouses, including fulfillment centers, transload and short-term storage warehouses and other similar distribution facilities will be considered industrial use types. The methodology outlined in **Worksheet A.2.8** and described as follows will be applied to determine the equivalent floor area for high-cube warehouses/fulfillment centers with a minimum gross floor area of 200,000 square feet, a minimum ceiling height of 24 feet and a minimum dock-high door loading ratio of 1 door per 10,000 square feet (*for the example calculation assume a high-cube warehouse with a gross floor area of 450,000 square feet, a ceiling height exceeding 24 feet and a dock-high door loading ratio exceeding 1:10,000*):

1. Subtract 200,000 square feet from the total gross floor area
(i.e. for the example facility it is $450,000 - 200,000 = 250,000$ square feet)
2. Multiply the resultant value from step 1 which is total gross floor area in excess of 200,000 square feet by 0.36
(i.e. for the example facility it is $250,000 \times 0.36 = 90,000$ square feet)
3. Add 200,000 square feet to the resultant value of step 2
(i.e. for the example facility it is $200,000 + 90,000 = 290,000$ square feet)
4. Use the resultant value of step 3 as the gross floor area to calculate the TUMF obligation using **Worksheet A.2.1** for standard non-residential fee calculations.

The TUMF obligation for a warehouse facility with a gross floor area of less than 200,000 square feet, a ceiling height of less than 24 feet and/or a dock-high door loading ratio of less than 1 door per 10,000 square feet will be calculated based on the actual gross floor area using **Worksheet A.2.1** for standard non-residential fee calculations. Furthermore, where other uses such as wholesale showrooms, retail showrooms or office suites are co-located with qualifying high-cube warehouse facilities, only the qualifying warehouse portion of the premises will be calculated using **Worksheet A.2.8**. The fee obligation for all other co-located facilities will be calculated based on the actual gross floor area and the appropriate land use category using **Worksheet A.2.1** for standard non-residential fee calculations.

1.1.2. Detailed Narrative

High-cube warehouses are primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. These facilities typically have a high level of on-site automation and logistics management enable highly-efficient processing of goods through the facility. High-cube warehouses include, but may not be limited to, the following types of facilities:

- High-cube transload and short-term storage facilities typically provide for consolidation and distribution of loads for manufacturers, wholesalers or retailers.

Transload and short-term storage facilities typically provide limited storage duration, high throughput and high-efficiency distribution.

- Fulfillment centers include high-cube warehouses typically characterized by significant storage and direct distribution of ecommerce products to the end users. These facilities typically handle smaller packages and quantities than other types of high-cube warehouses.
- High-cube parcel hub warehouses typically serve as regional and local freight-forwarding facilities of time sensitive shipments via air freight and ground carriers. These sites may also include truck maintenance, wash, and/or fueling facilities ancillary to the primary use of the site.
- High-cube cold storage warehouses are facilities that provide temperature-controlled environments for the storage and distribution of frozen foods or other perishable products.

For the purpose of determining the TUMF obligation, all high-cube warehouses are defined as follows:

Very large shell buildings commonly constructed using steel framed and/or concrete tilt-up techniques with a minimum gross floor area of 200,000 square feet, a minimum ceiling height of 24 feet and a minimum dock-high door loading ratio of 1 door per 10,000 square feet.

In accordance with Section 6.2 and Appendix B of the Transportation Uniform Mitigation Fee Nexus Study 2016 Update Final Report (Western Riverside Council of Governments, As Adopted July 10, 2017), high-cube warehouses are considered to be industrial use types with the primary use of the facility generally meeting the description of Motor Freight Transportation and Warehousing (SIC Major Category 42). The TUMF obligation for industrial (and all non-residential) land uses is based on the gross floor area of buildings associated with the specific land use and is calculated using **Worksheet A.2.1** for standard non-residential fee calculations. However, in the case of high-cube warehouses, vehicle trips generated to and from the site are typically lower than traditional industrial uses due to the high-level of on-site automation and logistics management. For this reason, it is necessary to determine the gross floor area equivalency for the purpose of calculating the TUMF obligation.

A review of Trip Generation 9th Edition (Institute of Traffic Engineers, 2012) indicates the average weekday daily trip generation rate for high-cube warehouses is 1.68 trips per thousand square feet, while the weekday PM peak-hour trip generation rate for the same uses is approximately 0.16 trips per thousand square feet of building area. By comparison, traditional warehouse uses have a weekday daily trip generation rate of 3.56 trips per thousand square feet, and PM peak-hour trip generation rates of 0.45 trips per thousand square feet and 0.58 trips per employee. A study of the trip generation characteristics of fulfillment centers in the Inland Empire of Southern California completed in January 2019 by WSP for the Western Riverside Council of Governments (WRCOG) found trip generation rates of these facilities to be generally consistent with the rates prescribed in Trip Generation 9th Edition for all high-cube warehouse uses, with an average weekday daily trip generation rate of 2.13 trips per thousand square feet and an average weekday PM peak rate of 0.16 trips per thousand square feet.

Table 5.7 summarizes the various characteristics of high-cube warehouses, including trip generation, and establishes the equivalent square feet for the purpose of calculating the TUMF obligation for all high-cube warehouse facilities.

Table 5.7 – Characteristics of High-Cube Warehouses and Distribution Centers				
<i>Land Use Type</i>	<i>Average Daily Vehicle Trips per 1,000 sqft</i>	<i>Average PM Peak Vehicle Trips per 1,000 sqft</i>	<i>Average PM Peak Trips per Employee</i>	<i>TUMF Weighted Equivalent sqft *</i>
<i>Warehousing (i) (150)</i>	3.56	0.45	0.58	
<i>High-Cube Warehouse (i) (152)</i>	1.68	0.16		0.36
<i>Fulfillment Centers (ii)</i>	2.13	0.16	0.16	
<i>Warehouse/Distribution Center (iii)</i>	1.10	0.08		
<i>All TUMF Industrial Use Types (i)</i>	5.33			
Source: (i) <u>Trip Generation 9th Edition</u>, Institute of Traffic Engineers, 2012 (ii) <u>TUMF High-Cube Warehouse Trip Generation Study</u>, WRCOG, January 2019 (iii) <u>San Bernardino/Riverside County Warehouse/Distribution Center Vehicle Trip Generation Study</u>, Crain and Associates, January 2005 Note: * - TUMF weighted equivalent square feet based on relative trip generation per 1000 sqft between the average of High-Cube Warehouse and Fulfillment Centers and the median of all TUMF Industrial Uses (consistent with TUMF Nexus Study Trip Generation Rate Comparison).				

The gross floor area equivalency for High-Cube Warehouses is based on the average of the trip generation characteristics of High-Cube Warehouse, which is quantified in the Trip Generation 9th Edition in terms of both daily and peak trips per thousand square feet gross floor area, and Fulfillment Centers, which is quantified in the TUMF High-Cube Warehouse Trip Generation Study in terms of both daily and peak trips per thousand square feet gross floor area as well as per employees. Based on this information, the simple average daily trip generation rate for a high-cube warehouse, including fulfillment centers, is approximately 1.90 trips per thousand square feet of gross floor area. To account for the variation in trip generation rates between high-cube warehouses, including fulfillment centers, and all TUMF industrial land use types, the gross floor area equivalency was weighted based on the relative trip generation between high-cube warehouses, including fulfillment centers, and the median of all TUMF Industrial Uses as used in the TUMF Nexus Study. The weighted gross floor area equivalency for high-cube warehouses is 0.36.

For the purpose of calculating the TUMF obligation for *High-Cube Warehouses* with a minimum gross floor area of 200,000 square feet, a minimum ceiling height of 24 feet and a minimum dock-high door loading ratio of 1 door per 10,000 square feet, the gross floor area *in excess of 200,000 square feet* will be multiplied by 0.36 and the resultant value *increased by 200,000 square feet* to determine the equivalent number of square feet of floor area. The *equivalent floor area* will be used for the purpose of calculating the TUMF at the rate prescribed by the respective local jurisdictions TUMF Ordinance and supported by the TUMF Nexus Study. For example, a high-cube warehouse with a gross floor area of 450,000 square feet, a ceiling height exceeding 24 feet and a dock-high door loading ratio exceeding 1:10,000 (for the example facility it is at least 45 dock-high door loading bays i.e. $450,000/10,000 = 45$) the equivalent floor area would be 290,000 square feet ($\{[450,000 - 200,000] \times 0.36\} + 200,000 = 290,000$)

The TUMF obligation for a warehouse facility with a gross floor area of less than 200,000 square feet, a ceiling height of less than 24 feet and/or a dock-high door loading ratio of less than 1 door per 10,000 square feet will be calculated based on the actual gross floor area using **Worksheet A.2.1** for standard non-residential fee calculations. Furthermore, where other uses such as wholesale showrooms, retail showrooms or office suites are co-located with qualifying high-cube warehouse facilities, only the qualifying warehouse portion of the premises will be calculated using **Worksheet A.2.8**. The fee obligation for all other co-located facilities will be calculated based on the actual gross floor area and the appropriate land use category using **Worksheet A.2.1** for standard non-residential fee calculations.

Worksheet A.2.8 High-Cube Warehouse TUMF Calculation Worksheet

Enter Gross Floor Area of Qualifying Building(s) (in square feet)	-	200,000	=		Total A ←
Enter <u>Total A</u>	X	0.36	=		Total B ←
Enter <u>Total B</u>	+	200,000	=	Enter this value as (part of) the <u>Total Gross Floor Area of Industrial Buildings</u> in Worksheet A.2.1	



Western Riverside Council of Governments

Public Works Committee

Staff Report

Subject: Resilient IE Activities Update – Evacuation Network

Contact: Andrea Howard, Program Manager, ahoward@wrcog.us, (951) 405-6751

Date: April 11, 2019

The purpose of this item is to provide an update on the Caltrans grant funded Regional Climate Adaptation Toolkit project, Resilient IE, and solicit input on the Draft Outreach and Stakeholder Engagement Plan and Draft Evacuation Maps.

Requested Action:

1. Discuss and provide input on the Draft Community Outreach & Engagement Plan and Draft Evacuation Network.

Background

In October 2017, WRCOG, in coordination with the San Bernardino County Transportation Commission (SBCTA), submitted an application to the Caltrans Adaptation Planning Grant Program, seeking funding for a Regional Adaptation Toolkit for Transportation Infrastructure, to support regional efforts to prepare for and mitigate risks associated with climate adaptation and transportation infrastructure. Caltrans awarded WRCOG and SBCTA a total of \$683,431 to develop the first of two phases of the Toolkit Project (Project). The Project would include the following components for Western Riverside County:

1. A newly established regional climate collaborative, the “Inland Empire Regional Climate Collaborative” (IERCC);
2. A revision to WRCOG’s community vulnerability assessment;
3. City-level, climate-related transportation hazards and evacuation maps;
4. A climate resilient transportation infrastructure guidebook; and
5. A regional climate adaptation and resiliency template general plan element.

In addition to the components outlined above, the grant includes \$101,055 for SBCTA to perform a transportation and community vulnerability assessment, which will include a pilot project. The pilot will entail a risk-based valuation to assess the true financial cost to the community as a whole, of a potential infrastructure outage, which could be caused by a climate-related issue, such as fire or flood.

1. IERCC – Stakeholder Engagement: The IERCC will be formed between WRCOG and SBCTA as a local branch of the Alliance of Regional Collaboratives for Climate Adaptation (ARCCA). ARCCA is a network of leading regional collaboratives from across California that work together to advance climate adaptation statewide and increase local capacity to build community resilience. Through ARCCA, WRCOG and SBCTA will connect with peers across the state to exchange knowledge, engage in targeted problem-solving, and implement joint campaigns for climate resiliency, effectively breaking down silos across sectors and jurisdictions, with the express aim of increasing local efficiency.

The consultant lead for Task 1 is the Local Government Commission (LGC).

2. Updated WRCOG Vulnerability Assessment: In 2014, WRCOG released its Subregional Climate Action Plan, CAPtivate 2.0, which included an Adaptation and Resiliency Strategy, which provides an overview of expected climate change effects, assets in the subregion that are vulnerable to climate change effects, and adaptation strategies intended to reduce vulnerability and increase resilience. As a component of the Adaptation Toolkit, the Adaptation and Resiliency Strategy will be updated to integrate the newest science and best practices and ensure consistency with the SBCTA vulnerability Assessment that will be developed by this project, for the purposes of providing similarly consistent and complementary work products for the other tasks included in the Project. In addition, this task will include a pilot project, exploring the true cost of climate-related infrastructure outages.

The consultant lead for the update to WRCOG's Vulnerability Assessment for Task 2 is PlaceWorks. The lead for the Pilot Climate Vulnerability Cost Analysis Project is WSP.

3. Transportation Hazards and Evacuation Maps: The transportation hazards and evacuation maps will be developed for both WRCOG and SBCTA and compiled into a portfolio of city-level maps that can be used for a variety of climate adaptation and resiliency planning efforts, including insertion into local hazard mitigation plans, safety elements of the General Plan, or local adaptation plans / strategies. Leveraging its considerable in-house resources and expertise, SBCTA will take the lead on this element of the project, though WRCOG will be involved throughout the process.

The consultant lead for Task 3 is PlaceWorks.

4. Climate Resilient Transportation Infrastructure Guidebook: With information from the existing WRCOG vulnerability analysis and the SBCTA analysis to be developed as a component of this grant, the Guidebook will provide strategies using green streets infrastructure, which aims to harness the efficacy of natural processes to manage flooding and extreme heat, to mitigate identified risks and provide resiliency to climate change effects on the transportation system. For example, permeable pavement can be used to help reduce pavement temperatures by absorbing sunlight, mitigate the urban heat island effect, and slow flash flooding during flood and storm events.

The consultant lead for Task 4 is WSP.

5. Regional Climate Adaptation and Resiliency Template General Plan Element: The Regional Template Climate Adaptation & Resiliency Element will be a timely resource for jurisdictions to incorporate into their General Plans or use in other policy to meet newly enacted requirements under SB 379, which mandates that the safety elements of General Plans must now include climate adaptation and resiliency strategies, or that these strategies must otherwise be included in local hazard mitigation plans. This template element will build on work previously conducted in WRCOG's Subregional Climate Action / Adaptation Plan, and will provide the necessary framework for jurisdictions to comply with new SB 379 mandates.

The consultant lead for Task 5 is PlaceWorks.

Schedule: Per the grant requirements, Resilient IE will conclude by the end of February 2020.

Project Updates

Staff is working closely with the consultant team to make progress on the initial tasks of the Project. Work is underway on four key efforts: stakeholder engagement (task 1), the update to WRCOG's Vulnerability Assessment (as well as the development of a similar assessment for SBCTA) (task 2), the Hazards and Evacuations Maps (task 3), and development of the Climate-Resilient Transportation Infrastructure Guidebook (task 4). WRCOG is currently seeking input on the Draft Outreach Plan (Task 1) and Draft Hazard and Evacuation Maps (Task 3), see below and attached for more information.

Task 1: IERCC – Stakeholder Engagement: Throughout the project, WRCOG and SBCTA have, and will continue to, engage member agencies through their committee structures, particularly the WRCOG Planning Directors (PDC) and Public Works Committees (PWC). Recently, Resilient IE formed an organizing committee

for the Regional Climate Collaborative and facilitated its first two meetings with a focus on the IERCC purpose, potential structure, and organizational logistics; the agendas and presentation decks from both meetings are included as Attachments 1 – 4. Consultants from LGC have prepared a Draft Community Outreach and Engagement Plan, included as Attachment 5. The overall outreach approach, detailed in the Draft Plan attached, is to obtain community input on adaptation and resiliency in a way that can benefit the region beyond the life of this project – informing WRCOG, SBCTA, and the new collaborative – as well as to forge relationships with the various organizations working in this space within the region. Members are asked to submit any comments regarding the Draft Outreach Plan by Friday, April 19, 2019.

Task 2: Update WRCOG Vulnerability Assessment: In an effort to facilitate consistency across the region, the Vulnerability Assessment (VA) to be prepared for San Bernardino County will be based off the existing WRCOG VA, but will take into account the latest best practices and technology available. The update to WRCOG's VA will reflect changes to utilize best available data and methodology, so the resulting VAs for each subregion will be consistent. Following preparation of a Gap Analysis Memo for WRCOG's existing VA (shared in February), the consultant team is preparing the revised Vulnerability Assessment which will address the deficiencies of the current plan, outlined in the Gap Analysis. Staff anticipate receiving a draft VA by mid-April and will share with PDC and PWC members for review and Comment.

Task 3: Transportation Hazards and Evacuations Map: PlaceWorks consultants have prepared a set of evacuation maps for each City. Prior to developing these drafts, PDC members were asked to share any existing maps and/or preferred routes, but few jurisdictions appeared to have anything prepared. In addition, PlaceWorks conducted a review of available Local Hazard Mitigation Plans, General Plan Safety Elements, and Circulation Plans, but found little information. To build the network, the consultants used the Riverside County roadway network made available on the County's open data portal. Consultants identified major roadways based on roadway classifications (Collector or Higher) contained in the dataset. Once identified, the most direct pathways to major transportation corridors (Freeways & Highways) were selected. Where there were redundant alignments, the route that was the most direct and had the highest service capacity was selected. Note: traffic flow direction, traffic patterns, and specific climate-related hazards and risks were not considered in this preliminary analysis,

The Draft Evacuation Network is accessible through ArcGIS at <http://arcg.is/1y10em>, the city-level maps are also provided in PDF form as Attachment 6. Committee members are asked to review and provide input regarding the regional evacuation needs and how to create a more accurate network to be used for the final risk assessment. Input on the draft network should be submitted to WRCOG staff by Friday, April 19, 2019.

Task 4: Climate Resilient Transportation Infrastructure Guidebook (Guidebook): The Guidebook will serve as a resource for jurisdictions regarding strategies, best practices, and challenges for using green streets infrastructure, particularly in the context of changing patterns of extreme temperatures, heavy precipitation events, drought, and wildfires. WSP previously prepared a Guidebook framework for review and comment and is currently working on drafting the Guidebook, using the approved outline as a guide. Current activities include identifying case study example projects to share with WRCOG and SBCTA for consideration prior to delving into any details.

Next Steps

Tasks 1 – 4 will advance under the direction of the consultant team with guidance from staff, as outlined above. Staff will return with regular updates to the Committee.

Prior Action:

February 14, 2019: The Planning Directors Committee received and filed.

Fiscal Impact:

Caltrans is providing \$683,431 of an estimated total project cost of \$771,977. The grant monies will cover all

consultant expenses and a portion of WRCOG staff expenses. WRCOG will contribute \$88,546 through in-kind (staff time) services to meet a required local match of 11.47% of the project whole. The staff time not covered by the grant will be covered through the Local Transportation Fund (LTF), and is programmed in the approved Fiscal Year 2018/2019 Agency budget.

Attachments:

1. Climate Collaborative Organizing Committee Meeting 1 – Agenda.
2. Climate Collaborative Organizing Committee Meeting 1 – Presentation.
3. Climate Collaborative Organizing Committee Meeting 2 – Agenda.
4. Climate Collaborative Organizing Committee Meeting 2 – Presentation.
5. Draft Community Outreach and Engagement Plan.
6. Draft WRCOG City-Level Evacuation Maps.

Item 6.D

Resilient IE Activities Update –
Evacuation Network

Attachment 1

Climate Collaborative Organizing
Committee Meeting 1 – Agenda

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Inland Empire Regional Collaborative Organizing Committee Meeting #1

Wednesday, March 6th | 9:00 AM – 10:00 AM

<https://lgc.zoom.us/my/juliakim>

Proposed Meeting Agenda

9:00 Welcome

- » Introductions
- » Overview of Agenda

9:05 Background

- » WRCOG/SBCTA Adaptation Planning Project
- » Role of Organizing Committee

9:15 Discussion: Collaborative Purpose

- » California's Regional Collaborative Landscape
- » Focus: Adaptation vs. Mitigation
- » Top Ranked Benefits (from survey):
 - Assistance in securing greater levels of funding and resources, including coordinating grant applications
 - Development and dissemination of best practices, case studies, and replicable strategies
 - Trainings and workshops that provide learning opportunities

9:30 Discussion: Collaborative Structure

- » Geographic Scope
 - How should the geographic scope be defined (Riverside and San Bernardino counties)?
 - Is there a desire to form sub-regional chapters as part of the collaborative?
- » Membership
 - Is there a desire to prioritize certain sectors for membership (e.g. public)?
 - How should the member dues structure be established?
- » Leadership structure
 - What would be the ideal committee structure?
 - How should committee members be selected or elected?
 - What organization would be the ideal fiscal agent/facilitator for the collaborative?

9:55 Key Next Steps

- » Governance
 - Begin drafting collaborative governance structure document
 - Share draft structure with organizing committee for review, then the broader stakeholder list for input
- » Informational Materials
 - Draft initial fact sheet on collaborative benefits
 - Share fact sheet with organizing committee for review, then the broader stakeholder list for input
- » Funding Structure
 - Draft member due structure for organizing committee to consider
 - Identify opportunities to acquire seed funding

10:00 Adjourn

Item 6.D

Resilient IE Activities Update –
Evacuation Network

Attachment 2

Climate Collaborative Organizing
Committee Meeting 1 – Presentation

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Inland Empire Regional Climate Collaborative Organizing Committee Meeting #1

Wednesday, March 6th | 9:00 – 10:00 AM



An exploration of the Inland Empire's collaborative potential.



Local Government Commission
Leaders for Livable Communities



San Bernardino County
Transportation Authority



A nighttime photograph of a cityscape viewed from an elevated position. The city lights are visible in the valley, and dark mountain ranges are in the background under a dark sky.

WELCOME

Introductions
Overview of Agenda

BACKGROUND

WRCOG/SBCTA Adaptation Planning Project
Organizing Committee Role

About Resilient IE

Funded by Caltrans' SB-1 Transportation Adaptation Planning Grant Program

Core Project Components:

1. A newly established regional climate collaborative in the Inland Empire
2. A revision to WRCOG's community vulnerability assessment and establishment of a vulnerability assessment for San Bernardino County
3. A pilot project assessing the true, community cost of a downed or damaged transportation asset
4. City-level, climate-related transportation hazards and evacuation maps
5. A climate resilient transportation infrastructure guidebook
6. A regional climate adaptation and resiliency template general plan element



Organizing Committee Role

Leading the formation of an Inland Empire Climate Collaborative

Provide guidance to help establish:

1. The collaborative's governance structure and charter
2. A sustainable funding structure
3. A membership structure

Provide high-level assistance with:

1. Member recruitment
2. Collaborative kickoff meeting
3. Identification of potential seed funding



Collaborative Purpose

California's Regional Collaborative Landscape

Adaptation vs. Mitigation

Top Ranked Benefits

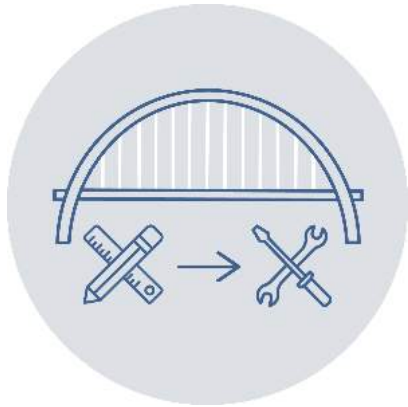
About ARCCA

The Alliance of Regional Collaboratives for Climate Adaptation

A network of leading regional collaboratives from across California that work together to advance adaptation statewide and increase local capacity to build community resilience.



Peer-to-Peer
Network



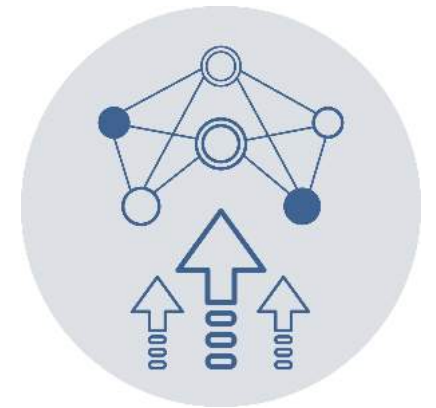
Beyond
Planning



Knowledge
Exchange



Urban-Rural
Connectivity



Emerging
Collaboratives

ARCCA's Member Regional Collaboratives

Seven regions represented

Emerging Collaboratives:

- Inland Empire
- San Joaquin Valley



Leadership Cultivation

Resources for local elected officials and agency leaders



CAPITAL REGION
CLIMATE READINESS
COLLABORATIVE

Investing In Our Future: Taking Action for a Healthier Community

It is critical to protect the region and well-being of our region. Without taking steps to prepare, impacts such as increased heat and air pollution and decreased water levels will affect our mental and physical health and can increase disease and mortality, especially for vulnerable populations. Fortunately, we have many solutions to help us prepare for climate impacts, reduce long-term health impacts, and grow more sustainable, resilient and vibrant neighborhoods.

How Will Climate Change Affect Our Health and Well-Being?

Heat Related Illnesses

Extreme temperatures and heat waves, magnified by the heat trapping effects of pavement and buildings, can trigger dehydration, cardiovascular and respiratory stress, and deadly heat strokes.

Air Quality

Higher temperatures will damage our air quality leading to heightened asthma and other respiratory and cardiovascular issues. A longer pollen season and more wildfires will also threaten our clean air and respiratory health.

Water Quality and Scarcity

With California likely to face more droughts in the upcoming decades, water quality could deteriorate, presenting a public health hazard.

Food Security

Drought and shifting temperatures are threatening our farms. Food scarcity will disproportionately harm low-income families as food costs go up, especially for fresh fruit and vegetables, which could lead to higher rates of obesity and malnutrition.

Disease

As temperatures warm, disease-bearing insects are expanding their range and active season. This means greater risk of Lyme disease, West Nile virus, and mosquito-borne diseases previously unknown in California.

A Local Perspective

"California's local public health agencies are on the front lines of addressing health-related issues made worse by climate change. We must work together, alongside county public health officers and public health agencies, to ensure that jurisdictions have what they need to address climate change in a way that fosters healthy, sustainable and resilient communities."

— Sacramento County Supervisor Phil Davis

www.climateadvice.info

Investing In Our Future: Public Safety and Preparedness

Being prepared is the best form of disaster response. Flooding, extreme heat, and wildfires directly endanger everyone in our region, as well as our economy and our infrastructure, and climate change will worsen these impacts. By preparing today, we can ensure that all communities, and particularly those most vulnerable, are safer, more resilient, and better equipped to recover quickly from future climate-related disasters.

How Will Climate Change Affect Our Safety?

Flooding

Capital Region communities are particularly vulnerable to flooding from the American, Sacramento and Cosumnes rivers and local creeks. As a result of climate change, stronger storms may overwhelm critical infrastructure, including dams, stormwater systems, and levees, risking lives and threatening our economy.

Wildfires

Decreased precipitation, warmer temperatures, dense forests, decades of fire suppression, and prolonged drought have turned our forests into tinderboxes, leading to more destructive wildfires. Wildfires result in hazardous air pollutants, damaged watersheds and habitats, increased landslide and flood risks, and threats to vital infrastructure.

Extreme Heat

The Capital Region faces more frequent and severe extreme heat days and heat waves, which add additional stress to our aging infrastructure and leads to potentially life-threatening health consequences, especially for vulnerable populations. The region already exceeds the California state average in heat-related illness and death.

Response and Recovery

Increased numbers of fires, floods and extreme heat can damage or overload critical transportation, communication networks, and health care systems, further endangering public safety by delaying disaster response efforts. Climate change may compound and multiply threats, which could lead to cascading disasters, fast-emerging crises, and reduced recovery time between events.

A Local Perspective

"As we unfortunately learned from Katrina, it only takes one extreme weather event to devastate a region. Our flood control system was not originally designed to deal with the type of extreme weather events that have been occurring. It is important now more than ever that we make our system more resilient to these types of severe weather events."

— Richard Johnson, Executive Director, Sacramento Area Flood Control Authority

The Capital Region Climate Readiness Collaborative is exploring strategies and solutions to strengthen the climate resiliency of our region. Join us to learn more! www.climateadvice.info



www.climateadvice.info

Investing In Our Future: Resilient Infrastructure for a Stronger Capital Region

We rarely consider our infrastructure – the buildings, highways, power lines that keep our lives running smoothly – until they fail. But climate change is bringing new threats such as bigger storms and more intense heat waves. We must build, repair, and invest wisely so that our critical infrastructure will continue to keep communities safe, support our businesses, and protect our quality of life now and for generations to come.

How will climate change affect our infrastructure?

Roads and Rails

Extreme heat can expand and damage pavement and steel on bridges, roads, airport runways, and rail lines. Wildfires, landslides and increased precipitation can also damage our regional infrastructure and disrupt our transportation system.

Power Supply and Communication Lines

On very hot days, electricity generation, transmission lines, and other grid components become less efficient, risking power outages. Bigger and more intense storms, as well as wildfires, can also damage power and communication lines.

Homes, Businesses and Other Critical Infrastructure

Stronger storms can overwhelm waste- and stormwater systems, flood neighborhoods, and – in a worst-case scenario – overtop levees. Stronger, faster wildfires can also damage buildings and other critical infrastructure, endangering public safety and disrupting businesses.

A Local Perspective

As the Capital Region faces more extreme weather events, the electricity grid must adapt to meet the challenges. SMUD is proactively working to ensure that Sacramento continues to benefit from a reliable and climate-ready energy system.

— Arlen Orchard, Chief Executive Officer & General Manager, Sacramento Municipal Utility District

By Integrating

climate adaptation strategies into our regional planning efforts, we can ensure that resources are invested wisely and that the region's critical transportation infrastructure remains effective – not just in 10 years but for the next 60 years.

— Michael McKee, Former Executive Director, Sacramento Area Council of Governments

The Capital Region Climate Readiness Collaborative is exploring strategies and solutions to strengthen the climate resiliency of our region. Join us to learn more! www.climateadvice.info

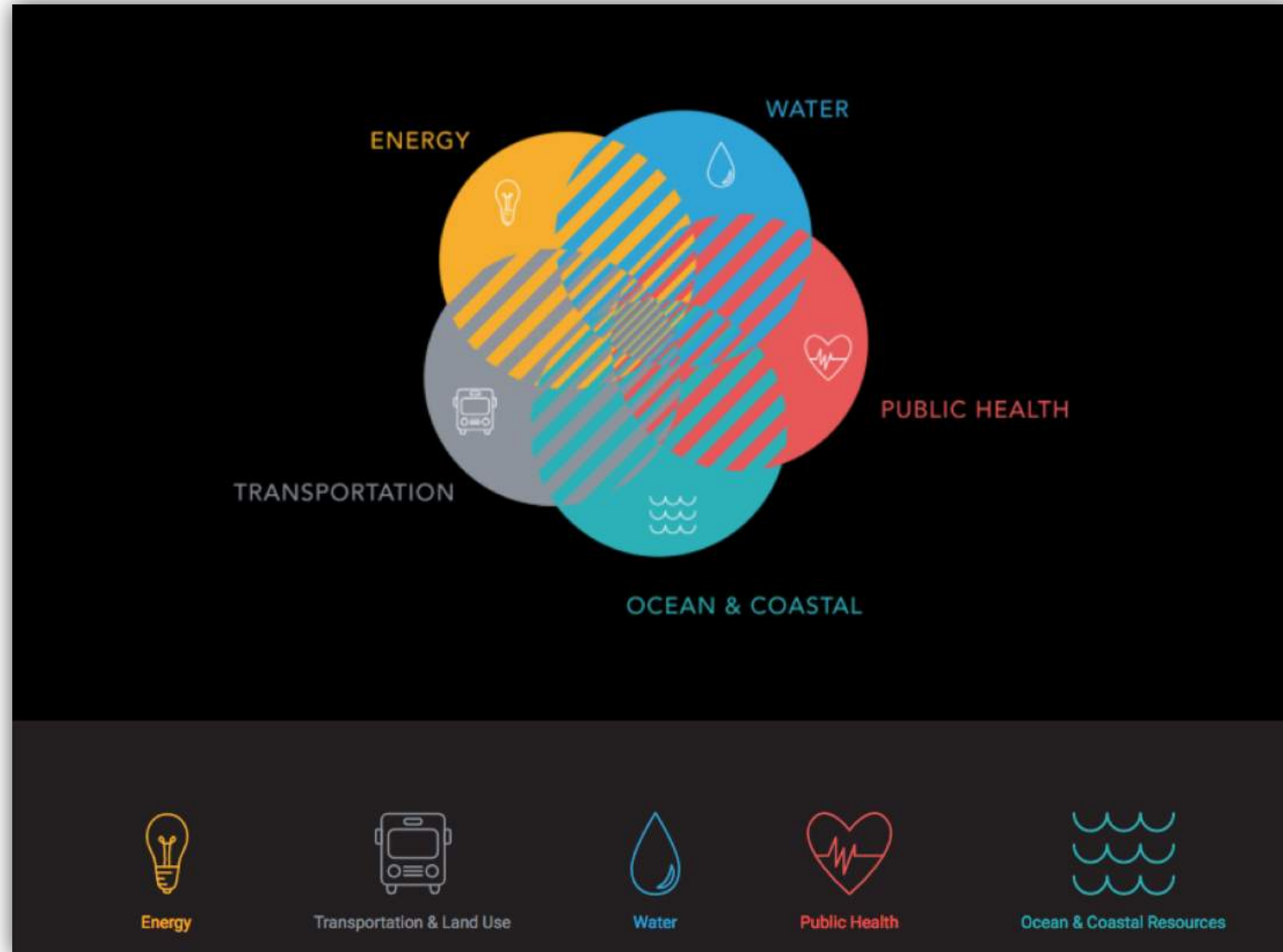


www.climateadvice.info

SIERRA
 CAMP

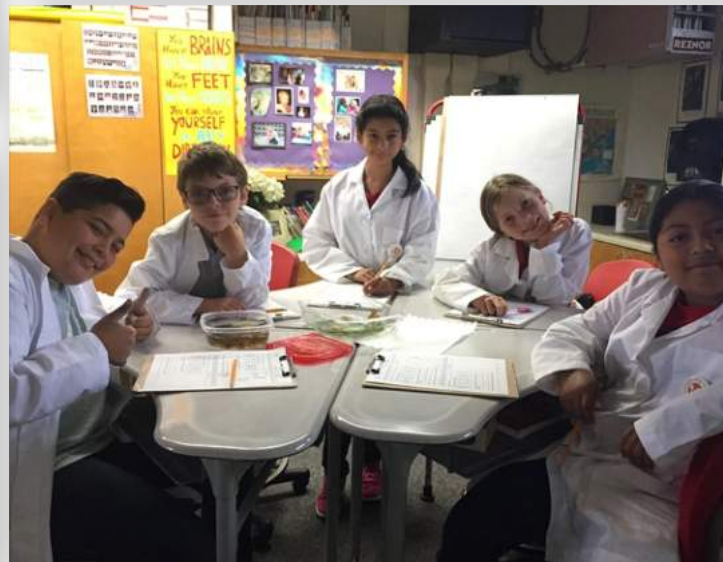
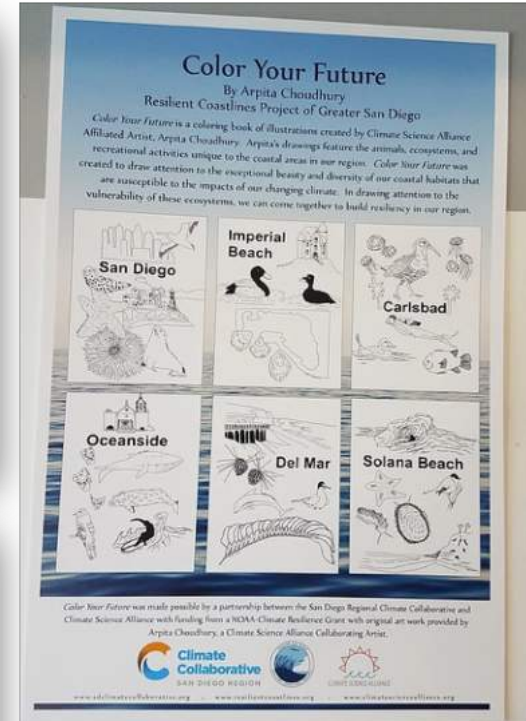
Regional Planning

A Greater LA Climate Action Framework



Community Engagement

Resilient Coastlines Project of Greater San Diego



Adaptation (+ Mitigation?)

What's needed in the Inland Empire?

Adaptation Only



Adaptation + Mitigation



Top Ranked Benefits

Based on survey results

1. Assistance in securing greater levels of funding and resources, including coordinating grant applications
2. Development and dissemination of best practices, case studies, and replicable strategies
3. Trainings and workshops that provide learning opportunities

Regional Collaborative Benefits

Value proposition to members

1. Facilitating connections and partnerships between local governments with similar goals and challenges
2. Fostering information, resource, and best practice sharing across jurisdictional lines
3. Creating a strategic approach that leverages limited resources and fully utilizes the region's innovative, progressive, and diverse history and talents to build resiliency
4. Accessing greater levels of adaptation funding by designing projects at the regional scale, jointly pursuing grant opportunities, and avoiding interregional competition over limited funds
5. Advocating more effectively for regional concerns and needs at the state level through a unified but representative voice (and by utilizing ARCCA as a platform and amplifier)
6. Developing cost-saving partnerships for local governments to coordinate and share resources
7. Formalizing a regional brain trust of adaptation experts and practitioners accessible to local governments to design creative solutions to critical problems
8. Highlighting and bringing resources to existing efforts and best practices for further funding and replication
9. Build partnerships as appropriate with leading experts and practitioners outside local government to help drive best practice adaptation planning locally (for example: academia, climate science entities, federal agencies, other regions in California, other regions outside California)
10. Avoiding maladaptive practices through regular communication and coordination

Thank you!



Next Organizing Committee Meeting: Monday, March 11th | 10:00 – 11:00 AM

Please stay tuned for a new poll to schedule 1-2 additional meetings.



Local Government Commission
Leaders for Livable Communities



San Bernardino County
Transportation Authority



Item 6.D

Resilient IE Activities Update –
Evacuation Network

Attachment 3

Climate Collaborative Organizing
Committee Meeting 2 – Agenda

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Inland Empire Regional Collaborative Organizing Committee Meeting #2

Monday, March 11th | 10:00 – 11:00 AM

<https://lgc.zoom.us/my/juliakim>

Meeting Agenda

- | | |
|-------|--|
| 10:00 | Welcome <ul style="list-style-type: none">» Roll Call» Overview of Agenda |
| 10:05 | Brief Background <ul style="list-style-type: none">» Role of Organizing Committee» Ground Rules |
| 10:15 | Collaborative Purpose <ul style="list-style-type: none">» Focus: Adaptation vs. Mitigation» Core Benefits |
| 10:30 | Discussion: Collaborative Structure <ul style="list-style-type: none">» Geographic Scope<ul style="list-style-type: none">○ How should the geographic scope be defined (Riverside and San Bernardino counties)?○ Is there a desire to form sub-regional chapters as part of the collaborative?» Membership<ul style="list-style-type: none">○ Is there a desire to prioritize certain sectors for membership (e.g. public)?○ How should the member dues structure be established?» Leadership structure<ul style="list-style-type: none">○ What would be the ideal committee structure?○ How should committee members be selected or elected?○ What organization would be the ideal fiscal agent/facilitator for the collaborative? |
| 10:55 | Key Next Steps <ul style="list-style-type: none">» Governance, Informational Materials, and Funding Structure |
| 11:00 | Adjourn |

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Item 6.D

Resilient IE Activities Update –
Evacuation Network

Attachment 4

Climate Collaborative Organizing
Committee Meeting 2 – Presentation

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Inland Empire Regional Climate Collaborative

Organizing Committee Meeting #2

Monday, March 11th | 10:00 - 11:00 AM



An exploration of the Inland Empire's collaborative potential.



Local Government Commission
Leaders for Livable Communities



San Bernardino County
Transportation Authority



A nighttime photograph of a cityscape viewed from a high vantage point. The city lights are visible in the valley, with mountains in the background under a dark sky. The text is overlaid on this image.

WELCOME

Roll Call
Overview of Agenda

BACKGROUND

Organizing Committee Role
Ground Rules

Organizing Committee Role

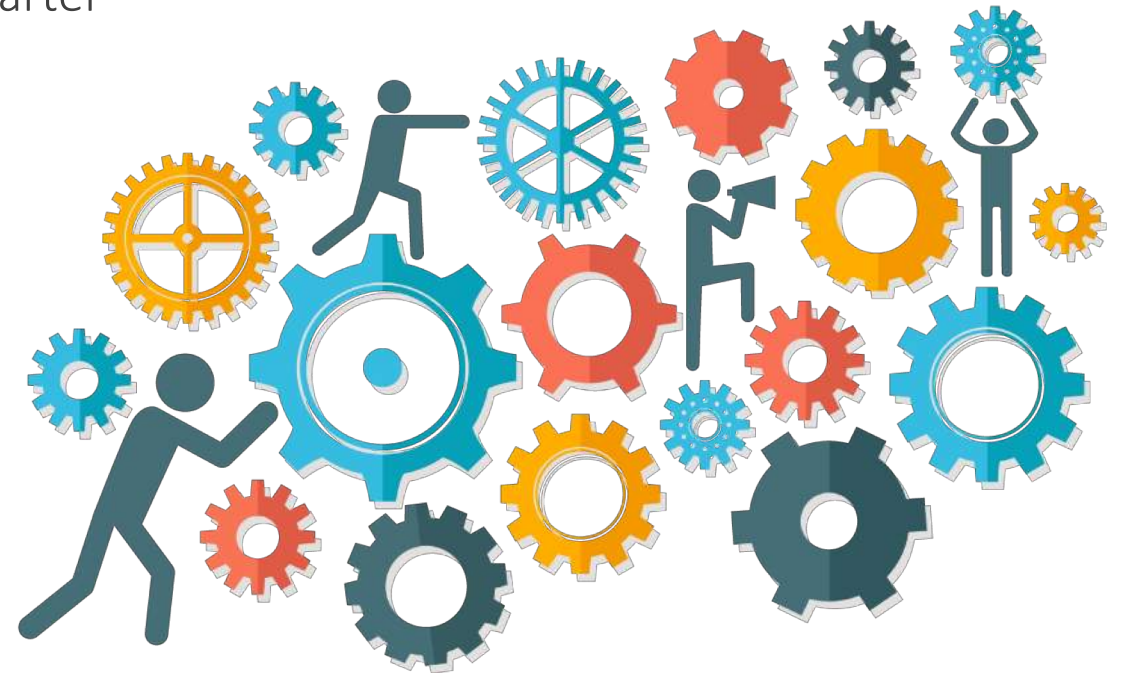
Leading the formation of an Inland Empire Climate Collaborative

Provide guidance to help establish:

1. The collaborative's governance structure and charter
2. A sustainable funding structure
3. A membership structure

Provide high-level assistance with:

1. Member recruitment
2. Collaborative kickoff meeting
3. Identification of potential seed funding



Collaborative Purpose

Adaptation vs. Mitigation
Core Benefits

Adaptation (+ Mitigation?)

What's needed in the Inland Empire?

Adaptation Only



Adaptation + Mitigation



Core Benefits

Based on survey results and committee input

1. Assistance in securing greater levels of **funding and resources**, including coordinating grant applications
2. Development and dissemination of **best practices**, case studies, and replicable strategies
3. **Trainings and workshops** that provide learning opportunities
4. Leadership and guidance in conducting equitable **community engagement** and community-driven planning
5. **Policy engagement** and advocacy including disseminating model ordinances and seeking regional alignment

COLLABORATIVE STRUCTURE

The background image shows two cyclists on a dirt trail. They are wearing helmets and athletic gear. The trail is surrounded by tall evergreen trees. In the distance, a calm lake is visible, with rolling hills and mountains on the horizon under a clear sky.

Geographic Scope
Membership Structure
Leadership Structure

Geographic Scope

1. How should the geographic scope be defined?
Riverside and San Bernardino Counties?
2. Is there a desire to form sub-regional chapters as part of the collaborative?



Collaboratives' Regions

Sub-regional chapters:

- Bay Area Climate Adaptation Network

Sub-regional collaboratives:

- Capital Region Climate Readiness Collaborative



Membership Structure

1. Is there a desire to prioritize certain sectors for membership?
2. How should the member due structure be established?



Collaborative Member Due Structures



CAPITAL REGION
CLIMATE READINESS
COLLABORATIVE

FOUNDATIONAL MEMBERS

Dues

\$10,000

PRIVATE ORGANIZATIONS & SPECIAL DISTRICTS

Number of Employees Dues

1 - 24	\$750
25 - 74	\$1,500
75 - 99	\$3,000
100 +	\$6,000

LOCAL AND REGIONAL AGENCIES

Population Dues

25,000 or under	\$750
25,001 - 74,999	\$1,500
75,000 +	\$3,000

NON-PROFIT ORGANIZATIONS & UNIVERSITIES

Number of Employees Dues

1 - 25	\$250
26 - 49	\$500
50 +	\$1,000

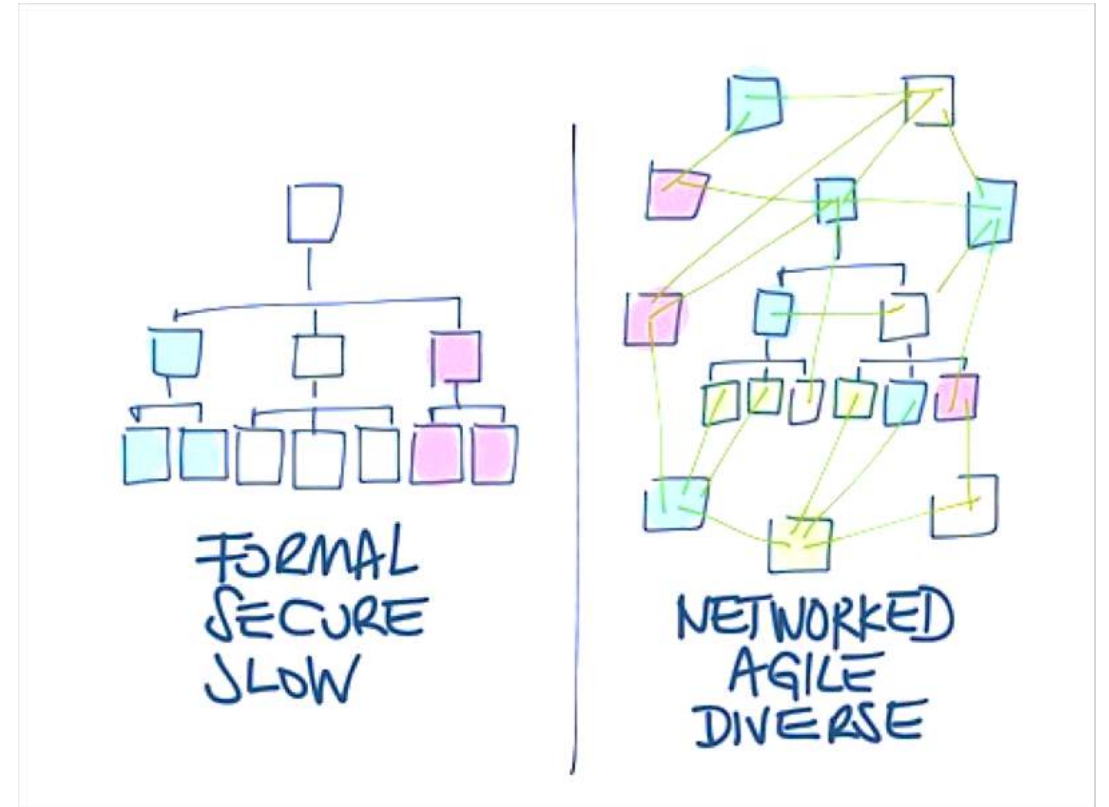
Collaborative Member Due Structures



Entity	Level	Annual Dues
Counties	-	\$5,000
Cities	Population: > 250k	\$5,000
	Population: 100k – 250k	\$2,500
	Population: < 100k	\$2,000
NGOs, Consortiums, Private Sector, Special Districts	Revenue: > \$5M	\$5,000
	Revenue: \$1M - \$5M	\$4,500
	Revenue: \$500k - \$1M	\$2,500
	Revenue: < \$500k	\$1,250

Leadership Structure

1. Who would be the ideal fiscal agent/facilitator for the collaborative?
2. What would be the ideal committee structure?
3. How should committee members be selected or elected?



Collaborative Administration Structure

NGO Facilitator



University Facilitator



Fiscal Agent / Rotating Facilitator



County MOU / Contracted Facilitator



NEXT STEPS



Key Next Steps

To inform future organizing committee meetings

Governance

- > Draft collaborative governance structure document
- > Committee to review draft governance structure document

Informational Materials

- > Draft initial fact sheet on collaborative benefits to share with broader stakeholder list
- > Committee to review draft fact sheet

Funding Structure

- > Draft member due structure
- > Committee to review draft member due structure

Thank you!



Next Organizing Committee Meeting: TBD

Please stay tuned for a new poll to schedule 1-2 additional meetings.



Local Government Commission
Leaders for Livable Communities



San Bernardino County
Transportation Authority



Item 6.D

Resilient IE Activities Update –
Evacuation Network

Attachment 5

Draft Community Outreach and
Engagement Plan

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RESILIENT IE

DRAFT Community Outreach & Engagement Plan

Resilient IE is a collaborative effort between Western Riverside Council of Governments (WRCOG) and the San Bernardino County Transportation Authority (SBCTA), funded by Caltrans' SB-1 Transportation Adaptation Planning Grant Program, aiming to support regional and local efforts to prepare for and mitigate risks associated with climate adaptation and transportation infrastructure. Resilient IE will generate six primary products and outcomes:

1. A newly established regional climate collaborative for the Inland Empire region;
2. A revision to WRCOG's community vulnerability assessment and a new vulnerability assessment for San Bernardino County;
3. A pilot project assessing the true, community cost of a downed or damaged transportation asset;
4. City-level, climate-related transportation hazards and evacuation maps;
5. A climate resilient transportation infrastructure guidebook; and
6. A regional climate adaptation and resiliency template general plan element.

A range of outreach and engagement activities will be conducted to gather input and feedback from community members to integrate and align project outcomes with community priorities. Due to the technical nature of the project, as well as its large geographic scope and expedited timeline, creative approaches will be utilized to best engage with community members following the spectrum of community engagement: inform, consult, involve, collaborate, and empower. The Comprehensive Community Engagement Guide that was developed as part of this project will be leveraged to ensure that key frameworks and best practices are being utilized throughout the implementation of community engagement activities.

The primary goals and objectives of the Resilient IE community outreach and engagement activities include the following:

1. Gather input from community members about their needs, concerns, priorities, capacities, and capabilities related to climate change risks and resiliency.
2. Share information and resources to better equip community members to undertake individual- or community-level climate change adaptation and resilience strategies.
3. Increase awareness and understanding of WRCOG and SBCTA's planning and implementation projects that aim to increase community resilience to climate change risks and impacts.
4. Activate and empower community members to engage in local and regional climate resiliency efforts.
5. Increase understanding of community priorities among public agency staff.

Lead: Local Government Commission

Timeframe: April 1, 2019 - January 31, 2020

Scope: Western Riverside County and San Bernardino County

Priority Stakeholders to Engage: Low-income residents and disadvantaged communities, residents, and business owners and employees

Community Outreach and Engagement Timeline

Planning and Development					Implementation and Dissemination										
Activity	2019												2020		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
1 Develop a Comprehensive Community Engagement Guide															
2 Develop Project-Specific Community Outreach & Engagement Plan															
3 Conduct Community-Wide Survey (English, Spanish, and Chinese)															
4 Conduct Interviews with CBOs and Community Leaders															
5 Host 4 Community Meetings (prioritizing low-income communities)															
6 Develop Engagement and Presentation Materials for Use at Existing Events															
7 Develop Initial Findings Report and Review Project Deliverables for Integration															
8 Conduct Additional Activities to Address Remaining Gaps															
9 Develop Final Summary Report															

Community Outreach and Engagement Activities

Community Survey

Conduct an online community survey to assess perception climate change risks and natural hazards, concerns and needs related to climate resilience and disaster preparedness, priorities for adaptation and resiliency solutions, and additional input to inform project products (e.g. feedback on evacuation routes). The survey will be translated into Spanish and other commonly spoken languages in the region, such as Chinese. LGC will work with community-based partners, public agencies, and other key stakeholders to disseminate the survey to a wide audience. Preliminary findings will be used to inform the community meetings, and the final results will be used to inform project deliverables, additional activities to conduct, and general engagement materials. Further analysis will be conducted to identify trends across key demographics and locations.

Timing of Specific Activities:

- **Develop Survey and Translate: April 2019**
 - LGC will adapt and refine effective community surveys that have been conducted (e.g. Capital Region UHI Project community survey, which has received over 1,100 responses) to draft a community survey for Resilient IE.

- The draft survey will be shared with project partners to ensure that the survey is sufficiently structured to gather the type of input that will be most valuable to the project.
- LGC will translate the English survey into Spanish and other commonly spoken languages, such as Chinese, to cater to the region's diverse population and maximize participation from hard-to-reach residents.
- The final translated surveys will be uploaded onto SurveyMonkey.
- **Disseminate Survey: May 2019 – July 2019**
 - Dissemination materials will be developed, including a template email, template social media language, and a flyer or postcard.
 - LGC will identify and reach out to CBOs, community leaders, public agencies, and other key stakeholders to request promotional support. These organizations may include cities, community centers, local churches, service organizations, local businesses, neighborhood associations, and other community-facing groups.
 - LGC will track survey responses to continuously recruit additional promotional partners and conduct direct outreach to community members.
 - Preliminary findings will be analyzed to inform other community outreach and engagement activities, including the community meetings, on an ongoing basis.
- **Review Results: August 2019**
 - After the survey closes, LGC will conduct a full analysis of the survey to create a prioritized list of community needs, concerns, and priorities. Further analysis will be conducted to identify trends across demographics (e.g. income level, ethnicity, and other demographic questions included in the survey).
 - LGC will share summaries and raw results with project partners and work collaboratively to identify opportunities to integrate community input into project deliverables.

Interviews with Community Leaders

Conduct interviews to gather input from leaders of community-based organizations such as neighborhood associations, school districts, service organizations, community leaders, and other interested groups on community priorities and needs. Through these interviews, information on community needs can be collected in a more streamlined manner while gaining greater understanding of the various organizations providing services and support to communities in the region. This effort also aims to gain buy-in from community leaders to support outreach activities and share the community survey through their networks.

Timing of Specific Activities:

- **Develop Interview Questions and Identify Community Leaders: April 2019**
 - LGC will adapt and refine effective interviews with community leaders that have been conducted to draft an interview script appropriate for Resilient IE.
 - The draft interview script will be shared with project partners to ensure that the interview is sufficiently structured to gather the type of input that will be most valuable to the project.
 - LGC will identify community-based organizations and leaders working in the region.
- **Conduct Interviews: May 2019 – July 2019**
 - LGC will invite the organizations and leaders identified to schedule interviews.

- LGC will conduct a minimum of 15 interviews with community leaders and take detailed notes to capture responses.
- Preliminary conclusions will be drawn to inform other community outreach and engagement activities, including the community meetings, on an ongoing basis.
- **Review Results: August 2019**
 - After all interviews are conducted, LGC will conduct a full analysis of interview responses to create a prioritized list of community needs, concerns, and priorities. Further analysis will be conducted to identify notable trends.
 - LGC will share summaries and raw results with project partners and work collaboratively to identify opportunities to integrate community input into project deliverables.

Potential Interview Questions:

- *Share introductory information on Resilient IE and purpose of interview.*
- Organization's priorities: Can you start by telling me about your organization's current priorities?
- Community Engagement: Does your organization engage directly with community members? And if so, can you tell us how and high-level information on the demographics of the community members you engage with?
- Community Priorities: What are you hearing (either directly from community members or CBOs that your organization engages with) in terms of community needs, concerns, and priorities? Note that these may differ from your own organization's priorities and can include topics that may not be 'directly' relevant to this project's scope.
- Transportation: Are you hearing any community concerns or needs related to transportation or mobility? If so, what are you hearing?
- Resiliency: Are you hearing any community concerns or needs related to individual and community-wide disaster preparedness or climate change risks? If so, what are you hearing?
- Community Events: As part of this project, we are seeking to attend existing community events to engage with the public. Do you know of any community events that you would recommend us having on our radar?
- Other comments: Do you have any other comments you would like to share with us at this time?

Community Meetings

Host four community meetings in disadvantaged communities to gather input from community members including perception and prioritization of climate change risks, adaptation measures, transportation needs, and additional input deemed valuable to inform Resilient IE. Use community meetings as opportunities to share about Resilient IE, WRCOG, SBCTA, and resiliency-focused resources. Community members will also be asked to provide input on the pilot project and other project deliverables.

Timing of Specific Activities:

- **Planning and Promotion: mid-April 2019 – June 2019**
 - LGC will work with partners to identify communities to host the meetings in (2 in Riverside County and 2 in San Bernardino County). Utilize CalEnviroScreen 3.0 to identify disadvantaged communities, as well as other resources that provide information on demographics such as income level and ethnicity.
 - Based off of feedback from the Collaborative Organizing Committee, community interviews, and recommendations from partners, LGC will identify community partners and organizations who have the capacity and reach to help promote the community meetings.

- LGC will work with project partners and local partners to determine the date, timing, and venue for each meeting, avoiding major conflicts with existing events and taking into account partners' availabilities. Aim to schedule community meetings to align with the Collaborative Kickoff Meeting.
- LGC will work with partners to conduct broad outreach to encourage participation at the meetings. Translated materials and interpreters will be considered depending on the communities' demographics and language needs. Offering food and refreshments will also encourage participation and LGC will identify opportunities through the project budget or external sponsors to provide refreshments. Childcare services and festive activities will also be considered.
- LGC will work with partners to develop the agenda, interactive activities, presentation, and all other materials that will be needed to conduct the meetings.
- Key questions that LGC will consider: Do the chosen venues invite participation and engagement? Does the process reflect, honor, and welcome the community? Are there issues or barriers (language, location, time, transportation, childcare, food, incentives, appeal, power dynamics, etc.) that should be considered throughout the whole process? Are there community driven events that organizers can participate in and that people will already be gathering for? Are there organizations that currently have relationships with the target populations that organizers can connect with (remember to consider power dynamics)? Are there ways to increase the level of input a community has in a process?
- **Conduct Community Meetings: July 2019**
 - LGC will work with partners to conduct and facilitate four community meetings. Each meeting will be designed to provide learning opportunities to community members as well as to gather input. Meetings will be designed to be as engaging as possible with interactive activities, small group discussions, game-style activities, and other methods to gather input and foster dialogue in an engaging manner.
 - The approach of each community meeting will be balanced to foster equal communication between project partners, who will be consulting the facts and the expertise, and community members, who will be encouraged to share their unique experience, values, vision, intuition, and concerns. As such, LGC as the facilitator will work to promote a culture of participation at each meeting that will facilitate ongoing quality public engagement.
- **Review Results: August 2019**
 - After all meetings are conducted, LGC will conduct a full analysis of interview responses to create a prioritized list of community needs, concerns, and priorities. Further analysis will be conducted to identify notable trends.
 - LGC will share summaries and raw results with project partners and work collaboratively to identify opportunities to integrate community input into project deliverables.

Community Outreach & Engagement Materials

Develop materials and resources, such as presentations, flyers, agendas, facilitator agendas, and talking points, that can be utilized by project partners to engage community members at existing community events. Attending existing events is a cost-effective way to engage with the community, targeted stakeholders, and the general public to gather input and feedback while sharing about Resilient IE. Generally, there are two different ways in which the team can have a presence at existing events:

- *Tabling*: Acquiring a table at conferences, workshops, festivals, farmer’s markets, and other existing community events to engage with interested participants on a one-on-one basis.
- *Presenting*: Being included in agendas for existing community-facing meetings being organized by public agencies, neighborhood associations, and other community-based organizations to provide an overview of Resilient and soliciting input from participants.

Timing of Specific Activities:

- **Identify Events and Materials Needed: April 2019**
 - LGC will work with project partners to identify the type of materials needed for WRCOG and SBCTA staff to attend existing local events and meetings. Partners may be requested to collaborate on the development of materials, such as providing information for flyers, factsheets, presentations, and other materials deemed necessary.
 - LGC will work with project partners and conduct online research to identify events that attract the type of community members and stakeholders of interest to engage.
 - LGC will continue to develop materials and identify events beyond April 2019.
- **Develop Materials: May 2019 – August 2019**
 - LGC will work with project partners to develop a range of materials that can be used by WRCOG and SBCTA staff when attending existing community events. Materials may include presentations, flyers, factsheets, agendas, facilitator agendas for interactive activities, talking points, and other materials requested. Project consultants may be requested to provide draft deliverables if project partners are interested in gathering more specific feedback.
 - LGC will share draft materials with the project team for review and feedback prior to finalization. The final materials will be shared with the project team for dissemination and use.
 - LGC will request summaries of input and feedback collected and provide coordination support, as requested, to route summaries to appropriate members of the project team. General feedback will be included as part of the report for the Community Outreach & Engagement task.

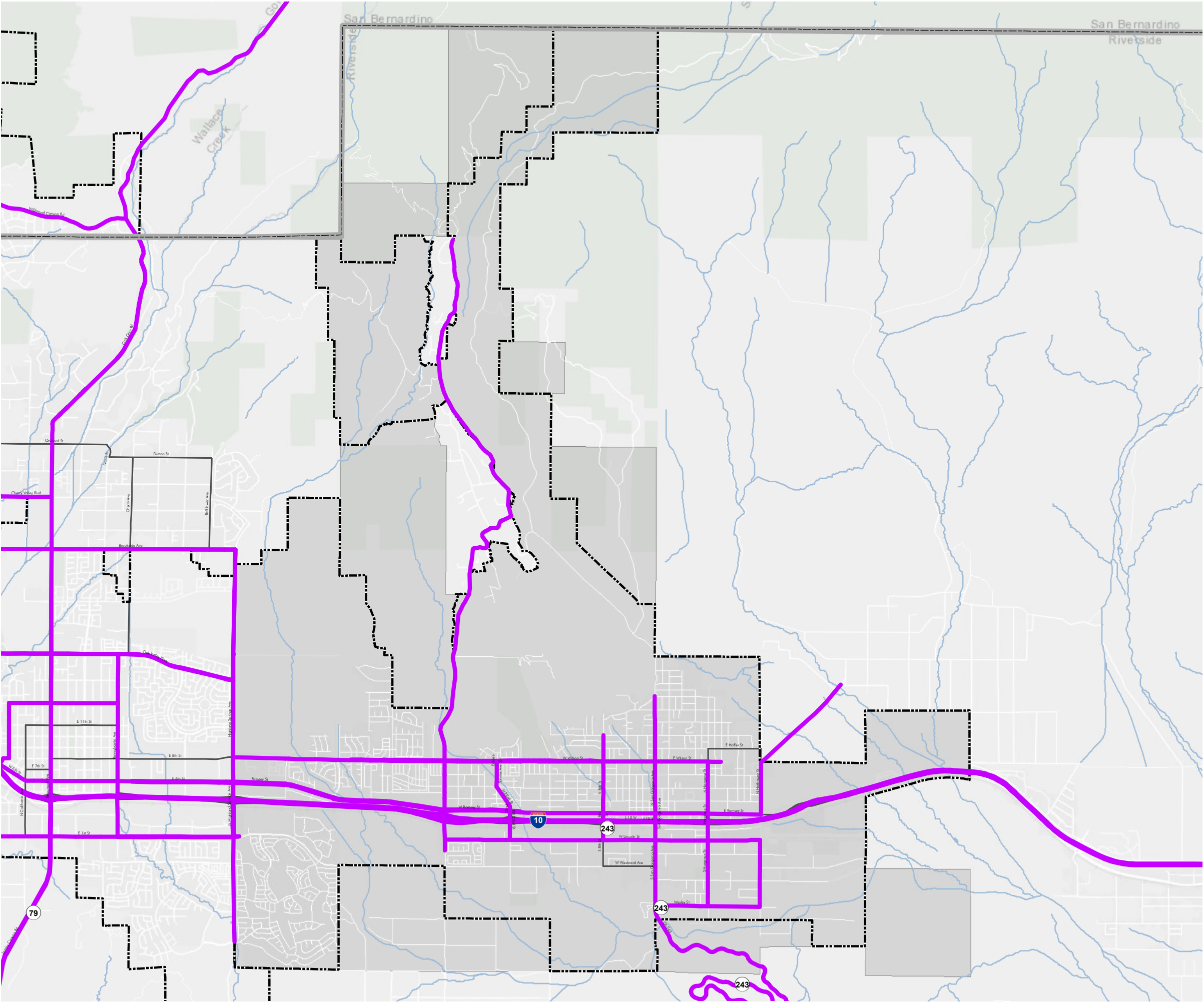
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Resilient IE Activities Update –
Evacuation Network

Attachment 6

Draft WRCOG City-Level Evacuation
Maps

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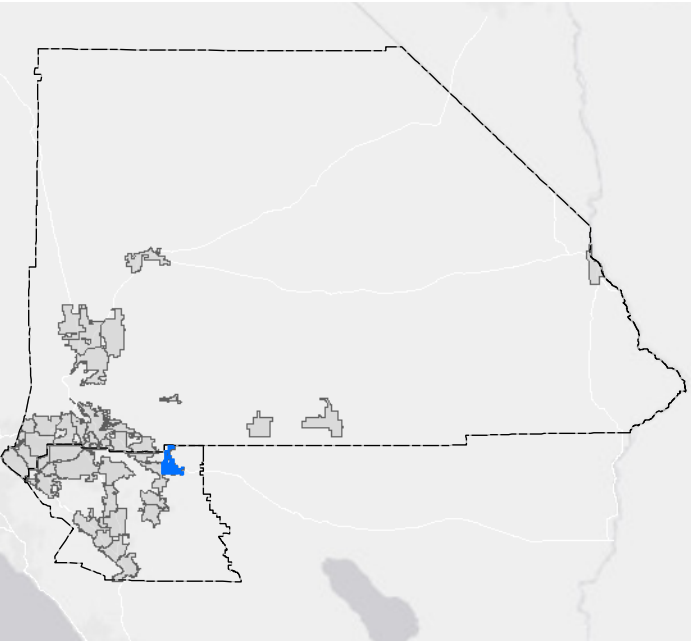


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Evacuation Routes

BANNING

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



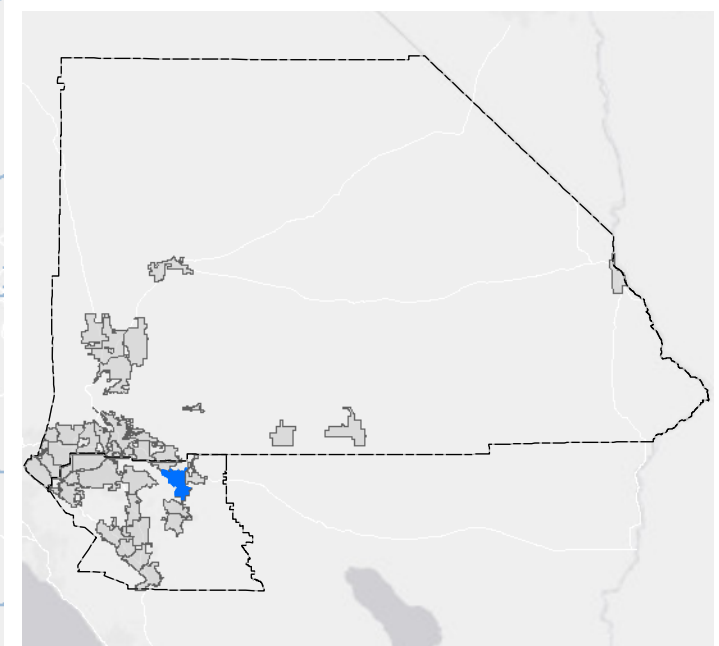
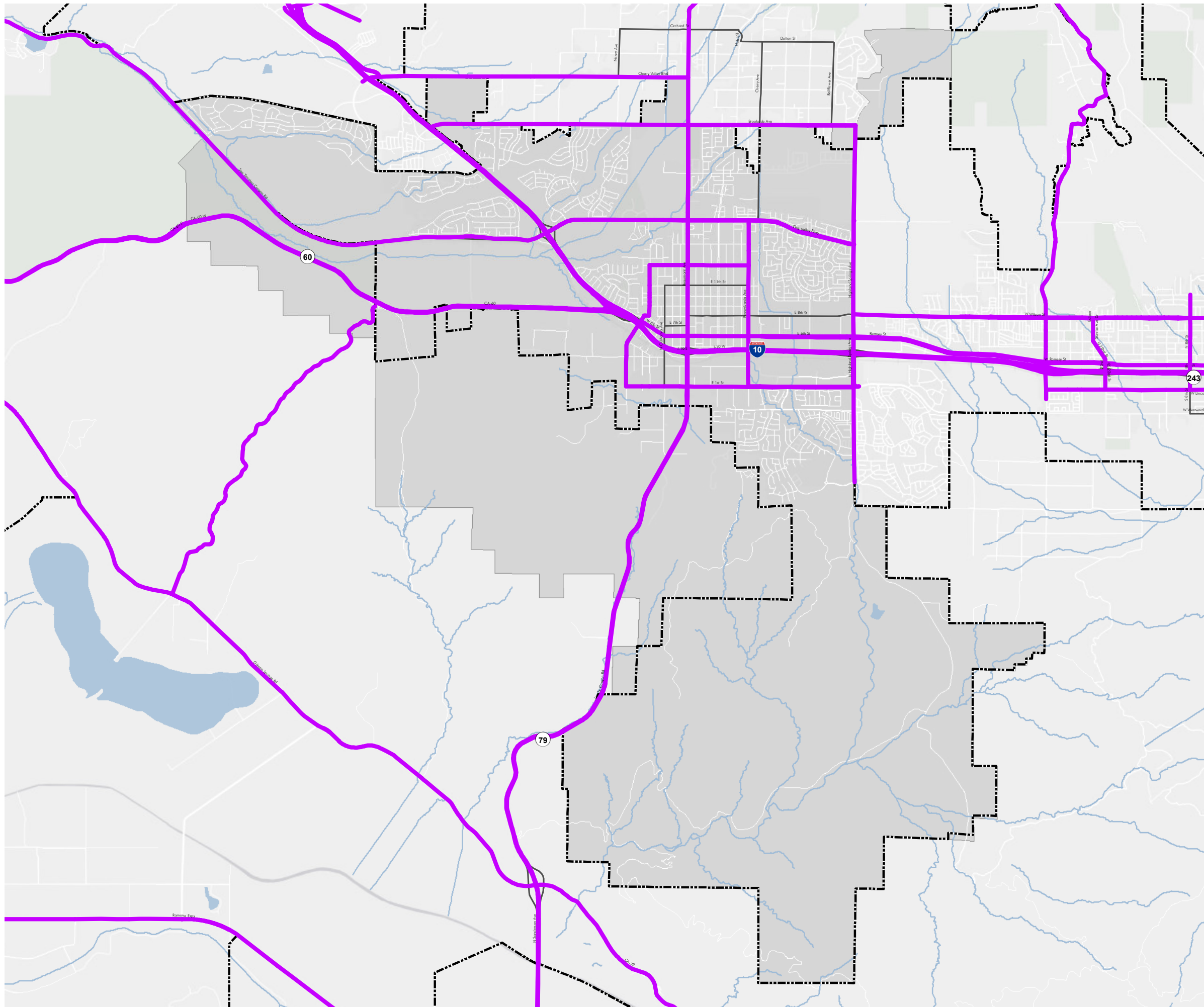
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Evacuation Routes

BEAUMONT

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



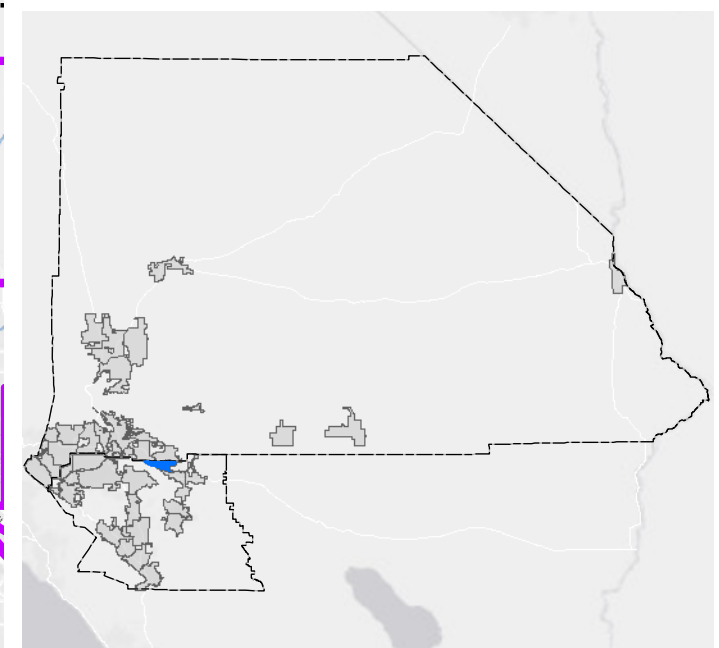
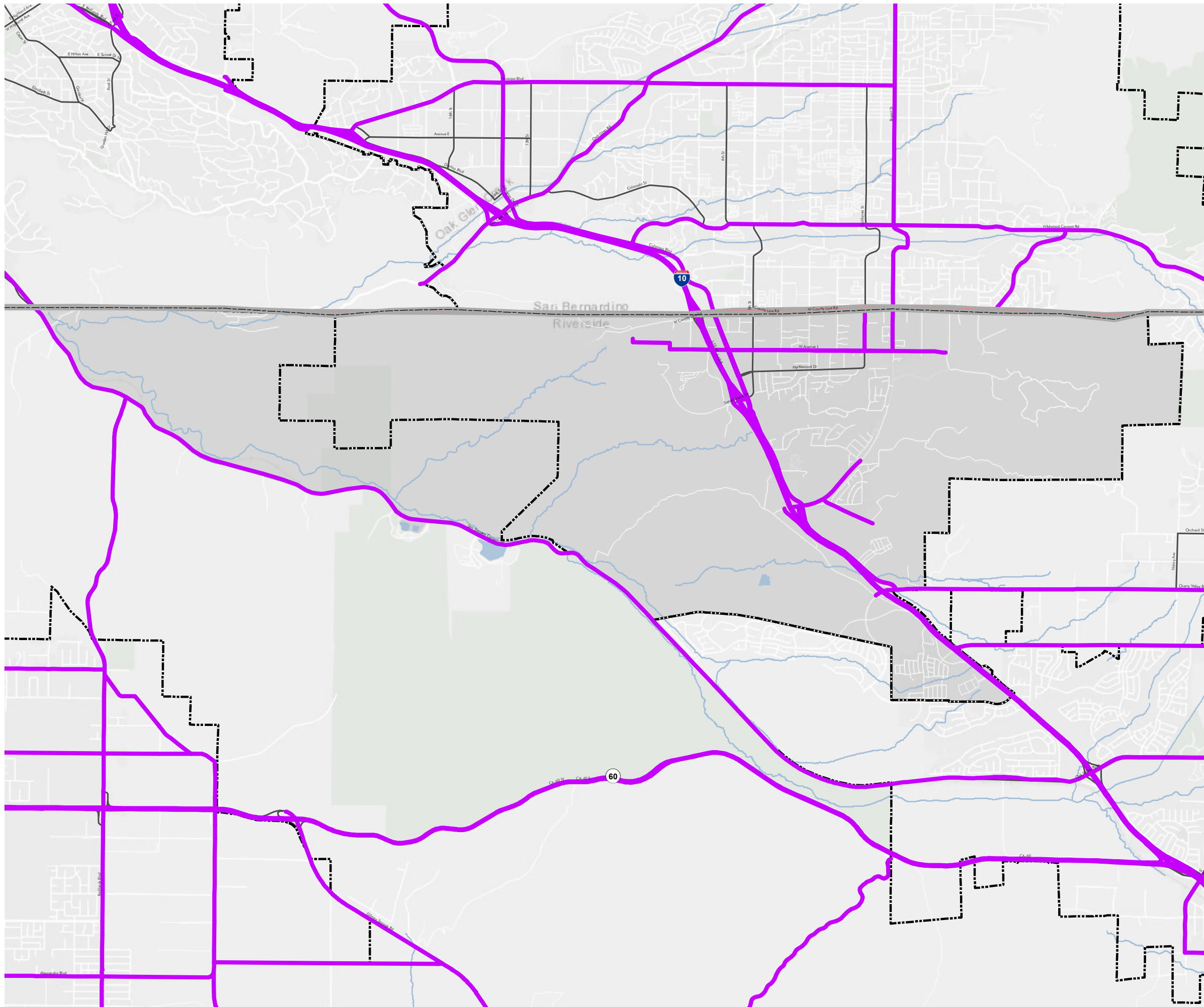
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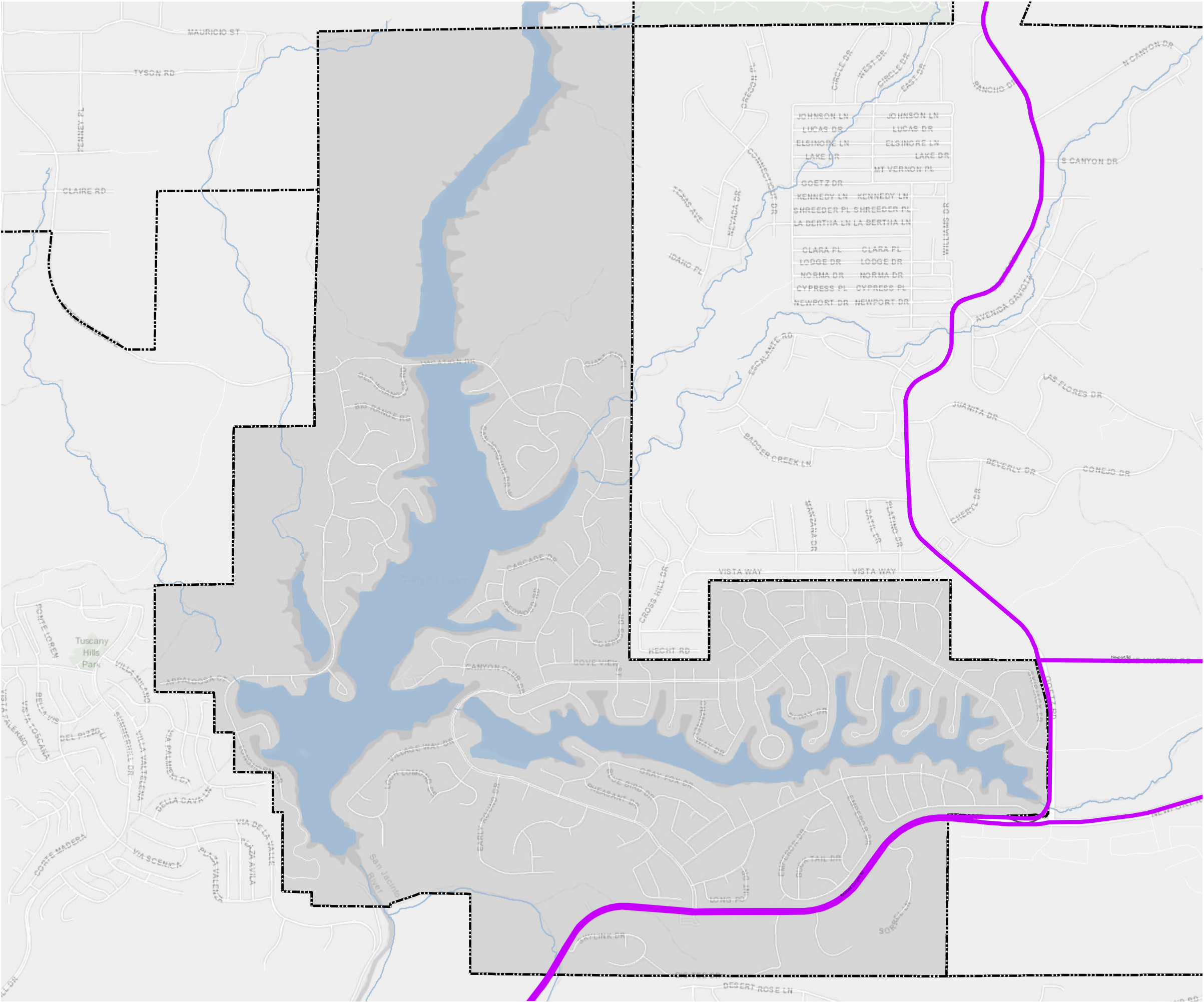
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Evacuation Routes

CALIMESA

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



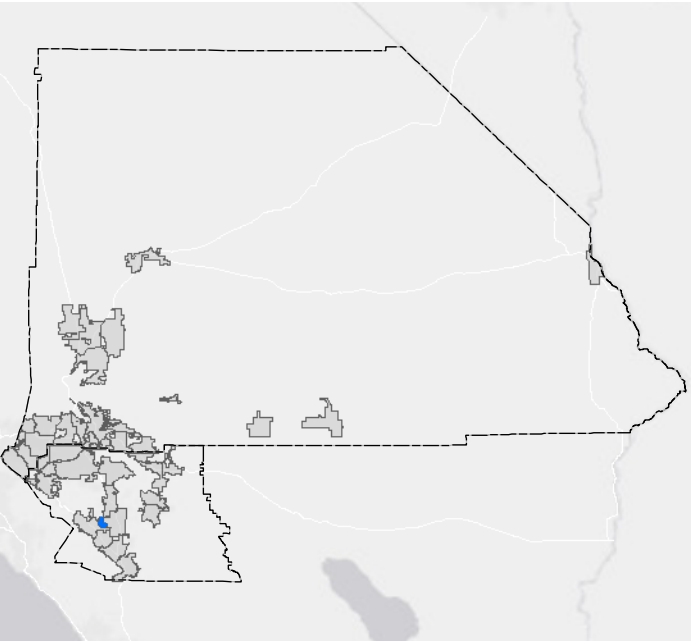


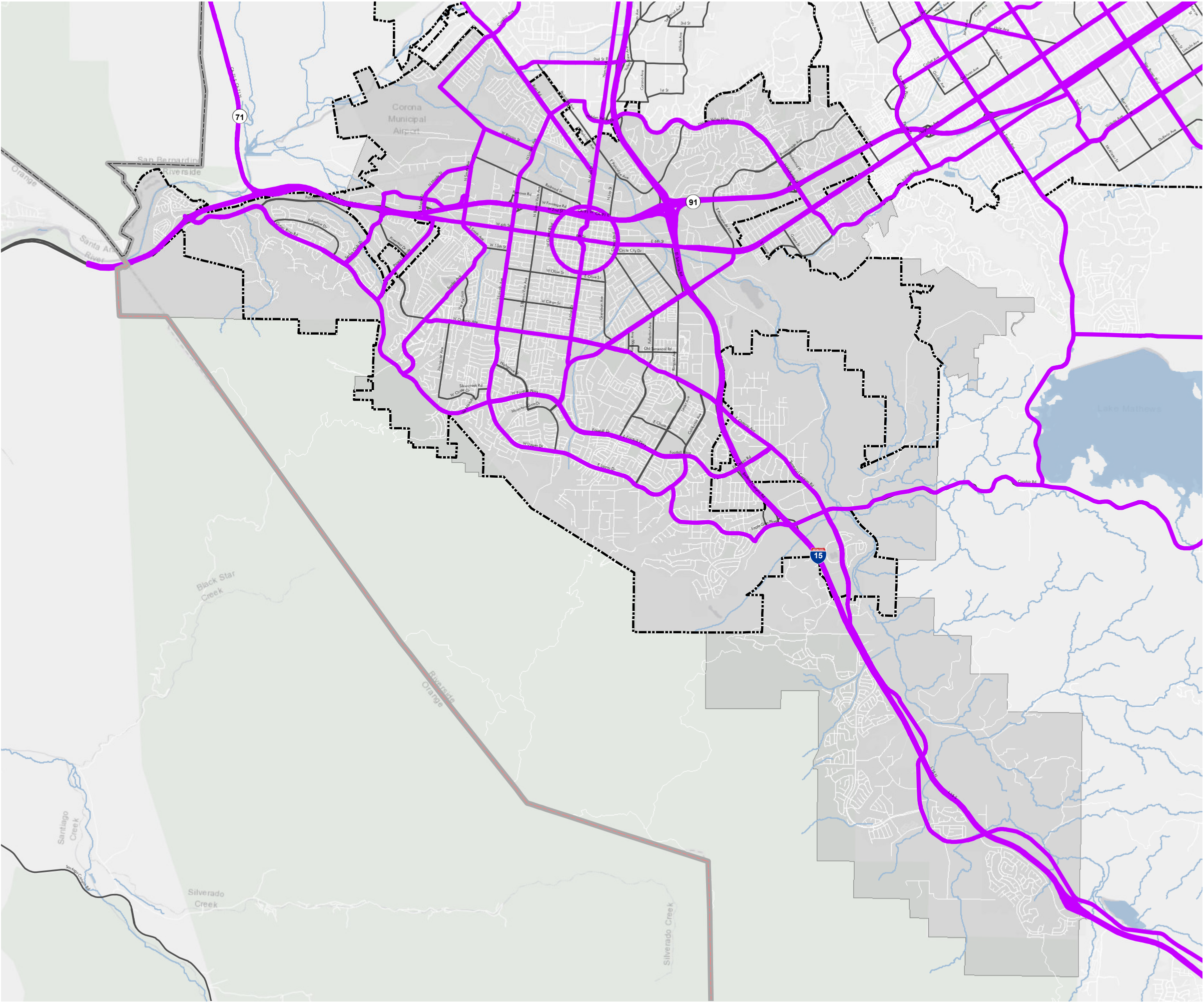
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Evacuation Routes

CANYON LAKE

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



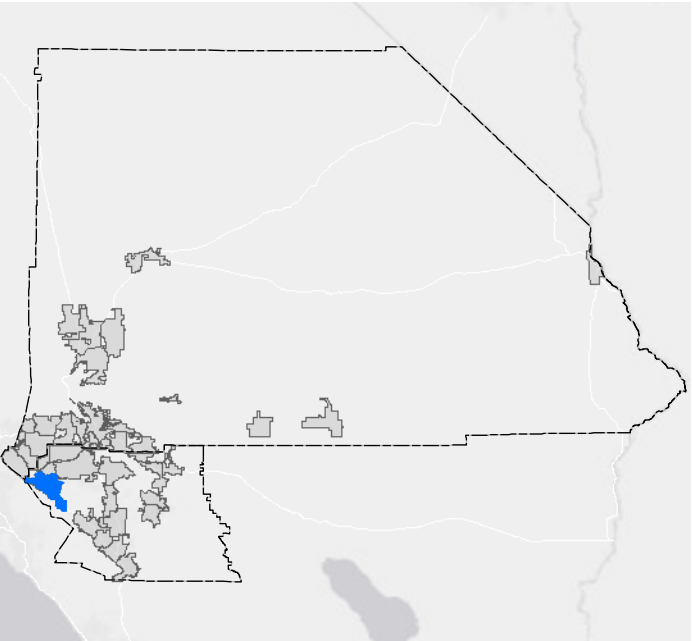


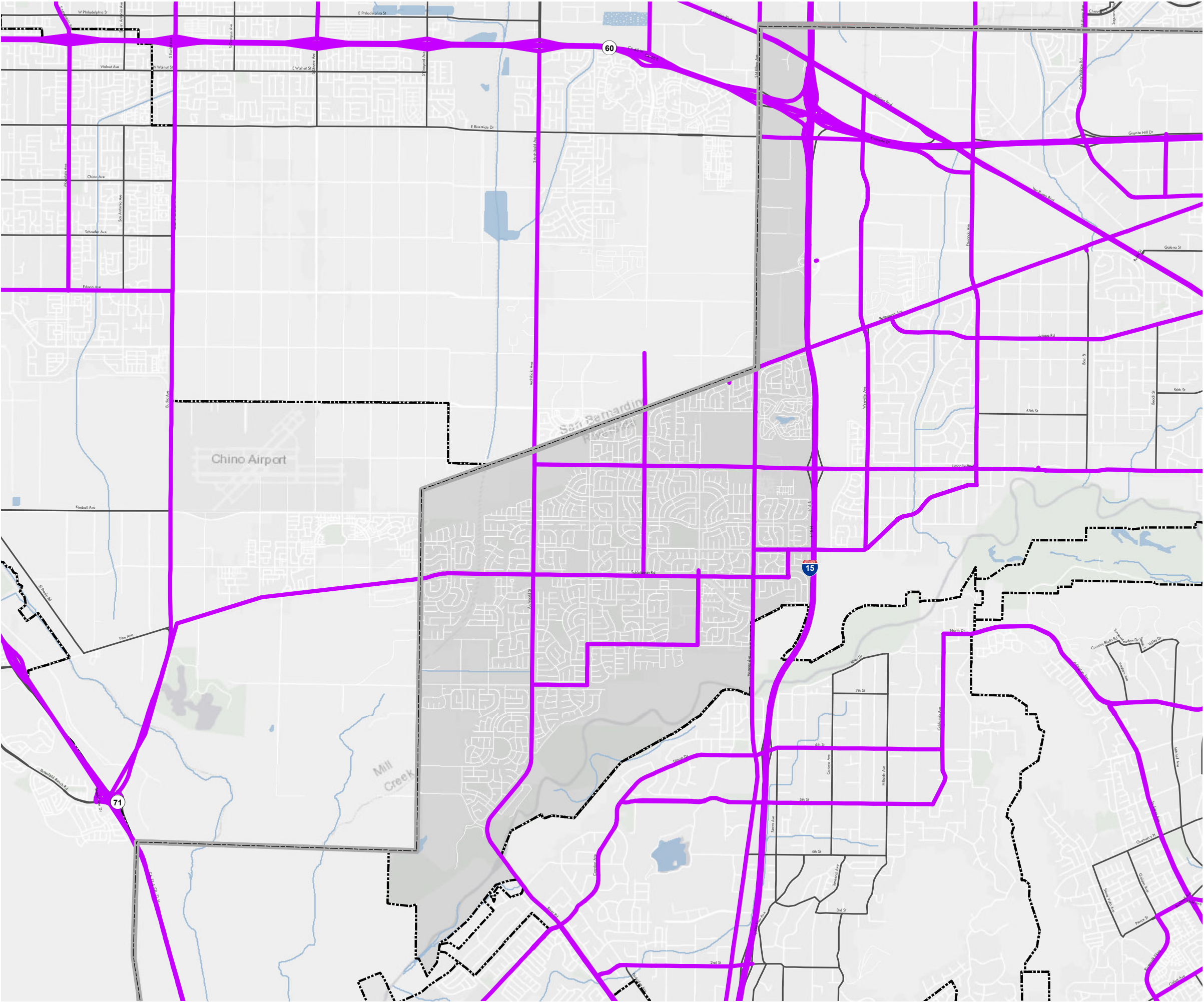
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Evacuation Routes

CORONA

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



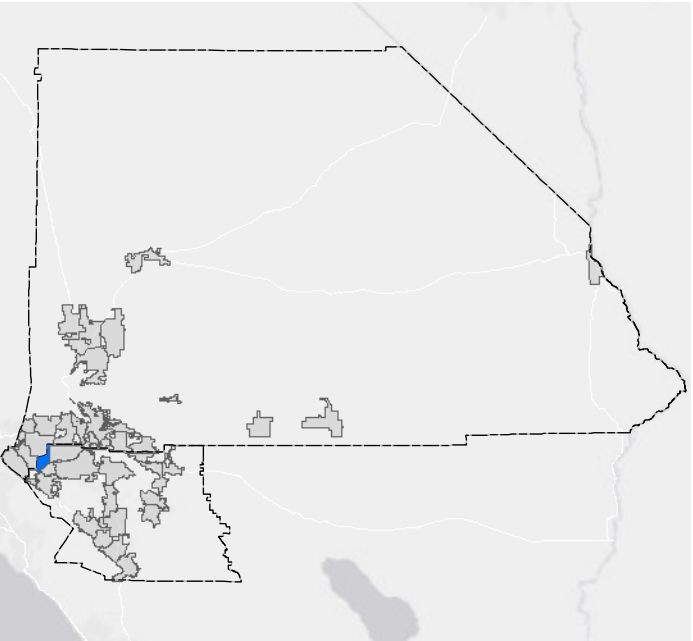


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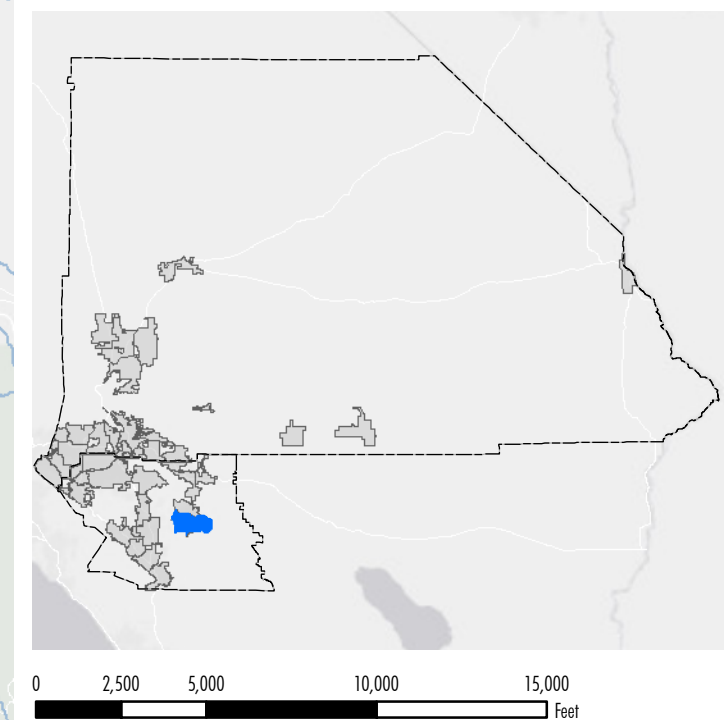
Evacuation Routes

EASTVALE

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits

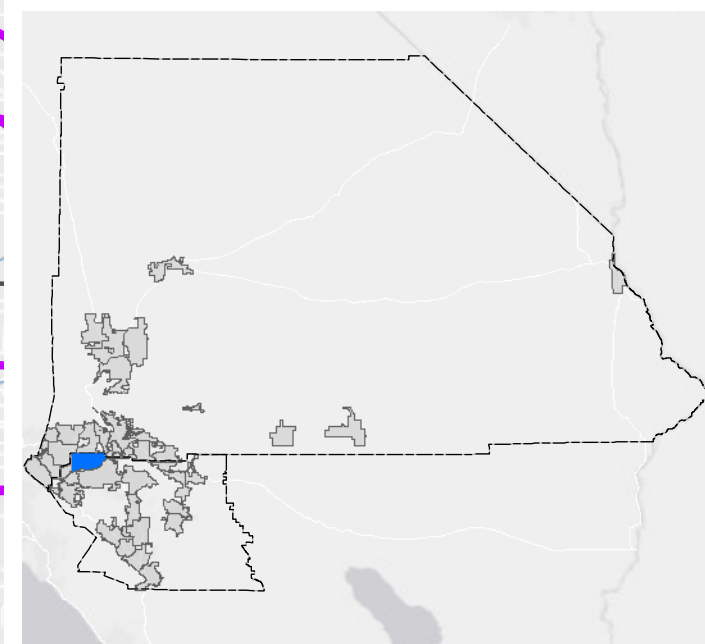
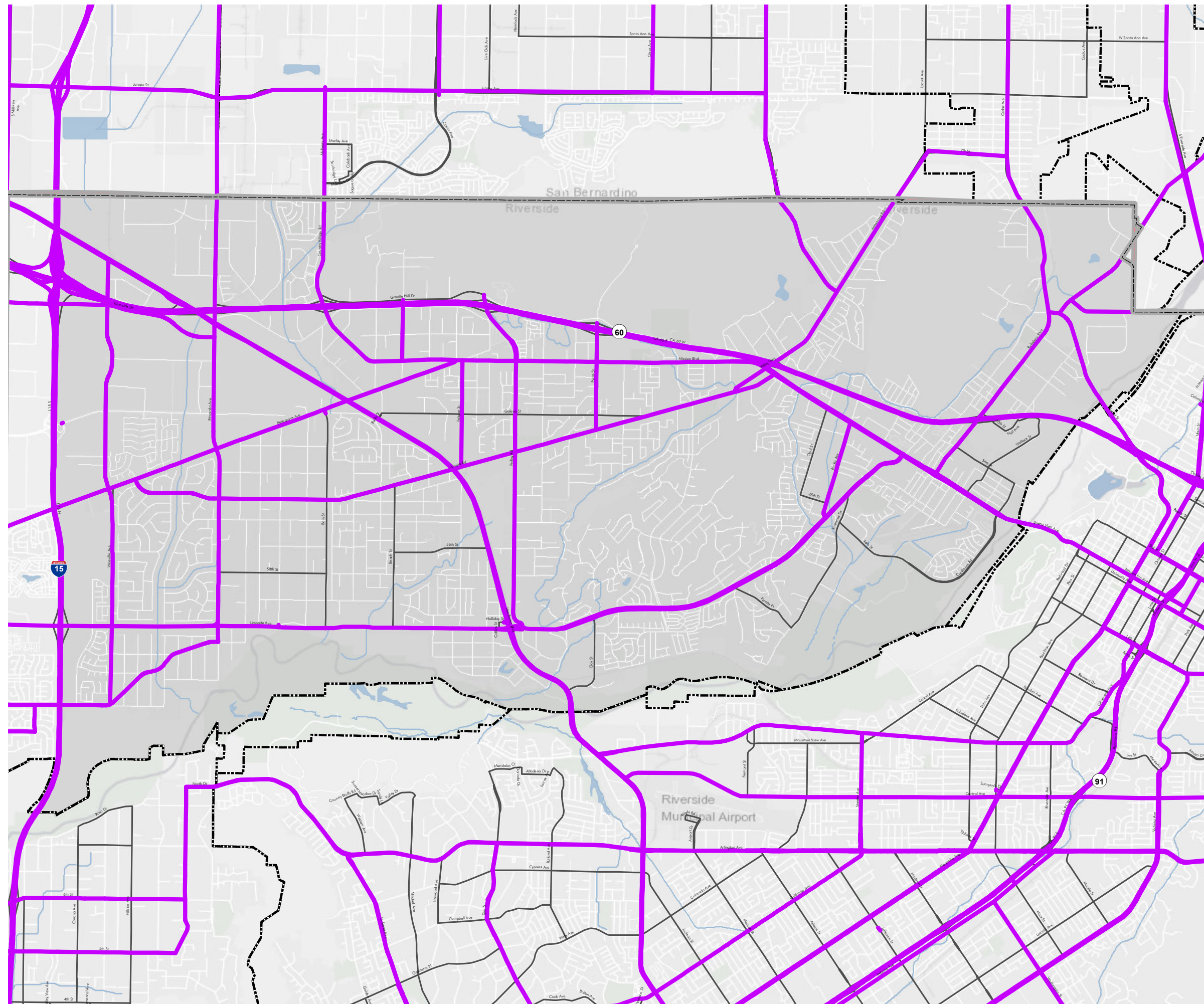


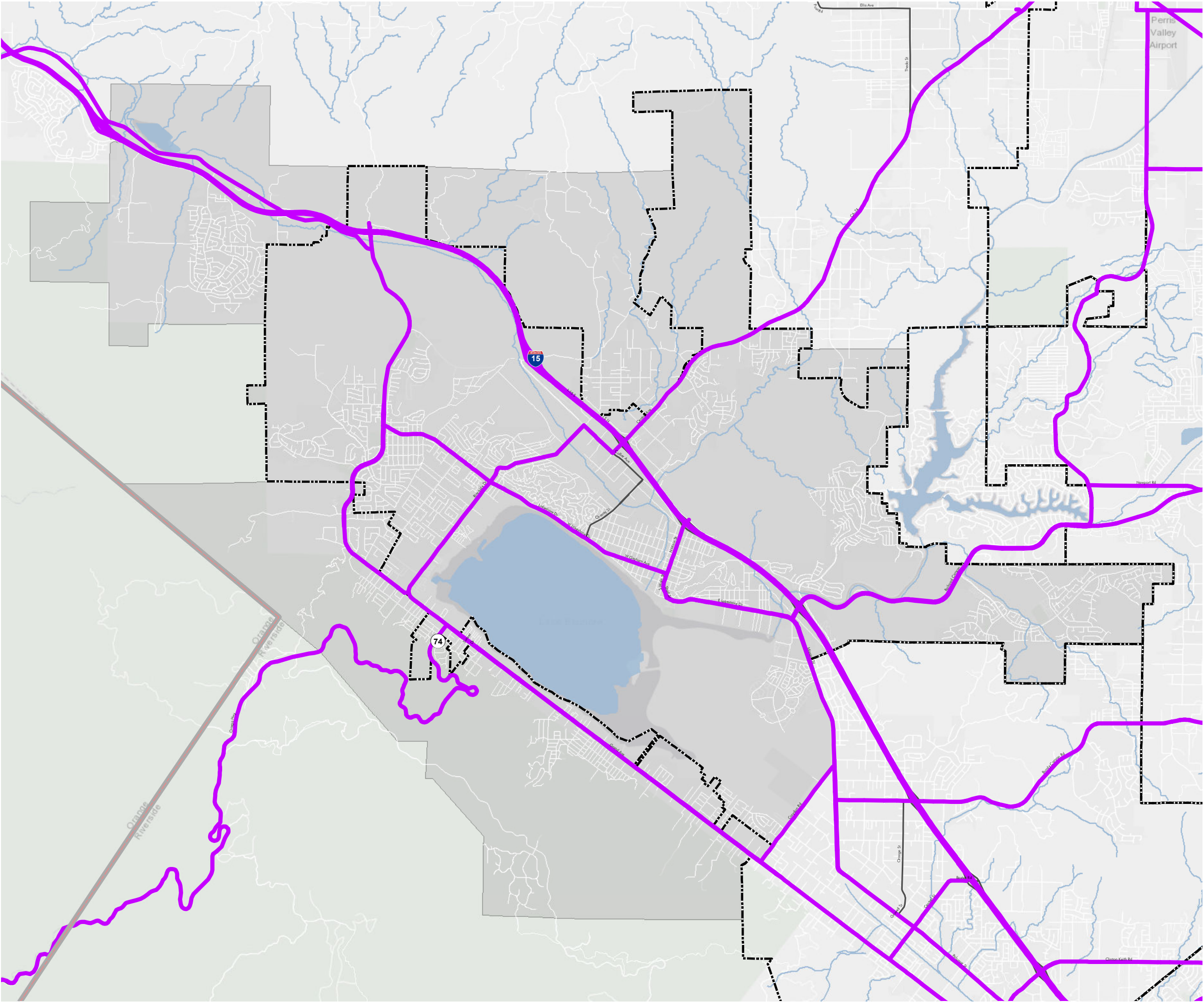
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Evacuation Routes

JURUPA VALLEY

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



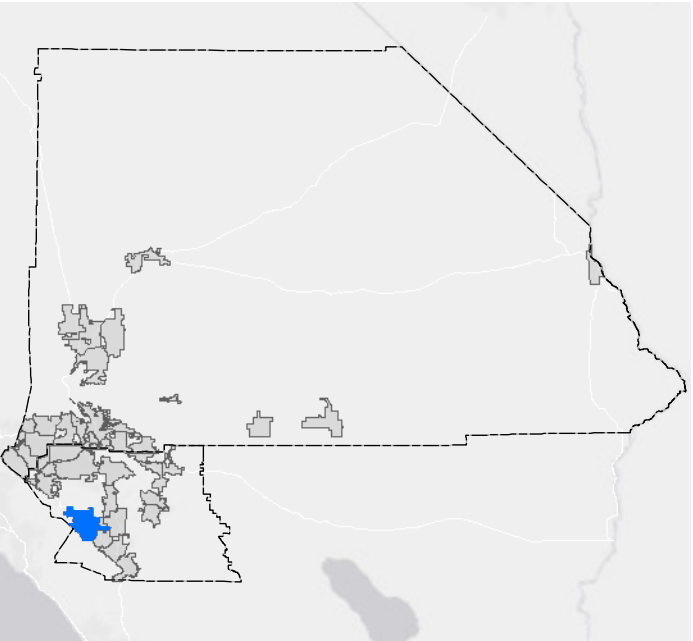


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Evacuation Routes

LAKE ELSINORE

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits

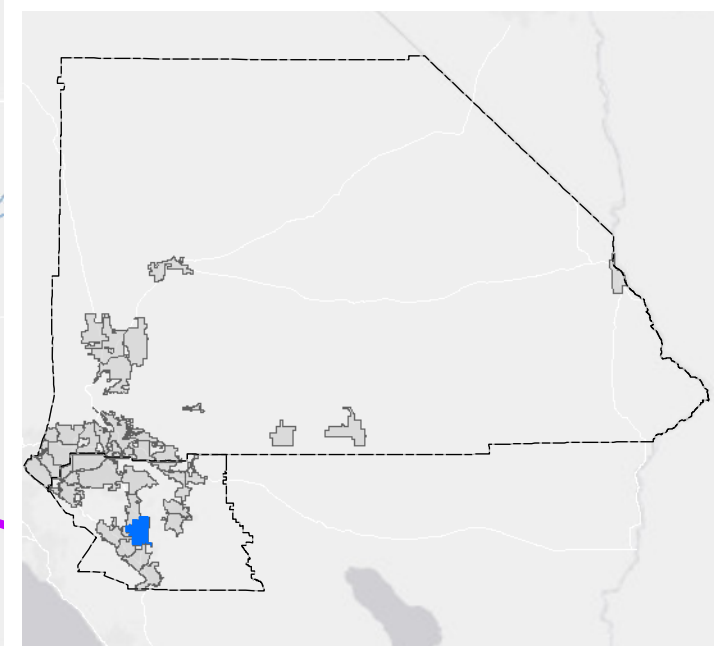
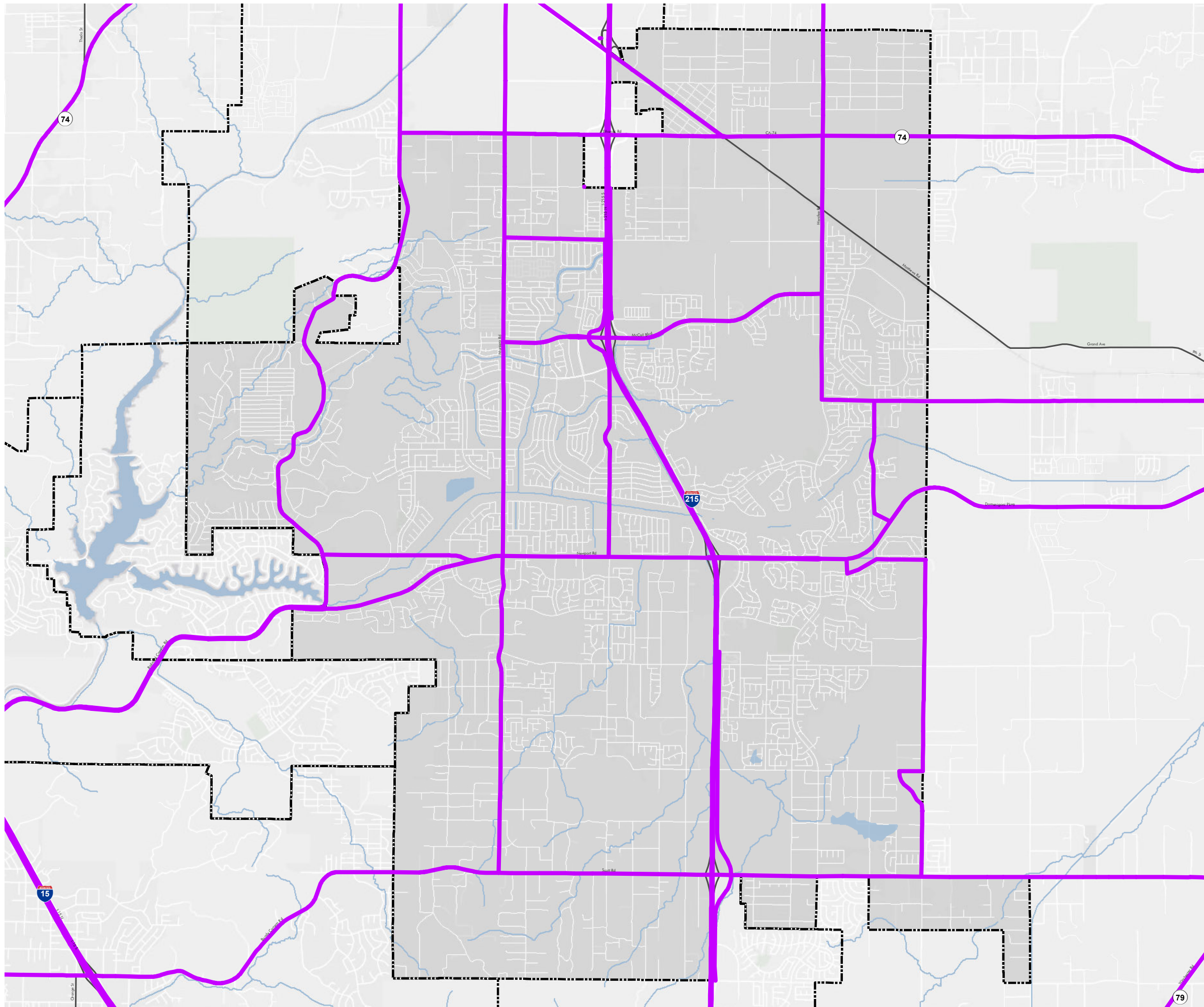


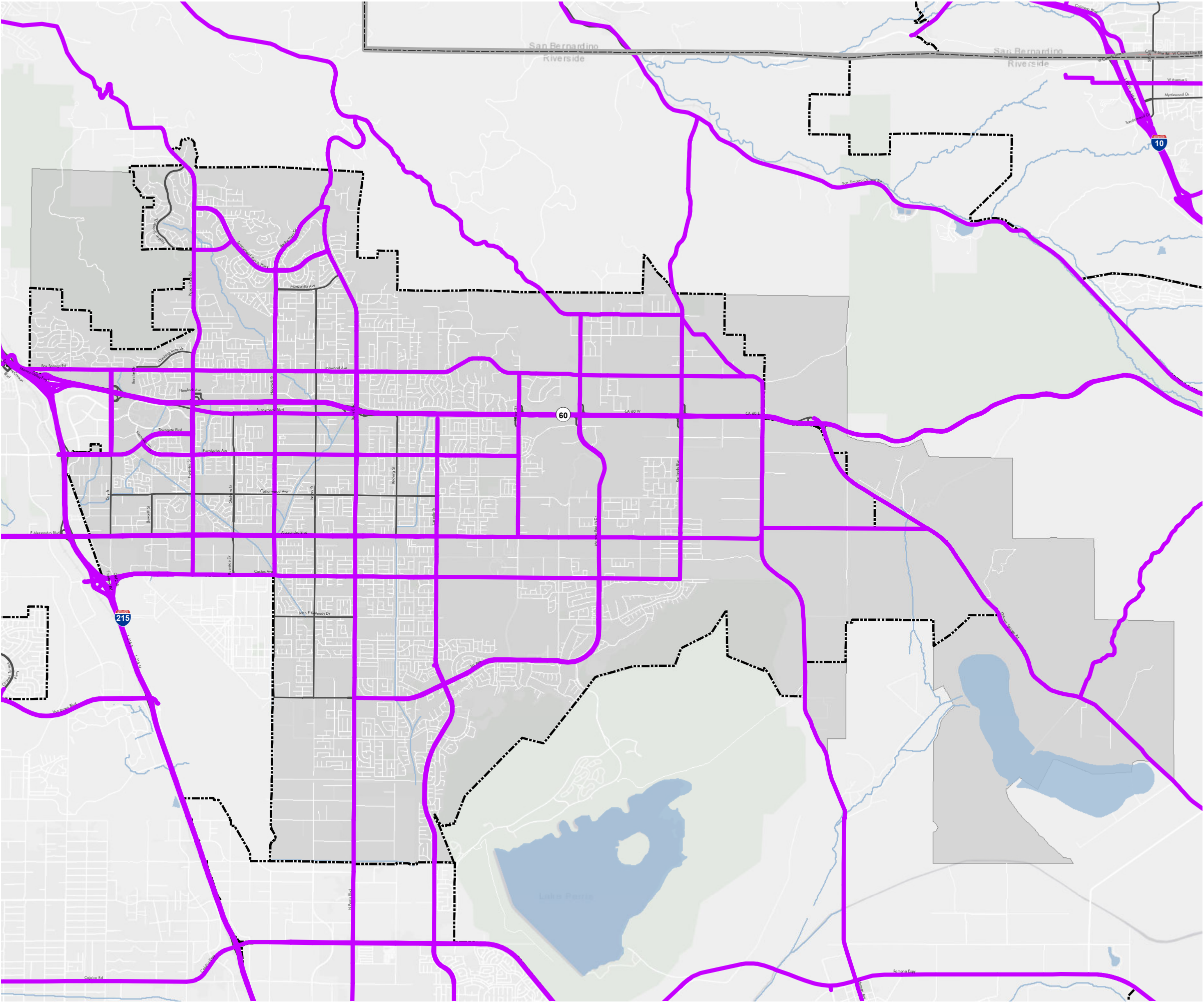
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Evacuation Routes

MENIFEE

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



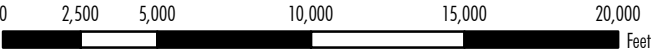
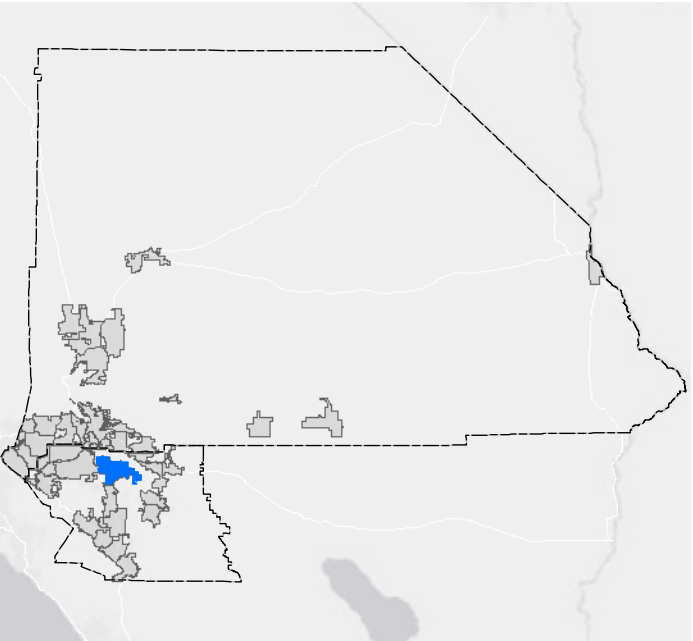


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Evacuation Routes

MORENO VALLEY

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits

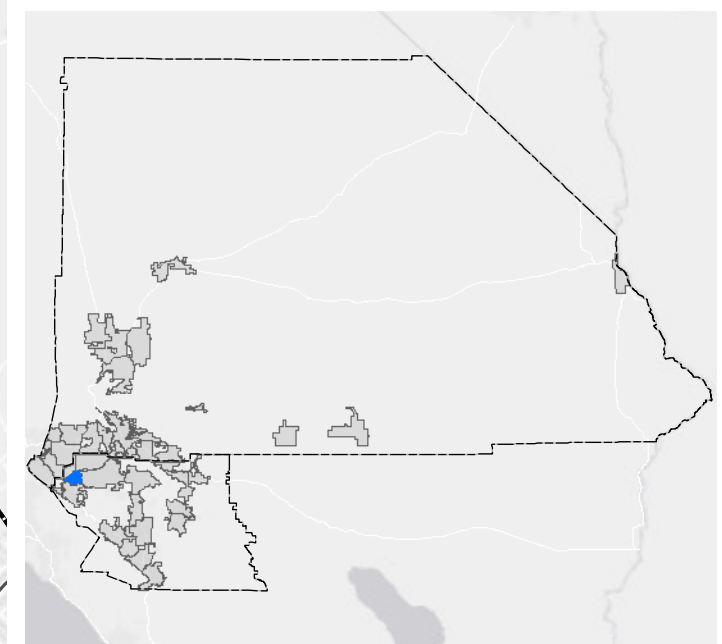
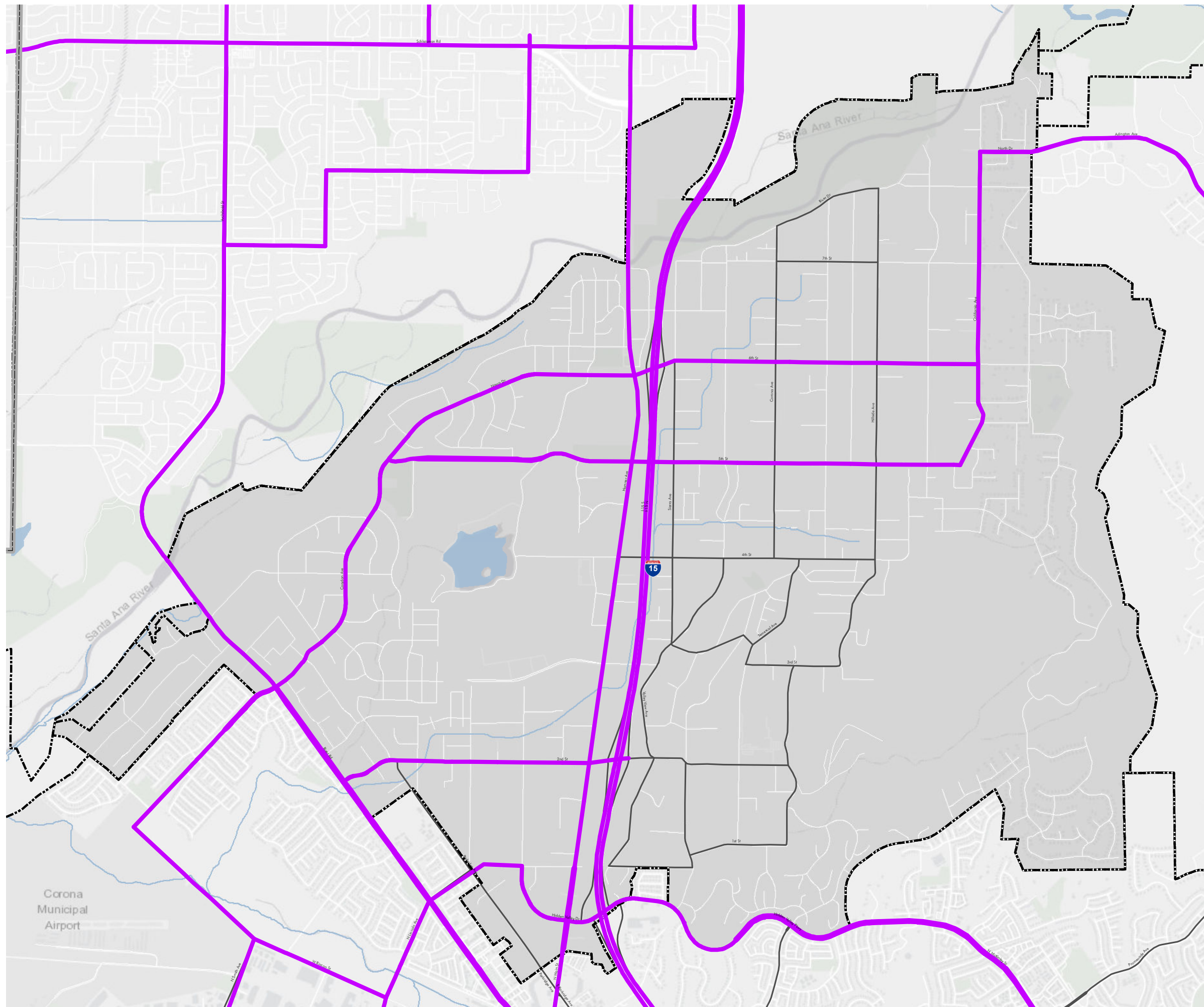


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Evacuation Routes

NORCO

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



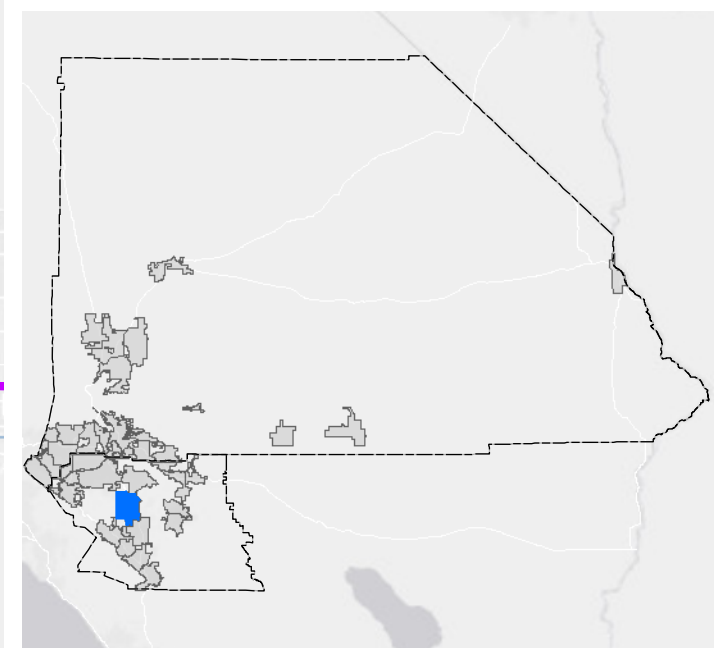
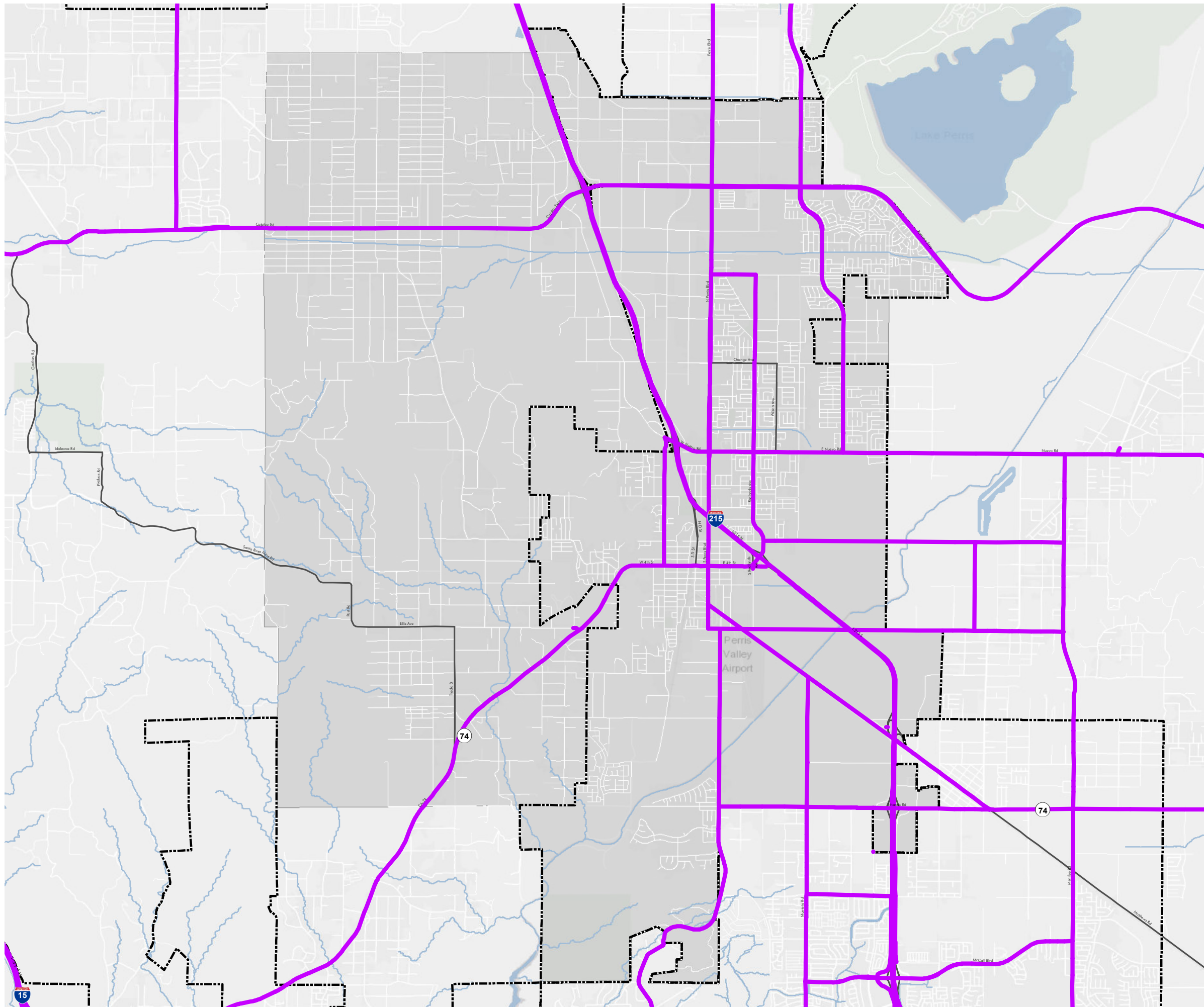
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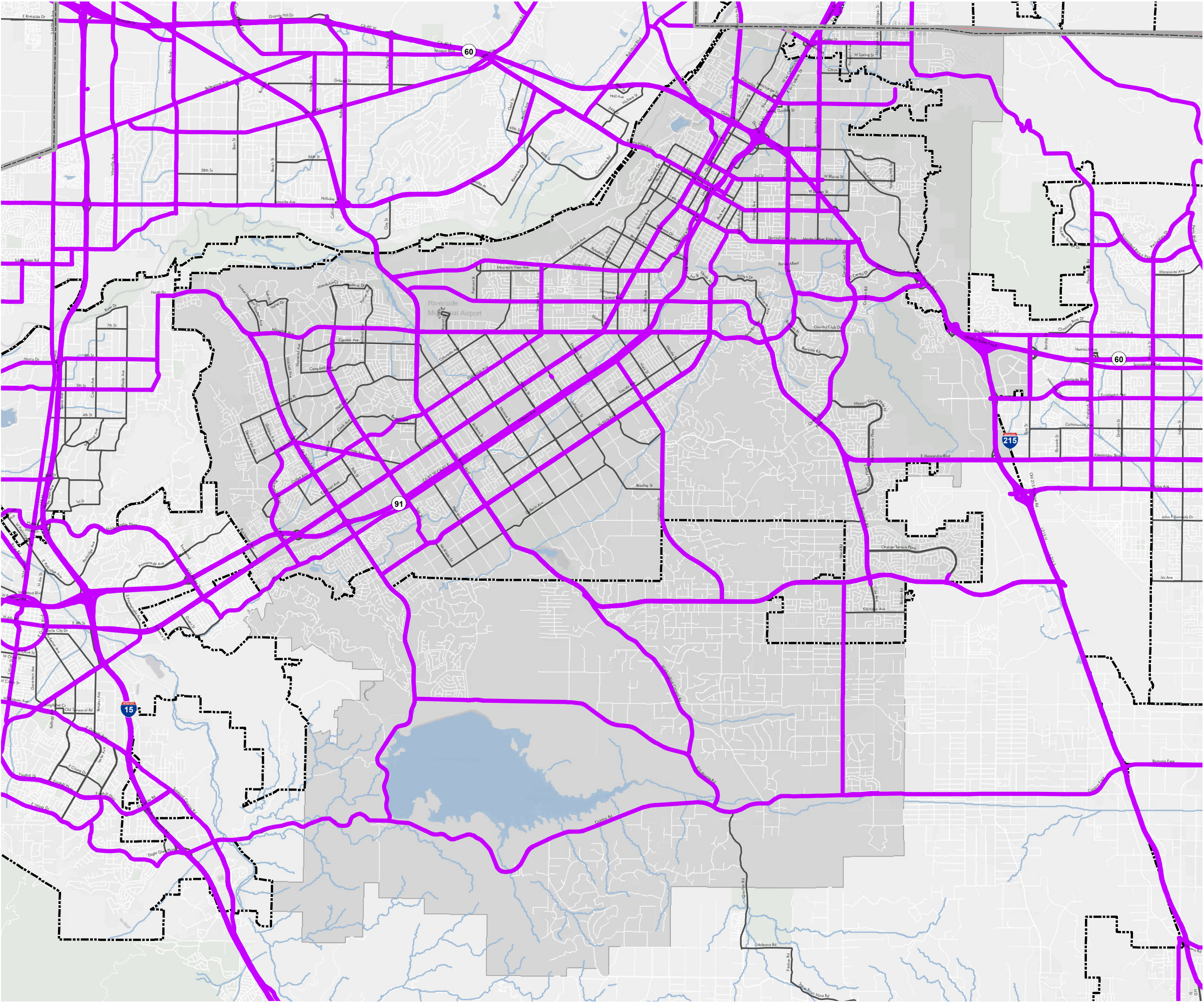
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Evacuation Routes

PERRIS

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



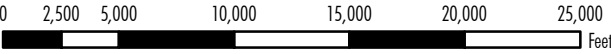
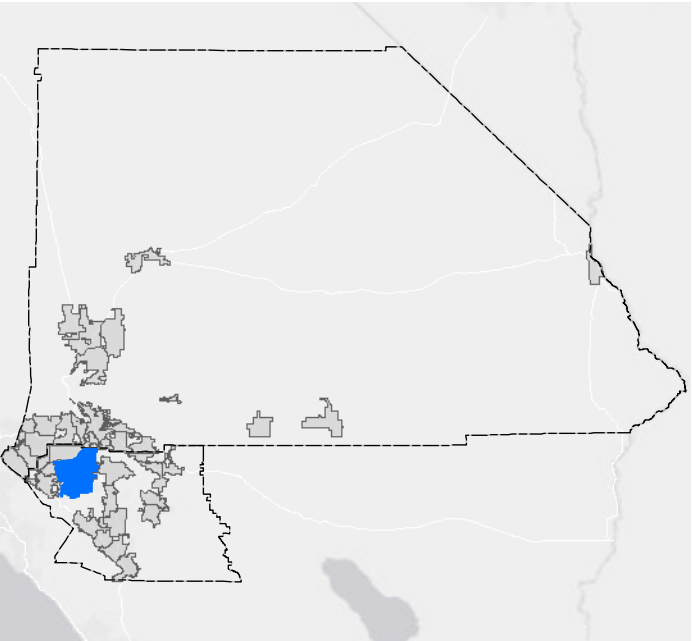


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Evacuation Routes

RIVERSIDE

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits

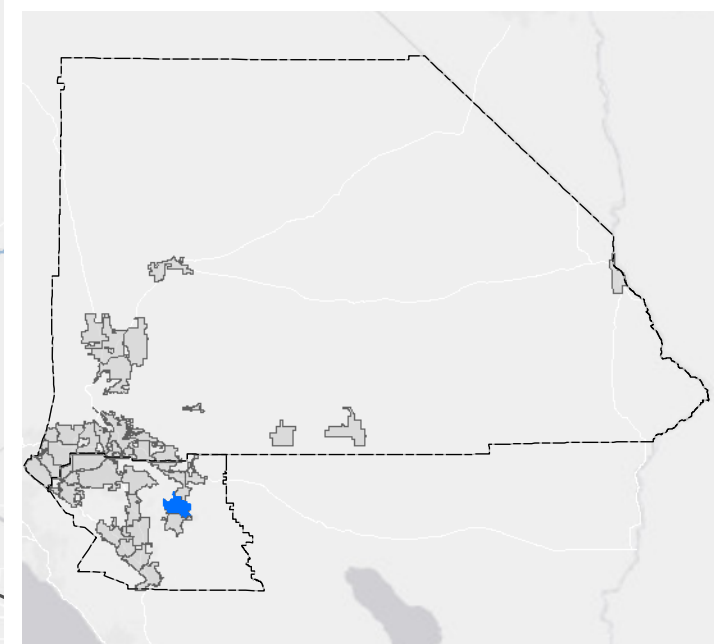
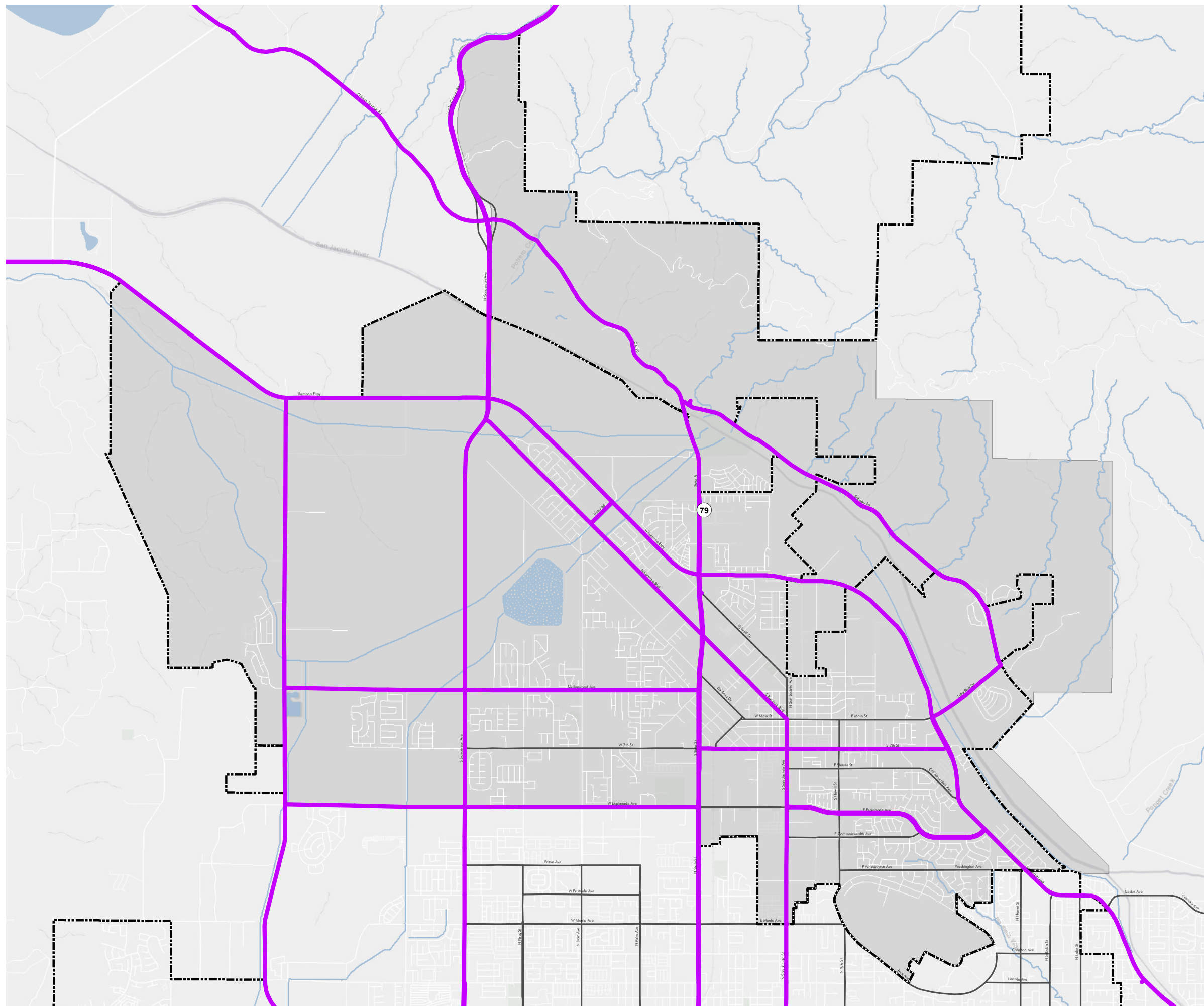


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Evacuation Routes

SAN JACINTO

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits

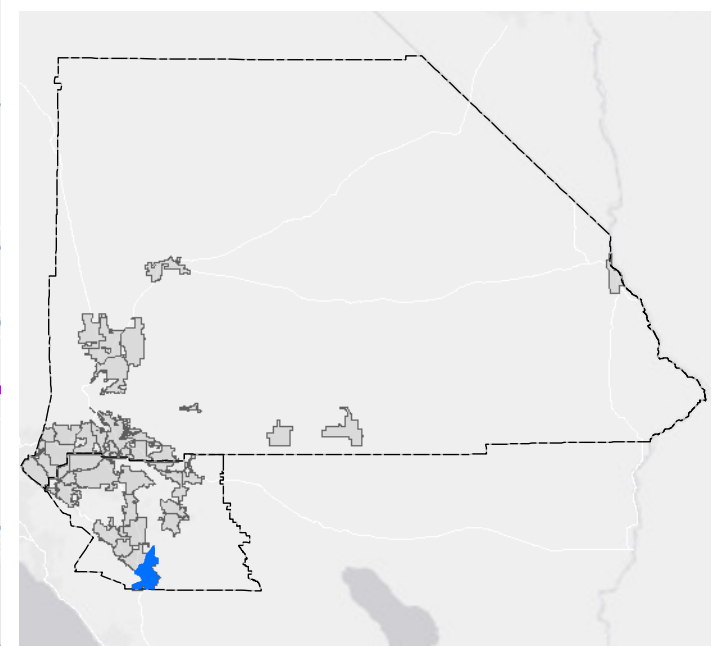


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Evacuation Routes

TEMECULA

- Evacuation Routes (Draft)
- Major Roads
- WRCOG_Boundary
- SB_County_Boundary
- City Limits



0 2,500 5,000 10,000 15,000 20,000 25,000 Feet



Western Riverside Council of Governments Public Works Committee

Staff Report

Subject: Small Cell Deployment Activities Update

Contact: George Wentz, Governmental Services Practice Vice-President, HR Green,
gwentz@hrgreen.com, 855-900-4742

Date: April 11, 2019

The purpose of this item is to provide a report on the deployment of small cells throughout the nation.

Requested Action:

1. Receive and file.

George Wentz and Dave Zelenok of HR Green will present an overview of the most recent deployment of small cells, with a focus on WRCOG local government activities.

Prior Action:

None.

Fiscal Impact:

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

Attachment:

None.

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Western Riverside Council of Governments

Public Works Committee

Staff Report

Subject: UrbanLeap Innovation Platform

Contact: Arik Bronshtein, Chief Executive Officer, UrbanLeap, arik@urbanleap.io, (650) 289-8734

Date: April 11, 2019

The purpose of this item is to provide a presentation on UrbanLeap's innovation management platform.

Requested Action:

1. Receive and file.

Urban Leap Overview

[UrbanLeap](#) is a SaaS innovation platform that provides governments with an environment to discover, test and share best practices and innovative solutions. The platform offers a low-risk method to test ideas and solutions prior to larger-scale implementation. UrbanLeap's earliest clients include the Cities of Palo Alto, Pittsburgh, and Las Vegas, and San Mateo County. Attachment 1 includes a more detailed overview of UrbanLeap and Attachment 2 provides a Case Study of the platform's application for the City of Pittsburgh. Mr. Bronshtein and Rich Lechner of UrbanLeap will present on the platform and discuss potential applications in the inland region.

Prior Action

None.

Fiscal Impact:

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

Attachments:

1. UrbanLeap Overview.
2. Case Study – City of Pittsburgh.

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Item 7.B

UrbanLeap Innovation Platform

Attachment 1

UrbanLeap Overview

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The fastest way for local governments to discover, test, and share innovative solutions



UrbanLeap is a cloud-based innovation management platform that allows governments to coordinate their smart urban initiatives in one place.

- Enhance discovery of relevant solutions and best practices
- Streamline the submission and evaluation process
- Automate workflows to enhance project success rates
- Improve collaboration across internal teams and vendors
- Increase transparency and stakeholder engagement
- Share learnings and results with like-minded organizations

Accelerate meaningful outcomes and improve your success rate



Discover
&
Select



Plan
&
Collaborate



Test
&
Evaluate



Share
&
Learn

“The challenges facing cities today means that exploring new, innovative ways of delivering services becomes imperative, not optional. UrbanLeap has built software that can quickly help to identify and evaluate new solutions for communities.”

- Jonathan Reichental, Former CIO of Palo Alto



Centralize Potential Solutions

Discover, collect and evaluate proposals that are relevant to your organization's goals and biggest challenges all in one place. Standardize your intake process and formatting across your teams.

Automate Your Workflow

Drive reliable results with an automated, structured workflow that government staff and vendors love.

Pilot Activity



Rapid detection of water contamination

Optiqua

Pilot Manager

Nancy Parker

Budget

\$12,700

Status Delayed

3rd sensor installation delayed due to change in requirements updated two weeks ago

Strategic Initiatives

Public Safety

Timeline

FEB 2018 MAR 2020

Public Safety

Protect and promote community safety to achieve a high quality of life for residents

Strategic Initiative Targets

10%

Reduction in crime rate in the Market District

Total Budgeted

\$16,480

Team Members

RD TW NP

Active Pilots

Accident prevention & early detection

Rapid detection of water contamination

Neighborhood vulnerability insights

Completed Pilots

Drones for traffic accident footage

Contracting

Analyze Social Media

ZenCity

Contract in progress

Predictive Traffic Management

WayCare

Contract in progress

Improving Transportation

Tracking

AV Public Transportation

Waymo

Next milestone: 2/9/19

5G Wireless

Internal

Surveys in progress

Affordable Housing

UrbanSim

Next milestone: 3/12/19

Smart Irrigation

HydroEpsilon

Collecting final results

Public Records Requests

NextRequest

Next milestone: 2/21/19

Evaluating

Public WiFi

Internal

Awaiting final evaluation

Procurement Chatbot

Yeti

Determining goal outcomes

Civic Engagement

OpenGov

Awaiting final evaluation

Collaborate Across Teams

Keep teams and vendors on the same page with features such as permissions and roles, communication, and smart notifications.

See the Full Picture

Maintain visibility across all of your innovation projects, monitor key milestones and success metrics to identify potential problems quickly. Orchestrate critical resources across your project portfolio to steer resources to the right places.

Maximize Benefit, Minimize Risk

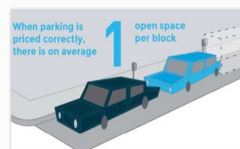
Use automated reports and hard data to take the right decision. Avoid risk and scale projects that make real impact on your residents.

Become Part of a Community

Join other progressive governments dedicated to improving outcomes by sharing best practices and solution experiences.

Explore Pilots

SEARCH



Performance Parking...

A Better City

Boston, MA

LEARN MORE



Children's Savings...

Eos Foundation

Boston, MA

LEARN MORE

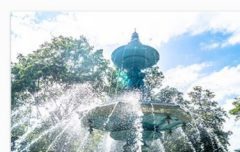


Bike Share

Ford GoBike

San Jose, CA

LEARN MORE



100 Fountains

Pilot Projects

New York City, NY

LEARN MORE



Smart Benches

Soofa

New York City, NY

LEARN MORE



UAS (Unmanned Aircraft...)

Multiple

Multiple, CA

LEARN MORE

140

Item 7.B

UrbanLeap Innovation Platform

Attachment 2

Case Study – City of Pittsburgh

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CASE STUDY: PITTSBURGH, PA

PGH Lab and UrbanLeap - Working together to make municipal government more efficient, transparent and sustainable

PGH Lab was launched by the City of Pittsburgh in 2016 with the goal of connecting local startup companies with local government authorities and agencies to test products and pilot services. Startups are connected with a "City Champion," a government employee, who works with the company throughout the three to four-month pilot project.



Throughout the first three editions of the Lab, the City of Pittsburgh and local authorities engaged 15 local startups in pilot projects testing a variety of new products and services. While not all companies secured local government contracts, two companies have moved to paid engagements after the completion of their pilot projects.

In anticipation for its 4th cohort, the city was looking for a way to scale PGH Lab, increase the pilot success rate, and to accelerate the outcomes of the solutions tested, by helping the Lab discover, test, and evaluate new technologies faster and more effectively. To achieve this objective, PGH Lab has entered a partnership with

UrbanLeap to vet, manage and track the pilots selected as part of the 4th edition, in a low-friction and data-driven way.

As a first step, PGH Lab has been using UrbanLeap's platform to simplify the process of collecting, reviewing and vetting proposals submitted as part of the 4th cohort. By leveraging UrbanLeap's built-in intake form and custom scorecard, PGH Lab has been able to standardize

and streamline the vetting process, and to significantly reduce the time and the resources usually allocated to this critical stage. 19 proposals have been funneled to the platform, enabling PGH Lab's reviewing committee to seamlessly review, score and discuss the merits of each proposed idea, in one single place, bringing transparency and agility to the whole process. As a result, 8 startups have been selected to move forward and run a total of 10 pilots.



Following the vetting process, the next step has been to leverage the platform to assemble teams, made of city champions, subject-matter experts, as well as the startup themselves. The platform offers a streamlined workflow and a collaborative environment to define the scope of the pilots, set strategic goals and performance metrics, and track the progress of each pilot.

For PGH Lab, one of the core benefits of using the platform is the ability it offers internal and external stakeholders to engage and connect with their pilot team members, in real time. Through its communication tool and its system of automatic notifications, the platform has been used by the team members to connect with each other, report on pilot status and milestone achievement and collaboratively determine the goals, objectives, and metrics associated with their respective pilots.



"UrbanLeap is playing a major role in bringing transparency to the process, helping the city track and measure the progress of the pilots in real time."

- Annia Aleman, City Innovation Specialist, PGH Lab

In terms of tracking, the platform centrally manages all documentation, metrics, data, and relevant information related to each pilot. That information is accessible to all PGH Lab internal and external stakeholders, at any time. At the portfolio level, PGH Lab is leveraging UrbanLeap's reporting capability to collect analytics directly tied to the Lab's strategic goals -- Citizen Engagement, Improved Operations, and Climate Change & Environment. The

dashboard tracks outcomes associated with the pilots, but also the progress and the resources allocated to each one of them. Those reports are particularly helpful for PGH Lab's management team to communicate the status of the program to the City's leadership and / or the residents, thereby improving government accountability in the process.

For Annia Aleman, City Innovation Specialist for the City of Pittsburgh and Manager of PGH Lab, “the platform plays a major role in bringing transparency to the process, helping the city track and measure the progress of the pilots in real time”. For the local startups, the platform is the best way to provide the information and the support needed to push their pilots across the finish line.

Core Features Used by PGH Lab and its Startup Partners:

- **Built-in Forms:** Standardize pilot proposals with lightweight forms
- **Custom Scorecards:** Create evaluation cards to score proposals
- **Planning Wizard:** Design pilots that drive better results
- **Data Management:** Plan, track, and manage pilot data
- **Reports:** Generate and share reports with a single click
- **Approvals:** Reduce red-tape and move things forward
- **Collaboration:** Across departments and with external stakeholders
- **City-wide View:** Identify trends, problems, and big promises across the region

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Western Riverside Council of Governments

Public Works Committee

Staff Report

Subject: 2019 TUMF Construction Cost Index Adjustment

Contact: Daniel Ramirez-Cornejo, Program Manager, dramirez-cornejo@wrcog.us, (951) 405-6712

Date: April 11, 2019

The purpose of this item is to present a potential Construction Cost Index (CCI) adjustment to the TUMF.

Requested Action:

1. Discuss and provide input.

WRCOG's Transportation Uniform Mitigation Fee (TUMF) Program is a regional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in Western Riverside County. Each of WRCOG's member jurisdictions and the March JPA participates in the Program through an adopted ordinance, collects fees from new development, and remits the fees to WRCOG. WRCOG, as administrator of the TUMF Program, allocates TUMF to the Riverside County Transportation Commission (RCTC), groupings of jurisdictions – referred to as TUMF Zones – based on the amounts of fees collected in these groups, the Western Riverside County Regional Conservation Authority (RCA) and the Riverside Transit Agency (RTA).

Background

Staff is required to bring annual CCI adjustment information through the WRCOG Committee structure for discussion and recommendation to the Executive Committee for consideration. The CCI is an administrative element of the TUMF Program and is intended to keep the dollar value of the TUMF Program whole. In recent years, the Executive Committee has not approved a CCI adjustment to the TUMF.

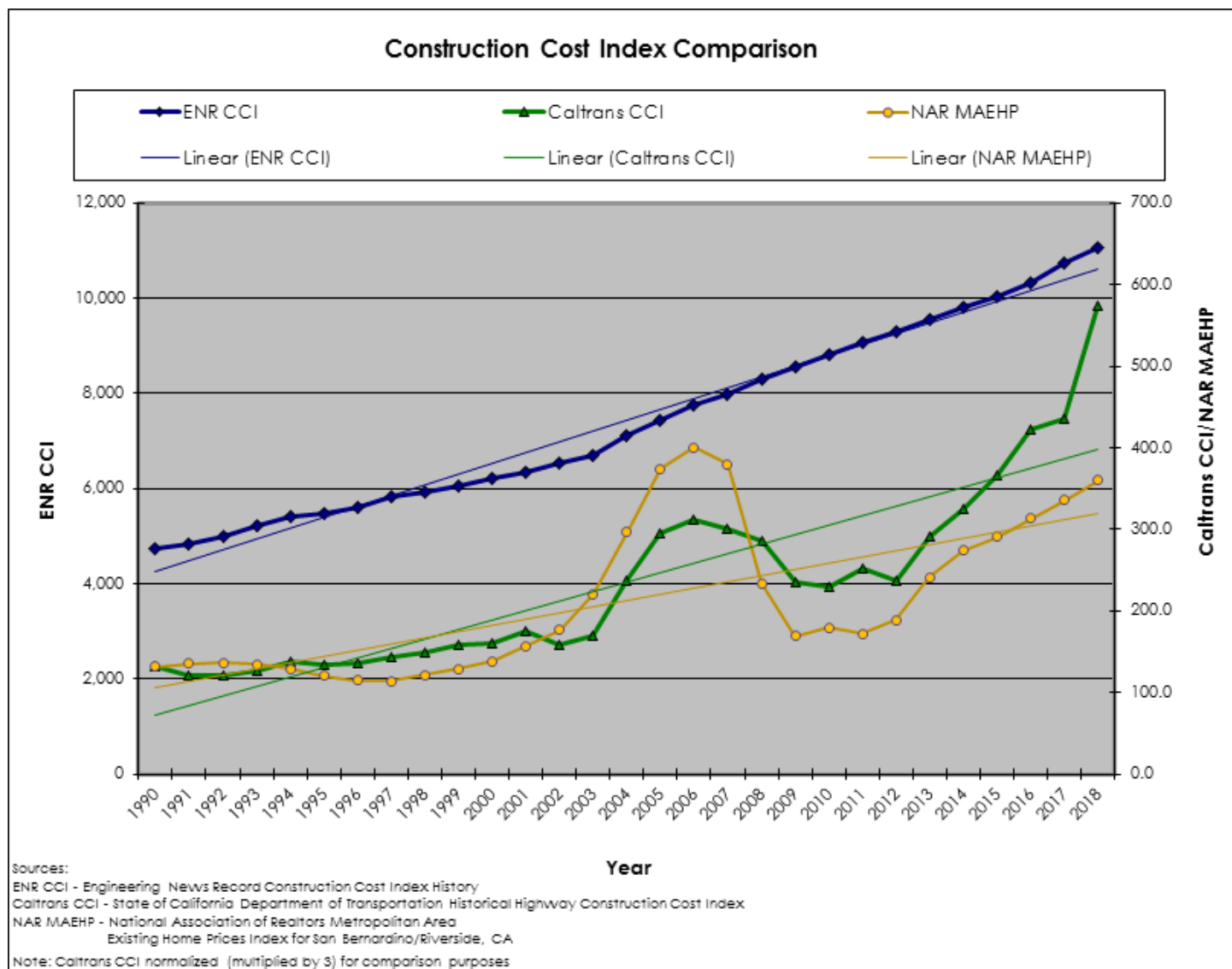
Proposed CCI Adjustment to the Existing TUMF

Since the adoption of the 2016 TUMF Nexus Study, construction, labor, and land costs have demonstrated an increasing trend. Though the Caltrans CCI is not a factor in determining the adjustment to the TUMF, it is shown on the below graph to demonstrate the sharp increase. Factors contributing to the increase include tariffs and the rebounding economy placing competition on transportation construction from other sectors for materials and labor. This is intended to demonstrate the rising costs of transportation improvements in the state, including a handful of interchange projects that are currently underway in the WRCOG subregion.

The TUMF CCI adjustment is based on the percentage increase in the Engineering News Record (ENR) CCI for the 12 month period from January 2018 to January 2019, and the percentage increase 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 12 month period from the 3rd Quarter of 2017 to the 3rd Quarter of 2018 (to coincide with the publication of the most recently updated index).

As depicted in the figure below, the ENR CCI has increased by approximately 7% and the NAR Median Sales Price of Existing Single-Family Homes in the Riverside / San Bernardino Metropolitan Statistical Area has

increased 15%. These two indices have been adopted by the Executive Committee as the basis for completing CCI adjustments to the TUMF schedule of fees.



The table below documents the current TUMF schedule, the TUMF schedule included in the 2016 Nexus Study, and the proposed CCI adjustment. WRCOG is required, per the TUMF Administrative Plan, to present the proposed CCI adjustment for consideration by the Executive Committee each year after the approval of the Nexus Study.

WRCOG will be returning to the Public Works Committee in May requesting a recommendation to forward to the Executive Committee for its approval in June. Any CCI adjustment would require the adoption of a new TUMF Ordinance by member agencies in the summer / fall of 2019.

Land Use Type	Units	Current TUMF	2016 Nexus Study TUMF	CCI Adjustment
Single-Family Residential	DU	\$ 8,873.00	\$ 9,418.00	\$ 9,810.00
Multi-Family Residential	DU	\$ 6,134.00	\$ 6,134.00	\$ 6,389.00
Retail	SF	\$ 7.50	\$ 12.31	\$ 13.01
Service	SF	\$ 4.56	\$ 4.56	\$ 4.75
Industrial	SF	\$ 1.77	\$ 1.77	\$ 1.81

Prior Action:

None.

Fiscal Impact:

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

Attachment:

None.

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Western Riverside Council of Governments

Public Works Committee

Staff Report

Subject: TUMF Regional Arterial Program

Contact: Shirley Medina, Planning and Programming Director, Riverside County Transportation Commission, smedina@rctc.org, (951) 787-7141

Date: April 11, 2019

The purpose of this item is to request input on the selection and programming criteria for the TUMF Regional Arterial Program – Cycle 2.

Requested Action:

1. Discuss and provide input.

WRCOG's Transportation Uniform Mitigation Fee (TUMF) Program is a regional fee program designed to provide transportation and transit infrastructure that mitigates the impact of new growth in Western Riverside County. Each of WRCOG's member jurisdictions and the March JPA participates in the Program through an adopted ordinance, collects fees from new development, and remits the fees to WRCOG. WRCOG, as administrator of the TUMF Program, allocates TUMF to the Riverside County Transportation Commission (RCTC), groupings of jurisdictions – referred to as TUMF Zones – based on the amounts of fees collected in these groups, the Western Riverside County Regional Conservation Authority (RCA) and the Riverside Transit Agency (RTA).

Background

In 2004, RCTC issued a call for projects for TUMF Regional Arterial funding and approved 23 projects. Initially, various project phases were approved for funding totaling \$71.3 million. As projects developed, local agencies requested additional funding for subsequent project phases. Currently, TUMF Regional Arterial expenditures are approximately \$210 million.

To date, all projects have been delivered with the exception of two projects: I-15 / Railroad Canyon Interchange and Van Buren Boulevard widening from Washington Street to Wood Road. The I-15 / Railroad Canyon Interchange is now fully funded for construction, receiving \$15 million from SB 1 Local Partnership Program Competitive funding with TUMF Regional Arterial and State Transportation Improvement Program funds as matching funds. The County of Riverside is the lead agency for the Van Buren Boulevard widening project, which is nearing completion of the design phase, and right of way and construction phases are anticipated to begin over the next few years.

The TUMF Regional Arterial Cycle 1 Program was originally envisioned as a five-year program. During the Great Recession, local agencies requested suspending, postponing, or substituting projects and, in some cases, reprogrammed the funds to other projects that were ready for or close to construction. These projects are:

Local Agency	Project	Reason
County of Riverside	I-15 / Schleisman Interchange	Environmental Issues, substituted project: I-15 /Limonite IC
County of Riverside	Eastern Bypass New Interchange	Suspended project, transferred funds to SR79 widening
County of Riverside	Eastern Bypass, Auld – I-15	Suspended project, transferred funds to SR79
County of Riverside	Potrero Blvd, San Tim-Oak Valley	Postponed
San Jacinto	Ramona Expwy Ext. 7th to Cedar	Environmental Issues, substituted project: Ramona Expwy: Sanderson to Eagle

Cycle 2 – TUMF Regional Arterial

Given that the TUMF Regional Arterial Cycle 1 Program is nearly complete, RCTC is seeking input from Western Riverside County local agencies on the development of Cycle 2. RCTC is considering releasing a Call for Projects or selecting regional projects from the TUMF Zones. Funding regional arterial projects that are ready for construction is an important objective for Cycle 2, as well as ensuring projects begin pre-construction activities. A timeline has not been established for Cycle 2 at this time as RCTC is in the early stages of exploring options that will complement other future funding cycles, such as SB 1 funding programs.

Prior Action:

None.

Fiscal Impact:

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

Attachment:

None.