

**RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT FOR FUNDING UNDER SB 821 BICYCLE AND
PEDESTRIAN FACILITIES PROGRAM**

(Transportation Development Act Article 3; Senate Bill 821)

This Funding Agreement (“AGREEMENT”) is entered into as of _____, 2023 (“Effective Date”), by and between the RIVERSIDE COUNTY TRANSPORTATION COMMISSION (“RCTC”) and City of Riverside (“RECIPIENT”). RCTC and RECIPIENT may be referred to herein individually as a “Party” and collectively as the “Parties.”

RECITALS

- A. RCTC is a county transportation commission created and existing pursuant to California Public Utilities Code Sections 130053 and 130053.5.
- B. Under RCTC’s SB 821 Bicycle and Pedestrian Facilities Program (“PROGRAM”), cities and counties in the County of Riverside are notified of the availability of PROGRAM funding and a call for projects (“CALL FOR PROJECTS”) is anticipated to be issued biennially by RCTC.
- C. On February 6th, 2023, a CALL FOR PROJECTS was published by RCTC seeking applications for FY 2023/24 PROGRAM funding, which applications were reviewed in accordance with the applicable evaluation criteria included in the CALL FOR PROJECTS.
- D. Based on the application attached as Attachment 1 and incorporated herein by this reference, RECIPIENT has been selected to receive PROGRAM funding for its proposed Riverside Citywide Pedestrian & Bicycle Improvements Project (“PROJECT”).
- E. Funding for the PROJECT shall be provided pursuant to the terms contained in this AGREEMENT and pursuant to applicable PROGRAM policies adopted by RCTC, which are attached hereto and incorporated herein as Attachment 2.

NOW, THEREFORE, in consideration of the preceding recitals and the mutual covenants and consideration contained herein, the Parties mutually agree as follows:

- 1. Incorporation of Recitals. The Parties acknowledge and agree that the above recitals are true and correct, and hereby incorporate those recitals by this reference into the AGREEMENT.
- 2. RCTC Funding Amount. RCTC hereby agrees to distribute to the RECIPIENT, on the terms and conditions set forth herein, a sum not to exceed Six Hundred Seventy-One Thousand Eight Hundred Eighty Seven Dollars and Fifty Cents (\$671,887.50), to be used exclusively for reimbursing the RECIPIENT for eligible expenses as described herein (“FUNDING AMOUNT”). RECIPIENT acknowledges and agrees that the FUNDING AMOUNT may be less than the actual and final cost of the PROJECT, which final costs are the sole responsibility of RECIPIENT, and RCTC will not contribute PROGRAM funds in excess of

the maximum authorized in this Section 2 unless otherwise mutually agreed to in writing by the PARTIES. In the event the FUNDING AMOUNT is not fully utilized by RECIPIENT for the PROJECT, the unused FUNDING AMOUNT must be returned to RCTC within ninety (90) ninety days of a written request by RCTC unless RECIPIENT can demonstrate in writing, subject to written approval by RCTC in its sole discretion, the following: (i) valid reason for why PROJECT costs were significantly lower than the estimate included in RECIPIENT's attached application for funding, and (ii) written proposal for how any unused FUNDING AMOUNT will be used for a proposal to support the PROJECT or other use that supports the goals and requirements of the PROGRAM.

2.1 Eligible Project Costs. Reimbursement for PROJECT costs ("REIMBURSEMENT") may only include those items expressly allowed for under Article 3 of the Transportation Development Act (California Public Utilities Code section 99200 *et seq.*), which provides that funding shall be allocated for the construction, including related engineering expenses, of facilities based on the PROGRAM policies adopted by RCTC, provided that such items are included in the scope of work included in the application, attached as Attachment 1 ("SCOPE OF WORK"). All PROJECT costs not included in the SCOPE OF WORK and not expressly permitted under Article 3 of the Transportation Development Act and the PROGRAM policies shall be considered ineligible for REIMBURSEMENT. In the event the SCOPE OF WORK needs to be amended, RECIPIENT shall submit a scope change request electronically via RCTC's online tracking and reporting system known as the Rivtrack system and accessible at <https://rivtrack.rctc.org/> ("Rivtrack system"). The electronically submitted scope change request must include the reasons for the requested change and confirmation that costs associated with the proposed amendment are eligible for PROGRAM reimbursement. Such request is subject to written approval by RCTC, in RCTC's sole discretion.

In the event of any ambiguity between this AGREEMENT, PROGRAM policies, and applicable law, the following order of precedence will govern: (1) applicable law; (2) PROGRAM policies; (3) this AGREEMENT. In the case of any conflict between this Agreement and any of its attachments, the body of this Agreement shall govern. Notwithstanding the foregoing, in the case of a conflict, the most stringent requirement shall govern, unless prohibited by applicable law or otherwise agreed upon by RCTC.

2.2 Timing for Project Completion. In accordance with the PROGRAM policies attached hereto as Attachment 2, RECIPIENT has thirty-six (36) months to complete the PROJECT from the date of this AGREEMENT, unless otherwise agreed to in writing by the PARTIES. If the PROJECT is not completed within 36 months, RCTC shall have the sole discretion to delete the PROJECT from the PROGRAM and reprogram the funding for future approved PROGRAM projects. RECIPIENT will not be reimbursed until the PROJECT is accepted as complete by RCTC following the submission of the PROGRAM funding claim form completed electronically via the Rivtrack system. In the event additional time is needed for the completion of the PROJECT, RECIPIENT may submit a time extension request electronically via the Rivtrack system. Before and after PROJECT photographs must be uploaded with the CLAIM FORM upon PROJECT completion, as well as copies of paid invoices and any other backup requested for repayment and audit purposes.

2.3 Increases in Project Funding. The FUNDING AMOUNT may, at RCTC's sole discretion, be augmented with additional PROGRAM funds and local agency match funds proportionate to the amounts included in Section 3 if there is a FUNDING AMOUNT balance and the RECIPIENT provides justification as to the reason for the funding

increase. Any such increase in the FUNDING AMOUNT must be approved in writing by RCTC's Executive Director and RCTC shall be under no obligation whatsoever to approve any increase in the FUNDING AMOUNT. No such increased funding shall be expended to pay for any PROJECT work already completed.

2.4 Cost Savings. In the event that bids or proposals for the PROJECT are lower than anticipated, or there are cost savings for any other reason, the FUNDING AMOUNT shall be reduced through an amendment to the AGREEMENT. RECIPIENT shall inform RCTC of any cost savings and any cost savings shall be returned to RCTC or may be reprogrammed with written approval by RCTC for other RECIPIENT projects that align with the PROGRAM. No PROGRAM funding may be used for projects not approved by RCTC. If RECIPIENT provides a local match commitment and there are cost savings on the PROJECT, RCTC will still be reimbursed at the matching ratio as presented in the Project application despite such cost savings in accordance with PROGRAM policies.

2.5 No Funding for Temporary Improvements. Only segments or components of improvements that are intended to form part of or be integrated into the PROJECT may be funded by PROGRAM funds. No improvement(s) which is/are temporary in nature, including but not limited to temporary lanes, curbs, or drainage facilities, shall be funded with PROGRAM funds except as needed for staged construction of the PROJECT.

2.6 Review and Reimbursement by RCTC. Upon submission into Rivtrack, of the final detailed invoice from the RECIPIENT clearly documenting work completed and corresponding costs, RCTC may request additional documentation or explanation of the SCOPE OF WORK costs for which reimbursement is sought. Undisputed amounts shall be paid by RCTC to the RECIPIENT within thirty (30) days. In the event that RCTC disputes the eligibility for reimbursement of all or a portion of an invoiced amount, the Parties shall meet and confer in an attempt to resolve the dispute. Additional details concerning the procedure for the RECIPIENT's submittal of invoices to RCTC and RCTC's consideration and payment of submitted invoices are set forth in Attachment 2.

2.7 Recipient's Funding Obligation to Complete the Work; Limitation of RCTC Obligations. In the event that the PROGRAM funds allocated to the SCOPE OF WORK represent less than the total cost of the PROJECT, RECIPIENT shall be solely responsible for providing such additional funds as may be required to complete the PROJECT. RCTC has no obligation with respect to the safety of any work performed under the SCOPE OF WORK, for the PROJECT, or at a PROJECT site. Further, RCTC shall not be liable for any action of RECIPIENT or its contractors relating to the condemnation of property undertaken by RECIPIENT or construction related to the PROJECT.

2.8 Recipient's Obligation to Repay Program Funds to RCTC. In the event it is determined, whether through a post-completion audit or otherwise, the PROJECT was not completed in accordance with the PROGRAM requirements or this AGREEMENT, RECIPIENT agrees that any PROGRAM funds distributed to RECIPIENT for the PROJECT shall be repaid in full to RCTC. The Parties shall enter into good faith negotiations to establish a reasonable repayment schedule and repayment mechanism which may include, but is not limited to, withholding of Measure A Local Streets and Roads revenues, if applicable. RECIPIENT acknowledges and agrees that RCTC shall have the right to withhold any Measure A Local Streets and Roads revenues due to RECIPIENT, in an amount not to exceed the total of the PROGRAM funds distributed to RECIPIENT, and/or initiate legal action to compel repayment,

if the RECIPIENT fails to repay RCTC within a reasonable time period not to exceed one hundred eighty (180) days, including any good faith negotiations, from receipt of written notification from RCTC that repayment is required due to failure to comply with the PROGRAM policies or this AGREEMENT.

2.9 Records Retention and Audits. RECIPIENT shall retain all PROJECT records in an organized manner for a minimum of three (3) years following completion of the PROJECT. PROJECT records shall be made available for inspection by RCTC upon request. If a post PROJECT audit or review indicates that RCTC has provided reimbursement to the RECIPIENT in an amount in excess of the FUNDING AMOUNT set forth in Section 2, or has provided reimbursement of ineligible PROJECT costs, the RECIPIENT shall reimburse RCTC for the excess or ineligible payments within thirty (30) days of notification by RCTC. This Section 2.9 does not supersede any rights or remedies provided to RCTC under Section 2.8 or applicable law.

3. Recipient's Local Match Contribution. RECIPIENT shall provide at least Six Hundred Seventy-One Thousand Eight Hundred Eighty-Seven Dollars and Fifty Cents (\$671,887.50) of funding toward the SCOPE OF WORK, as indicated in RECIPIENT'S application attached as Attachment 1 and submitted to RCTC in response to its CALL FOR PROJECTS. RECIPIENT costs related to (i) preparation and administration costs related to invoices, billings and payments; (ii) any RECIPIENT fees attributed to the processing of the SCOPE OF WORK; and (iii) expenses for items not included within the attached SCOPE OF WORK shall be borne solely by the RECIPIENT and shall not qualify towards RECIPIENT'S local match requirement in this Section 3.
4. Term: The term of this AGREEMENT shall be from the date first herein above written until: (i) the date RCTC formally accepts the PROJECT as complete, pursuant to Section 2.2; (ii) termination of this AGREEMENT pursuant to Section 14; or (iii) RECIPIENT has fully satisfied its obligations under this AGREEMENT. All applicable indemnification and insurance provisions of this AGREEMENT shall remain in effect following the termination of this AGREEMENT.
5. Recipient Responsibilities. RECIPIENT shall be responsible for all aspects of the PROJECT, in compliance with all applicable state and federal laws, including: (i) development and approval of plans, specifications and engineer's estimate in accordance with all applicable laws, regulations and building codes; obtaining any necessary environmental clearances; right of way acquisition; and, obtaining all permits required by impacted agencies prior to commencement of the PROJECT; (ii) all aspects of procurement, contracting, and administration of the contracts and claims for the PROJECT; (iii) all construction management of any construction activities undertaken in connection with the PROJECT, including surveying and materials testing; and, (iv) development of a budget for the PROJECT and SCOPE OF WORK prior to award of any contract for the PROJECT, taking into consideration available funding, including PROGRAM funds.
6. Indemnification. RECIPIENT shall defend, indemnify and hold RCTC, its officials, governing board members, officers, employees, agents, and consultants free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property, persons or government funding agency, including wrongful death, arising out of or incident to any intentional or negligent acts, errors or omissions of the RECIPIENT, its officials, officers, employees, agents, consultants and

contractors arising out of or in connection with the performance of this AGREEMENT, the PROJECT or the SCOPE OF WORK. RECIPIENT'S obligation to indemnify includes without limitation the payment of all consequential damages and reasonable attorneys' fees, expert witness fees and other related costs and expenses of defense. RECIPIENT shall defend, at its own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against RCTC, its officials, officers, employees, agents, and consultants in connection with this AGREEMENT. RECIPIENT shall pay and satisfy any judgment, award or decree that may be rendered against RCTC, its officials, officers, employees, agents, and consultants in any such suits, actions or other legal proceedings, including any settlement. RECIPIENT's obligation to indemnify shall not be restricted to insurance proceeds. The indemnity obligation shall not apply to the extent of any negligence or willful misconduct of RCTC, its officials, officers, employees, agents, and consultants. This section shall survive the expiration or termination of this Agreement.

7. Expenditure of Funds by Recipient Prior to Execution of Agreement. RECIPIENT may commence the Project starting July 1, 2023, and costs incurred following such date will be eligible for reimbursement under this AGREEMENT, provided they otherwise meet the requirements herein, and provided that this AGREEMENT is executed no later than October 1, 2023.
8. Compliance with Applicable Laws and Insurance. RECIPIENT agrees to comply with all applicable laws and regulations, including public contracting laws, requirements for any local state or federal funding used, and records retention and performance reporting requirements concerning the SCOPE OF WORK and PROJECT, which applicable laws and regulations shall be passed on to contractors by RECIPIENT as applicable. RECIPIENT shall have the responsibility of making sure the appropriate amounts of insurance are included in all applicable agreements for the construction of the PROJECT and RCTC shall be named as an Additional Insured on all insurance certificates obtained for the completion of the PROJECT. PROJECT insurance funds shall be looked to first for the repayment of any claims determined to have merit.
9. Representatives of the Parties. RCTC's Executive Director, or his or her designee, shall serve as RCTC's representative and shall have the authority to act on behalf of RCTC for all purposes under this AGREEMENT. RECIPIENT's representative shall be the individual identified in the Project application as RECIPIENT'S representative to RCTC. RECIPIENT'S representative, or designee, shall have the authority to act on behalf of RECIPIENT for all purposes under this AGREEMENT and shall coordinate all activities with RCTC concerning the SCOPE OF WORK under the RECIPIENT's responsibility. RECIPIENT shall work closely and cooperate fully with RCTC's representative and any other agencies which may have jurisdiction over or an interest in the PROJECT.
10. Monitoring of Progress by RCTC. RECIPIENT shall allow RCTC's designated representative, or designee, to inspect or review the progress of the work at any reasonable time with prior written notice by RCTC. RCTC may request that the RECIPIENT provide RCTC with progress reports concerning the status of the SCOPE OF WORK and PROJECT completion.
11. Binding on Successors in Interest. Each and every provision of this AGREEMENT shall be binding and inure to the benefit of the successors in interest of the Parties. Due to the

specific obligations contemplated herein, this AGREEMENT may not be assigned by any Party hereto except with the prior written consent of the other Party.

12. Independent Contractors. Any person or entities retained by RECIPIENT or any contractor shall be retained on an independent contractor basis and shall not be employees of RCTC. Any personnel performing services on the PROJECT shall at all times be under the exclusive direction and control of the RECIPIENT or contractor, whichever is applicable. The RECIPIENT or contractor shall pay all wages, salaries and other amounts due such personnel in connection with their performance of services on the SCOPE OF WORK and as required by law. The RECIPIENT or contractor shall be responsible for all reports and obligations concerning such personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance and workers' compensation insurance.
13. Conflicts of Interest. For the term of this AGREEMENT, no member, officer or employee of RECIPIENT or RCTC, during the term of his or her service with RECIPIENT or RCTC, as the case may be, shall have any direct interest in this AGREEMENT, or obtain any present or anticipated material benefit arising therefrom.
14. Termination. This AGREEMENT may be terminated for cause or convenience as further specified below.

14.1 Termination for Convenience. Either RCTC or RECIPIENT may, by written notice to the other party, terminate this AGREEMENT, in whole or in part, for convenience by giving thirty (30) days' written notice to the other party of such termination and specifying the effective date thereof.

14.2 Effect of Termination for Convenience. In the event that RECIPIENT terminates this AGREEMENT for convenience, RECIPIENT shall, within 180 days, repay to RCTC in full all PROGRAM funds provided to RECIPIENT under this AGREEMENT. In the event that RCTC terminates this AGREEMENT for convenience, RCTC shall, within 90 days, distribute to the RECIPIENT PROGRAM funds in an amount equal to the aggregate total of all unpaid invoices which have been received from RECIPIENT regarding the SCOPE OF WORK for the PROJECT at the time of the notice of termination; provided, however, that RCTC shall be entitled to exercise its rights under Section 2.6, including but not limited to conducting a review of the invoices and requesting additional information from RECIPIENT. This AGREEMENT shall terminate upon receipt by the non-terminating party of the amounts due it under this Section 14.

14.3 Termination for Cause. Either RCTC or RECIPIENT may, by written notice to the other party, terminate this AGREEMENT, in whole or in part, in response to a material breach hereof by the other Party, by giving written notice to the other Party of such termination and specifying the effective date thereof. The written notice shall provide a thirty (30) day period to cure any alleged breach. During the 30 day cure period, the Parties shall discuss, in good faith, the manner in which the breach can be cured.

14.4 Effect of Termination for Cause. In the event that RECIPIENT terminates this AGREEMENT in response to RCTC's uncured material breach hereof, RCTC shall, within ninety (90) days, distribute to the RECIPIENT PROGRAM funds in an amount equal to the aggregate total of all unpaid invoices which have been received from RECIPIENT regarding the SCOPE OF WORK for the PROJECT at the time of the notice of termination. In the event that

RCTC terminates this AGREEMENT in response to the RECIPIENT's uncured material breach hereof, the RECIPIENT shall, within one hundred eighty (180) days, repay to RCTC in full all PROGRAM funds provided to RECIPIENT under this AGREEMENT. Notwithstanding termination of this AGREEMENT by RCTC pursuant to this Section 14.4, RCTC shall be entitled to exercise its rights under Section 2.6, including but not limited to conducting a review of the invoices and requesting additional information. This AGREEMENT shall terminate upon receipt by the terminating Party of the amounts due it under this Section 14.4.

14.5 No Program Funding. In the event that RCTC determines there are inadequate PROGRAM funds for whatever reason, RCTC shall have the right to immediately terminate the AGREEMENT with written notice to RECIPIENT. In the event that RCTC terminates this AGREEMENT under this Section 14.5, RCTC shall, within 90 days, distribute to the RECIPIENT PROGRAM funds in an amount equal to the aggregate total of all unpaid invoices which have been received from RECIPIENT regarding the SCOPE OF WORK for the PROJECT at the time of the notice of termination; provided, however, that RCTC shall be entitled to exercise its rights under Section 2.6, including but not limited to conducting a review of the invoices and requesting additional information from RECIPIENT.

14.6 Cumulative Remedies. The rights and remedies of the Parties provided in this Section 14 are in addition to any other rights and remedies provided by law or under this AGREEMENT.

15. Notice. All notices hereunder shall be in writing and shall be effective upon receipt by the other Party. All notices and communications between the Parties to this AGREEMENT shall be addressed as set forth below and provided by any of the following methods (i) personally delivered; (ii) sent by electronic mail, with a subject line clearly identifying this AGREEMENT, read receipt requested, and a cc: provided to the identified staff; (iii) sent by first-class mail, return receipt requested; or (iv) sent by overnight express delivery service with postage or other charges fully prepaid. Notwithstanding the foregoing, notices of dispute or termination sent by electronic mail must be followed by hard copy mailed notice to be effective. Notwithstanding the foregoing, invoices and requests for changes to the SCOPE OF WORK, shall be submitted through the Rivtrack system as specified in this AGREEMENT.

TO RCTC:

Anne Mayer
Executive Director
RCTC
4080 Lemon Street, 3rd Floor
Riverside, California 92501
Phone: (951) 787-7141
e-mail: amayer@rctc.org

cc: JChan@RCTC.org

TO RECIPIENT:

Mike Futrell
City Manager
City of Riverside
3900 Main Street
Riverside, CA 92522
(951) 568-5021
mfutrell@riversideca.gov

Any party may update its address and contact information by providing written notice of the new information to the other Parties in accordance with this Section 15.

16. Prevailing Wages. RECIPIENT is alerted to the requirements of California Labor Code Sections 1770 *et seq.*, which require the payment of prevailing wages where the SCOPE OF WORK or any portion thereof is determined to be a “public work,” as defined therein. RECIPIENT shall ensure compliance with applicable prevailing wage requirements by any person or entity hired to perform the SCOPE OF WORK or any portion thereof falling within the definition of “public work.” RECIPIENT shall defend, indemnify, and hold harmless RCTC, its officers, employees, consultants, and agents from any claim or liability, including without limitation reasonable attorneys’ fees, arising from any failure or alleged failure to comply with California Labor Code Sections 1770 *et seq.* on the PROJECT.
17. Equal Opportunity Employment. The Parties represent that they are equal opportunity employers and they shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, sexual orientation, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.
18. Entire Agreement. This AGREEMENT embodies the entire understanding and agreement between the Parties pertaining to the matters described herein and supersedes and cancels all prior oral or written agreements between the Parties with respect to these matters. Each Party acknowledges that no Party, agent or representative of the other Party has made any promise, representation or warranty, express or implied, not expressly contained in this AGREEMENT, that induced the other Party to sign this document. Modifications to this AGREEMENT shall be in the form of a written amendment executed by authorized representatives of the Parties to be bound.
19. Governing Law; Venue and Severability. This AGREEMENT shall be governed by, and be construed in accordance with, the laws of the State of California. Venue shall be in Riverside County. If any portion of this AGREEMENT is found to be unenforceable by a court of law with appropriate jurisdiction, the remainder of the AGREEMENT shall be severable and survive as binding on the Parties.
20. Attorneys’ and Other Fees. If any legal action is initiated for the enforcement/interpretation of this AGREEMENT, or because of any alleged dispute, breach, default or misrepresentation in connection with any of the provisions of this AGREEMENT, the successful or prevailing party shall be entitled to recover reasonable attorneys’ fees, witness fees and other costs incurred in that action or proceeding, in addition to any other relief to which it may be entitled as determined by a court of law or appointed decider under alternative legal proceedings.
21. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.
22. Section Headings and Interpretation. The section headings contained herein are for convenience only and shall not affect in any way the interpretation of any of the provisions contained herein. The AGREEMENT shall not be interpreted as being drafted by any Party or its counsel.
23. No Waiver. Failure of RCTC to insist on any one occasion upon strict compliance with any of the terms, covenants or conditions in this AGREEMENT shall not be deemed a waiver of

such term, covenant or condition, nor shall any waiver or relinquishment of any rights or powers hereunder at any one time or more times be deemed a waiver or relinquishment of such other right or power provided under applicable law.

24. Time of Essence. Time is of the essence for each and every provision of this AGREEMENT.
25. Counterparts. This AGREEMENT may be executed in any number of counterparts, each of which shall be deemed to be an original, but all which together will constitute but one agreement.
26. Form of Signatures. A manually signed copy of this Agreement which is transmitted by facsimile, email or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original executed copy of this Agreement for all purposes. This Agreement may be signed using an electronic signature.
27. Survival. All rights and obligations under this AGREEMENT that by their nature are to continue after any expiration or termination of this AGREEMENT shall survive any such expiration or termination.

[SIGNATURES ON NEXT PAGE]

**SIGNATURE PAGE
TO
AGREEMENT NO. 24-62-018-00
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT FOR FUNDING UNDER SB 821 BICYCLE AND PEDESTRIAN
FACILITIES PROGRAM**

IN WITNESS WHEREOF, the Parties have caused this AGREEMENT to be signed by their duly authorized representatives as of the Effective Date.

RCTC

RECIPIENT

CITY OF RIVERSIDE

By: _____
Anne Mayer, Executive Director

By: _____

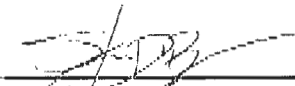
Name: _____

Title: _____


APPROVED AS TO FORM

APPROVED AS TO FORM

Best, Best & Krieger LLP

By: 

General Counsel to RCTC

By: 

Name: Tarren Alicia Torres

Title: Deputy City Attorney

ATTACHMENT 1

(RECIPIENT APPLICATION FOR FUNDING)

Questionnaire Tab

Email address: pnitollama@riversideca.gov

Project Name: Riverside Citywide Pedestrian & Bicycle Improvements Project

Has this Project been previously awarded in a past SB 821 Cycle?

- No
- Yes, in 17-18 FY Cycle
- Yes, in 19-20 FY Cycle
- Yes, in 21-22 FY Cycle

Lead Agency: Riverside, City of

Memorandum of Understanding

By October 1, 2023, awardees will execute the Project MOU with the Commission. To streamline the process, please provide the name and contact information of the individual who will be the signatory on the MOU.

This is typically the City Manager, City Engineer, or Public Works Director.

MOU Signatory * Title: *
Mike Futrell City Manager

Email address: *
mfutrell@riversideca.gov

Project Contact Person

Provide contact information for Project's contact person. This could be the Public Works Director, the Project Manager, or other City/County Staff.

Project Contact is the same as current user

Project Contact Person: * Title: *
Philip Nitollama City Traffic Engineer

Email address: * Phone Number: *
pnitollama@riversideca.gov (951) 568-5021

Project Overview

Project Type (check all that apply) *

- Bicycle Project
- Pedestrian Project
- Multi-use Trail Project
- Non-Infrastructure/Plan

Project Locate in a Disadvantage Community, per SB-535? *

- Yes
- No
- Partial

Does the proposed project include any of the following (check all that apply)? *

- Curb
- Gutter
- Driveway Ramp
- Project does not include any of the above

Project Application Tab

Project Number: 000177 Agency: Riverside, City of

Project Name: Riverside Citywide Pedestrian & Bicycle Improvements Project

Status: Submitted To RCTC

Project Type: Bicycle Project, Pedestrian Project

A. Scope of Work (500 Characters)

The Riverside Citywide Pedestrian & Bicycle Improvements Project proposes to install High-Visibility Crosswalks, accessible pedestrian signal systems, Green Bike Lane Striping, RRFB's, LED Stop Signs, & signage/striping upgrades at 24 prioritized intersection locations as identified in the Local Roadway Safety Plan, Riverside PACT Plan & public requests. The project benefits include improved connectivity, enhanced safety & mobility, & encourages a more active lifestyle via walking & biking.

495 of 500 Characters

B. Funding

Enter the project costs for PA/ED, PS&E, ROW, Construction and Local Match in the fields provided below. The gray fields contain formulas that will calculate the Total Project Cost, SB 821 Request, and the Percentage Splits.

10% Programming Cap: \$690,120.20

20% Programming Cap: \$1,380,240.40

		Agency	Split %		RCTC	Split %	
PA & ED:	0.00	Local Match:	671,887.50	50%	Local Match:	671,887.50	50%
PS & E:	96,000.00	SB 821 Request:	671,887.50	50%	SB 821 Request:	671,887.50	50%
ROW:	0.00			100%		100%	
Construction:	1,197,775.00						
Administration:	50,000.00						
Total Project Cost:	1,343,775.00						

C. Schedule

For completed phases, provide supporting documentation such as copies of environmental clearance, title sheet of 100% plans with engineer's stamp, or right of way clearance and attach in section J.

	Start	End
PA & ED:	07/03/2023	06/28/2024
PS & E:	07/03/2023	06/28/2024
ROW:		
Construction:	07/01/2024	03/31/2026
Close out:	04/01/2026	07/01/2026

D. Project Background & Project Description

Describe the project background and the existing conditions of the larger project area and or project vicinity. Discussion can include background information on current roadway configuration, missing bike and pedestrian facilities, and importance of project to local active transportation users. If possible, upload photographs of existing conditions.

Describe the project in its entirety. Include the purpose and need, benefit, and location of the project. Provide a map showing existing and proposed project improvements. If available, upload typical cross-sections showing vehicular lane widths, active transportation facilities width, and any landscaping or lighting features in section J.

The City of Riverside is the 12th most populated city in the state of California with 317,257 residents and encompasses 81.5 square miles (Attachment A). Due to the city's large population, the city is divided into seven (7) Wards (or communities) (Attachment B). The prioritized pedestrian / bicycle infrastructure needs of each Ward are incorporated in the proposed citywide project with the purpose to promote safety for vulnerable road users at intersections and encourage multi-modal transportation in the community. There are 3 or 4 intersections locations for each Ward that are included in the Citywide Project with a total of twenty-four (24) prioritized intersection locations. The Riverside Citywide Pedestrian & Bicycle Improvement Project proposes to construct High-Visibility Crosswalks, upgrade Ped Push Buttons, Green Bike Striping, RRFBS, Flashing LED Stop Signs, & signage/stripping improvements at the following twenty-four (24) prioritized intersection locations: 1. Iowa Ave & Blaine St (Signal) 2. Spruce St & Rustin Ave (Stop Sign Controlled) 3. Rustin Ave & Linden St (Stop Sign Controlled) 4. Chicago Ave & University Ave (Signal) 5. Watkins Dr & Knox Ct (Stop Sign Controlled) 6. Third St & Anderson Ave (Stop Sign Controlled) 7. Alessandro Blvd & Chicago Ave (Signal) 8. Van Buren Blvd & Jurupa Ave (Signal) 9. Van Buren Blvd & Arlington Ave (Signal) 10. Lincoln Ave. & Victoria Ave (Stop Sign Controlled) 11. Wood Rd & Van Buren Blvd (Signal) 12. Orange Terrace Pkwy & Abrams Dr (Stop Sign Controlled) 13. Orange Terrace Pkwy & Sandhill Dr. (West) (Stop Sign Controlled) 14. Adams St & Magnolia Ave (Signal) 15. Van Buren Blvd & California Ave (Signal) 16. Van Buren Blvd & Indiana Ave (Signal) 17. Magnolia Ave & Tyler St (Signal) 18 Collett Ave & Polk St. (Stop Sign Controlled) 19. Magnolia Ave & Polk St (Signal) 20. Tyler St & Hole Ave. (Signal) 21 Pierce St & Magnolia Ave (Signal) 22. Golden Ave & Cochran Ave (Stop Sign Controlled) 23. Sierra Vista & Gedney Way (S) (Stop Sign Controlled) 24. Rutland & Sylvan ((Stop Sign Controlled) Attachment C illustrates the citywide project improvement map that highlights the intersection locations, proposed improvements, and intersection radius buffers. Individual intersection improvements are summarized in Attachment D along with graphic photos of improvements for illustration purposes. A range of one to three safety countermeasures improvements are proposed for each individual intersection as shown in Attachment D. Existing photos, displaying current inadequate ped & bike infrastructure conditions, are shown in Attachment E. The 24 prioritized intersection locations were selected based on the City's Local Roadway Safety Plan (LRSP), Riverside P.A.C.T. Plan, direct resident requests, adjacency to bus stops, and access to key destinations as tabulated in Attachment F. Excerpts from the Local Roadway Safety Plan (LRSP) are included in Attachment G and identify the needs / benefits / locations of thirteen prioritized intersections included in the citywide project along with ped & bike improvements that are consistent with the application. The LRSP included input from two stakeholder engagement meetings and the report's findings are based on a citywide collision analysis for 5 years (July 2017-June 2022). The thirteen intersections selected for this project were part of the Top 20 highest crash intersection locations citywide plus one case study intersection. Attachment H includes excerpts from the Riverside P.A.C.T. document. P.A.C.T. = Pedestrian Target Safeguarding Plan, Active Transportation Plan, Complete Streets Ordinance & Trails Master Plan. The Active Transportation Plan specifically identifies the needs / benefits / locations of eight prioritized intersections included in the citywide project and proposed ped / bike improvements consistent with the grant application. The Riverside P.A.C.T. was established based on a comprehensive community engagement strategy and the report's findings are based on multiple years of pedestrian and bicycle collision analysis. The eight intersections selected were part of the community's request as well as pedestrian & bicycle collision history review. The City routinely receives a large amount of resident requests regarding pedestrian and bicycle infrastructure improvements which are documented in the service request formats. Attachment I includes eighteen of the prioritized intersections included in the citywide project with improvements consistent with the public requests. The City has attempted to accommodate the resident requests through various maintenance programs, capital improvement projects and grant pursuit opportunities. However, the improvements for these 18 intersections have not yet been constructed. In order to address the safety needs, infrastructure upgrades and resident requests, the proposed improvements for the citywide project proposes to build a total of 62 high-visibility crosswalks, 12 accessible pedestrian signal systems, 8 green bicycle striping improvements, 23 flashing LED solar powered stop signs, 1 flashing LED solar powered pedestrian warning sign, and signage / striping improvements at 2 intersection locations (see Attachment J for additional details regarding the safety benefits of the proposed improvements): Additional supporting information / documentation for the citywide project includes: - The City executed a Complete Streets Ordinance No. 7569 to provide guidance on street character, connectivity, access for all users, development of continuous pedestrian paths ... and to require the roadways within the City be developed according to approved standards and design elements as set forth in the Complete Streets Ordinance. See Attachment K. - Riverside is generally considered a car-dependent City. According to the U.S. Census Bureau, there are approximately 141,435 workers 16 years and over residing in the City of Riverside. Those who walk, bike, or take transit represent roughly 6.1 percent of the Riverside worker population, or approximately 8,628 people. The majority of workers (74.4 percent) drive alone. The rates of driving alone and walking to work in Riverside are similar to those of California as a whole, but public transit use (2.4 percent) and biking (0.7 percent) are considerably lower. The City of Riverside received a "Walk Score" of 42, which is considered "car dependent". - Attachment L includes a Letter of Support from the City of Riverside Public Works Director indicating advocacy for the project. The City Council also approved the city's 50% local match requirements (should the project be awarded) as indicated in the Meeting Agenda, Agenda Report, Attachments & Meeting Minutes. - The received Letters of Support for the proposed citywide pedestrian and bicycle improvements from the Riverside Unified School District (RUSD), Alvord Unified School District (AUSD) and the Riverside Bike Club as documented in Attachment M. - The City of Riverside's General Plan Circulation and Community Mobility Element (Attachment R) contains multiple objectives supporting pedestrian and bicycling modes of transportation that will be satisfied with the proposed improvements of this grant including: Policy CCM-8.2: Promote walking and biking as a safe mode of travel for children attending local schools. Policy CCM-10.5: Promote the health benefits of using a bicycle or walking as a means of transportation. Policy CCM-10.12: Encourage bicycling as a commute mode to school, work, etc. - An engineer's estimate for the citywide project total costs is calculated in Attachment Q and is equivalent to \$1,343,775.00. Line items include engineering design costs, construction administration / inspection costs, mobilization, water pollution control, traffic control, construction costs, and contingency costs.

E. Destinations Served (2 points for each destination served, max 14 points)

Briefly summarize and list all the destinations served by the proposed project. Provide a project vicinity map identifying all the destinations served by the proposed project within a ¼ mile or a 2-mile radius. Destinations are schools or higher education facilities, commercial centers, municipal or any other civic centers, medical facilities, and recreational centers.

For pedestrian projects, the destinations need to be within ¼ mile radius to be eligible. For bicycle or multi-use trail projects, destinations need to be within a 2-mile radius. Each destination served will receive 2 points each.

On the map, provide a ¼ mile buffer or a 2-mile buffer surrounding the project site. Maps without the marked buffer will receive half of its eligible points.

The Citywide Project to improve twenty-four (24) prioritized intersection locations would serve many destinations, as demonstrated in the Destinations Served Map (Attachment N). A 3/4 mile radius has been shaded in red for all 24 prioritized intersection locations. An additional 2-mile radius has been drawn with a green line for intersections with Green Bike Lane Striping Improvements – Intersections 1, 4, 7, 11, 12, 13, 14, and 15. These eight locations are signalized intersections. The key destinations within a 3/4 mile radius of the project map include: Alcott Elementary School (649 students) Amelia Earhart Middle School (821 students) Arlanza Elementary School (455 students) Arlington High School (1,922 students) Arlington Heights Sports Park Arlington Plaza Benjamin Franklin Elementary School (772 students) Bergamot Park Bordwell Park Bryant Park Cal Baptist University (8,252 students) California School for the Deaf (318 students) Castleview Elementary School (627 students) Castleview Park Cesar E. Chavez Community Center Challen Park Chemawa Middle School (800 students) Chicago Plaza Collett Elementary School (544 students) Collett Park Don Derr Park Don Lorenzi Park Doty Trust Park El Dorado Park Emerson Elementary School (611 students) Gage Middle School (933 students) Galleria at Tyler Harrison Elementary School (498 students) Harrison Park Highland Elementary School (613 students) Highland Park Hillcrest High School (1,842 students) Hunt Park Hunter Hobby Park Jackson Elementary School (669 students) Jefferson Elementary School (901 students) John F. Kennedy Elementary School (854 students) John W. North High School (2,227 students) Kaiser Permanente Medical Center La Sierra Academy (550 students) La Sierra High School (1,546 students) La Sierra Park La Sierra University (2,300+ students) Liberty Elementary School (592 students) Longfellow Elementary School (652 students) Mark Twain Elementary School (981 students) Martin Luther King High School (2,852 students) McAuliffe Elementary School (587 students) Monroe Elementary School (582 students) Myra Linn Elementary School (476 students) Myra Linn Park Norte Vista High School (2,056 students) Orange Terrace Community Park Orangecrest Town Center Orrenma Elementary School (519 students) Parkview Community Hospital. Patterson Park Philip M. Stokoe Elementary School (618 students) Raincross High School (207 students) Ramona High School (2,078 students) Rancho Loma Park Reach Leadership STEAM Academy (621 students) Riverside Municipal Airport Riverside Polytechnic High School (2,468 students) Riverside STEM Academy (662 students) Riverwalk Dog Park Rutland Park Sherman Indian High School (220 students) Swanson Park Terrace Elementary School (733 students) Thundersky Park Tomas Rivera Elementary School (698 students) Twinhill Elementary School (431 students) University Heights Middle School (796 students) University of California, Riverside (26,000+ students) University Village Valley View Elementary School (668 students) Victoria Elementary School (479 students) Woodcrest Christian School (609 students)

F. Safety (max 15 points)

Describe the extent to which the proposed project will increase safety for the non-motorized public. Additionally, explain any safety enhancement features included in the project scope, such as rectangular rapid flashing beacons, bicycle box (see <https://safety.fhwa.dot.gov/provencountermeasures/>). Include information about project characteristics such as: no existing shoulder within project limits, no existing/planned sidewalk or bikeway adjacent to the project, etc. Applicants may wish to consider including documented pedestrian/bicycle collision or injury history, most current and valid 85th percentile speed of motorized traffic in project limits, photos of existing safety hazards the project will address, existing pedestrian/bicycle traffic counts, student attendance figures for school served by project. Additionally generate a collision heat map for the project site using collision data from the last ten years. Heat map can be generated using the ATP Maps & Summary interface from TIMS (<https://tims.berkeley.edu/>) or Crossroads. Upload map in section J.

The Riverside Citywide Pedestrian and Bicycle Improvements Project will improve pedestrian and bicycle safety at 24 prioritized intersection locations with proven safety countermeasures such as the installation of high-visibility crosswalks, accessible pedestrian signal systems, green bicycle lane striping, rectangular rapid flashing beacons, flashing LED solar powered stop signs / pedestrian signs, and signage / striping modifications. Estimated crash reduction benefits for each of the proven safety countermeasures are included in Attachment J and are explained here: High Visibility Crosswalks - increases the visibility to both drivers and pedestrians from farther away when compared to traditional traverse line crosswalks. This improvement replaces existing two traverse line crosswalks with high-visibility ladder crosswalks or continental style crosswalks using thermoplastic materials. The FHWA Proven Safety Countermeasures fact sheet estimates the safety benefits of high visibility crosswalks can potentially reduce pedestrian injury crashes up to 40%. See Attachment J. Accessible Pedestrian Signal Systems (APS) - provide essential information and safety to pedestrians with disabilities (blind, visually impaired, deaf) by alerting them to the status of the walk cycle via auditory, visual and tactile cues. The proposed audible pedestrian push button systems (with the touch free wave feature) will replace existing standard, non-accessible, non-audible, non-vibrating and touch required push buttons at existing signalized intersection crossings. The Caltrans Traffic Operations Policy Directive 21-06 indicates that the touch-free feature of the APS shall be installed and activated at pedestrian crossings as a public health safety enhancement and to minimize the spread of contact-related pathogens (such as the COVID-19 pandemic). The Public Right-Of-Way Guidelines (PROWAG) R209 indicates that the APS is an integrated device that communicates information about the WALK and DON'T WALK intervals at signalized intersection in non-visual formats (audible tones and vibrotactile surfaces) to pedestrians who are blind or have low vision. The FHWA Improving Safety For Pedestrians and Bicyclists Accessing Transit document also supports APS installation. The Local Roadway Safety Plan countermeasure toolbox identifies the accessible pedestrian signal system to provide safety benefits similar to the pedestrian countdown signal heads which have an estimated crash reduction factor of 25% for pedestrian & bike collisions. See Attachment J. Green Bike Lane Striping Improvements - are consistent with the FHWA proven safety countermeasures for installation of bicycle lanes, added as a countermeasure toolbox option in the LRSP, and listed in the National Association of City Transportation Officials (NACTO) to raise motorist and bicyclist awareness to potential areas of conflict. This improvement will enhance the existing standard white longitudinal bike lane lines (or in some locations no existing bike lanes) & bike symbols with green thermoplastic pavement markings at vehicle and bicycle high conflict zones and install new bicycle detector loops to improve bicycle passage at signalized intersections. The safety benefits are estimated to range from 30%-49% reduction in bicycle crashes for bicycle lane additions per the FHWA Proven Safety Countermeasure fact sheet. See Attachment J. Rapid Rectangular Flashing Beacon Systems (RRFB's) - are utilized to enhance pedestrian conspicuity and increase driver awareness at marked crosswalks. This improvement will replace existing static pedestrian crossing signs that do not flash and are not push activated systems. The FHWA Proven Safety Countermeasures fact sheet estimates the safety benefits can reduce pedestrian crashes up to 47% and increase motorist yield rates up to 98% for RRFB improvements. See Attachment J. Flashing LED Solar Powered Stop Signs / Pedestrian Warning Signs - are considered to be consistent with flashing beacons from the systemic application of multiple low-cost countermeasures at stop-controlled intersections per the FHWA proven safety countermeasures. This improvement will replace existing standard non-flashing static signs. Per the FHWA proven safety countermeasures for systemic application of multiple low-cost countermeasures, the safety benefits are estimated to result in 10% reduction in fatal and injury crashes and have an average cost-benefit ratio of 12:1. See Attachment J. Signage / Striping Modifications - provide additional enhancements such as yield limit lines and advance pedestrian signage for existing marked crosswalks which are consistent with the CA Manual of Uniform Traffic Control Devices (M.U.T.C.D.) Figure 3B-17. There are no existing yield lines, advance pedestrian signage or marked crosswalks for this improvement modification at two intersection locations. This improvement presents new signage / striping enhancements for all roadway users. Per the FHWA proven safety countermeasures for systemic application of multiple low-cost countermeasures, the safety benefits are estimated to result in 10% reduction in fatal and injury crashes and have an average cost-benefit ratio of 12:1. See Attachment J. The City utilized the Transportation Injury Mapping System (TIMS) to obtain the pedestrian and bicycle injury collision histories for EACH of the 24 prioritized intersection location during the calendar years of 2011-2022. Per the TIMS website, Year 2022 collision data is provisional. As shown in Attachment O - the pedestrian and bicycle collision totals for each of the 24 prioritized intersection locations are: 1. Iowa Ave & Blaine St (56 bicycle collisions, 76 pedestrian collisions) 2. Spruce St & Rustin Ave (33 bicycle collisions, 42 pedestrian collisions) 3. Rustin Ave & Linden St (46 bicycle collisions, 65 pedestrian collisions) 4. Chicago Ave & University Ave (74 bicycle collisions, 99 pedestrian collisions) 5. Watkins Dr & Knox Ct (7 bicycle collisions, 5 pedestrian collisions) 6. Third St & Anderson Ave (77 bicycle collisions, 99 pedestrian collisions) 7. Alessandro Blvd & Chicago Ave (5 bicycle collisions, 5 pedestrian collisions) 8. Van Buren Blvd & Jurupa Ave (9 bicycle collisions, 9 pedestrian collisions) 9. Van Buren Blvd & Arlington Ave (36 bicycle collisions, 66 pedestrian collisions) 10. Lincoln Ave. & Victoria Ave (14 bicycle collisions, 14 pedestrian collisions) 11. Wood Rd & Van Buren Blvd (12 bicycle collisions, 25 pedestrian collisions) 12. Orange Terrace Pkwy & Abrams Dr (5 bicycle collisions, 9 pedestrian collisions) 13. Orange Terrace Pkwy & Sandhill Dr. (West) (3 bicycle collisions, 6 pedestrian collisions) 14. Adams St & Magnolia Ave (55 bicycle collisions, 52 pedestrian collisions) 15. Van Buren Blvd & California Ave (934 bicycle collisions, 1,023 pedestrian collisions) 16. Van Buren Blvd & Indiana Ave (39 bicycle collisions, 45 pedestrian collisions) 17. Magnolia Ave & Tyler St (61 bicycle collisions, 68 pedestrian collisions) 18 Collett Ave & Polk St. (36 bicycle collisions, 37 pedestrian collisions) 19. Magnolia Ave & Polk St (66 bicycle collisions, 84 pedestrian collisions) 20. Tyler St & Hole Ave. (58 bicycle collisions, 62 pedestrian collisions) 21 Pierce St & Magnolia Ave (23 bicycle collisions, 21 pedestrian collisions) 22. Golden Ave & Cochran Ave (48 bicycle collisions, 43 pedestrian collisions) 23. Sierra Vista & Gedney Way (S) (5 bicycle collisions, 11 pedestrian collisions) 24. Rutland & Sylvan (28 bicycle collisions, 42 pedestrian collisions). The total cumulative number of pedestrian collisions is 1,987 collisions and the total cumulative number of bicycle collisions is 1,708 collisions as listed in Attachment O. Given the disproportionate high number of pedestrian and bicycle collisions, the proposed safety countermeasure improvements are needed now. Without the proposed safety countermeasures, the pedestrian and bicycle collisions are not only anticipated to continue at the current crash rate but has the potential to increase in frequency and severity. The traffic collision summary table, crash map, and heat map for EACH of the 24 prioritized intersection locations are graphically presented in Attachment O. The traffic collision summary table for each intersection includes a breakdown of pedestrian and bicycle collision reported and classified into fatal, severe injury, visible injury, complaint of pain injury, and total collisions. Photos of existing conditions of the project are shown in Attachment E. As shown, the existing marked crosswalks are just traverse lines, static signs are not flashing, APS buttons require a touch activation and do not provide audible or vibrotactile features, and no green bike lanes / no bike loop detectors. Student attendance figures for each school served by the citywide project are listed in Section E of the Destinations Served Section of the grant application.

G. Multimodal Access (1 point each, max 6 points)

In a project vicinity map, identify all the bus routes, Metrolink stations, park-and-ride facilities, bicycle lanes, sidewalks or crosswalks improved by the proposed project within a ¼ mile or a 2-mile radius.

For pedestrian projects, these amenities need to be within ¼ mile radius to be eligible. For bicycle or multi-use trail projects, amenities need to be within a 2-mile radius. Each amenity will receive 1 point.

On the map, provide a ¼ mile buffer or a 2-mile buffer surrounding the project site. Maps without the marked buffer will receive half of its eligible points. Upload map in section J.

Below, discuss how the project along with its nearby amenities encourage multi-modalism. Briefly summarize and list all the bus stops, Metrolink Stations, park-and-ride facilities, missing bicycle or sidewalks, or crosswalks enhanced by the proposed project and indicate if the items are existing or planned.

The Multimodal Access Maps for the Riverside Citywide Pedestrian & Bicycle Improvements Project is included in Attachment P. By enhancing pedestrian and bicycle facilities with the proposed citywide improvements, each of the 24 prioritized intersection locations will improve access to Riverside's extensive multimodal system. The City is served by many Riverside Transit Agency routes and Metrolink Stations. Within a 3/4 mile radius, the 24 prioritized intersection locations will serve a combined total of 387 RTA Bus Stop Locations across 15 RTA Bus Routes and two Metrolink Stations. A summary of routes and stops served by each location is illustrated in Attachment P and consists of the following:
 Prioritized Intersection Locations 1-6: 90 RTA Bus Stop Locations served along RTA Transit Routes 1, 10, 13, 14, 16, 22, 51, 56, 204 and 1 Metrolink Station at Riverside-Hunter Park Metrolink Station. Prioritized Intersection Locations 7-8: 26 RTA Bus Stop Locations served along RTA Transit Routes 10, 20, 22, and 51. Prioritized Intersection Locations 9-11: 29 RTA Bus Stop Locations served along RTA Transit Routes 22 and 27. Prioritized Intersection Locations 12-17: 147 RTA Bus Stop Locations served along RTA Transit Routes 1, 10, 12, 13, 14, 15, 21, and 27. Prioritized Intersection Locations 18-24: 89 RTA Bus Stop Locations served along RTA Transit Routes 1, 10, 12, 13, 14, 15, 21, 27, 200 and 1 Metrolink Station at Riverside-La Sierra Metrolink Station. The Citywide Riverside Pedestrian and Bicycle Improvements Project will encourage multi-modal transportation at the 24 prioritized intersection locations based on its proximity to the 387 RTA Bus Stop Locations which are served by 15 RTA Bus Routes and connection to 2 Metrolink Stations at Riverside-Hunter Park Metrolink Station and Riverside-La Sierra Metrolink Station. The proposed pedestrian and bicycle improvements adjacent to the RTA Bus Stops and Metrolink stations encourage multi-modal transportation by improving the first and last mile connections of the trips and reducing the dependency of single-occupant vehicles while simultaneously promoting an active lifestyle.

H. Matching Funds (max 10 points)

10% Programming Cap: \$690,120.20		20% Programming Cap: \$1,380,240.40		Match %	Points
Agency		Split %	Match Points		
Local Match:	671,887.50			50%	10
		50%	10.00	45%	9
SB 821 Request:	671,887.50			40%	8
		50%		35%	7
				30%	6
				25%	5
				20%	4
				15%	3
			10%	2	
			5%	1	
			0%	0	

I. Population Equity (max 5 points)

Agency: Riverside, City of

Population Equity Points

3.00

J. Attachments

Upload attachments indicated from previous sections.

Title	Document Type
Attachment C - Project Improvement Map reduce file size.pdf	Project Background & Project Description Map
Attachment N - Destinations Served (Locations 1-5)_.pdf	Destinations Served Project Map
Attachment P - Multimodal Access Map_.pdf	Multimodal Access Project Map
Attachment O - Traffic Collision Summary 2011-2022 Crash Maps & Heat Maps Individual Intersections.pdf	Safety Project Map
Attachment L - City Letter of Support + City Council Meeting 4.18.23 - EXCERPTS - Agenda - Minutes - Report - Attachments_reduce_file_size.pdf	Commitment to Local Match
Attachment Q - Engineering Estimate - SB 821 FY 23-24 Riverside Citywide Bike & Ped Facilities_.pdf	Project's Engineers Estimate
Attachment A - Riverside Demographics Information - Population - Square Miles_reduce_file_size.pdf	Title Sheet
Attachment B - Riverside Ward Map.pdf	Title Sheet
Attachment D - Individual Intersection Improvements Summary reduced file size.pdf	Title Sheet
Attachment E - Existing Conditions Photos reduce file size.pdf	Title Sheet
Attachment F - Intersection Selection Summary.pdf	Title Sheet
Attachment G - Riverside Local Roadway Safety Plan (LRSP) Excerpts_.pdf	Title Sheet
Attachment H - Riverside P.A.C.T. Excerpts_reduce file size.pdf	Title Sheet
Attachment I - Riverside Residents Requests_reduce file size.pdf	Title Sheet
Attachment J - Safety Countermeasure Improvement Benefits_reduce file size.pdf	Title Sheet
Attachment K - Complete Streets Ordinance - Ordinance 7569 - Signed 9.7.21.pdf	Title Sheet
Attachment M - Letters of Support - RUSD AUSD Riverside Bike Club_reduce file size.pdf	Title Sheet
Attachment R - Riverside General Plan Circulation Element - Active Transportation.pdf	Title Sheet
Attachment S - Riverside Disadvantaged Community Map - SB 535.pdf	Title Sheet

K. Certification

I certify that the information presented herein is complete and accurate.

Name: philip nitollama

Title: Senior Management Analyst

Date: 04/27/2023

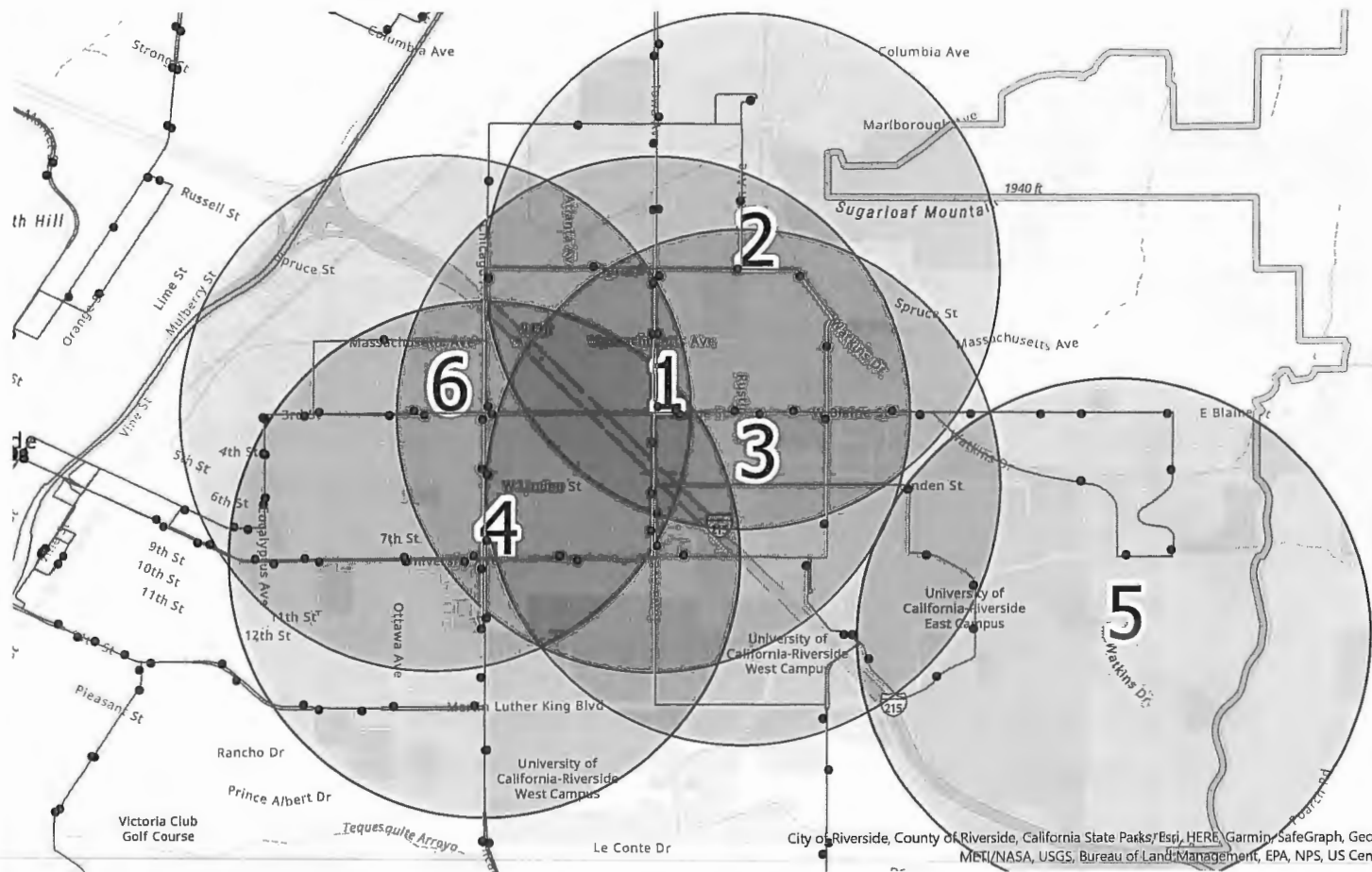
Map Tab

Project Number: 000177 Agency: Riverside, City of
Project Type: Bicycle Project, Pedestrian Project

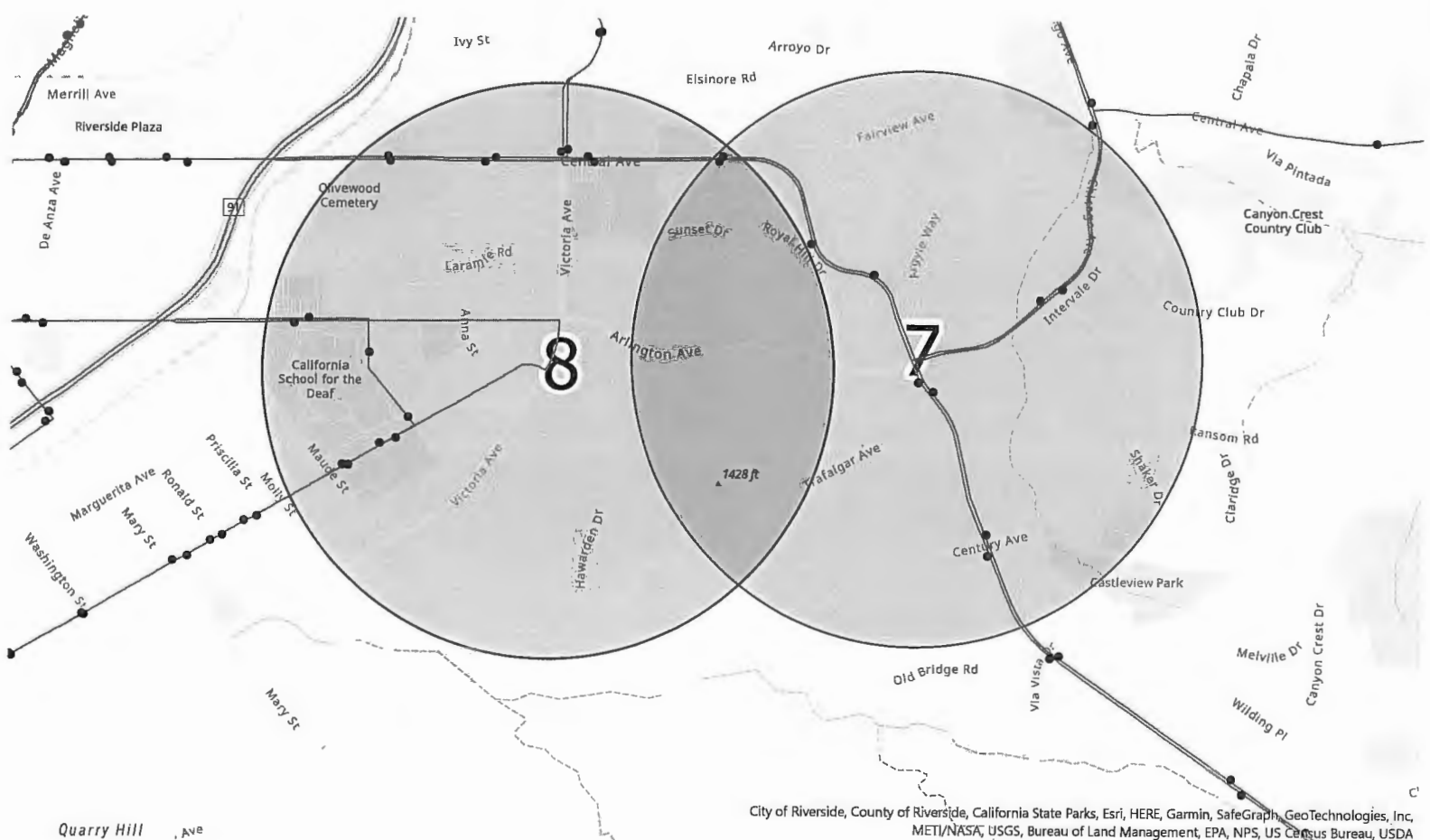
Project Name: Riverside Citywide Pedestrian & Bicycle Improvements Project

Status: Submitted To RCTC





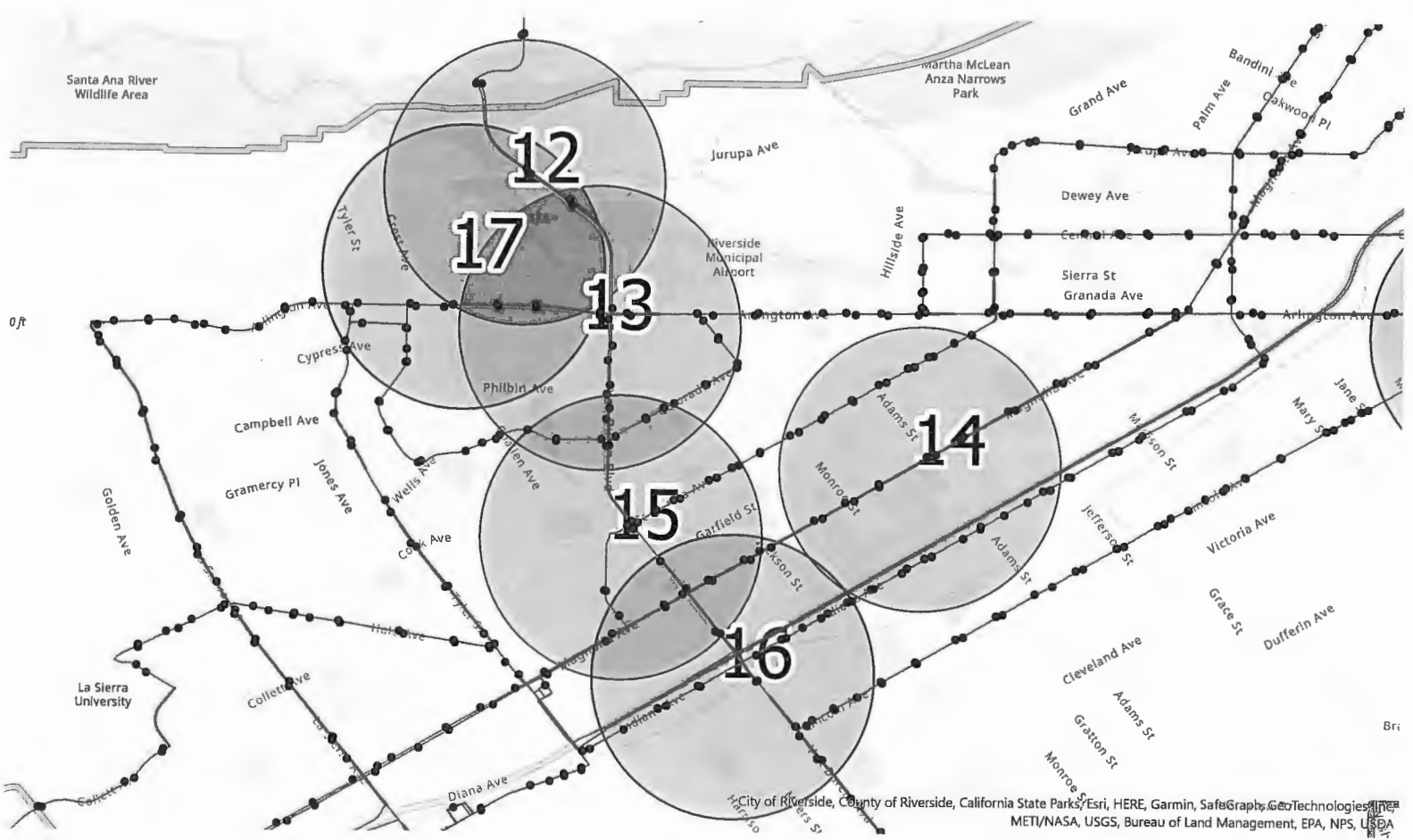
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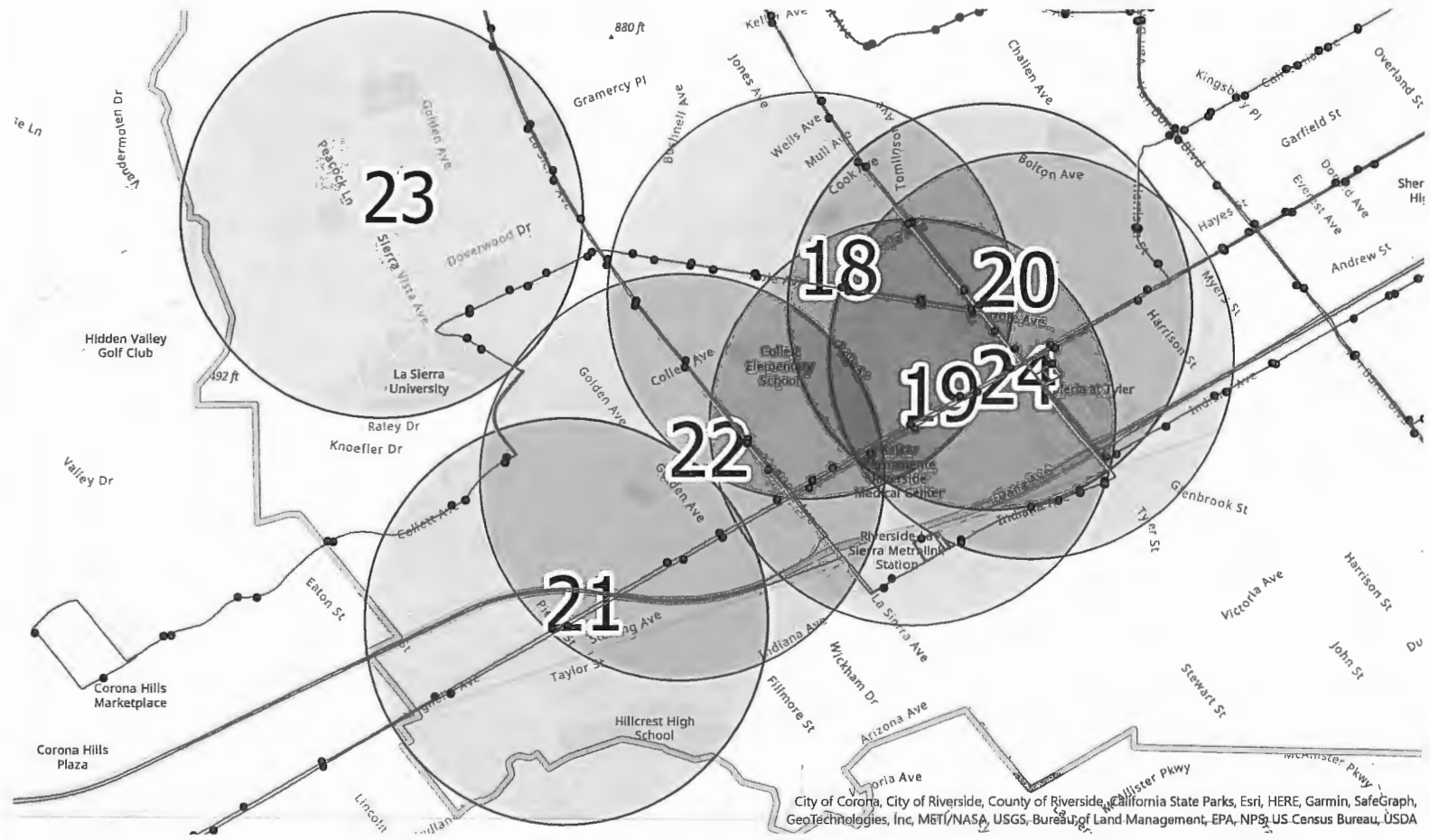
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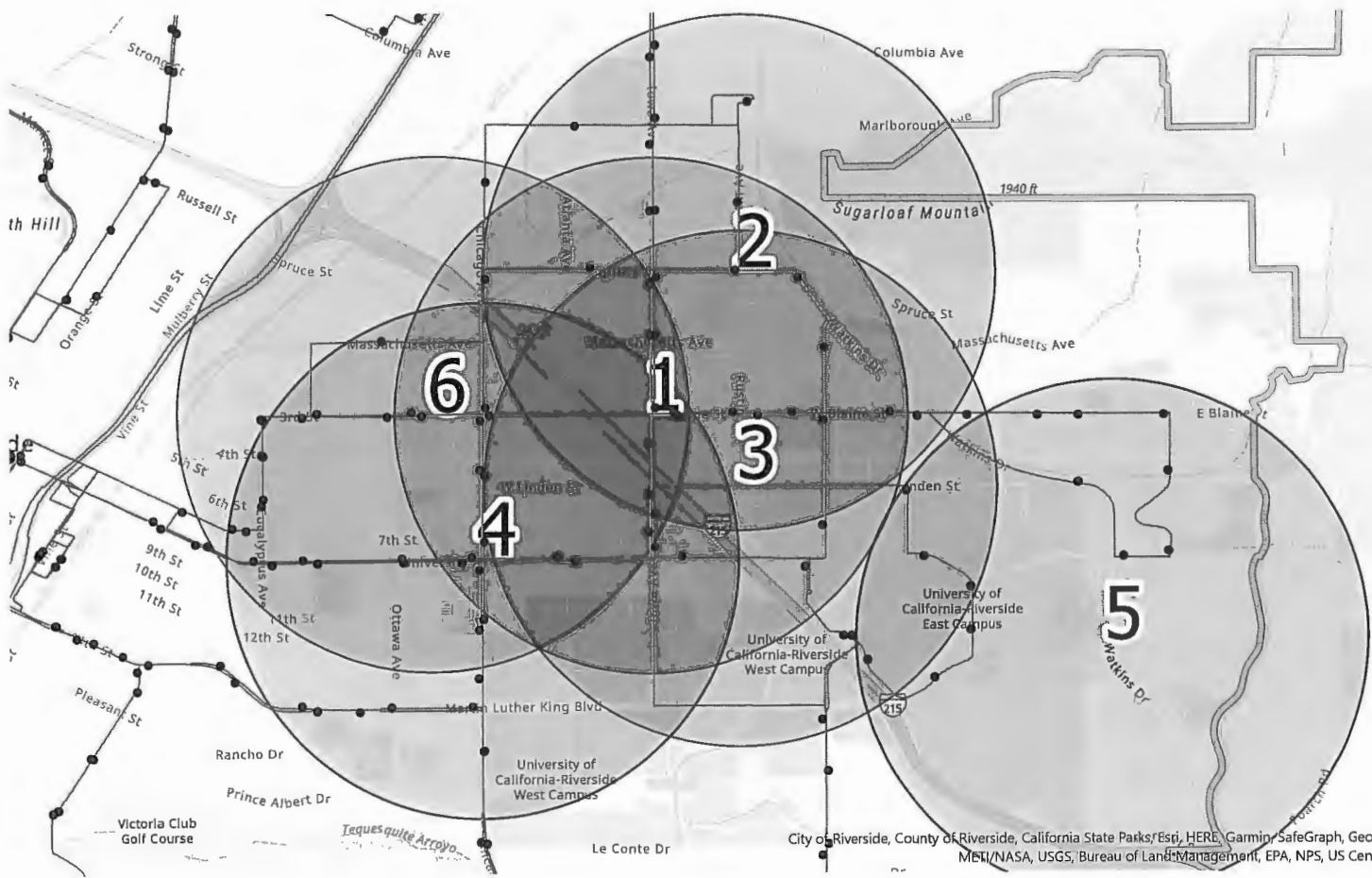
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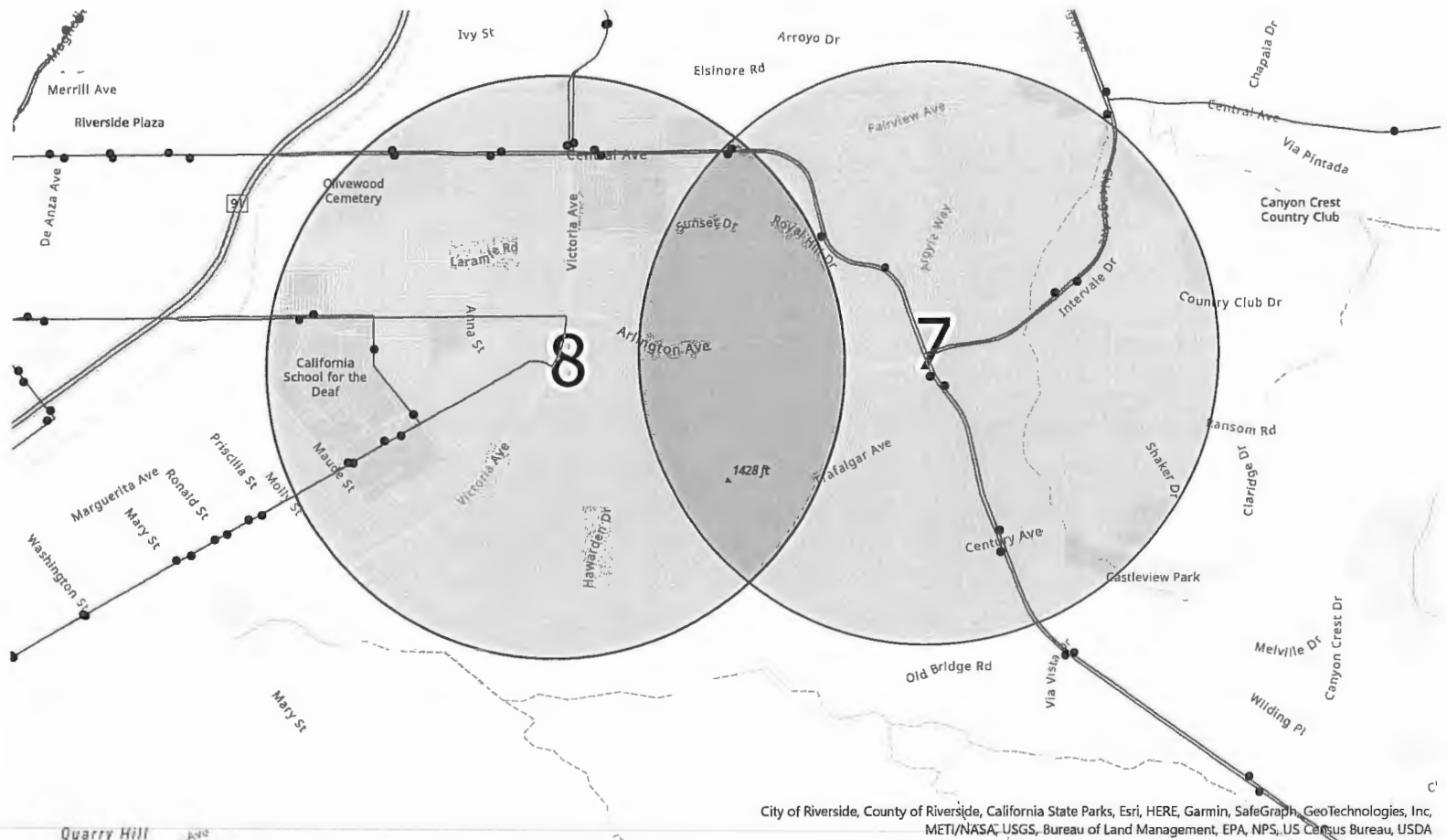
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City of Corona, City of Riverside, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, MGT/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA



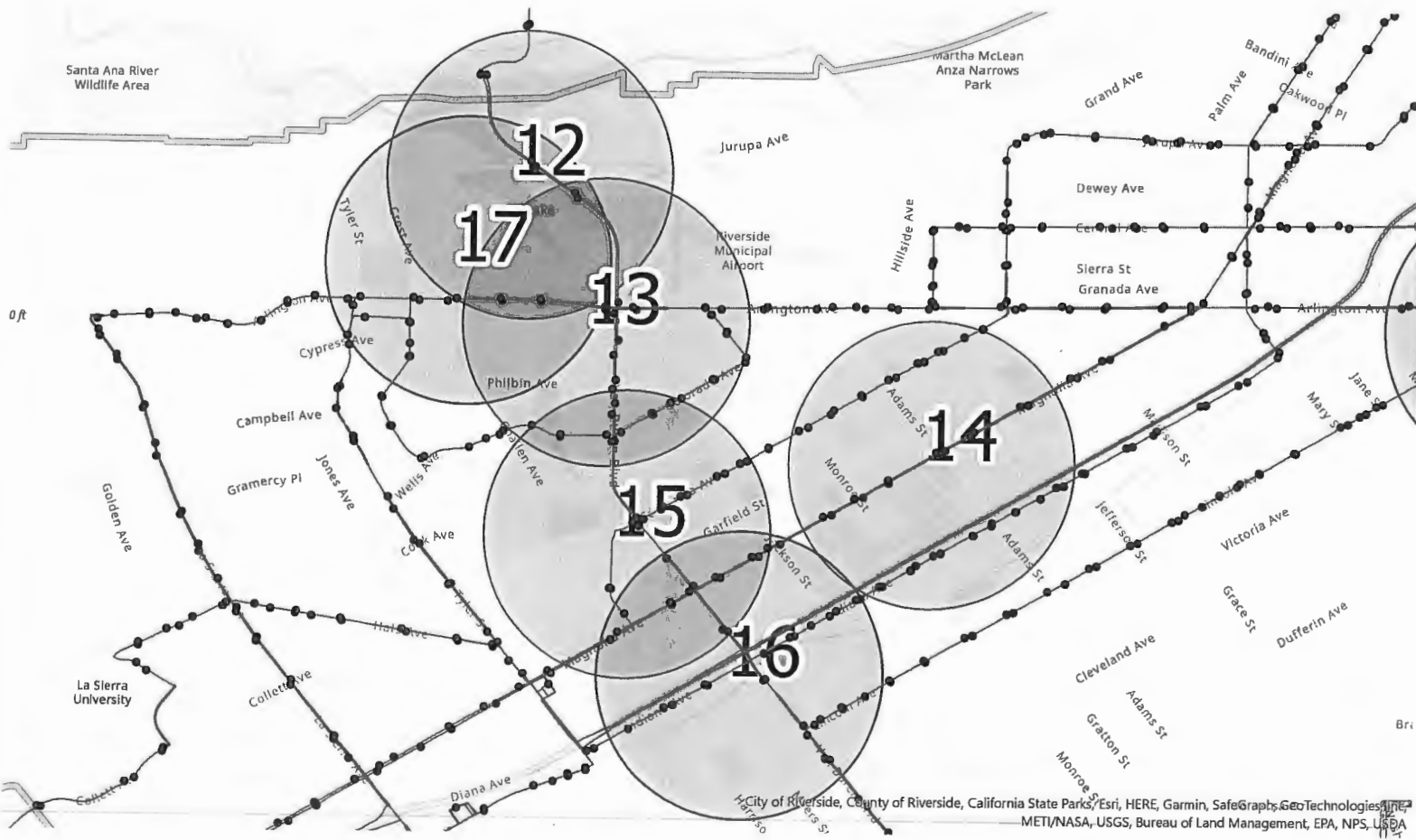
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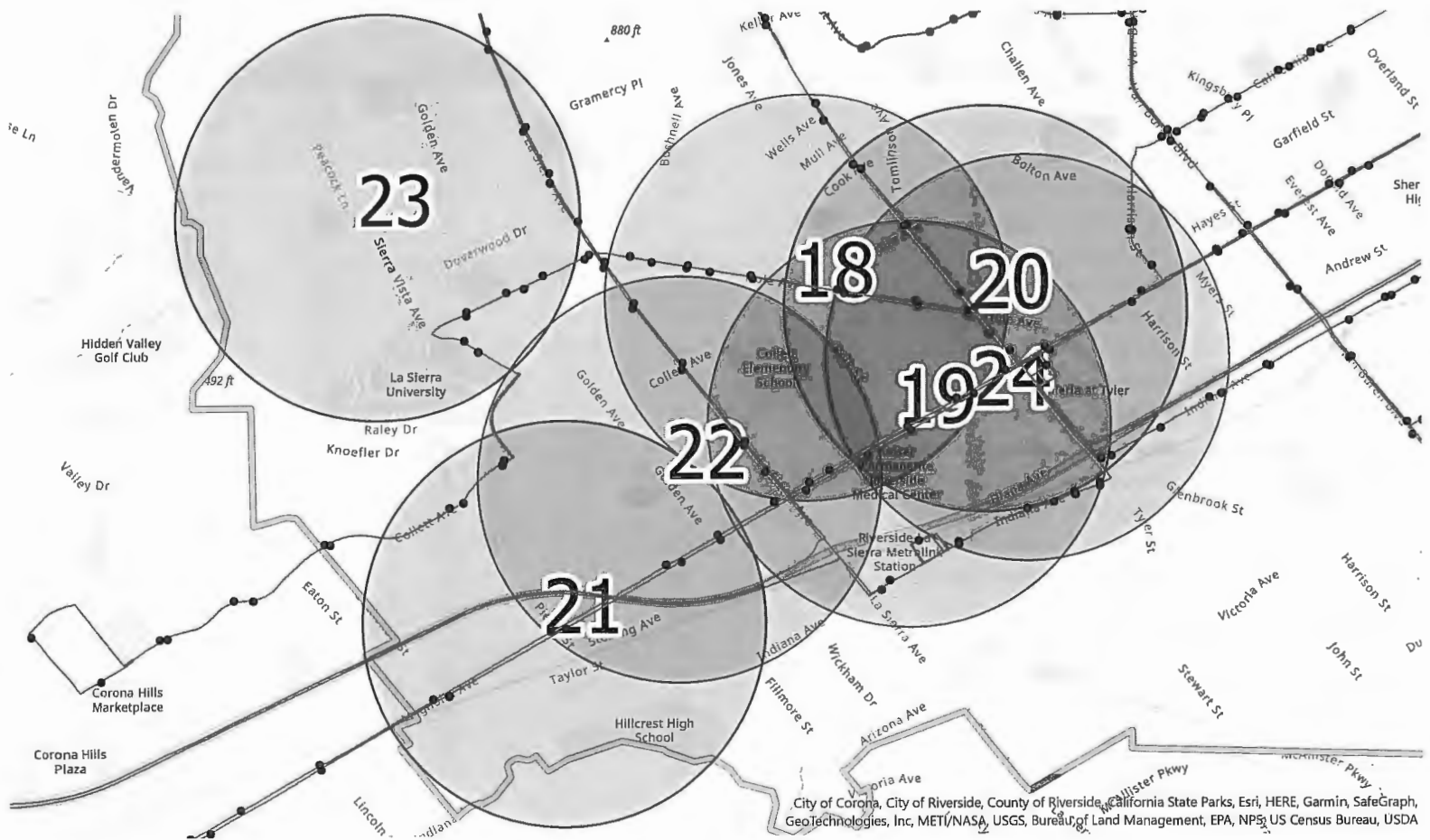
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UC Riverside, City of Riverside, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA



City of Riverside, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraphs, GeoTechnologies, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA



City of Corona, City of Riverside, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, MET/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

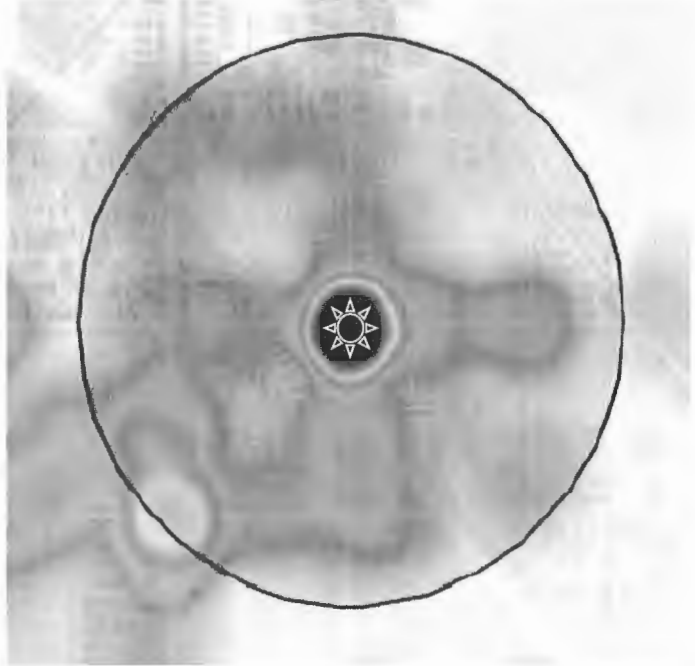
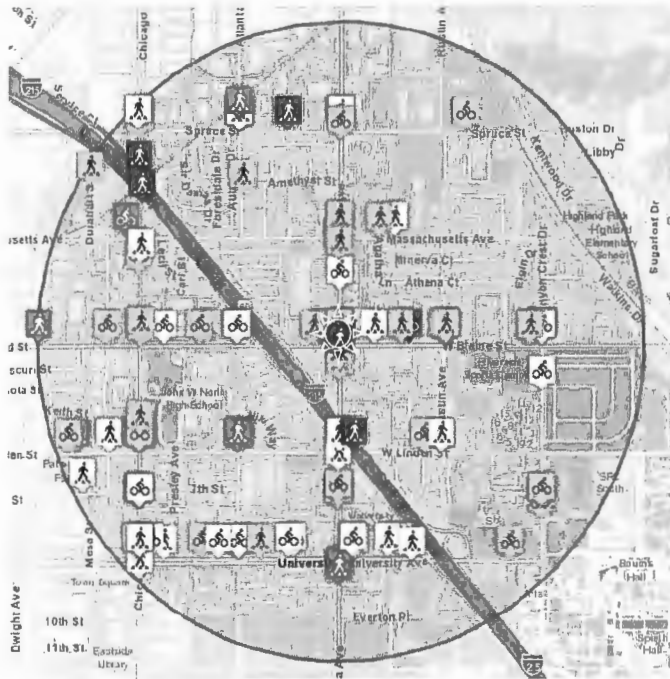
ATTACHMENT 0 - PEDESTRIAN BICYCLE COLLISION SUMMARY TABLE

TDA Article 3 (SB821) Grant FY 23/24 - City of Riverside Bicycle and Pedestrian Facilities Project

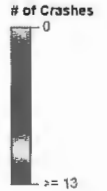
Number	Ward	Location	Pedestrian Collisions (2011-2022) ¹	Bicycle Collisions (2011-2022) ¹	Pedestrian & Bicycle Collisions (2011-22) ¹
1	1	Iowa Ave and Blaine St	75	56	131
2	1	Spruce St and Rustin Ave	42	33	75
3	1	Rustin Ave and Linden St	65	46	111
4	2	Chicago Ave and University St	99	74	173
5	2	Watkins Dr and Knox Ct	5	7	12
6	2	Third St and Anderson Ave	99	77	176
7	2	Alessandro Blvd and Chicago Ave	5	5	10
8	3	Van Buren Blvd and Jurupa Ave	9	9	18
9	4	Van Buren Blvd and Arlington Ave	66	36	102
10	4	Lincoln Ave and Victoria Ave	14	14	28
11	4	Wood Rd and Van Buren Blvd	25	12	37
12	3	Orange Terrace Pkwy and Abrams Dr	9	5	14
13	3	Orange Terrace Pkwy & Sandhill Dr (West)	6	3	9
14	5	Adams St and Magnolia Ave	32	33	65
15	5	Van Buren Blvd and California Ave	1023	934	1957
16	5	Van Buren Blvd and Indiana Ave	45	39	84
17	7	Magnolia Ave and Tyler St	68	61	129
18	6	Collett Ave and Polk St	37	36	73
19	6	Magnolia Ave and Polk St	84	66	150
20	6	Tyler St and Hole Ave	62	58	120
21	7	Pierce St and Magnolia Ave	21	23	44
22	7	Golden Ave and Cochran Ave	43	48	91
23	7	Sierra Vista Ave and Gedney Way (S)	11	5	16
24	6	Rutland Ave and Sylvan Dr	42	28	70
TOTAL			1,987	1,708	3,695

¹ SOURCE: Transportation Injury Mapping System (TIMS) - Pedestrian & Bicycle Collision Data Summary from 2011-2022 with a 250-foot radius from intersection.

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP

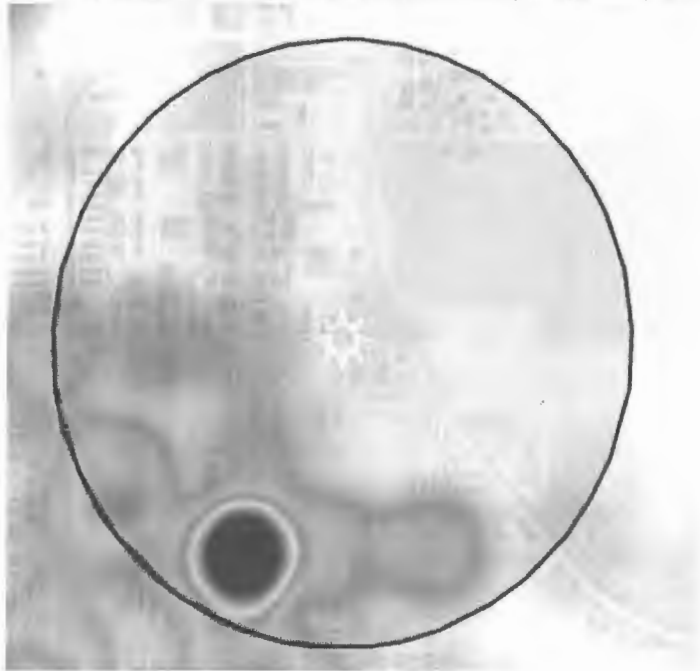


Crash Severity	Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
<ul style="list-style-type: none"> Fatal Severe Injury Other Visible Injury Complaint of Pain 	Bicycle	1	1	31	23	56
	Pedestrian	7	9	31	28	75



Iowa St & Blaine St (Intersection 1)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

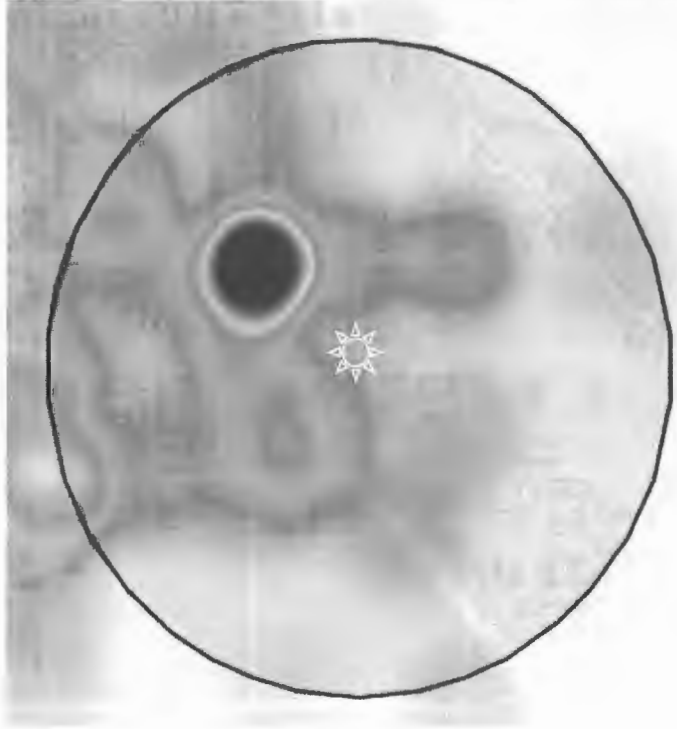
- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	1	2	14	16	33
Pedestrian	3	5	20	14	42



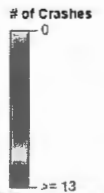
Spruce St & Rustin Ave (Intersection 2)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity
 ■ Fatal
 ■ Severe Injury
 ■ Other Visible Injury
 ■ Complaint of Pain

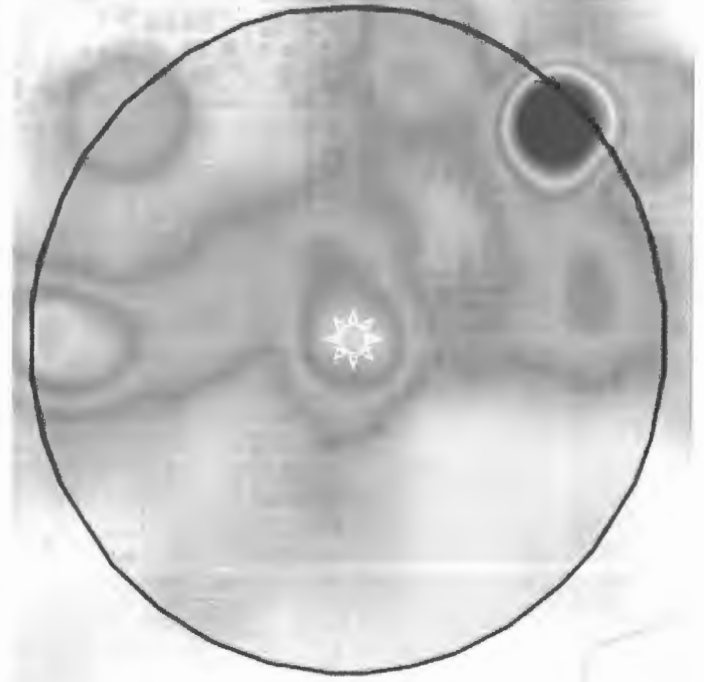
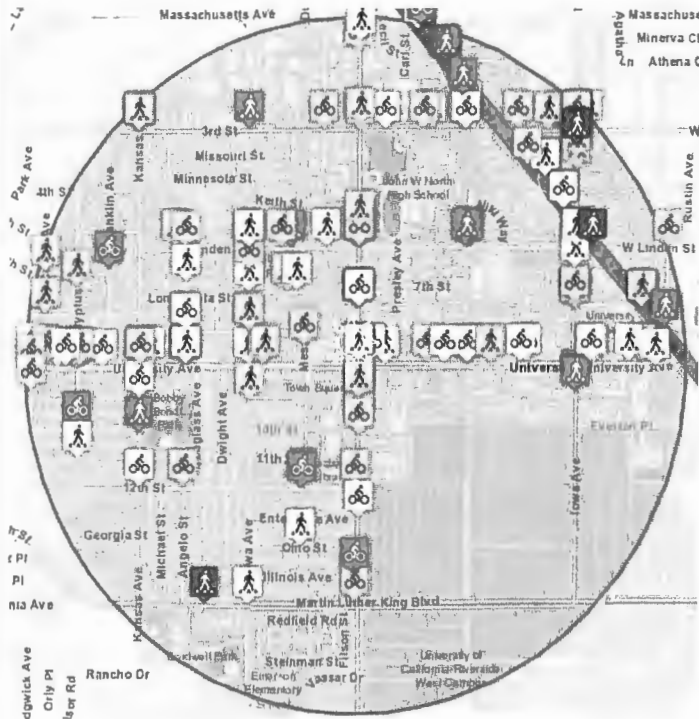
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	1	0	21	24	46
Pedestrian	3	10	29	23	65



Rustin Ave & Linden St (Intersection 3)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



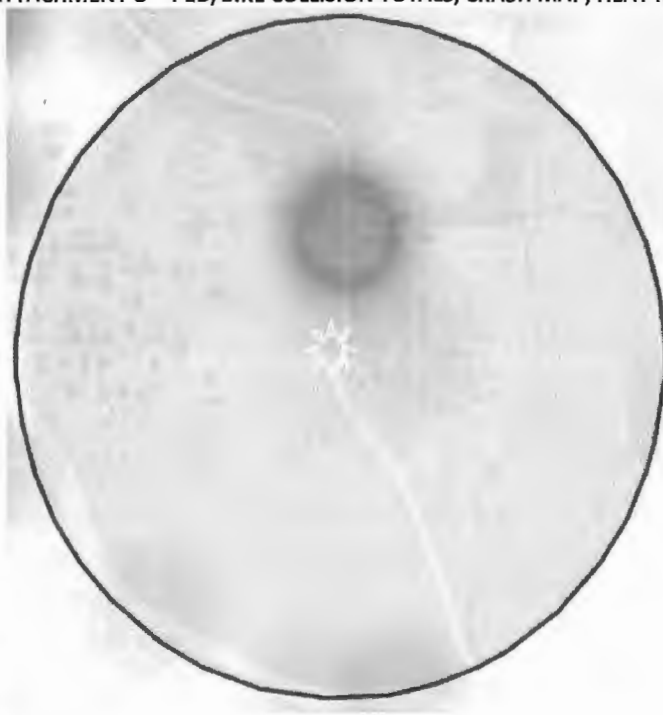
- Crash Severity**
- Fatal
 - Severe Injury
 - Other Visible Injury
 - Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	5	37	32	74
Pedestrian	7	13	40	39	99



Chicago Ave & University St (Intersection 4)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP

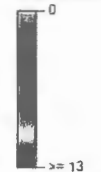


Crash Severity

- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	0	3	4	7
Pedestrian	0	2	1	2	5

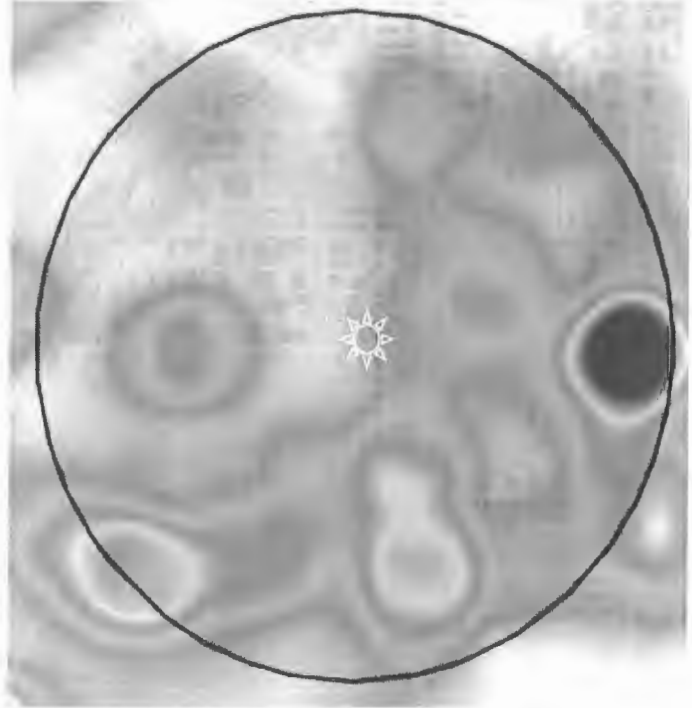
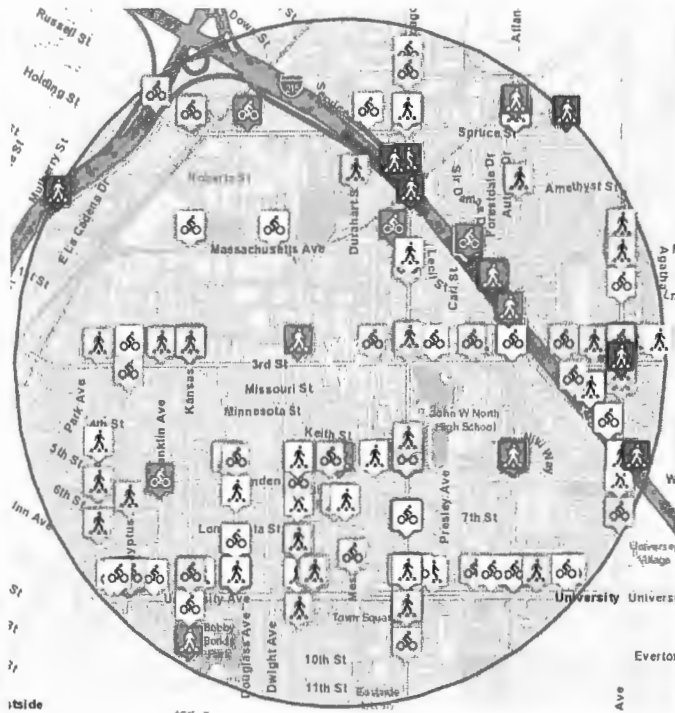
of Crashes



Watkins Dr & Knox Ct (Intersection 5)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

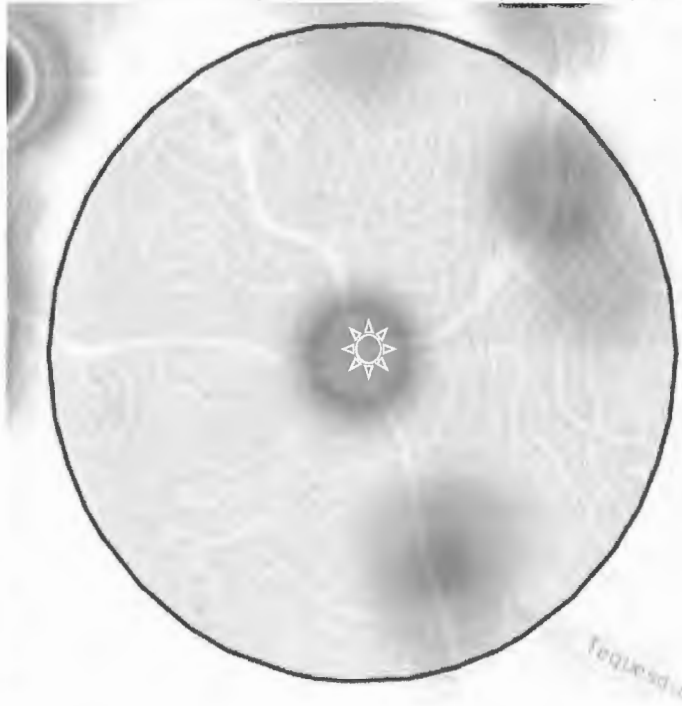
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	4	36	37	77
Pedestrian	10	11	40	38	99



Third St & Anderson Ave (Intersection 6)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity
 ■ Fatal
 ■ Severe Injury
 ■ Other Visible Injury
 ■ Complaint of Pain

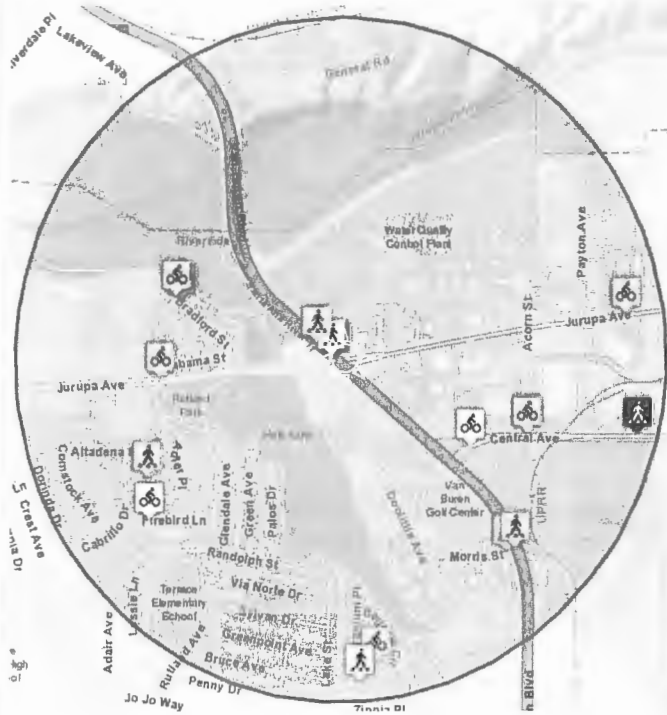
	Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle		0	0	2	3	5
Pedestrian		0	3	1	1	5



Chicago Ave & Alessandro Blvd (Intersection 7)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

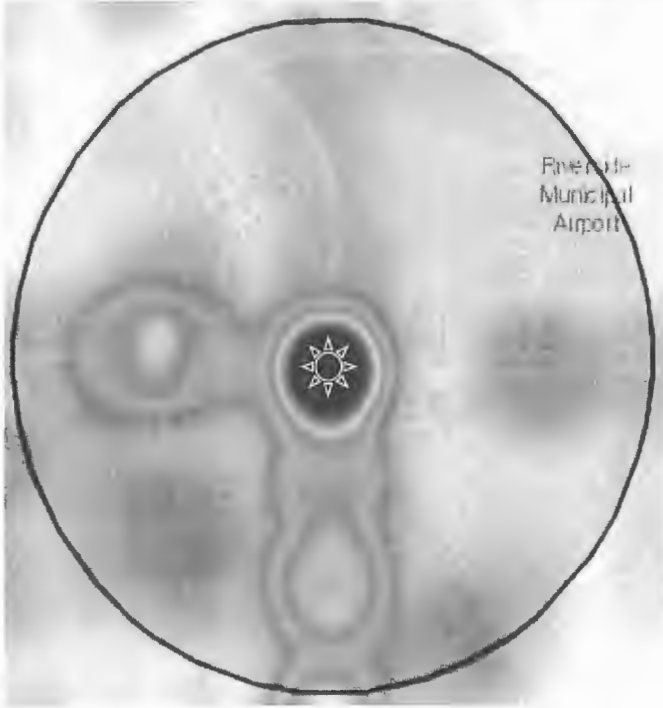
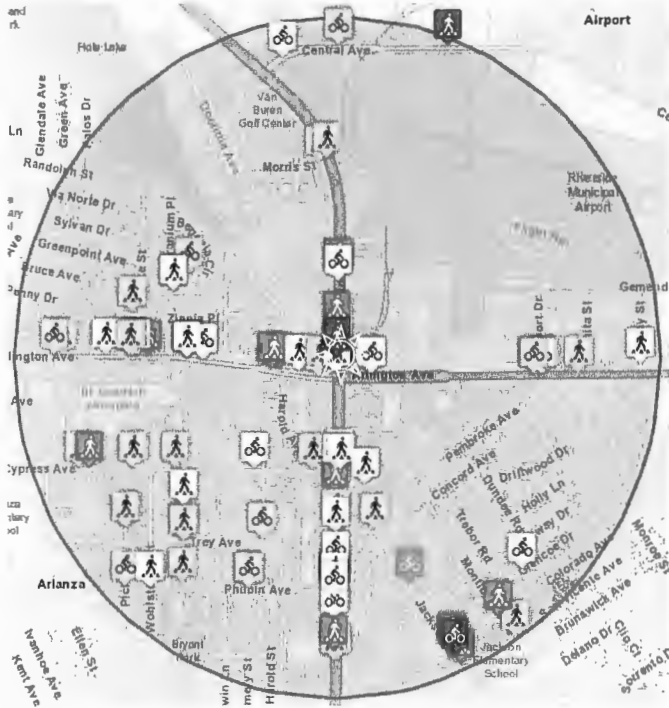
- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	2	5	2	9
Pedestrian	1	0	5	3	9



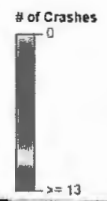
Van Buren Blvd & Jurupa Ave (Intersection 8)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



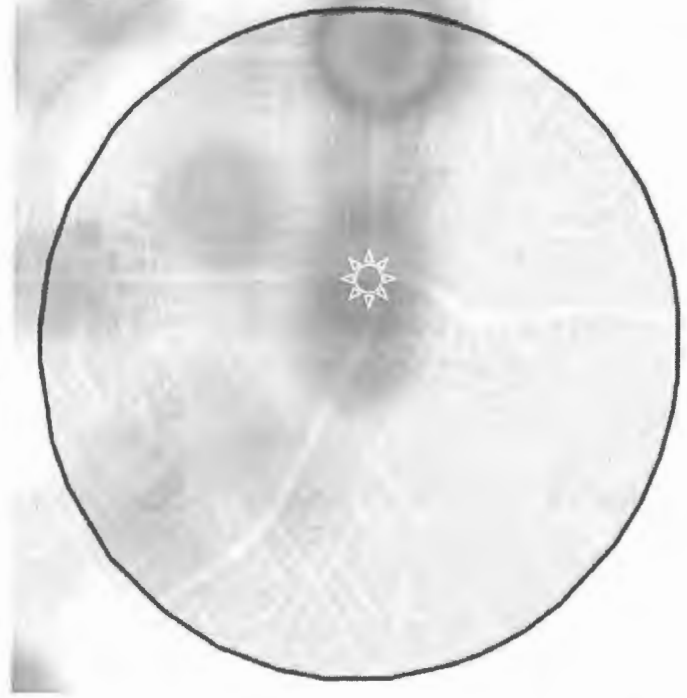
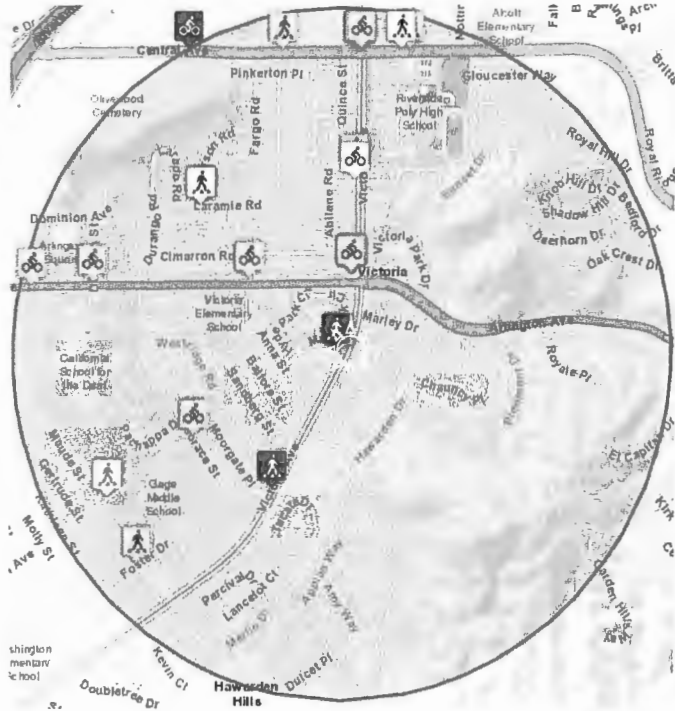
Crash Severity
 ■ Fatal
 ■ Severe Injury
 ■ Other Visible Injury
 ■ Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	2	4	11	19	36
Pedestrian	7	12	27	20	66



Van Buren Blvd & Arlington Ave (Intersection 9)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

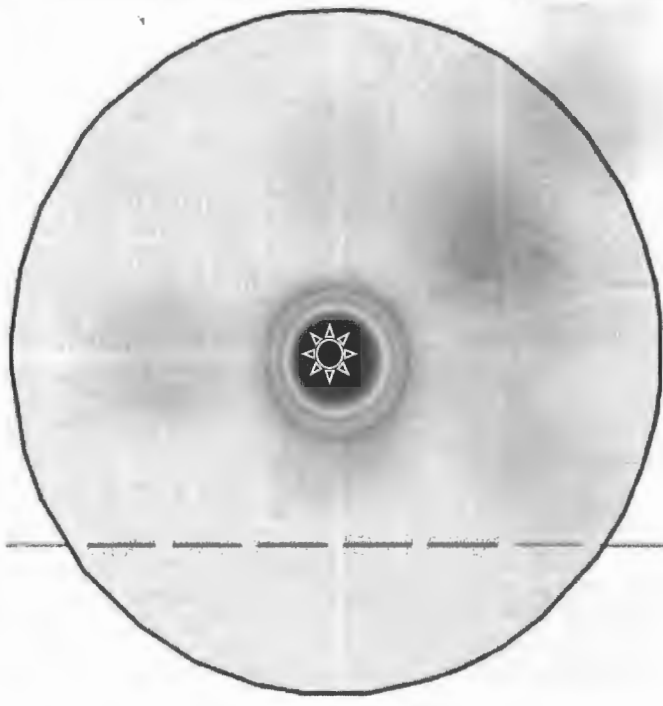
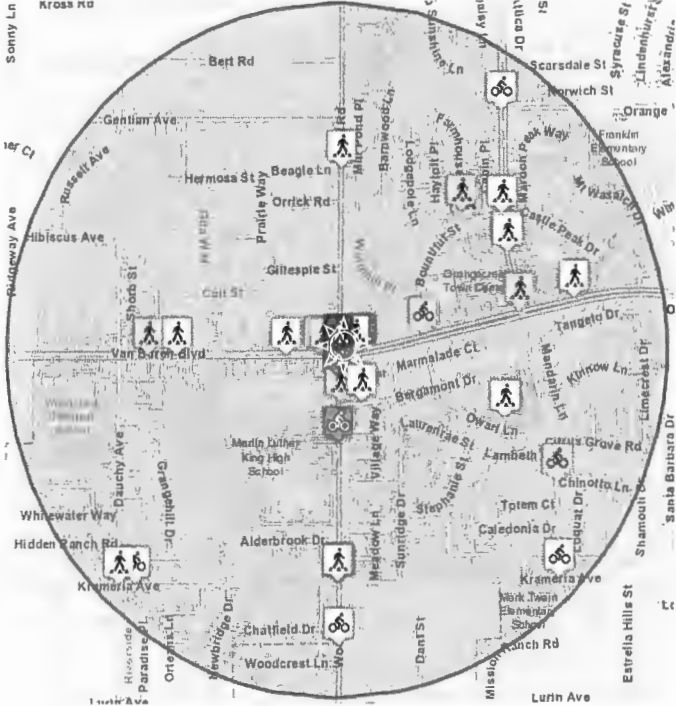
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	1	0	10	3	14
Pedestrian	2	0	8	4	14



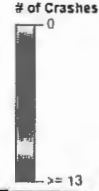
Lincoln Ave & Victoria Ave (Intersection 10)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP

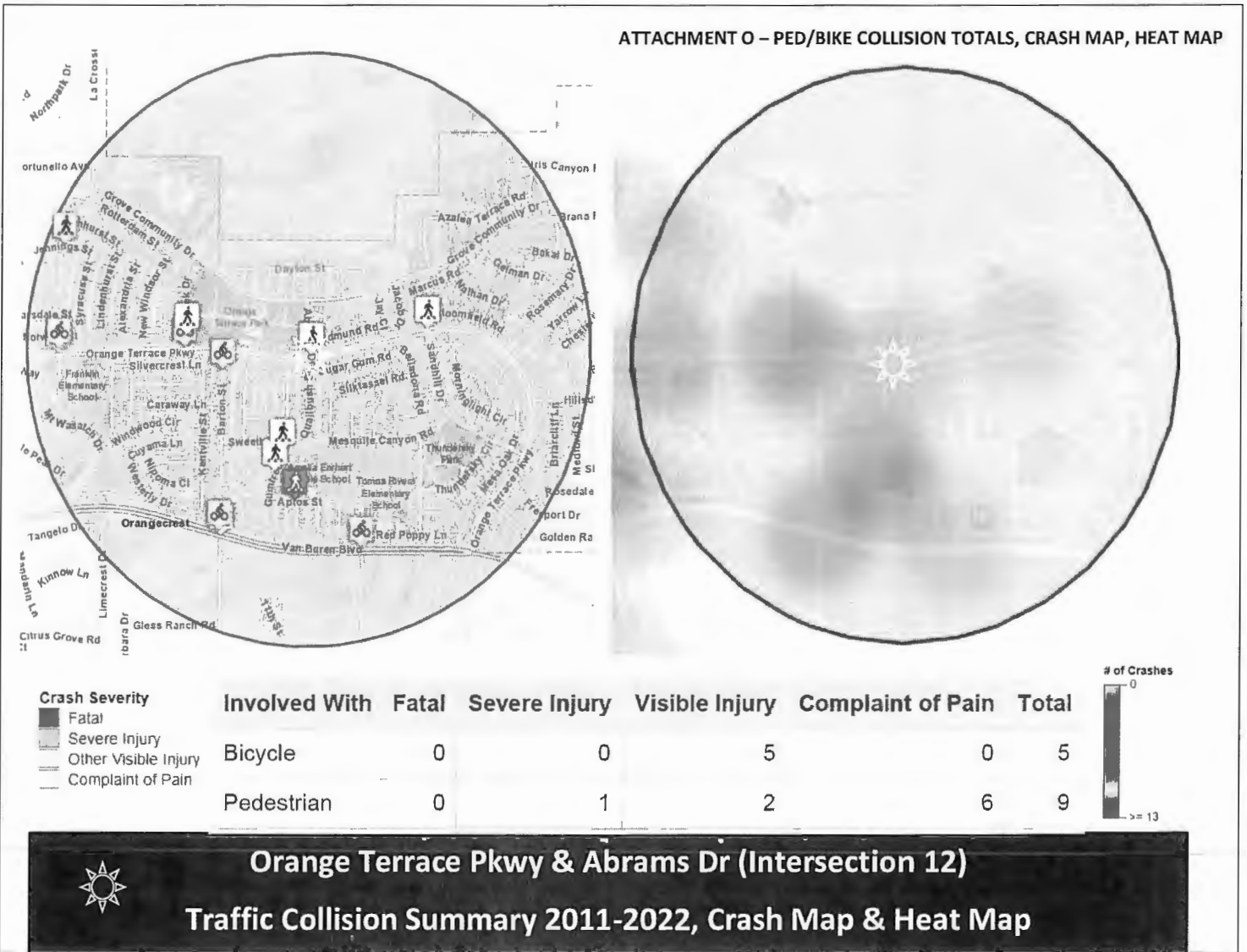


Crash Severity	Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
<ul style="list-style-type: none"> Fatal Severe Injury Other Visible Injury Complaint of Pain 	Bicycle	0	1	7	4	12
	Pedestrian	1	2	10	12	25



Wood Ave & Van Buren Blvd (Intersection 11)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Orange Terrace Pkwy & Abrams Dr (Intersection 12)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



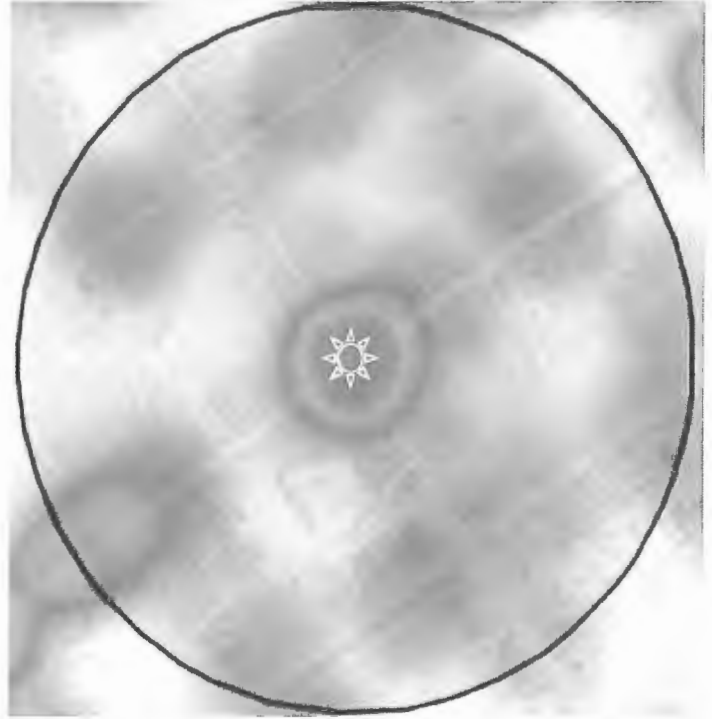
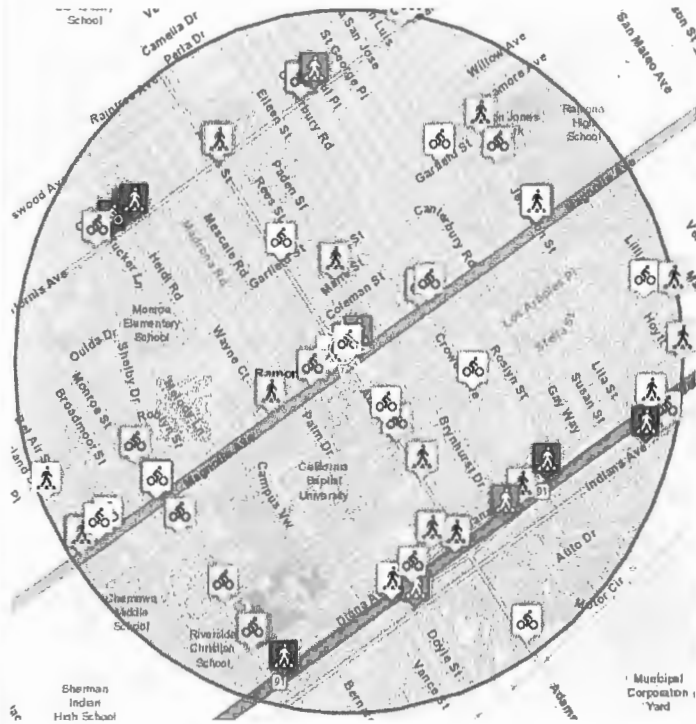
- Crash Severity**
- Fatal
 - Severe Injury
 - Other Visible Injury
 - Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	0	3	0	3
Pedestrian	0	1	0	5	6



Orange Terrace Pkwy & Sandhill West (Intersection 13)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

Involved With Fatal Severe Injury Visible Injury Complaint of Pain Total

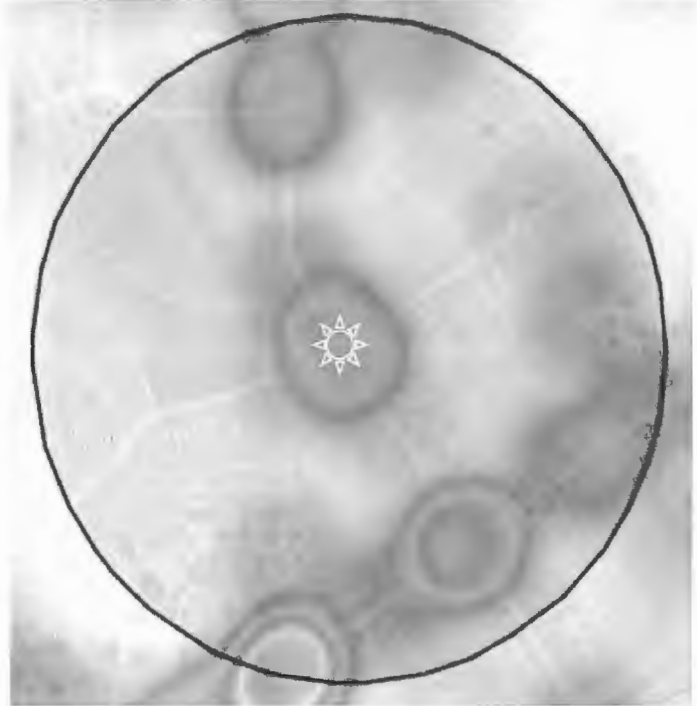
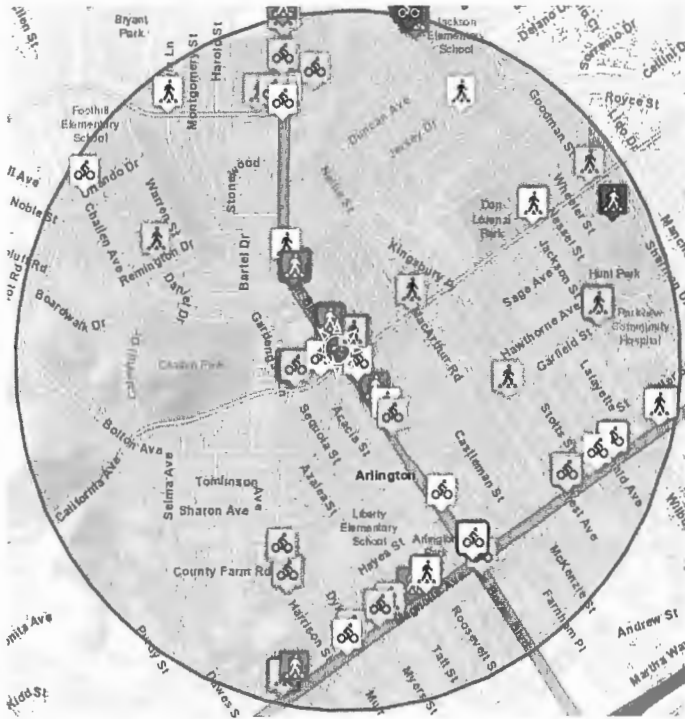
Bicycle	1	0	19	13	33
Pedestrian	4	6	14	8	32



Adams St & Magnolia Ave (Intersection 14)

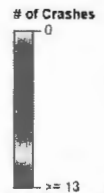
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



- Crash Severity**
- Fatal
 - Severe Injury
 - Other Visible Injury
 - Complaint of Pain

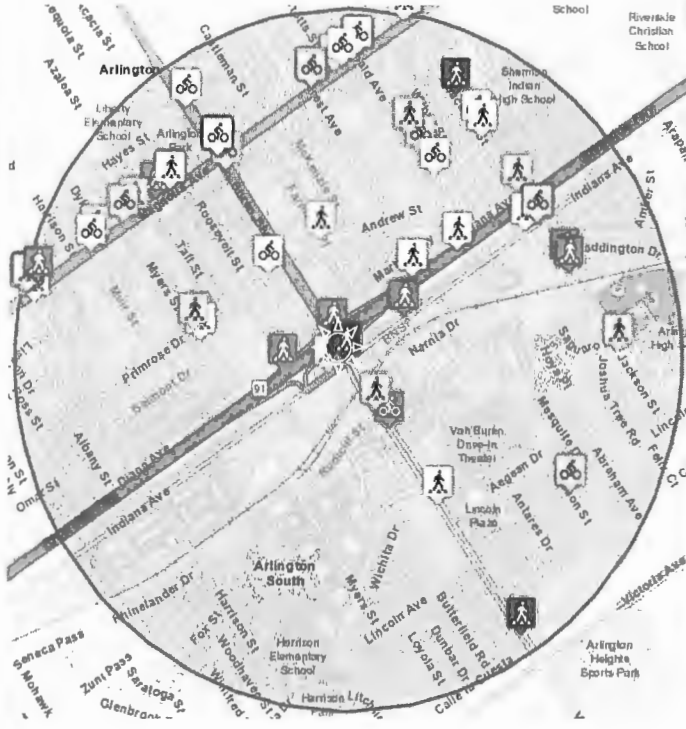
	Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle		15	76	459	384	934
Pedestrian		78	141	422	382	1023



Van Buren Blvd & California Ave (Intersection 15)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



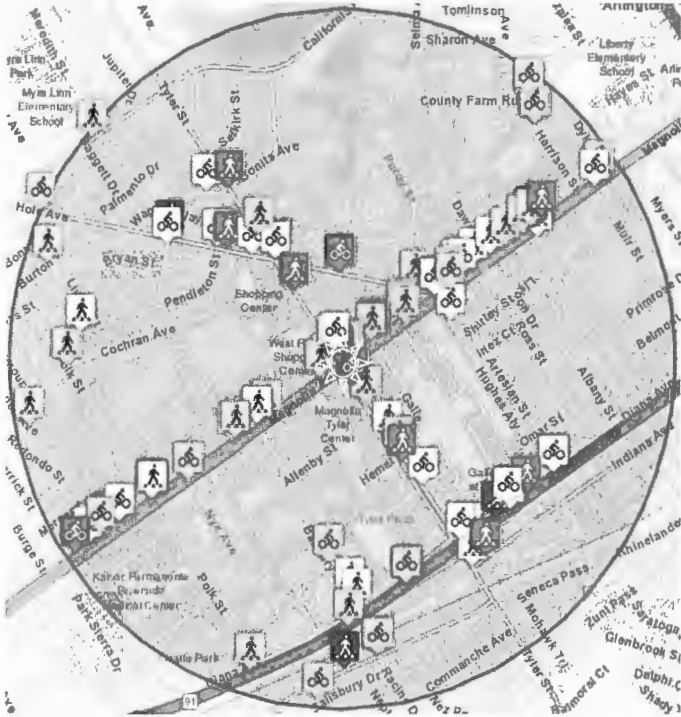
- Crash Severity**
- Fatal
 - Severe Injury
 - Other Visible Injury
 - Complaint of Pain





	Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle		0	4	15	20	39
Pedestrian		4	7	12	22	45



 **Van Buren Blvd & Indiana Ave (Intersection 16)**
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



- Crash Severity**
-  Fatal
 -  Severe Injury
 -  Other Visible Injury
 -  Complaint of Pain

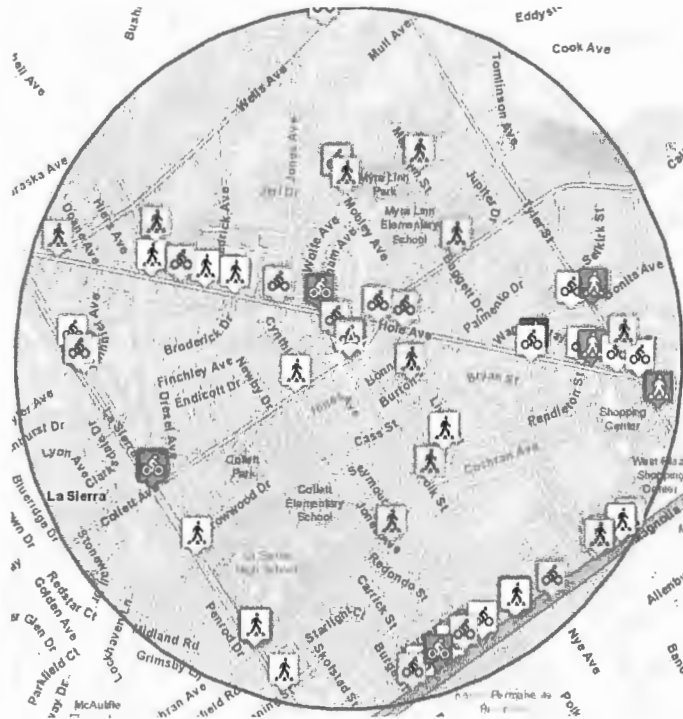
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	5	24	32	61
Pedestrian	5	11	31	21	68



Magnolia Ave & Tyler St (Intersection 17)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

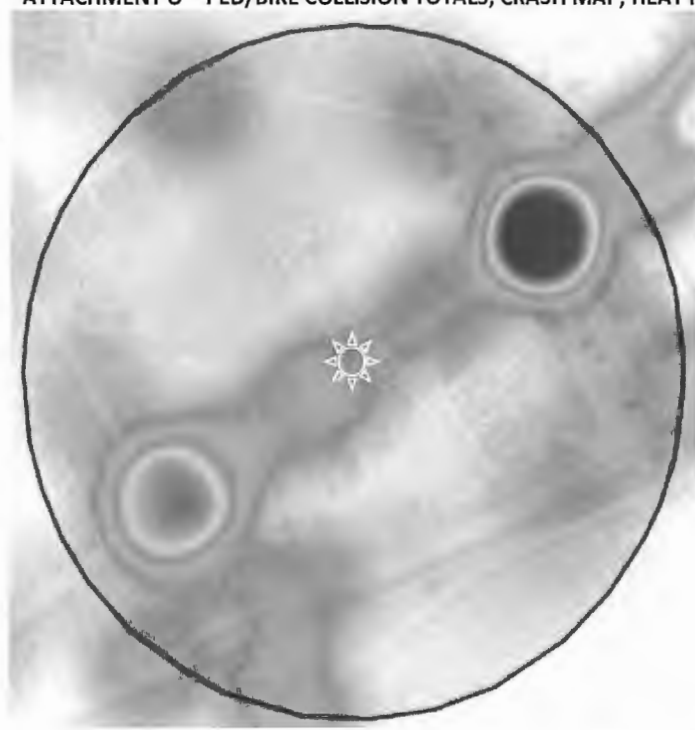
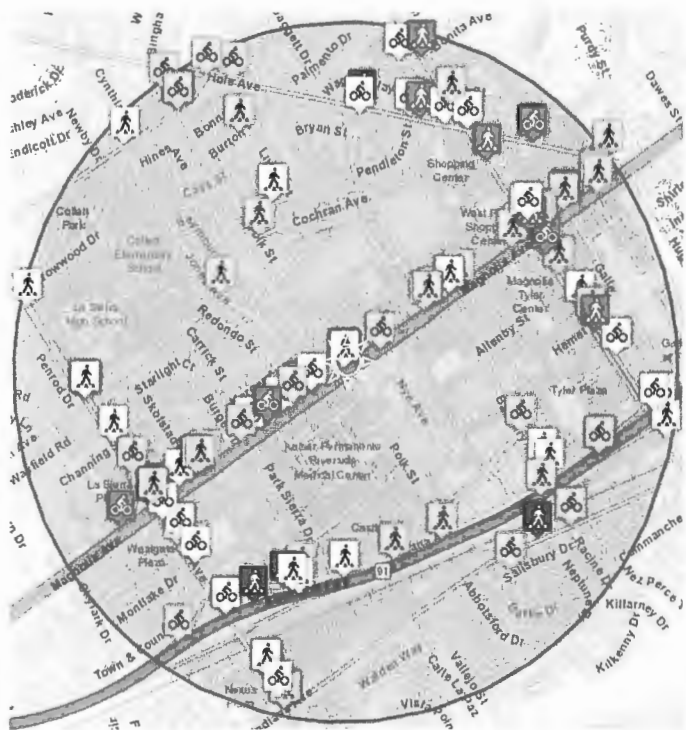
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	4	18	14	36
Pedestrian	2	4	15	16	37



Collett Ave & Polk St (Intersection 18)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map


ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



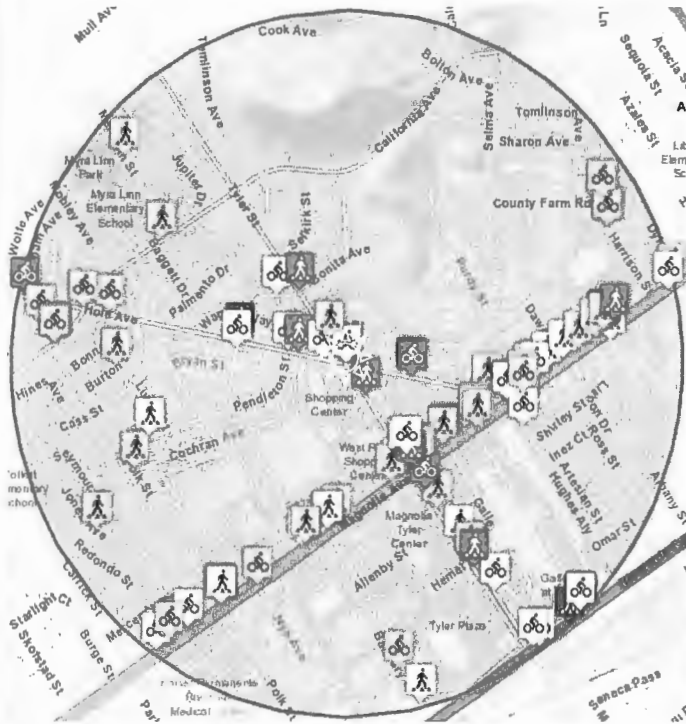
Crash Severity
 Fatal
 Severe Injury
 Other Visible Injury
 Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	5	30	31	66
Pedestrian	6	10	36	32	84



 **Magnolia Ave & Polk St (Intersection 19)**
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

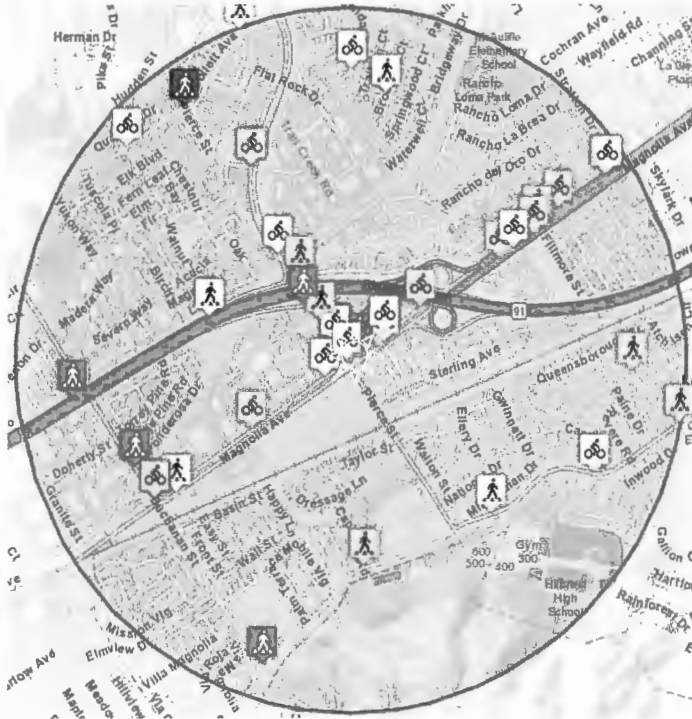
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	5	22	31	58
Pedestrian	4	9	29	20	62



Tyler St & Hole Ave (Intersection 20)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



- Crash Severity**
- Fatal
 - Severe Injury
 - Other Visible Injury
 - Complaint of Pain

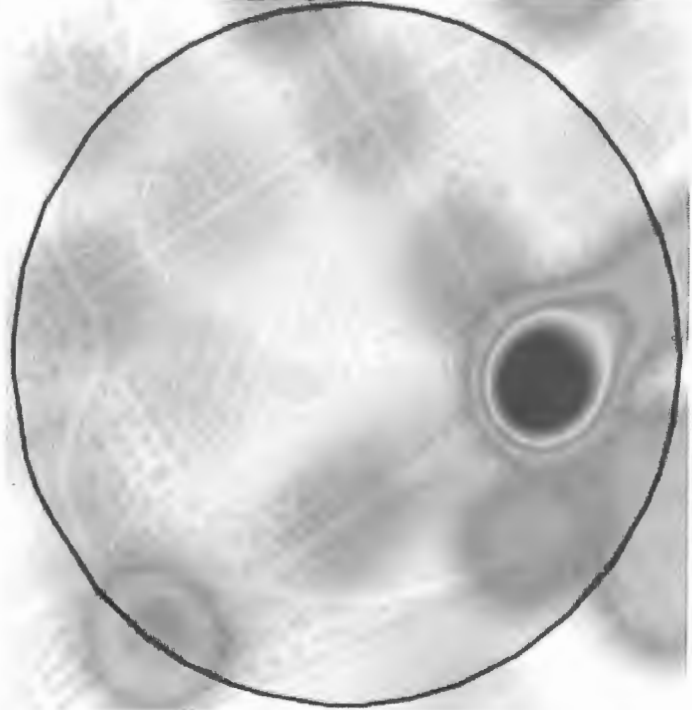
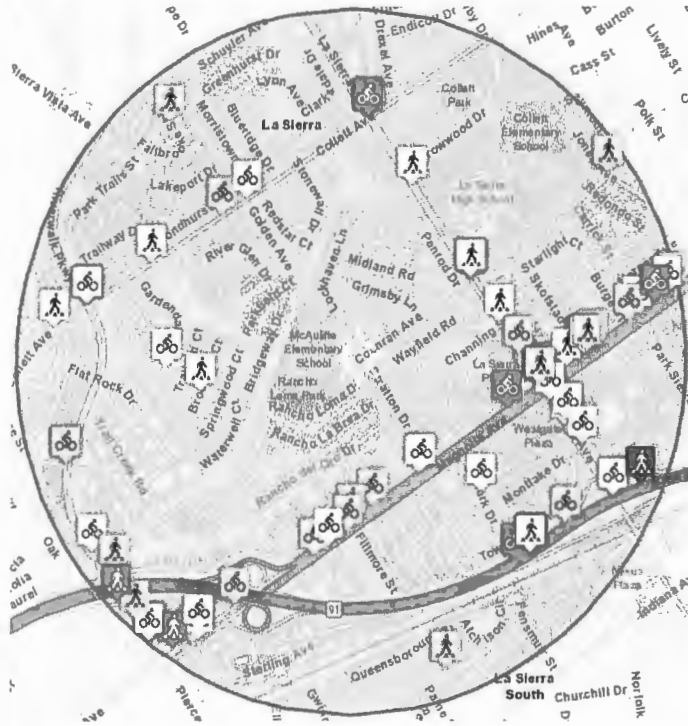
	Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle		0	2	10	11	23
Pedestrian		1	5	8	7	21



Pierce St & Magnolia Ave (Intersection 21)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



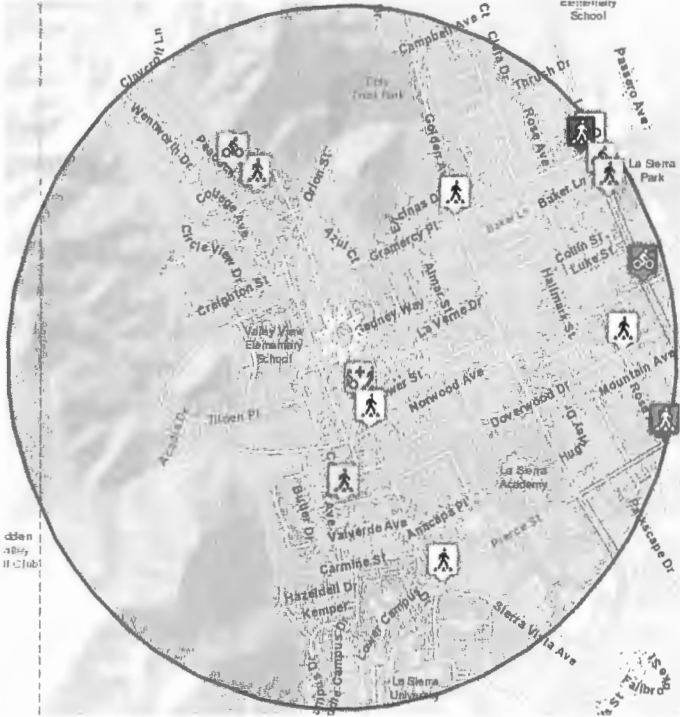
Crash Severity
 ■ Fatal
 ■ Severe Injury
 ■ Other Visible Injury
 — Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	5	19	24	48
Pedestrian	1	5	19	18	43



Golden Ave and Cochran Ave (Intersection 22)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



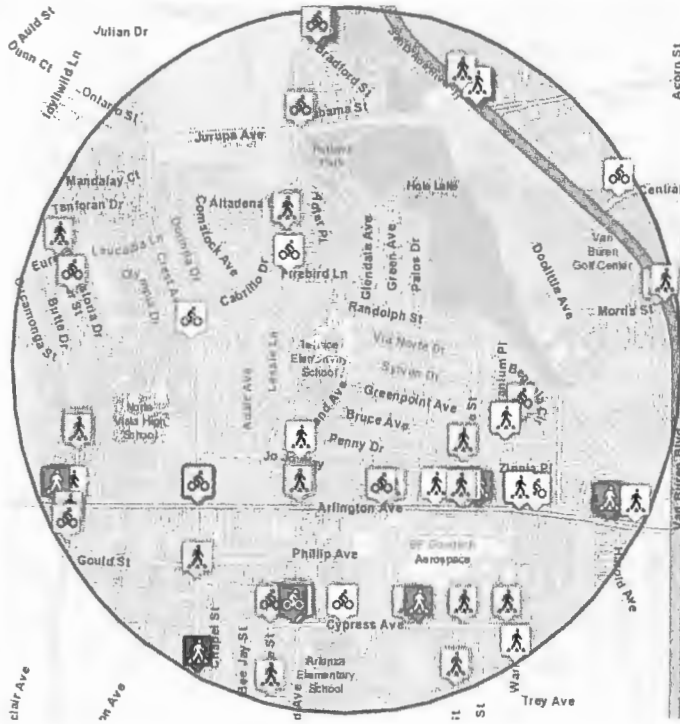
- Crash Severity**
- Fatal
 - Severe Injury
 - Other Visible Injury
 - Complaint of Pain

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	1	3	1	5
Pedestrian	1	1	5	4	11



Sierra Vista & Gedney Way (Intersection 23)
Traffic Collision Summary 2011-2022, Crash Map & Heat Map

ATTACHMENT O – PED/BIKE COLLISION TOTALS, CRASH MAP, HEAT MAP



Crash Severity

- Fatal
- Severe Injury
- Other Visible Injury
- Complaint of Pain

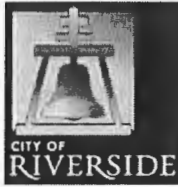
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	4	15	9	28
Pedestrian	2	7	20	13	42



Rutland Ave and Sylvan Dr (Intersection 24)

Traffic Collision Summary 2011-2022, Crash Map & Heat Map





**PUBLIC WORKS
DEPARTMENT**
Traffic Engineering

City of Arts & Innovation

April 21, 2023

TDA Article 3 (SB 821) Evaluation Committee
Riverside County Transportation Commission
4080 Lemon Street, 3rd Floor
Riverside, CA 92501

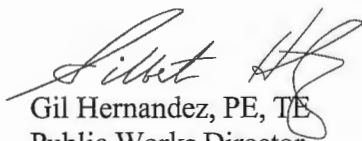
Re: Local Match Funding for the Riverside Citywide Pedestrian & Bicycle Improvements Project

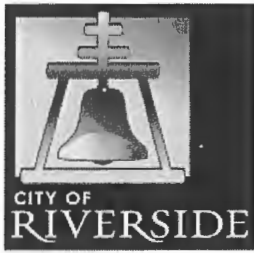
Dear SB-821 Evaluation Committee:

This letter is to confirm that the City of Riverside Public Works Department has the local match funding requirement for its Riverside Citywide Pedestrian and Bicycle Improvements Project application. On April 18, 2023, the Riverside City Council unanimously voted to approve up to \$690,120 in local matching funds to serve as a 50% participation for the Riverside Citywide Pedestrian & Bicycle Improvement Project. I have verified the availability of the funds reflected in the Engineer's Estimate and have attached the Council Memorandum and Minutes as evidence of our agency's due diligence and commitment to fund our portion of the project should it be awarded. We appreciate your agency's consideration to construct critical pedestrian and bicycle improvements for the Riverside community.

Please feel free to contact Philip Nitollama, City Traffic Engineer, should you have any questions at 951-568-5021 or via email at pnitollama@riversideca.gov.

Sincerely,


Gil Hernandez, PE, TE
Public Works Director



City of Riverside

City Council

City of Arts & Innovation

Agenda - Revised

Mayor
Patricia Lock Dawson

Councilmembers:

Erin Edwards
Clarissa Cervantes
Ronaldo Fierro
Chuck Conder
Gaby Plascencia
Jim Perry
Steve Hemenway

Meeting Date: Tuesday, April 18, 2023
Publication Date: Friday, April 14, 2023

3:00 PM

City Hall - Art Pick Council Chamber
3900 Main Street, Riverside

Live Webcast at:
www.RiversideCA.gov/Meeting or
www.WatchRiverside.com

Originally Published: April 6, 2023

MISSION STATEMENT

The City of Riverside is committed to providing high quality municipal services to ensure a safe, inclusive, and livable community.

Face coverings are strongly recommended.

For virtual Public Comment, two options are available:

VIA TELEPHONE:

Call (669) 900-6833 and enter Meeting ID: 926 9699 1265

Press *9 to be placed in the queue to speak.

Individuals in the queue will be prompted to unmute by pressing *6 to speak.

VIA ZOOM:

Use the following link: <https://zoom.us/j/92696991265>

Select the "raise hand" function to request to speak.

An on-screen message will prompt you to "unmute" and speak.

Public comments are limited to 3 minutes.

Please follow along via the telephone or Zoom options above to ensure you call in at the appropriate time for your item(s).

Public comments regarding items on this agenda or any matters within the jurisdiction of the City Council can be submitted via the eComment feature at www.riversideca.gov/meeting until two hours before the meeting. Email comments to City_Clerk@riversideca.gov.

7 P.M.**PUBLIC COMMENT**

Audience participation is encouraged. Public comments are limited to 3 minutes.

- 25 To comment on the Consent Calendar and any matters within the jurisdiction of the City Council, you are invited to participate in person or call at (669) 900-6833 and enter Meeting ID: 926 9699 1265. Press *9 to be placed in the queue to speak. Individuals in the queue will be prompted to unmute by pressing *6 when you are ready to speak.

To participate via ZOOM, use the following link: <https://zoom.us/j/92696991265>. Select the "raise hand" function to request to speak. An on-screen message will prompt you to "unmute" and speak.

CONSENT CALENDAR - Item # 27-37

All matters listed under the CONSENT CALENDAR are considered routine by the City Council and may be enacted by one motion in the form listed below. There will be no separate discussion of these items unless, before the City Council votes on the motion to adopt, Members of the City Council or staff request specific items be removed from the Consent Calendar for separate action.

- 26 Announcement of Measure Z Funded Item No. 31

Attachments: [Measure Z Photo](#)

City Clerk

- 27 Minutes of April 4, 2023

Attachments: [Minutes](#)

- 28 Appoint Oscar Valadez to Transportation Board Citywide seat, Barbie T. Gomez to Commission of the Deaf Citywide seat, and Desiree N. Wroten to Budget Engagement Commission Ward 3 Resident seat (All Wards)

Attachments: [Report](#)

- 29 Correction to City Council minutes of February 21, 2023, to reflect the Amendment to the Agreement with Raincross Hospitality Corporation was removed from the agenda and forwarded to Financial Performance and Budget Committee (All Wards)

Attachments: [Report](#)
[Minutes 2-21-23](#)

Cooperative Purchasing for estimated amount of \$4,814,000 plus interest from Water Field Account for Water Field and Operations divisions (All Wards)

Attachments: [Report](#)
[Sourcewell Solicitation Process](#)
[Sourcewell Vehicle Purchase Agreements](#)
[Presentation](#)

Public Works

35 A Resolution of the City Council of the City of Riverside, California, authorizing the City Manager, or his Designee, to apply for, submit, and execute all required documents with the California Department of Transportation for not-to-exceed \$3 million for the Clean California Local Grant Program for beautification efforts along Martin Luther King Boulevard between Kansas Avenue and Canyon Crest Drive - Waive further reading - Supplemental appropriation - Five affirmative votes required (Ward 2)

Attachments: [Report](#)
[Resolution](#)
[Local Match Calculation Form](#)

36 Fiscal Year 2023-24 Transportation Development Act Article 3, (Senate Bill 821) grant applications to Riverside County Transportation Commission for \$1,380,240 with City-match of \$1,380,240 for total project cost of \$2,760,480 for concrete sidewalks and pedestrian ramps on Stover Avenue, installation of LED Stop signs, crosswalks, audible pedestrian push button systems and upgraded pedestrian ramps at various Citywide intersections (All Wards)

Attachments: [Report](#)
[Stover Ave. Sidewalk Location Map](#)
[Pedestrian and Bicycle Safety Project List](#)

37 2023 Western Riverside Regional Arterials grant application to Riverside County Transportation Commission for \$4,000,000 for plans, specifications, and estimates project phase for State Route 91/Adams Street interchange reconstruction (Wards 4 and 6)

Attachments: [Report](#)
[Location Map](#)

COMMUNICATIONS

38 City Attorney report on Closed Session discussions

39 Items for future City Council consideration as requested by Mayor or Members of



City Council Memorandum

City of Arts & Innovation

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: APRIL 18, 2023

FROM: PUBLIC WORKS DEPARTMENT WARDS: ALL

SUBJECT: APPROVAL OF TWO FISCAL YEAR 2023-24 TRANSPORTATION DEVELOPMENT ACT ARTICLE 3, SENATE BILL 821 GRANT APPLICATIONS TO THE RIVERSIDE COUNTY TRANSPORTATION COMMISSION FOR \$1,380,240, FOR A TOTAL PROJECT COST OF \$2,760,480 WITH REQUIRED CITY MATCH, FOR CONCRETE SIDEWALKS AND PEDESTRIAN RAMPS ON STOVER AVENUE, INSTALLATION OF LED STOP SIGNS, CROSSWALKS, AUDIBLE PEDESTRIAN PUSH BUTTON SYSTEMS AND UPGRADED PEDESTRIAN RAMPS AT VARIOUS CITYWIDE INTERSECTIONS (ALL WARDS)

ISSUE:

Authorize the submittal of two grant applications requesting up to \$1,380,240 in grant funding for the Transportation Development Act Article 3 (Senate Bill 821) Grant Program offered by the Riverside County Transportation Commission to construct new concrete sidewalks and pedestrian ramps, new LED stop signs, new high visibility crosswalks, and new audible pedestrian push button systems Citywide. The total project cost is estimated at \$2,760,480 which is two grant awards and required dollar-for-dollar City match funds.

RECOMMENDATIONS:

That the City Council:

1. Authorize the Public Works Department to prepare and submit a FY 2023/24 Transportation Development Act Article 3 (Senate Bill 821) grant application (Grant #1) to the Riverside County Transportation Commission in an amount up to \$690,120 (with \$690,120 in required City match funds) to construct new concrete sidewalks and pedestrian ramps on Stover Avenue from Fury Drive to Eagle Rock Drive; and
2. Authorize the Public Works Department to prepare and submit a FY 2023/24 Transportation Development Act Article 3 (Senate Bill 821) grant application (Grant #2) to the Riverside County Transportation Commission in an amount up to \$690,120 (with \$690,120 in required City match funds) to install LED Stop signs, high visibility crosswalks, audible pedestrian push buttons systems, and upgraded pedestrian ramps at various intersections Citywide.

BACKGROUND:

Transportation Development Act (TDA) Article 3, or Senate Bill (SB) 821, Bicycle and Pedestrian Facilities Program funding, is provided through a ¼ cent of the general sales tax collected statewide. The TDA provides two major sources of funding for public transportation: the Local Transportation Fund (LTF) and the State Transit Assistance (STA). The LTF provides funding for essential transit and commuter rail services, TDA Article 3/SB 821, and planning efforts. Each year, 2% of the LTF revenue is made available for use on bicycle and pedestrian facility projects through the TDA Article3/SB 821 program. TDA Article 3/SB 821 is a discretionary program administered by the Riverside County Transportation Commission (RCTC). The total amount available for programming in the 2023/24 TDA Article 3/SB 821 Call for Projects is an estimated \$6,901,202. Each City/Agency is eligible to submit up to three applications. Each application is limited to a maximum request of \$690,120, which is 10% of available grant funding. Total award to each City/Agency is limited to \$1,380,240, or 20% of available funding. Both project applications require 1:1 local match from the City.

The TDA Article3/SB 821 Call for Projects occurs on a biennial basis, with a release date on February 6, 2023, and a due date on April 27, 2023. Per RCTC's TDA Article3/SB 821 adopted policies, awardees receiving an allocation have 36 months from award, defined as July 1 of the Call for Projects fiscal year cycle to complete construction. Eligible projects include:

- Construction, including related engineering expenses, of bicycle and pedestrian facilities, or for bicycle safety education programs;
- Maintenance of bicycling trails, which are closed to motorized traffic;
- Maintenance and repairs of Class I off-street bicycle facilities only;
- Restriping Class II bicycle lanes;
- Providing facilities for the use of bicycles that serve the needs of commuting bicyclists, including, but not limited to, new trails serving major transportation corridors, secure bicycle parking at employment centers, park and ride lots, and transit terminals where other funds are available; and
- Development of comprehensive bicycle and pedestrian plans (limitations apply). Plans must emphasize bike/pedestrian facilities that support utilitarian bike/pedestrian travel rather than solely recreational activities.

DISCUSSION:

The Public Works Department is requesting authorization from the City Council to submit a grant application requesting a total of up to \$690,120 in TDA Article3/SB 821 grant funding to construct new concrete sidewalks and pedestrian ramps on Stover Avenue from east of Fury Drive to west of Eagle Rock Drive (Attachment 1).

Additionally, the Public Works Department is requesting authorization from the City Council to submit a grant application requesting a total of up to \$690,120 in TDA Article3/SB 821 grant funding to install solar-powered LED-flashing stop signs, upgraded high-visibility crosswalks, updated pedestrian ramps, audible pedestrian push button systems Citywide. A full list of project locations is shown in Attachment 2.

The recommended streets and intersections are in close vicinity to local schools, parks, medical facility, the downtown area, employment centers, and commercial retail shopping centers and support requests from the community to improve these facilities and locations. If the projects are awarded, new sidewalks, stop signs, crosswalks, pedestrian ramps, and audible pedestrian push button systems are expected to improve sidewalk connectivity, enhance safety and mobility for residents, and improve public health by encouraging increased walking and a more active lifestyle. The combined effects would also reduce greenhouse gas emissions as residents would be encouraged to walk for shorter trips.

STRATEGIC PLAN ALIGNMENT:

This item supports **Strategic Priority 6 – Infrastructure, Mobility, and Connectivity** and aims to ensure safe, reliable infrastructure that benefits the community and facilitates connection between people, places, and information. The proposed TDA Article 3/SB 821 funded projects align with the goals below:

- 6.1** – Provide, expand and ensure equitable access to sustainable modes of transportation that connect people to opportunities such as employment, education, healthcare, and community amenities.
- 6.2** – Maintain, protect, and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.
- 6.3** – Identify and pursue new and unique funding opportunities to develop, operate, maintain, and renew infrastructure and programs that meet the community's needs.

This project aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – The proposed improvements are part of a more significant endeavor to improve the City's transportation network and quality of life for the residents and visitors. The proposed project improvements are primarily based on residential service requests received by the Public Works Department.
2. **Equity** – Public Works strives to improve the City's roadway network to provide safe and reliable transportation in all areas of the City. The proposed project includes locations within all wards, many located in disadvantaged communities that will benefit from improved active transportation connectivity.
3. **Fiscal Responsibility** – The proposed pedestrian and bicycle improvement projects leverage various city funds to garner grant funding of an equal matching amount, doubling the budget for needed improvements to a total of up to \$2,760,480 (which includes the agency maximum grant award of \$1,380,240).
4. **Innovation** – The proposed LED Lit Stop sign improvements combine innovative solar technology with an updated traffic safety device element to increase compliance with stop signs and improve safety at the intersections.
5. **Sustainability & Resiliency** – The construction materials specified for the proposed projects meet or exceed industry standards and are expected to last well into the future.

The improvements will also promote a sustainable, healthy lifestyle by enhancing the safety and connectivity of walking paths and bikeways.

FISCAL IMPACT:

The total estimated fiscal impact of this recommendation is up to \$2,760,480, which is comprised of \$1,380,240 in RCTC grant funds over two awards, and an additional \$1,380,240 in local matching funds to complete the TDA Article 3/SB 821 infrastructure improvements (Table 1).

Table 1 – Project Costs:

Project Name	TDA Article 3 (SB 821) Bicycle and Pedestrian Grant Program Funds Requested	Local Match Funds (50%)	Total Project Cost
Stover Avenue sidewalk improvements	\$690,120	\$690,120	\$1,380,240
Citywide LED Stop Signs, High-Visibility Crosswalks, Rectangular Rapid Flashing Beacons (RRFB), Audible Pedestrian Push Button Systems (APS), & Green Bike Lane Striping	\$690,120	\$690,120	\$1,380,240
Estimated TDA Article 3 (SB 821) Bicycle & Pedestrian Grant Program Total:			\$2,760,480

If successful, the TDA Article 3 (SB 821) grant funding will be used for the construction of the pedestrian and bicycle infrastructure improvements.

Staff will return to Council if awarded the grant with a definitive recommendation for allocating matching funding, in the amount of up to \$1,380,240 from potential funding sources, including bond proceeds, surplus reserves, Special Gas Tax, Measure A, or others as available.

Prepared by: Gilbert Hernandez, Public Works Director
 Certified as to availability of funds: Edward Enriquez, Interim Assistant City Manager/Chief Financial Officer/City Treasurer
 Approved by: Kris Martinez, Assistant City Manager
 Approved as to form: Phaedra A. Norton, City Attorney

Attachments:

1. Stover Ave. Sidewalk Location Map
2. Pedestrian and Bicycle Safety Project List

ATTACHMENT 2: PEDESTRIAN AND BICYCLE SAFETY PROJECT LIST

SB821 Grant FY 23/24 - Bicycle and Pedestrian Facilities					
Ward	Location	Intersection Type	Countermeasure 1	Countermeasure 2	Countermeasure 3
1	Iowa Ave and Blaine St	Signalized	Audible Ped Push Button System	Green Bike Lane Striping	High Visibility Crosswalk
1	Spruce St and Rustin Ave	Unsignalized	Rectangular Rapid Flashing Beacon		
1	Rustin Ave and Linden St	Unsignalized	Flashing LED Stop Signs	Green Bike Lane Striping	High Visibility Crosswalk
2	Chicago Ave and University St	Signalized	Audible Ped Push Button System	Green Bike Lane Striping	
2	Watkins Dr and Knox Ct	Unsignalized	Flashing LED Stop Signs		High Visibility Crosswalk
2	Third St and Anderson Ave	Unsignalized	Rectangular Rapid Flashing Beacon		
2	Chicago Ave and Alessandro Blvd	Signalized	Audible Ped Push Button System	Green Bike Lane Striping	High Visibility Crosswalk
3	Van Buren Blvd and Jurupa Ave	Signalized	Audible Ped Push Button System	Green Bike Lane Striping	High Visibility Crosswalk
3	Van Buren Blvd and Arlington Ave	Signalized		Green Bike Lane Striping	High Visibility Crosswalk
3	Lincoln Ave and Victoria Ave	Unsignalized	Flashing LED Stop Signs	Raised Median	Flashing Ped signs
4	Wood Rd and Van Buren Blvd	Signalized	Audible Ped Push Button System	Green Bike Lane Striping	High Visibility Crosswalk
4	Orange Terrace Pkwy and Abrams Dr	Unsignalized	Flashing LED Stop Signs		High Visibility Crosswalk
4	Orange Terrace Pkwy and Sandhill Dr (V	Unsignalized	Flashing LED Stop Signs		High Visibility Crosswalk
5	Adams St and Magnolia Ave	Signalized	Audible Ped Push Button System	Green Bike Lane Striping	High Visibility Crosswalk
5	Van Buren Blvd and California Ave	Signalized	Audible Ped Push Button System		High Visibility Crosswalk
5	Van Buren Blvd and Indiana Ave	Signalized	Audible Ped Push Button System		High Visibility Crosswalk
6	Magnolia Ave and Tyler St	Signalized	Audible Ped Push Button System		
6	Collett Ave and Polk St	Unsignalized	Flashing LED Stop Signs		High Visibility Crosswalk
6	Magnolia Ave and Polk St	Signalized	Audible Ped Push Button System		High Visibility Crosswalk
6	Tyler St and Hole Ave	Signalized	Audible Ped Push Button System		High Visibility Crosswalk
7	Pierce St and Magnolia Ave	Signalized	Audible Ped Push Button System		High Visibility Crosswalk
7	Golden Ave and Cochran Ave	Unsignalized	Flashing LED Stop Signs		High Visibility Crosswalk
7	Sierra Vista Ave and Gedney Way (5)	Unsignalized	Rectangular Rapid Flashing Beacon		
7	Rutland Ave and Sylvan Dr	Unsignalized	Flashing LED Stop Signs		High Visibility Crosswalk



City of Arts & Innovation

CITY COUNCIL MINUTES

TUESDAY, APRIL 18, 2023, 3 P.M.
PUBLIC COMMENT IN PERSON/TELEPHONE
ART PICK COUNCIL CHAMBER
3900 MAIN STREET

ORAL COMMUNICATIONS FROM THE AUDIENCE

Sean Mill spoke regarding adopting a resolution opposing Assembly Bill 742. Jason Hunter spoke regarding newly adopted Code of Ethics and Conduct.

Councilmember Perry reported that the City submitted a letter in March to the Public Safety Committee at the State Assembly opposing Assembly Bill 742. The City Council Safety, Wellness, and Youth Committee will be reviewing Assembly Bills relating to public safety at the April 19, 2023, meeting.

CONSENT CALENDAR

It was moved by Councilmember Hemenway and seconded by Councilmember Perry to approve the Consent Calendar as presented affirming the actions appropriate to each item. The motion carried with Councilmembers Edwards, Cervantes, Perry, and Hemenway and Councilwoman Plascencia voting aye, Councilmembers Fierro and Conder absent.

MINUTES

The minutes of the meeting of April 4, 2023, were approved as presented.

BOARD AND COMMISSION APPOINTMENTS

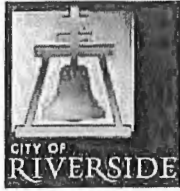
The Mayor and City Council appointed Oscar Valadez to the Transportation Board Citywide seat for a term through March 1, 2025, Barbie T. Gomez to the Commission of the Deaf for a term that will be decided during the first meeting of the Commission, and Desiree N. Wroten to the Budget Engagement Commission Ward 3 Resident seat for a term through March 1, 2027.

CORRECTION TO MINUTES OF FEBRUARY 21, 2023

The City Council approved a correction to the minutes of February 21, 2023, Page 108-243, to reflect the Consent Calendar item regarding the First Amendment to Agreement with Raincross Hospitality Corporation was removed from the agenda and forwarded to Financial Performance and Budget Committee.

FISCAL YEAR 2022-23 SIX MONTHS ENDING DECEMBER 31, 2022, CASH, INVESTMENTS, AND DEBT REPORT

The City Council received and ordered filed the Fiscal Year 2022-23 six-months ending December 31, 2022, Cash, Investments, and Debt Report.



City of Arts & Innovation

CITY COUNCIL MINUTES

TUESDAY, APRIL 18, 2023, 3 P.M.
PUBLIC COMMENT IN PERSON/TELEPHONE
ART PICK COUNCIL CHAMBER
3900 MAIN STREET

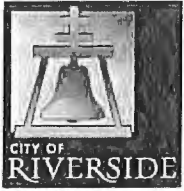
availability of budgeted funds; and (2) authorized the City Manager, or designee, to execute the individual purchase agreements, purchase orders, and all necessary documents as needed for these individual purchases with all authority for such, including approval of minor and/or non-substantial changes, expiring on September 30, 2023.

CLEAN CALIFORNIA LOCAL GRANT PROGRAM - BEAUTIFICATION - MARTIN LUTHER KING/ KANSAS/CANYON CREST - SUPPLEMENTAL APPROPRIATION - RESOLUTION

The City Council (1) adopted a Resolution authorizing the City Manager, or designee, to apply for, submit, and execute all required documents with the California Department of Transportation for the Clean California Local Grant Program through June 30, 2026; (2) received a grant for Fiscal Year 2023-24 in the amount of \$3 million, or the actual amount awarded, from the California Department of Transportation Clean California Local Grant Program; and (3) and upon grant award, authorized the Chief Financial Officer, or designee, to record an increase in revenue and an appropriation in expenditures in the amount of the grant award in the Fiscal Year 2023-24 California Department of Transportation Clean California Local Grant Program accounts; whereupon, the title having been read and further reading waived, Resolution No. 23980 of the City Council of the City of Riverside, California, Authorizing the City Manager, or his Designee, to Apply for, Submit, and Execute all Required Documents with the California Department of Transportation for the Clean California Local Grant Program for Beautification Efforts along Martin Luther King Blvd. Between Kansas Ave. and Canyon Crest Dr., was presented and adopted.

FISCAL YEAR 2023-24 TRANSPORTATION DEVELOPMENT ACT GRANT APPLICATIONS - CONCRETE SIDEWALKS, PEDESTRIAN RAMPS, LED STOP SIGNS, CROSSWALKS, AND AUDIBLE PEDESTRIAN PUSH BUTTON - VARIOUS CITYWIDE INTERSECTIONS

The City Council (1) authorized the Public Works Department to prepare and submit a Fiscal Year 2023-24 Transportation Development Act Article 3 (Senate Bill 821) grant application (Grant #1) to the Riverside County Transportation Commission in an amount up to \$690,120 (with \$690,120 in required City match funds) to construct new concrete sidewalks and pedestrian ramps on Stover Avenue from Fury Drive to Eagle Rock Drive; and (2) authorized the Public Works Department to prepare and submit a Fiscal Year 2023-24 Transportation Development Act Article 3 (Senate Bill 821) grant application (Grant #2) to the Riverside County Transportation Commission in an amount up to \$690,120 (with \$690,120 in required City match funds) to install LED Stop signs, high visibility



City of Arts & Innovation

CITY COUNCIL MINUTES

TUESDAY, APRIL 18, 2023, 3 P.M.
PUBLIC COMMENT IN PERSON/TELEPHONE
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crosswalks, audible pedestrian push buttons systems, and upgraded pedestrian ramps at various intersections Citywide.

2023 WESTERN RIVERSIDE REGIONAL ARTERIALS GRANT APPLICATION - STATE ROUTE 91/ADAMS STREET INTERCHANGE RECONSTRUCTION

The City Council authorized the Public Works Department to prepare and submit a 2023 Western Riverside Regional Arterials grant application to the Riverside County Transportation Commission in an amount of \$4,000,000 for the plans, specifications, and estimates phase of the State Route 91/Adams Street Interchange Reconstruction.

COMMUNICATIONS

CITY ATTORNEY REPORT ON CLOSED SESSIONS

City Attorney Norton announced that the City Council authorized the initiation of litigation in the case concerning Sheila Simmons v. City of Riverside and no reportable action was taken on the other items during closed session.

ITEMS FOR FUTURE CITY COUNCIL CONSIDERATION

There were no requests made at this time.

The City Council adjourned at 7:31 pm. in honor of Daniel "Danny" C. Garcia and Hunter Fisk.

Respectfully submitted,

DONESIA GAUSE
City Clerk

SB821 FY23/24 Bicycle and Pedestrian Facilities

Project Cost Estimate

No.	Description	Quantity	Unit	Unit Price	Total
ADMINISTRATIVE ITEMS					
1	Engineering Design	1	LS	\$96,000.00	\$96,000.00
2	Construction Administration	1	LS	\$50,000.00	\$50,000.00
Sub-Total: Administrative Items					\$146,000.00
INCIDENTAL ITEMS					
3	Mobilization	1	LS	\$50,000.00	\$50,000.00
4	Water Pollution Control	1	LS	\$7,000.00	\$7,000.00
5	Traffic Control and Access	1	LS	\$50,000.00	\$50,000.00
Sub-Total: Incidental Items					\$107,000.00
CONSTRUCTION ITEMS					
6	High Visibility Crosswalk (Includes removal of existing crosswalk and associated striping and pavement legends, installation of thermoplastic ladder crosswalk or continental crosswalk with stop bar, and associated striping and pavement legends)	62	EA	\$6,000.00	\$372,000.00
7	Accessible Pedestrian Signal System (Includes removing existing buttons, installing APS buttons, installing CCU)	12	EA	\$21,000.00	\$252,000.00
8	Green Bicycle Striping Improvements (Signalized Intersection - Includes green thermoplastic pavement markings, sharrows, conflict zones, signage, and bicycle detector loops)	8	EA	\$14,875.00	\$119,000.00
9	Rapid Rectangular Flashing Beacon System (Includes foundation, pole, solar panel and power system, push buttons)	3	EA	\$15,000.00	\$45,000.00
10	Flashing LED Solar Powered Stop Sign	23	EA	\$4,500.00	\$103,500.00
11	Flashing LED Solar Powered Pedestrian Warning Sign	1	EA	\$4,500.00	\$4,500.00
12	Signage/Striping Modifications (Lincoln Ave and Victoria Ave)	1	EA	\$12,000.00	\$12,000.00
13	Signage/Striping Modifications (Sierra Vista Ave and Gedney Way)	1	EA	\$7,500.00	\$7,500.00
Sub-Total: Construction Items					\$915,500.00
TOTAL FOR ALL CONTRACT BID ITEMS					\$1,168,500.00
					15% Contingency
					\$175,275.00
					TOTAL
					\$1,343,775.00

ATTACHMENT D - INDIVIDUAL INTERSECTION IMPROVEMENTS SUMMARY

TDA ARTICLE 3 (SB821) Grant FY 23/24 - Riverside Citywide Pedestrian & Bicycle Improvements Project					
Number	Ward	Intersection Location & Type (Green = Signalized; Yellow = Stop Controlled)	Safety Countermeasure 1	Safety Countermeasure 2	Safety Countermeasure 3
1	1	Iowa Ave and Blaine St	APS ¹	Green Bike Lane Striping	High Visibility Crosswalks
2	1	Spruce St and Rustin Ave	RRFB		
3	1	Rustin Ave and Linden St	Flashing LED Stop Signs		High Visibility Crosswalks
4	2	Chicago Ave and University St	APS	Green Bike Lane Striping	
5	2	Watkins Dr and Knox Ct	Flashing LED Stop Signs		High Visibility Crosswalks
6	2	Third St and Anderson Ave	RRFB		
7	2	Alessandro Blvd and Chicago Ave	APS	Green Bike Lane Striping	High Visibility Crosswalks
8	4	Lincoln Ave and Victoria Ave	Flashing LED Stop Signs & Ped Signs	Signing / Striping Mod	High Visibility Crosswalks
9	3	Orange Terrace Pkwy and Abrams Dr	Flashing LED Stop Signs		High Visibility Crosswalks
10	3	Orange Terrace Pkwy & Sandhill Dr (West)	Flashing LED Stop Signs		High Visibility Crosswalks
11	4	Wood Rd and Van Buren Blvd	APS	Green Bike Lane Striping	High Visibility Crosswalks
12	3	Van Buren Blvd and Jurupa Ave	APS	Green Bike Lane Striping	High Visibility Crosswalks
13	4	Van Buren Blvd and Arlington Ave		Green Bike Lane Striping	High Visibility Crosswalks
14	5	Adams St and Magnolia Ave	APS	Green Bike Lane Striping	High Visibility Crosswalks
15	5	Van Buren Blvd and California Ave	APS	Green Bike Lane Striping	High Visibility Crosswalks
16	5	Van Buren Blvd and Indiana Ave	APS		High Visibility Crosswalks
17	6	Rutland Ave and Sylvan Dr	Flashing LED Stop Signs		High Visibility Crosswalks
18	6	Collett Ave and Polk St	Flashing LED Stop Signs		High Visibility Crosswalks
19	6	Magnolia Ave and Polk St	APS		High Visibility Crosswalks
20	6	Tyler St and Hole Ave	APS		High Visibility Crosswalks
21	7	Pierce St and Magnolia Ave	APS		High Visibility Crosswalks
22	7	Golden Ave and Cochran Ave	Flashing LED Stop Signs		High Visibility Crosswalks
23	7	Sierra Vista Ave and Gedney Way (S)	RRFB	Signing / Striping Mod	
24	7	Magnolia Ave and Tyler St	APS		

Signalized Intersection

Stop Controlled Intersection

¹ APS = Audible Pedestrian Push Button System

Attachment D
High Visibility Crosswalk Improvement Example Photo



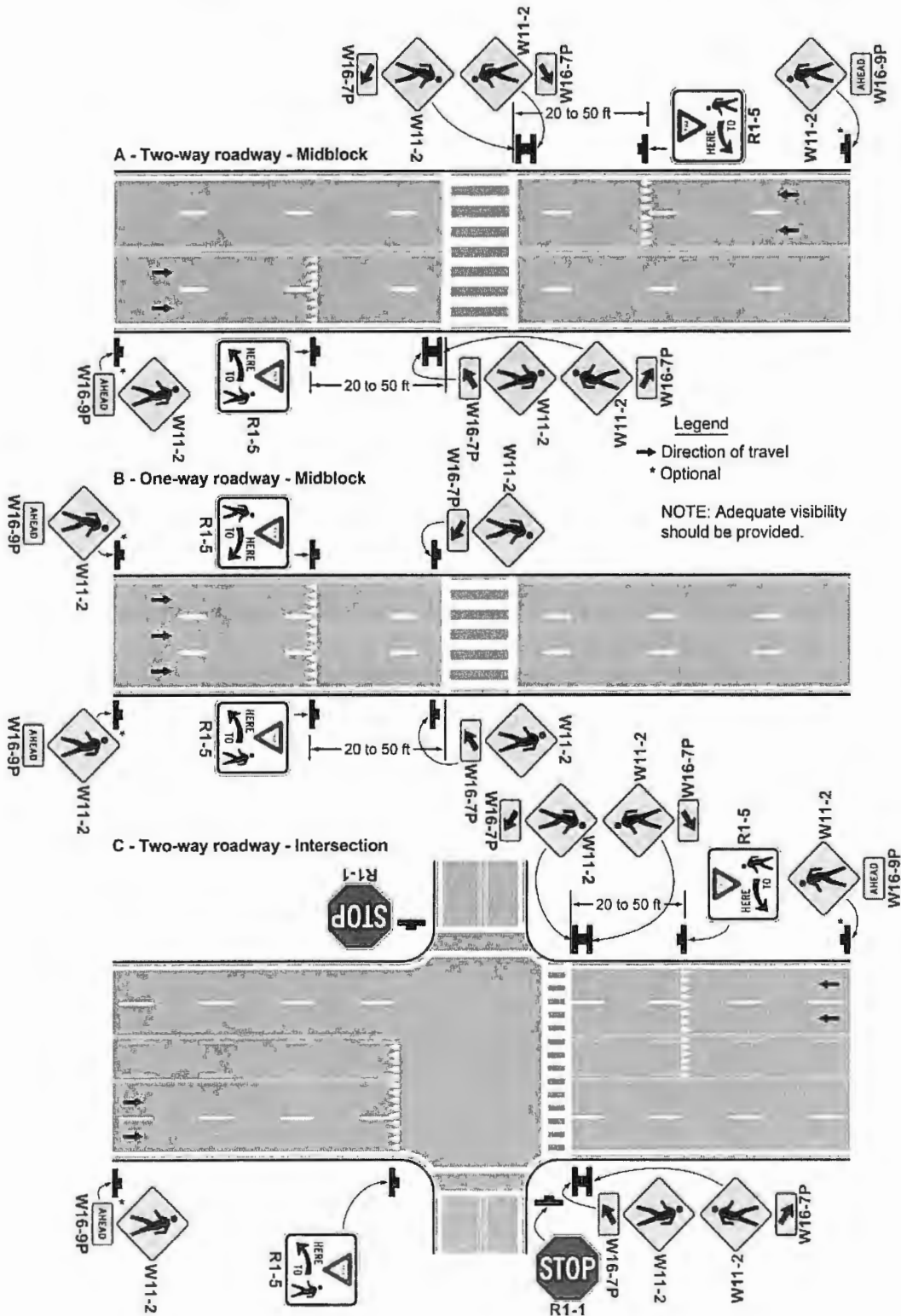
Existing Photo along Canyon Crest & UCR commercial village

Attachment D
Green Bike Lane Striping Improvement Example Photos



Existing Photos at Linden & Canyon Crest

Figure 3B-17 (CA). Examples of Crosswalk Enhancements at Uncontrolled Multilane Approaches



ATTACHMENT E

Existing Photos



Intersection 1 - Blaine St at Iowa Ave - Looking westbound. Improvements include – high visibility crosswalk, green bike lane striping & audible ped push buttons. (Top picture)



Intersection 2 – Rustin Ave at Spruce St - Looking eastbound. Improvements include – rectangular rapid flashing beacons.

ATTACHMENT E

Existing Photos



Intersection 3 – Rustin Ave & Linden St - Looking eastbound. Improvements include – high visibility crosswalk, green bike lane striping & flashing LED edge-lit stop signs. (Top picture)



Intersection 4 – Chicago Ave & University St - Looking eastbound. Improvements include –green bike lane striping & audible pedestrian pushbuttons.

ATTACHMENT E

Existing Photos



Intersection 5 – Watkins Dr & Knox Ct - Looking northbound. Improvements include – high visibility crosswalk & flashing LED edge-lit stop signs. (Top picture)



Intersection 6 – Third St & Anderson Ave - Looking westbound. Improvements include – rectangular rapid flashing beacon

ATTACHMENT E

Existing Photos



Intersection 7 – Alessandro Blvd & Chicago Ave - Looking northbound. Improvements include – high visibility crosswalk, green bike lane striping & audible pedestrian pushbuttons. (Top picture)



Intersection 8 – Lincoln Ave & Victoria Ave - Looking southbound. Improvements include – high visibility crosswalks, raised median & flashing LED edge-lit stop signs and pedestrian signs.

ATTACHMENT E

Existing Photos



Intersection 9 – Orange Terrace Pkwy & Abrams Dr - Looking westbound. Improvements include – high visibility crosswalks & flashing LED-edge lit stop signs. (Top picture)



Intersection 10 – Orange Terrace Pkwy & Sandhill Dr. (west)- Looking eastbound. Improvements include – high visibility crosswalks & flashing LED-edge lit stop signs.

ATTACHMENT E

Existing Photos



Intersection 11 – Wood Rd & Van Buren Blvd - Looking westbound. Improvements include – high visibility crosswalks, green bike lane striping & audible pedestrian pushbuttons. (Top picture)



Intersection 12 – Van Buren Blvd & Jurupa Ave - Looking southbound. Improvements include – high visibility crosswalks, green bike lane striping & audible pedestrian pushbuttons.

ATTACHMENT E

Existing Photos



Intersection 13 – Arlington Ave & Van Buren Blvd - Looking northbound. Improvements include – high visibility crosswalks & green bike lane striping. (Top picture)



Intersection 14 – Adams St & Magnolia Ave - Looking eastbound. Improvements include – high visibility crosswalks, green bike lane striping & audible pedestrian pushbuttons.

ATTACHMENT E

Existing Photos



Intersection 15 – Van Buren Blvd & California Ave - Looking northbound. Improvements include – high visibility crosswalks & audible pedestrian pushbuttons. (Top picture)



Intersection 16 – Indiana Ave & Van Buren Blvd - Looking westbound. Improvements include – high visibility crosswalks & audible pedestrian pushbuttons.

ATTACHMENT E

Existing Photos



Intersection 17 – Rutland Ave & Sylvan Dr - Looking northbound. Improvements include – high visibility crosswalks & flashing LED-edge lit stop signs. (Top picture)



Intersection 18 – Collett Ave & Polk St - Looking southbound. Improvements include – high visibility crosswalks & flashing LED-edge lit stop signs.

ATTACHMENT E

Existing Photos



Intersection 19 – Magnolia Ave & Polk St - Looking southbound. Improvements include – high visibility crosswalks & audible pedestrian pushbuttons. Note extra ped button at median refuge island. Adjacent to Kaiser Hospital (Top picture)



Intersection 20 – Tyler St & Hole Ave - Looking southeast. Improvements include – high visibility crosswalks & audible pedestrian pushbuttons. Note median refuge islands at two corners.

ATTACHMENT E

Existing Photos



Intersection 21 – Magnolia Ave & Pierce St - Looking northbound. Improvements include – high visibility crosswalks & audible pedestrian pushbuttons. (Top picture)



Intersection 22 – Golden Ave & Cochran Ave - Looking southbound. Improvements include – high visibility crosswalks & flashing LED-edge lit stop signs.

ATTACHMENT E

Existing Photos



Intersection 23 – Sierra Vista & Gedney Way (S) - Looking southbound. Improvements include – rectangular rapid flashing beacons. (Top picture)



Intersection 21 – Magnolia Ave & Tyler St - Looking westbound. Improvements include –audible pedestrian pushbuttons.

ATTACHMENT F - INTERSECTION SELECTION SUMMARY
TDA ARTICLE 3 (SB821) Grant FY 23/24 - Riverside Citywide Pedestrian & Bicycle Improvements Project

#	Ward	Intersection Location & Type (Green = Signalized; Yellow = Stop Controlled)	Intersection Selection Summary				Destination
			Local Roadway Safety Plan	Riverside P.A.C.T. ¹	Resident Request	Transit Stops	
1	1	Iowa Ave and Blaine St	X	X	X	X	Commercial Retail
2	1	Spruce St and Rustin Ave			X	X	University Heights School
3	1	Rustin Ave and Linden St		X	X		Reach Leadership School
4	2	Chicago Ave and University St	X	X	X	X	Commercial Retail
5	2	Watkins Dr and Knox Ct			X		UCR, Riverside STEM Sch
6	2	Third St and Anderson Ave			X	X	R.T.A. Office
7	2	Alessandro Blvd and Chicago Ave	X		X	X	Castleview Elementary
8	4	Lincoln Ave and Victoria Ave	X		X	X	Gage MS, Raincross HS
9	3	Orange Terrace Pkwy and Abrams Dr		X	X	X	Franklin ES, Park, OTPCC ⁴
10	3	Orange Terrace Pkwy & Sandhill Dr (W)				X	Franklin ES, Park, OTPCC ⁴
11	4	Wood Rd and Van Buren Blvd	X	X	X	X	MLK High School, Retail
12	3	Van Buren Blvd and Jurupa Ave	X		X		S.A.R.T. ² , Retail
13	4	Van Buren Blvd and Arlington Ave	X	X	X		R.M.A. ³ , Retail
14	5	Adams St and Magnolia Ave				X	Central Baptist Univ.
15	5	Van Buren Blvd and California Ave	X		X	X	Commercial Retail
16	5	Van Buren Blvd and Indiana Ave	X	X		X	Commercial Retail
17	6	Rutland Ave and Sylvan Dr			X	X	Terrace Elementary
18	6	Collett Ave and Polk St	X		X		Collett Elementary
19	6	Magnolia Ave and Polk St				X	Kaiser Regional Hospital
20	6	Tyler St and Hole Ave	X			X	Myra Linn Elementary
21	7	Pierce St and Magnolia Ave	X		X	X	Commercial Retail
22	7	Golden Ave and Cochran Ave			X		McAuliffe Elementary
23	7	Sierra Vista Ave and Gedney Way (S)			X		Valley View Elementary
24	7	Magnolia Ave and Tyler St		X		X	Commercial Retail

¹ Riverside P.A.C.T. = Pedestrian Target Safeguarding Plan (PTS), Active Transportation Plan (AT Plan), Complete Streets Ordinance (CSO) & Trails Master Plan (TMP)

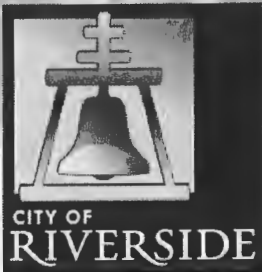
² S.A.R.T. = Santa Ana River Trail

³ R.M.A. = Riverside Municipal Airport

⁴ OTPCC = Orange Terrace Park Community Center

CITY OF RIVERSIDE LOCAL ROADWAY SAFETY PLAN

PREPARED FOR:



PREPARED BY:

Kimley»Horn

**CITY OF RIVERSIDE
LOCAL ROADWAY SAFETY PLAN**



Primary Collision Factor	No. of Collisions	%
Pedestrian Violation	187	1.18%
Not Stated	169	1.06%
Other Than Driver	152	0.96%
Unsafe Lane Change	138	0.87%
Ped R/W Violation	130	0.82%
Improper Passing	79	0.50%
Other Hazardous Movement	62	0.39%
Hazardous Parking	25	0.16%
Following Too Closely	21	0.13%
Impeding Traffic	8	0.05%
Other Equipment	8	0.05%
Other	5	0.03%
Lights	3	0.02%
Other Than Driver or PED	1	0.01%
Brakes	1	0.01%

Source: Riverside Crossroads Database (2017 – 2022)

7.5 Vulnerable Users

7.5.1 Pedestrian Collisions

509 pedestrian involved collisions occurred during the study period, resulting in 21 fatal collisions, 62 severe injuries, and 369 collisions with some form of reported injury or pain.

Figure 10 shows the locations of pedestrian collisions during the study period. This figure zoomed into each City ward is provided in Appendix A. The top 3 primary collision factors for these collisions were pedestrian violation (36.6%), pedestrian right-of-way violation (25.5%), and other improper driving (16.9%).

7.5.2 Bicycle Collisions

During the study period, 354 collisions involving bicycles were reported. Of these, 4 were fatal, 25 were severe injuries, and 277 were some forms of reported injury or pain. **Figure 10** shows the location of bicycle collisions during the study period. This figure zoomed into each City ward is provided in Appendix A. The top 3 primary collision factors for bicycle collisions were drivers/bicyclists on the wrong side of the road (29.7%), drivers/bicyclists ignoring traffic signals and signs (17.4%), and automobile right-of-way violations (14.7%).

CITY OF RIVERSIDE
LOCAL ROADWAY SAFETY PLAN



Figure 10 – Pedestrian & Bicycle Collisions (2017-2022)



CITY OF RIVERSIDE
LOCAL ROADWAY SAFETY PLAN



Table 6– Analysis Results: Intersections (Top 20 Per Type)

No.	Intersection	Ward	Crashes	Local CCR Differential ¹	EPDO ²	Fatal	Serious Injury	Other Visible Injury	Complaint of Pain	PDO	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overtuned	Other	Pedestrian	Bicycle	Aggressive	Distracted	Impaired	Drink	Over
Signalized Intersections																								
1	Tyler St & Magnolia Ave	6	147	0.76	1046	2	2	10	29	104	26	39	50	4	9	0	8	10	2	24	4	6	1	4
2	Iowa Ave & W Blaine St	1	105	0.74	776	1	2	7	22	73	21	25	34	7	11	0	2	4	2	22	2	6	3	2
3	Van Buren Blvd & Arlington Ave	3/6	103	0.29	1142	3	2	6	32	60	17	20	33	4	10	0	5	4	2	42	2	7	1	6
4	Van Buren Blvd & California Ave	5	84	0.33	592	0	2	6	24	52	24	19	27	2	6	0	2	4	2	32	1	8	0	2
5	Van Buren Blvd & Jurupa Ave	3	80	7.18	779	3	0	11	20	46	18	8	37	5	8	0	3	1	1	46	1	5	2	3
6	La Sierra Ave & Magnolia Ave	6	79	0.23	437	0	1	8	23	47	20	17	31	5	3	0	1	2	2	32	3	4	0	1
7	Chicago Ave & University Ave	2	79	0.29	367	0	1	5	15	58	16	14	31	3	6	0	2	5	1	22	0	4	1	2
8	La Sierra Ave & Indiana Ave	6	78	0.22	187	0	0	5	12	61	13	19	34	3	6	0	0	4	2	25	0	3	0	3
9	Alessandro Blvd & Chicago Ave	2	74	-0.03	870	0	4	3	22	45	11	22	29	2	8	0	2	0	2	33	2	8	0	5
10	Van Buren Blvd & Indiana Ave	5	66	0.21	365	1	0	3	21	41	13	13	34	1	3	0	0	1	0	32	1	2	0	2
11	Ollivewood Ave & 14th St	1	64	2.72	515	0	2	8	9	45	17	18	18	2	5	0	2	2	2	21	3	5	0	5
12	Madison St & Indiana Ave	4	62	0.83	172	0	0	3	16	43	15	14	24	2	3	0	1	1	0	20	1	1	2	3
13	Iowa Ave & University Ave	2	62	0.19	301	0	1	2	11	48	12	15	21	0	5	1	4	3	1	12	2	3	0	0
14	Tyler St & Hole Ave	6	61	0.20	234	0	0	10	15	36	26	12	14	2	3	0	1	2	1	25	1	0	0	1
15	Wood Rd & Van Buren Blvd	4	59	0.02	694	1	2	8	13	35	5	18	17	5	3	2	3	5	1	19	1	3	0	5
16	Van Buren Blvd & Philbin Ave	6	58	0.23	183	0	0	5	15	38	19	12	16	3	1	0	1	5	1	21	1	3	1	3

CITY OF RIVERSIDE
LOCAL ROADWAY SAFETY PLAN



No.	Intersection	Ward	Crashes	Local CCR Differential ¹	EPDO ²	Fatal	Serious Injury	Other Visible Injury	Complaint of Pain	PDO	Broadside	Sideswipe	Rear End	Head On	Hit Object	Overtaken	Other	Pedestrian	Bicycle	Aggressive	Distracted	Impaired	Dark	Wet
17	Pierce St & Magnolia Ave	7	56	4.75	229	0	0	10	15	31	15	6	22	2	9	0	1	1	3	23	4	6	0	3
18	Van Buren Blvd & Colorado Ave	6	55	4.65	214	0	0	7	18	30	16	9	20	3	5	0	1	1	3	25	0	5	1	3
19	Mission Grove Pkwy S & Alessandro Blvd	2/4	54	0.21	150	0	0	2	15	37	8	16	22	0	3	0	5	1	0	16	0	4	3	5
20	Cole Ave & Van Buren Blvd	4	53	0.17	216	0	0	11	11	31	11	14	15	5	4	0	2	2	1	19	1	6	1	5
Unsignalized Intersections																								
1	Shopping Center Driveway & Arlington Ave	3	49	0.55	317	1	0	6	9	33	3	10	27	1	7	0	1	0	2	21	0	3	0	3
2	Market St & 6th St	1	30	0.45	119	0	0	5	8	17	12	7	7	0	0	0	1	3	1	5	1	0	0	2
3	Adams St & Diana Ave	5	26	0.97	240	0	1	1	8	16	6	6	6	3	5	0	0	0	0	7	0	1	0	2
4	Jackson St & Audrey Ave	6	23	1.52	212	0	1	1	3	18	7	9	5	1	1	0	0	0	0	1	1	2	0	1
5	McMahon St & Arlington Ave	3	23	0.20	113	0	0	4	10	9	10	4	2	1	2	1	2	0	1	2	1	0	0	0
6	Jones Ave & Magnolia Ave	6	21	0.23	383	1	1	1	5	13	2	5	8	0	3	0	1	2	2	3	1	2	0	1
7	Pegasus Dr & Arlington Ave	3	21	0.25	111	0	0	4	10	7	12	3	1	2	2	1	0	0	0	2	0	1	0	0
8	Tyler St & Hemet St	6	20	0.09	214	0	1	1	4	14	4	6	7	0	1	0	0	2	1	3	0	1	0	0
9	Harold St & Arlington Ave	6	19	0.21	93	0	0	5	5	9	5	0	5	1	8	0	0	0	0	4	1	5	0	0
10	La Cadena Dr W & Primer St	1	18	0.19	58	0	0	2	4	12	4	6	2	0	4	0	1	1	0	3	0	1	0	2
11	Polk St & Collett Ave	6	17	0.18	77	0	0	2	8	7	9	1	5	1	0	0	0	1	1	10	1	0	1	1
12	Washington St & Lincoln Ave	4	17	0.24	211	0	1	0	6	10	11	3	1	1	0	0	0	1	1	7	1	1	0	0
13	Tyler St & Gould St	7	17	0.38	37	0	0	1	2	14	6	3	4	0	3	0	0	1	0	2	0	1	1	3
14	Lake St & Arlington Ave	7	17	0.16	72	0	0	3	5	9	5	4	3	2	0	0	2	1	1	1	1	0	0	0
15	Locust St & Mission Inn Ave	1	17	0.23	231	0	1	2	6	8	6	5	4	2	0	0	0	0	0	2	0	3	0	1
16	Mitchell Ave & Wells Ave	6	16	0.54	51	0	0	1	5	10	6	2	4	1	2	0	1	0	0	9	1	0	1	1



8.2 Emphasis Areas

Emphasis areas represent crash factors that are common in the City and provide the opportunity to reduce the largest number of traffic injuries with strategic investment. Emphasis areas were developed by revisiting the vision and goals of this planning process and comparing them with the trends and patterns identified in the crash analysis.

8.2.4 Emphasis Area #1: Vulnerable Road Users (Pedestrians & Bicyclists)

Description: Pedestrians and bicyclists are classified by Caltrans as vulnerable users, meaning they possess the highest potential for severe harm during a crash. This emphasis area is inclusive of wheelchairs and those on scooters and skateboards. These groups need appropriate infrastructure to travel to key destinations such as schools, workplaces, and core commercial areas. Of the 863 crashes involving vulnerable road users, 25 resulted in a fatal injury and 87 resulted in a severe injury. The City should aim to implement countermeasures to further protect these users from injury.

Goals for Emphasis Area #1:

- Improve active transportation infrastructure by adding pedestrian facilities, bike lanes, and other amenities to make it safer for employees and community members to get to key destinations such as school, commercial centers, transit centers, and recreation areas
- Encourage healthier lifestyles through active transportation infrastructure
- Apply for HSIP, ATP, SS4A, and other funding to implement countermeasures to address vulnerable road user crashes

Strategies for Emphasis Area #1:

- Provide outreach, education, and enforcement to encourage more separation between vehicular and pedestrian traffic
- Install high-visibility crosswalk markings at the intersection of key destinations
- Ensure all signalized intersections have completed crosswalks
- Provide dedicated pedestrian and bicycle infrastructure to and from bus stops
- Install adequate street lighting and increase lighting levels in conflict areas
- Widen street shoulders
- Provide signage (e.g., pedestrian crossing ahead) to help drivers expect to slow down for pedestrians and bikes
- Install bicycle lanes along key corridors
- Install bicycle storage facilities in public areas, such as parks and schools, to encourage bicycle use
- Install bicycle markings (including green paint in conflict zones)
- Install bicycle detection with discrimination capability on key corridors



- Install curb extensions
- Install ADA ramps
- Modify signal phasing to implement a Leading Pedestrian Interval (LPI)
- Install/upgrade pedestrian crossing at uncontrolled locations
- Install audible pedestrian push button systems at signalized intersections
- Establish rotating enforcement targets for high visibility campaigns
- Work closer with local advocacy groups and bicycle clubs (such as the Inland Empire Biking Alliance and Riverside Bicycle Club) to assist in prioritizing bicycle improvements
- Work with rail operators to improve safety at rail crossings

These strategies will be implemented by the City, law enforcement, and community organizations. Funding sources for these strategies may include OTS, NHTSA, and SB1 grant programs.

8.2.1 Emphasis Area #2: Impaired Driving

Description: Impaired driving crashes are a high priority challenge area within the Caltrans SHSP. Caltrans defines these as crashes where any evidence of drug or alcohol use by the driver is present, even if the driver was not over the legal limit. 7.4% were reported as the driver being under the influence of alcohol or drugs. 6.74% of all fatalities and 14.07% of all severe injuries were attributable to impaired driving.

Goal for Emphasis Area #2:

- Reduce the number of crashes attributed to impaired driving
- Identify hot spots and priority corridors for countermeasures to reduce impaired driving
- Apply for funding to implement countermeasures to reduce impaired driving crashes

Strategies for Emphasis Area #2:

- Authorize, publicize, and conduct sobriety checkpoints programs
- Implement an impaired driving education campaign
- Develop educational programs targeting specific audiences based on age group
- Additional enforcement presence
- Create effective media campaigns in both visual and print media

These strategies will be implemented by the City, law enforcement, and community organizations. Funding sources for these strategies may include OTS, NHTSA, and SB1 grant programs.



8.2.2 Emphasis Area #3: Intersection Improvements

Description: Collisions involved at intersections, interchanges, and other roadway access. About 82% of total of collisions took place at or near intersections. 12.1% of the fatal and severe injury collisions in Riverside took place at or near intersections, compared to 23.8% statewide.

Goal for Emphasis Area #3:

- Reduce the number of crashes at intersections, interchanges, and other roadway access.
- Identify hot spots and prioritize locations for intersection improvements.
- Apply for funding and implement countermeasures to address collisions at intersections for improvement.

Strategies for Emphasis Area #3:

- Engineering improvements are not limited but could include:
 - backplates with reflective borders
 - left-and right turn lanes at two-way controlled intersections
 - protected left-turn movements
 - battery back-up systems
 - intersection safety lighting
 - high visibility crosswalks
- Collaborate with Caltrans to prioritize safety at interchanges and promote walking and bicycling

These strategies can be implemented by the City with assistance from emergency services and community organizations. Funding sources for these strategies may include HSIP, OTS, and SB1 grant programs.

8.2.3 Emphasis Area #4: Aggressive Driving

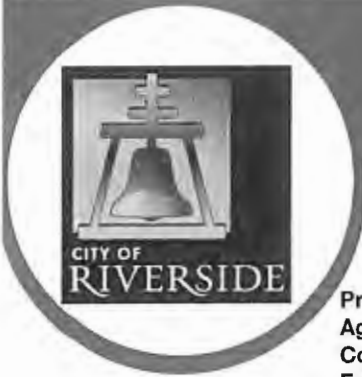
Description: Aggressive driving, as defined by the Caltrans SHSP, includes several behaviors including speeding, tailgating, and ignoring traffic signals and signs. Aggressive driving behaviors (unsafe speed or following too closely) accounted for 30 percent of collisions. 16 percent of these collisions resulted in a fatality, 28 percent of these collisions resulted in a severe injury, and 9 percent of these collisions resulted in some other form of injury.

Goal for Emphasis Area #4:

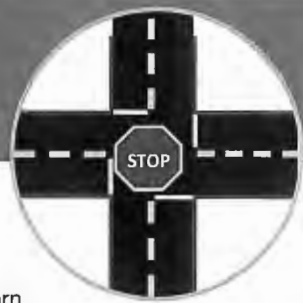
- Reduce the number of crashes due to aggressive driving in the City
- Identify hot spots and priority corridors for aggressive driving
- Apply for funding and implement countermeasures to address aggressive driving

Strategies for Emphasis Area #4:

- Educational campaign to target aggressive drivers



Case Study Sheet: Location #5



Project Name: Riverside LRSP
Agency Name: City of Riverside
Contact Name: Brett Craig, PE, TE, Senior Traffic Engineer
Email: bcraig@riversideca.gov

Prepared by: Kimley-Horn
Checked by: Jason Melchor, PE
Date: October 2022

**FOUR-WAY-STOP
INTERSECTION**

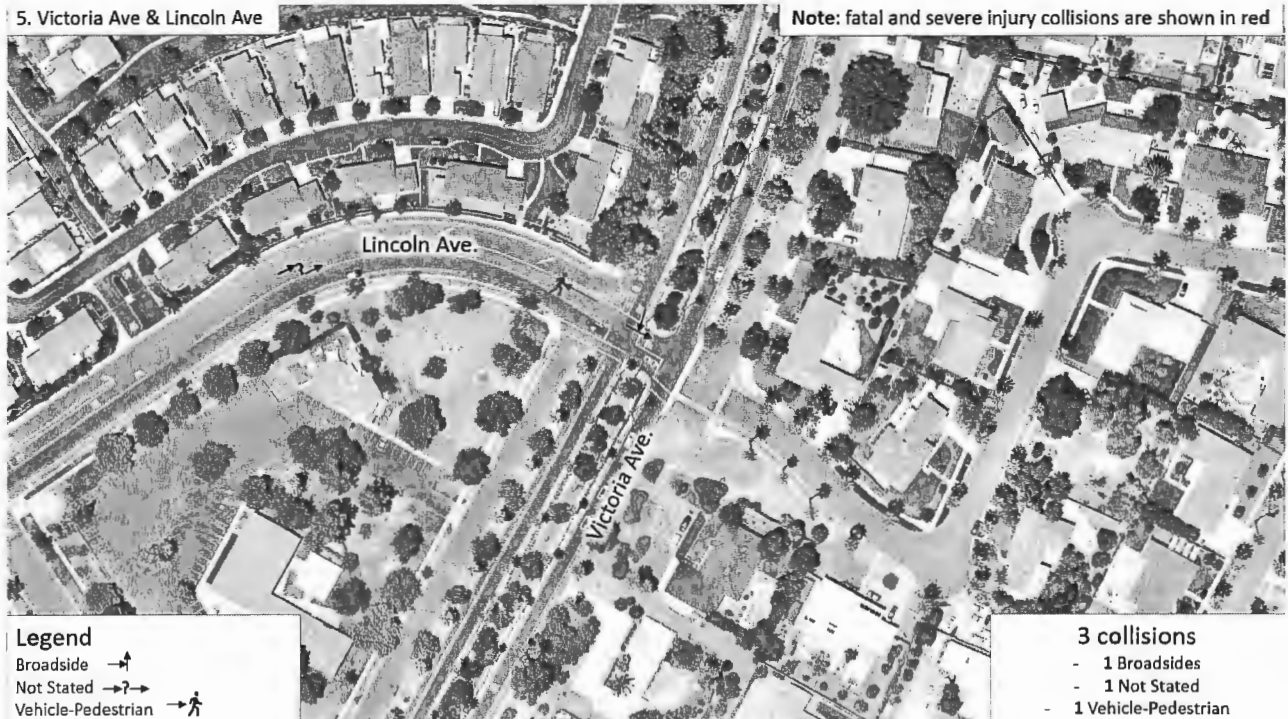
Project Location, Description & Maps

Intersection: Victoria Ave & Lincoln Ave

Example of Similar Intersections: Victoria Ave & Maude St, 14th St & Pine St



5. Victoria Ave & Lincoln Ave



Note: fatal and severe injury collisions are shown in red

- Legend**
- Broadside →↑
 - Not Stated →→→
 - Vehicle-Pedestrian →→→

- 3 collisions**
- 1 Broadside
- 1 Not Stated
- 1 Vehicle-Pedestrian

Case Study Sheet: Location #5

Project Location, Description & Maps

Collision Data	
Total Collisions	3
Fatal and Severe Injury Collisions	1
Top 2 Collision Types (%)	Broadside (33%) Vehicle-Pedestrian (33%)
Dark Collisions	3
Impaired Collisions	0

Collision Data	
Number of Approaches	4
Total Entering Vehicles	25,524
Crosswalk Condition	Fair
Control Type	Stop sign
Lighting	Sufficient Lighting
Highest Posted Speed Limit	25

Collisions Involved With		
Vehicular	Pedestrian	Bicycle
0	1	1

Field Visit Notes

- Free right turn SB
- Pedestrians cross diagonally
- Victoria Ave (Frontage Rd) is underutilized

Countermeasure Evaluation

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Install pedestrian crossing at uncontrolled locations	25% (NS20PB)	\$567,725	\$34,800	16.31
Close free right turn and reconfigure	5%	\$114,210	\$30,000	3.81
Close access to Victoria Ave frontage road to allow for simpler intersection reconfiguration	5%	\$114,210	\$25,000	4.57

Countermeasure Evaluation (continued)

Potential Countermeasures	Crash Reduction Factor (LRSM/CMF ID)	20 Year Safety Benefit	Total 20-Year Costs	Safety Related B/C Ratio
Install intersection safety lights	40% (NS01)	\$913,680	\$25,000	36.55
Install stop signs to free right turns	15% (NS06)	\$342,630	\$8,400	40.79
Install LED stop signs	15% (NS08)	\$342,630	\$12,000	28.55
Install curb extensions	35% (NS21PB)	\$794,815	\$80,000	9.93

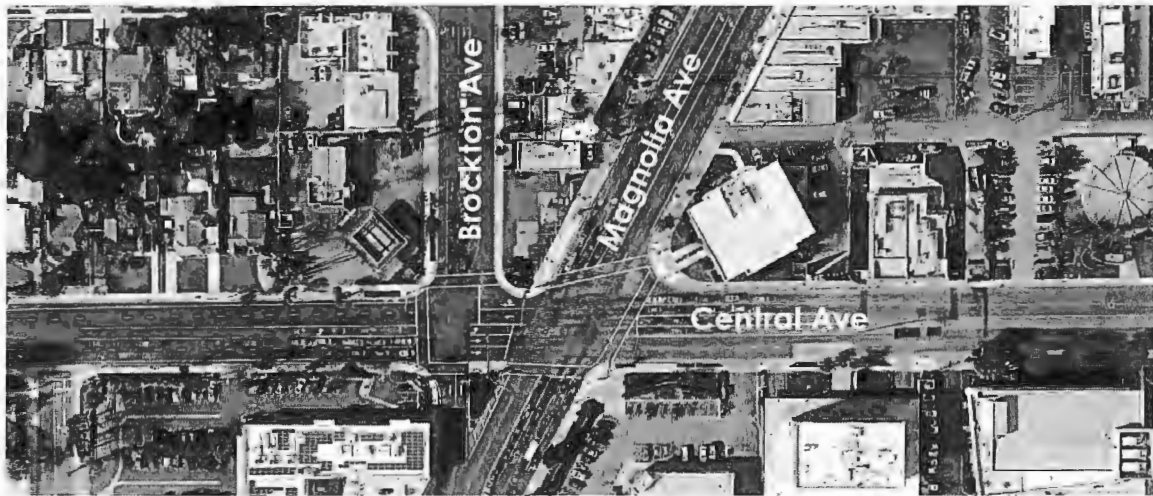


Photo Caption: Intersection of Brockton Ave, Magnolia Ave and Central Ave.

TYOLOGY A. SIGNALIZED INTERSECTION

Common Challenges

- High vehicle speeds
- High vehicle volumes
- Free right-turn lanes
- Left-turn pedestrian conflicts
- Cars stop too close to the crosswalk
- Failure to yield to pedestrians

Tools

- Curb extensions
- No right on red
- Crosswalks and curb ramps
- High visibility crosswalks
- Slip lane removal
- Leading pedestrian intervals
- Conflict markings
- Signage and lighting
- Traffic circles
- Pedestrian Scramble
- Roundabout
- Flashing yellow arrows
- Advance limit lines
- Diagonal crosswalks

Identified Spot Improvements

- Blaine St and Iowa Ave
- Chicago Ave and University Ave
- Jurupa Ave and Magnolia Ave
- Iowa Ave and W Linden St
- Chicago Ave and Central Ave
- Madison St and Arlington Ave
- Central Ave and Magnolia Ave
- Wood Rd and Van Buren Blvd
- Indiana Ave and La Sierra Ave
- Van Buren Blvd and Arlington Ave
- Magnolia Ave and Van Buren Blvd
- Magnolia Ave and Tyler St



Photo Caption: Intersection of El Cerrito Blvd and Canyon Crest Dr.

TPOLOGY B. MAJOR STREET/MINOR STREET

Common Challenges

- Failure to yield to pedestrians
- Unmarked crosswalks
- Lighting
- High vehicle speeds
- High vehicle volumes
- Long blocks without controlled crossings
- Left-turn pedestrian conflicts
- Cars stop too close to the crosswalk

Tools

- Curb extensions
- Signage and lighting
- Crosswalks and curb ramps
- Pedestrian crossing beacons at uncontrolled crossings
- Conflict markings and advance stop/yield pavement markings
- Traffic circles
- Flashing yellow arrows
- Advance limit lines
- Diagonal crosswalks

Identified Spot

Improvements

- Rustin Ave and Blaine St
- 14th St and Victoria Ave
- Magnolia Ave and Elizabeth St

- Fairmount Blvd and Market St
- 14th and Olivewood Ave
- University Ave at entrance to University Village
- El Cerrito and Canyon Crest DR
- Rustin Ave and W Linden St
- La Sierra Ave and Collett Ave
- La Sierra Ave and Cochran
- Van Buren Blvd and Jackson St
- Campbell Ave and La Sierra Ave
- Grammercy Pl and La Sierra Ave
- La Sierra Ave and Minnier Ave
- Washington St and Victoria Ave



Photo Caption: University Ave and I-215.

TYPOLOGY F. FREEWAY INTERCHANGES

Common Challenges

- High vehicle speeds
- High vehicle volumes
- Drivers not expecting pedestrians
- Missing sidewalks
- Unmarked crossings
- Lighting
- Limited alternative routes

Tools

- Marked crosswalks
- Signs
- Pavement markings
- Sidewalks
- Lighting
- Slip lane removal
- On ramp lane removal

Identified Spot Improvements

- University Ave and I-215 interchange
- Van Buren Blvd and Indiana Ave
- Central Ave and SR-91 interchange
- Tyler St and Indiana Ave - North
- Tyler St and Indiana Ave - South
- Third St. and I-215

ServReq

2437

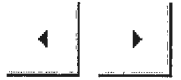
Entered by

Sharon

SERVICE REQUEST

Request Date

3/15/2005



Primary Street Iowa

Secondary Street Blaine

First Name	Clara
Last Name	Card
Title	
Organization	

Address	1267 C. Linden Street	
City	Riverside	
State	Ca	Zip 92507-

Home Phon	(951) 276-4917
Work Phone	
Mobile Phone	

Assigned: Patricia

Disposition	Modified
-------------	----------

Request

She want's this intersection investegated. She say's that there are too many grid locks.

Findings

No action is taken at this time. Contact was made with R/P discussing the high volume of traffic traveling thru this intersection and the current Caltrans construction & detours. R/P's main concern is motorist's stopping for the signal light and blocking the crosswalk, including right-turn violators. R/P was advised to contact RSPD for enforcement (which R/P has previously done). Additionally an email was sent to Marva in Traffic advising her of problem. TC Report ran/attached.

DATES

Processed By Patricia Roberts

4/7/2005

Reviewed By Diane Huggett

4/11/2005

Approved by TE Patti Castillo

4/12/2005

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

19717

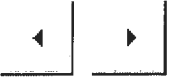
Entered by

Beth

SERVICE REQUEST

Request Date

5/14/2019



Primary Street | Spruce

Secondary Street | Rustin

First Name	Marty
Last Name	Offeney
Title	
Organization	

Address	300 Hillandale	
City		
State		Zip

Home Phon	(951) 781-5480
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition	Modified
-------------	----------

Request

SR # 1-129709775 Request for pedestrian crossing light, flashing signal on Spruce x Rustin.

Findings

Reviewed - per CTE will consider for future grant application project. Left msg. advising R/P.

Processed By	Dawna Fuller
--------------	--------------

DATES

6/27/2019

Reviewed By	
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Approved by TE	
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--

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

19498

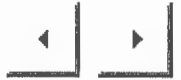
Entered by

Beth

SERVICE REQUEST

Request Date

3/12/2019



Primary Street Spruce

Secondary Street Rustin

First Name	Marty (Martha)
Last Name	Offeney
Title	
Organization	

Address	300 Hillandale Ct		
City			
State		Zip	

Home Phon	(951) 781-5480
Work Phone	
Mobile Phone	

Assigned: Beth

Disposition Modified

Request

SR # 1-127884506 People don't "stop" (don't see the signs or marking in the street) and they run & turn right thru the crosswalk @ Spruce St @ Rustin Ave. Caller request blinking lights inset in the street crosswalk make it more visible and safer for the pedestrians.

Findings

This is an enforcement issue. Will request enforcement for cars not stopping at the stop sign.

DATES

Processed By

Reviewed By

Approved by TE

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

16613

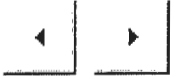
Entered by

Dawna

SERVICE REQUEST

Request Date

4/26/2017



Primary Street Spruce

Secondary Street Rustin

First Name	Joyce
Last Name	Bergbom
Title	
Organization	

Address			
City			
State		Zip	

Home Phon	(951) 522-6355
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

Request

SR#1-109177130 - Requesting pedestrian traffic signals or in pavement lighting system. Cp is vision impaired and feels the crosswalk on Spruce is not safe.

Findings

Discussed concerns. TC report reviewed. Existing high visibility yellow school crosswalk in place W leg, FYG Assembly B & advance warning Assembly D signs and SLOW SCHOOL LEGENDS in place. Reviewed - W.O. #6161 issued to add WB advance yield line and Yield Here to Pedestrians sign. E-mail to Call Center for Code Enforcement request for property owner removal of remaining tall weeds just at SW corner of vacant lot located on NE corner of Spruce & Rustin due to impact to visibility of pedestrians entering CW from N/S by WB traffic. Requested PD enforcement to address speeding. Advised R/P.

Processed By Dawna Fuller

DATES 5/4/2017

Reviewed By

Approved by TE Gilbert Hernandez

5/4/2017

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input checked="" type="radio"/>	Striping Marking
<input type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

Entered by

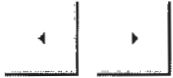
SERVICE REQUEST

Request Date

3/12/2020

20885

Beth



Primary Street Linden

Secondary Street Rustin

First Name	Muhammad
Last Name	Shamshiddeen
Title	
Organization	

Address	
City	
State	Zip

Home Phone	(951) 965-8701
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

Request

SR # 1-138986920 Requesting flashing lights on existing stop signs on Linden & Rustin.

Findings

Reviewed - intersection is MWS controlled and equipped with both standard right side stop signs and 2nd signs within the centerline EB & WB for added driver awareness. Solar powered flashing stop sign test projects are allowing for assessment of effectiveness and longevity to determine if expanded use and/or pursuit of grant funding for these devices is recommended. To add location to list of potential future grant projects for consideration. Left msg. for R/P 5/19/20.

DATES

Processed By Dawna Fuller

5/19/2020

Reviewed By

Approved by TE

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

20093

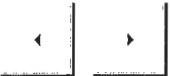
Entered by

Beth

SERVICE REQUEST

Request Date

8/19/2019



Primary Street Rustin

Secondary Street Linden

First Name	Muhammad
Last Name	Shamsid-deen
Title	
Organization	

Address	
City	
State	Zip

Home Phone	(951) 512-2164
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

Request

Requesting LED flashing stop signs at Rustin and Linden.

Findings

Installed solar powered flashing stop sign test projects at California x Bolton and Lincoln x Monroe - will allow for assessment of effectiveness and longevity to determine if expanded use and/or pursuit of grant funding for these devices is recommended. Left msg. for R/P 8/22/19.

ACTION	
Click the one that best applies	
<input checked="" type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

Processed By Dawna Fuller

DATES 8/22/2019

Reviewed By

Approved by TE

ServReq

Entered by

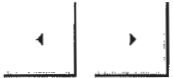
SERVICE REQUEST

Request Date

17102

Dawna

8/8/2017



Primary Street Chicago

Secondary Street University

First Name	
Last Name	Resident
Title	
Organization	

Address			
City			
State		Zip	

Home Phone	
Work Phone	
Mobile Phone	

Assigned: Nathan

Disposition Modified

Request

Concerns from wheelchair user regarding crossing busy intersection because vehicles often make right turns right in front of him and is requesting intersection signs be noted in business intersections with an associated fine for improper right turns in front of people in wheelchairs referred from ADA Coordinator, Monique Gordon, General Services.

Findings

SE advised no sign specifically enforcing motorist interactions with individuals in wheelchairs and motorists are required to yield to all peds in crosswalks during walk phase and flashing don't walk interval. R/P added that he has a 15' flag posted on his wheelchair to increase visibility and is still narrowly missed and has witnessed near accidents with other pedestrians. TC reports reviewed. Reviewed - requested PD enforcement. Advised Monique 8/23/17.

DATES

Processed By Dawna Fuller

8/23/2017

Reviewed By

Approved by TE

ACTION

Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

ServReq

21586

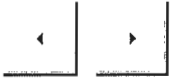
Entered by

Dawna

SERVICE REQUEST

Request Date

1/20/2021



Primary Street Watkins

Secondary Street Knox

First Name	Enno
Last Name	Kloefkorn
Title	
Organization	

Address	225 Knox Ct.		
City	Riverside		
State	CA	Zip	

Home Phone	(951) 788-7669
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

ACTION

Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

Request

SR#1-147936119 - Requesting regular STOP signs be replaced with LED STOP signs at intersection. RP claims that stop signs are being ignored. (311 Note: Entered SR for extra enforcement)

Findings

Per Call Center note PD enforcement already requested. Existing Stop Ahead signage and legends in place approaching MWS @ Knox. To consider location for potential future grant project as appropriate for upgrade of existing standard stop signs on Watkins Dr. to flashing LED edge lit stop signs. Left msg. for R/P.

DATES

Processed By Dawna Fuller

1/26/2021

Reviewed By

Approved by TE

ServReq

Entered by

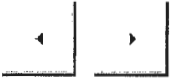
SERVICE REQUEST

Request Date

7027

Dawna

5/29/2009



Primary Street Third

Secondary Street Anderson

First Name	Raymond
Last Name	Urias
Title	
Organization	

Address	4815 Kingsbury	
City	Riverside	
State	CA	Zip

Home Phone	(951) 354-7899
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

Request

SRO#1-7418561 - Stop sign requested @ crosswalk in front of the RTA office, 1825 3rd Street. On 5/28 as I crossed the st using the x-walk a car just drove right through not slowing down at all. Later as I waited for a bus I noticed that all vehicles travel very fast only to stop a few hundred ft away. I believe stop signs would increase the safety to all pedestrians.

Findings

Discussed concerns and advised of upcoming RTA project which will install in-pavement lighting system at crosswalk. E-mail to PD.

Processed By Dawna Fuller

DATES

5/29/2009

Reviewed By

Approved by TE

ACTION

Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

ServReq

12700

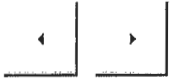
Entered by

Dawna

SERVICE REQUEST

Request Date

10/30/2014



Primary Street |Arlington

Secondary Street |Alessandro

First Name	Robert
Last Name	Wise
Title	
Organization	

Address	
City	
State	
Zip	

Home Phone	
Work Phone	(951) 826-2429
Mobile Phone	

Assigned: |Dawna

Disposition | Modified

Request

SRO#1-77658363 - while trying to cross crosswalk from EB Arlington to Chicago the ped cross is green same as the thru signals & 2nd lane of cars turning onto Alessandro can't see pedestrians or cyclists. Install flashing cross walk lights or something.

Findings

Discussed concerns. Reviewed - W.O. #5023 issued. Advised R/P.

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

Processed By | Dawna Fuller

DATES

11/6/2014

Reviewed By |

Approved by TE | Gilbert Hernandez

11/6/2014

ServReq

Entered by

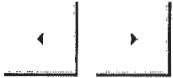
SERVICE REQUEST

Request Date

13281

Monica

3/19/2015



Primary Street Lincoln

Secondary Street Victoria

First Name	Karen
Last Name	Wright
Title	
Organization	

Address	4137 Central Ave	
City	Riverside	
State	CA	Zip 92506-

Home Phone	(951) 204-3252
Work Phone	
Mobile Phone	

Assigned: Monica

Disposition Duplicate

Request

SR# 1-82983993 - Caller requesting a cross walk at this location , Lincoln & Victoria . There is no cross walk here and this area is heavily populated with recreational walkers / bikers . Please install a cross walk .

Findings

Duplicate. See SR# 13277

Processed By Monica Amir-Blake

DATES

3/19/2015

Reviewed By

Approved by TE

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

13277

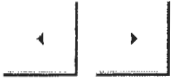
Entered by

Monica

SERVICE REQUEST

Request Date

3/19/2015



Primary Street Victoria

Secondary Street Lincoln

First Name	Karen
Last Name	Wright
Title	
Organization	

Address	4167 Central Ave		
City	Riverside		
State	CA	Zip	92506-

Home Phone	(951) 204-3252
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

Request

SR# 1-82989200 - Victoria and Lincoln, requesting a crosswalk in this location. Also on Anna Street as well. (also see SR# 13281)

Findings

Discussed concerns. Reviewed - existing "Turning Traffic Must Yield to Pedestrians" sign in place.(also see SR# 13281).

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

Processed By Dawna Fuller

DATES 3/20/2015

Reviewed By

Approved by TE

ServReq

Entered by

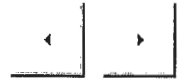
SERVICE REQUEST

Request Date

15140

Dawna

6/1/2016



Primary Street Victoria

Secondary Street Lincoln

First Name	Cindy
Last Name	Thompson
Title	
Organization	

Address	kss4luck@gmail.com		
City			
State		Zip	

Home Phone	(951) 295-4528
Work Phone	
Mobile Phone	

Assigned: Dawna / Nathan

Disposition Modified

Request

WB Victoria crossing Lincoln needs a crosswalk there as cars fly around the blind corner on Lincoln towards Victoria referred from the Mayor's Office.

Findings

Reviewed - W.O. #5707 issued.

DATES

Processed By Dawna Fuller

6/13/2016

Reviewed By

Approved by TE Gilbert Hernandez

6/13/2016

ACTION
Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

ServReq

20780

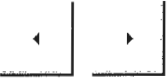
Entered by

Dawna

SERVICE REQUEST

Request Date

2/19/2020



Primary Street Abrams

Secondary Street Orange Terrace

First Name	Marilyn
Last Name	Fernholz
Title	
Organization	

Address	mfernholz@hotmail.com	Home Phone	
City		Work Phone	
State		Mobile Phone	(909) 240-6801
Zip			

Assigned: Nathan / Dawna Disposition Modified

Request

Report of concerns regarding pedestrian crosswalks and U-turns at intersection raised at 2/19 Orange Terrace community meeting and per follow-up e-mail from R/P to CTE.

Findings

CTE forwarded R/P a link to the Riverside PACT planning survey to provide input regarding biking and walking in her neighborhood. Called R/P 2/21 and she advised it was not a convenient time - e-mailed contact information and will discuss upon reply. Intersection is MWS controlled. Spoke to R/P - she indicated that crosswalk concern is related to insufficient lighting at the intersection making it difficult to see pedestrians crossing at the intersection when dark and not motorists failing to yield to pedestrians. R/P requested in pavement lighted crosswalk on Orange Terrace - advised that those devices are utilized at uncontrolled crossings only and this intersection is MWS controlled with marked crosswalks on S & E legs requiring all motorists to stop and yield ROW to pedestrians and motorists as appropriate. E-mail to Call Center requesting PU to review lighting conditions. Per Celine Aaravilla of PU she will discuss upcoming LED project with R/P (see Call Center SR 1-138472533). R/P also indicated that U-turn concern involves EB motorists on Orange Terrace failing to yield ROW to stopped motorists on Abrams frequently with peaks when activities are occurring at the park and community center. R/P requests future consideration of installing a break in the center median to provide LT access to dw's @ community center. Reviewed - not recommended. TC history requested. 5-year TC report reviewed - none of the 3 collisions shown involved a U-turn movement. Reviewed - PD enforcement recommended. E-mail to Call Center requesting PD enforcement. Advised R/P.

ACTION
Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

DATES		
Processed By	Dawna Fuller	2/24/2020
Reviewed By		
Approved by TE		

ServReq

Entered by

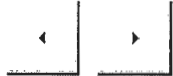
SERVICE REQUEST

Request Date

9732

Dawna

12/20/2011



Primary Street Van Buren

Secondary Street Wood

First Name	Eric
Last Name	Lewis / CTE
Title	Chairman
Organization	Bicycle Advisory Committe

Address	ericle@moval.com
City	
State	Zip

Home Phone	
Work Phone	(951) 413-3149
Mobile Phone	

Assigned: Dawna Disposition: Granted

Request

Install approx. 300' missing bike lane on EB Van Buren E/O Wood.

Findings

Reviewed - W.O. #4118 issued.

DATES

Processed By	Dawna Fuller	12/20/2011
Reviewed By		
Approved by TE	Steve Libring	12/20/2011

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input checked="" type="radio"/>	Striping Marking
<input type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

10024

Entered by

Dawna

SERVICE REQUEST

Request Date

3/30/2012



Primary Street Jurupa

Secondary Street Van Buren

First Name	Alex
Last Name	Cummings
Title	
Organization	

Address			
City			
State		Zip	

Home Phone	
Work Phone	
Mobile Phone	(603) 973-2502

Assigned: Dawna

Disposition Denied

ACTION

Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

Request

SRO#1-44494313 - Bike trail detour near Santa Ana River. mile 11, markings need to be painted on street for detour on Jurupa/ Van Buren Blvd. People are driving too close to bicycles on Jurupa where no bike lane exists.

Findings

Reviewed - no action recommended - temporarily signed. Advised R/P.

DATES

Processed By Dawna Fuller

3/30/2012

Reviewed By

Approved by TE

ServReq

9740

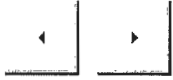
Entered by

Dawna

SERVICE REQUEST

Request Date

12/22/2011



Primary Street | Arlington

Secondary Street | Van Buren

First Name	Eric
Last Name	Lewis / CTE
Title	Chairman
Organization	Bicycle Advisory Committe

Address	ericle@moval.com	
City		
State		Zip

Home Phone	
Work Phone	(951) 413-3149
Mobile Phone	

Assigned: | Dawna

Disposition | Granted

Request

Install 7-8' bike lanes & legends on Arlington from Van Buren to Adams where lane width permits, large R81's W/O Adams & Monroe & E/O Van Buren & Monroe, and 4" white edgeline 8' off curb for parking lane on S/S Arlington E/O Monroe in front of apts where road widens with adjacent Bike Lane.

Findings

W.O. #4122 issued.

DATES

Processed By | Dawna Fuller

12/23/2011

Reviewed By

Approved by TE | Steve Libring

12/23/2011

ACTION
Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

ServReq

20905

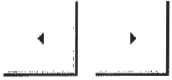
Entered by

Monica

SERVICE REQUEST

Request Date

5/19/2020



Primary Street Van Buren

Secondary Street California

First Name	Michelle
Last Name	Hickey
Title	
Organization	

Address	9664 Estrellita St	
City	Riverside	
State	CA	Zip

Home Phone	(951) 359-6921
Work Phone	
Mobile Phone	

Assigned: Nathan / Dawna

Disposition Modified

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

Request

SR# 1-139451946 - Req to install larger pedestrian pushbuttons at the intersection

Findings

CTE requested signal shop to investigate. Per 5/21 e-mail from Todd intersection has all ADA ped push buttons.

DATES

Processed By Dawna Fuller

5/21/2020

Reviewed By

Approved by TE

ServReq

Entered by

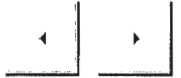
SERVICE REQUEST

Request Date

7725

Dawna

2/4/2010



Primary Street Van Buren

Secondary Street California

First Name	David
Last Name	Villa
Title	
Organization	

Address	5830 Crest Ave.	
City	Riverside	
State	CA	Zip 92503-

Home Phone	(951) 351-0276
Work Phone	
Mobile Phone	

Assigned: Dawna Disposition: Granted

Request

Poor condition of crosswalks on Van Buren & California - repaint.

Findings

Discussed concerns. Per Streets crosswalk at Van Buren & California to be refreshed.

DATES

Processed By: Dawna Fuller

2/17/2010

Reviewed By:

Approved by TE:

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input checked="" type="radio"/>	Striping Marking
<input type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

2314

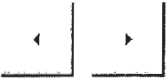
Entered by

Dawna

SERVICE REQUEST

Request Date

2/2/2005



Primary Street Rutland

Secondary Street Sylvan

First Name	Ms. Mary
Last Name	Herrera
Title	
Organization	

Address	8480 Sylvan Dr.		
City	Riverside		
State	CA	Zip	92503-

Home Phone	(951) 689-0767
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

Request

Per SRO # 3010 - Requests stop ahead sign for stop sign on Sylvan and Rutland. Near Terrace Elementary. People frequently ignore a fairly new stop sign.

Findings

Field inspection conducted 2/3/05 observed existing W17 Stop Ahead signage in place on SLS's on Rutland north of Sylvan across from 6690 Rutland and at Rutland side of 8795 Greenpoint. Rutland was recently resurfaced and accompanying STOP AHEAD pavement markings are in the process of being replaced. Per Louie Perez of Streets restriping and painting of pavement markings will begin 2/3/05. Advised R/P 2/3/05.

Processed By Dawna Fuller

DATES

2/3/2005

Reviewed By Diane Huggett

2/4/2005

Approved by TE Patti Castillo

2/7/2005

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input type="radio"/>	Striping Marking
<input checked="" type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

Entered by

SERVICE REQUEST

Request Date

23526

Veronica

10/10/2022



Primary Street Collett

Secondary Street Polk

First Name	Robert
Last Name	Costa
Title	
Organization	

Address	4034 Grimsby Ln.	
City		
State		Zip

Home Phone	
Work Phone	
Mobile Phone	(951) 518-7978

Assigned: Dawna

Disposition	Modified
-------------	----------

Request

SR#1-164815741- Resident crossing guard requesting flashing solar lights be installed on stop signs at 4-way intersection. Between 8am-9am, 1pm to 3pm are peak times. Concerned about accidents, kids walking to and from school daily.

Findings

Left msg. for R/P. TC history requested. To review. 5-yr TC history shows 16 total collisions (9 broadsides, 4 rear ends, 1 pedestrian involved, 1 sideswipe, and 1 head-on). See also related SR#23366 from resident with same last name at same address / phone# - left 2nd msg. for R/P. Intersection is MWS controlled and is included on list of potential future traffic signal project locations for consideration as funding becomes available. 3rd msg. left for R/P. E-mail to Call Center requesting PD enforcement of stop and failure to yield to pedestrian violations. Reviewed - CTE supports addition of advance Stop Ahead warning signs and pavement legends all directions - prior W.O. # 8556 issued (see SR #23366).

ACTION
Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

DATES		
Processed By	Dawna Fuller	1/10/2023
Reviewed By		
Approved by TE		

ServReq

23366

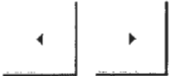
Entered by

Veronica

SERVICE REQUEST

Request Date

8/24/2022



Primary Street Collett

Secondary Street Polk

First Name	Linda
Last Name	Costa
Title	
Organization	

Address	4034 Grimsby Lane		
City	Riverside		
State	CA	Zip	92505-

Home Phone	
Work Phone	
Mobile Phone	(951) 529-5474

Assigned: Dawna

Disposition Modified

Request

SR#1-163562591 - Requesting blinking lights at the stop sign on Collett Ave & Polk St.

Findings

Left msg. for R/P. 5-yr TC history requested. TC history shows 16 total collisions (9 broadsides, 4 rear ends, 1 pedestrian involved, 1 sideswipe, and 1 head-on). Left 2nd msg. for R/P. Intersection is MWS controlled and is included on list of potential future traffic signal project locations for consideration as funding becomes available. 3rd msg. left for R/P. E-mail to Call Center requesting PD enforcement of stop and failure to yield to pedestrian violations (see also SR#23526). Reviewed - CTE supports addition of advance Stop Ahead warning signs and pavement legends all directions - W.O. # 8556 issued.

ACTION
Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

DATES

Processed By Dawna Fuller

1/10/2023

Reviewed By

Approved by TE Philip Nitollama

1/10/2023

ServReq

Entered by

SERVICE REQUEST

Request Date

2364

Dawna

2/15/2005



Primary Street Magnolia

Secondary Street Pierce

First Name	David
Last Name	Villa
Title	
Organization	

Address	5830 Crest Ave.	
City	Riverside	
State	CA	Zip 92503-

Home Phone	(951) 351-0276
Work Phone	
Mobile Phone	

Assigned: Dawna Disposition Granted

Request
Repaint faded existing crosswalks.

Findings
Field inspection conducted 2/23/05. W/O #1005 was issued to repaint faded existing white crosswalks (3 ea) at the north, south and west legs @ Magnolia & Pierce and faded LL at east leg.

DATES

Processed By	Dawna Fuller	2/23/2005
Reviewed By	Diane Huggett	2/24/2005
Approved by TE	Patti Castillo	2/28/2005

ACTION	
Click the one that best applies	
<input type="radio"/>	Stop Sign
<input type="radio"/>	Speed Limit Sign
<input type="radio"/>	Red Curb
<input type="radio"/>	Weight Restriction
<input type="radio"/>	School Sign
<input type="radio"/>	Curve Warning
<input type="radio"/>	Crossing Guard Study
<input type="radio"/>	Speed Humps
<input type="radio"/>	Sight Restriction
<input type="radio"/>	Parking
<input checked="" type="radio"/>	Striping Marking
<input type="radio"/>	Other
<input type="radio"/>	Signal
<input type="radio"/>	Sidewalk

ServReq

23365

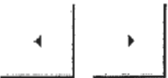
Entered by

Veronica

SERVICE REQUEST

Request Date

8/24/2022



Primary Street Golden

Secondary Street Cochran

First Name	Linda
Last Name	Costa
Title	
Organization	

Address	4034 Grimsby Lane	
City	Riverside	
State	CA	Zip 92505-

Home Phone	
Work Phone	
Mobile Phone	(951) 529-5474

Assigned: Dawna

Disposition Modified

Request

SR#1-163562540- Requesting blinking lights at the stop sign on Cochran & Golden. RP is a cross guard for nearby elementary school and continues to see vehicles go by stop sign without stopping.

Findings

Left msg. for R/P. Left 2nd msg. for R/P. 3rd attempt to contact R/P and R/P hung up on call. 4th attempt to contact R/P 12/20 msg. indicates voicemail is full thus unable to determine if concern is stop vioaltions on Golden or on Cochran and if motorists are failing to yield to pedestrians and/or crossing guard when in crosswalk. E-mail to Call Center requesting PD enforcement for reported stop vioaltions during Mc Auliffe Elementary start and dismissal. Intersection added to list for consideration of potential future grant project for possible upgrade to flashing LED stop signs on Golden at Cochran. TC history requested. TC report shows 4 totals collisions all in 2022 with 2 hit objects and 2 rear ends and no broadsides. Reviewed - W.O. #8530 issued.

ACTION
Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk

Processed By Dawna Fuller

DATES
12/22/2022

Reviewed By

Approved by TE Brett Craig

1/3/2023

ServReq

22492

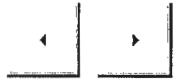
Entered by

Dawna

SERVICE REQUEST

Request Date

9/23/2021



Primary Street Sierra Vista

Secondary Street Gedney

First Name	Robert
Last Name	Vierra
Title	
Organization	

Address	11595 Flower St.	
City	Riverside	
State	CA	Zip

Home Phone	(951) 505-9041
Work Phone	
Mobile Phone	

Assigned: Dawna

Disposition Modified

Request

SR#1-154783916 - Request cross walk installed at Sierra Vista from the 11600 block of Gedney. Children cross the street to and from school.

Findings

Collision history requested. A.M. student pedestrian crossing count to be conducted per CTE due to proximity to rear access gate/path for Valley View Elementary. Count conducted 1/25/21. 5-yr TC history showed no collisions. Reviewed - installation of yellow continental school crosswalk on angle @ N leg to align with existing ADA ramps recommended per CTE (see SR#22548 & W.O. #8179) issued and intersection added to list of potential future grant project locations for possible upgrade to ped push button RRFB crossing. Advised R/P.

DATES

Processed By Dawna Fuller

2/4/2022

Reviewed By

Approved by TE

ACTION
Click the one that best applies

- Stop Sign
- Speed Limit Sign
- Red Curb
- Weight Restriction
- School Sign
- Curve Warning
- Crossing Guard Study
- Speed Humps
- Sight Restriction
- Parking
- Striping Marking
- Other
- Signal
- Sidewalk



Safety Benefits:

High-visibility crosswalks can reduce pedestrian injury crashes up to:

40%¹

Intersection lighting can reduce pedestrian crashes up to:

42%²

Advance yield or stop markings and signs can reduce pedestrian crashes up to:

25%³

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://safety.fhwa.dot.gov/provencountermeasures/> and https://safety.fhwa.dot.gov/ped_bike/step/docs/tech_sheet_VizEnhancement2018.pdf.

Crosswalk Visibility Enhancements

Poor lighting conditions, obstructions such as parked cars, and horizontal or vertical roadway curvature can reduce visibility at crosswalks, contributing to safety issues. For multilane roadway crossings where vehicle volumes are in excess of 10,000 Average Annual Daily Traffic (AADT), a marked crosswalk alone is typically not sufficient. Under such conditions, more substantial crossing improvements could prevent an increase in pedestrian crash potential.

Three main crosswalk visibility enhancements help make crosswalks and the pedestrians, bicyclists, wheelchair and other mobility device users, and transit users using them more visible to drivers. These include high-visibility crosswalks, lighting, and signing and pavement markings. These enhancements can also assist users in deciding where to cross. Agencies can implement these features as standalone or combination enhancements to indicate the preferred location for users to cross.

High-visibility crosswalks

High-visibility crosswalks use patterns (i.e., bar pairs, continental, ladder) that are visible to both the driver and pedestrian from farther away compared to traditional transverse line crosswalks. They should be considered at all midblock pedestrian crossings and uncontrolled intersections. Agencies should use materials such as inlay or thermoplastic tape, instead of paint or brick, for highly reflective crosswalk markings.

Improved Lighting

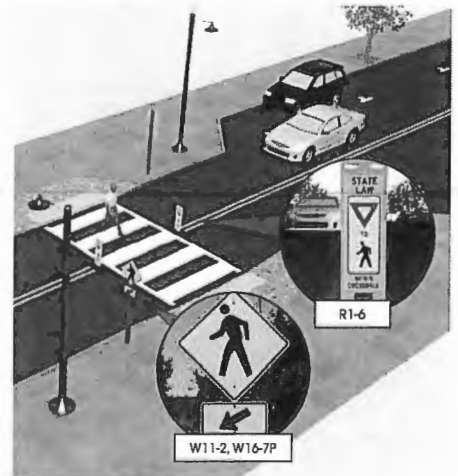
The goal of crosswalk lighting should be to illuminate with positive contrast to make it easier for a driver to visually identify the pedestrian. This involves carefully placing the luminaires in forward locations to avoid a silhouette effect of the pedestrian.

Enhanced Signing and Pavement Markings

On multilane roadways, agencies can use "YIELD Here to Pedestrians" or "STOP Here for Pedestrians" signs 20 to 50 feet in advance of

a marked crosswalk to indicate where a driver should stop or yield to pedestrians, depending on State law. To supplement the signing, agencies can also install a STOP or YIELD bar (commonly referred to as "shark's teeth") pavement markings.

In-street signing, such as "STOP Here for Pedestrians" or "YIELD Here to Pedestrians" may be appropriate on roads with two- or three-lane roads where speed limits are 30 miles per hour or less.



Source: FHWA

¹ Chen, L., C. Chen, and R. Ewing. The Relative Effectiveness of Pedestrian Safety Countermeasures at Urban Intersections - Lessons from a New York City Experience. (2012).

² Elvik, R. and Vaa, T. Handbook of Road Safety Measures. Oxford, United Kingdom, Elsevier, (2004).

³ Zeeger et al. Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments, FHWA, (2017).

High Visibility Crosswalk Improvement Example Photo



Existing Photo along Canyon Crest & UCR commercial village

**CITY OF RIVERSIDE
LOCAL ROADWAY SAFETY PLAN**



Citywide Countermeasure Toolbox

ID	Potential Countermeasures	Where to apply?	Crash Reduction Factor	Per Unit Cost	Unit
S02	Improve signal hardware; lenses, back-plates with retroreflective borders, mounting, size, and number	Signalized intersections with significant broadside and rear-end collisions due to signal visibility	15%	\$26,400	per intersection
S04	Provide Advanced Dilemma Zone Detection system	Signalized intersections with significant right-angle and rear-end collisions due to unsafe stopping during yellow phases	40%	\$76,800	per intersection
S10	Install flashing beacons as advance warning for signalized intersections	Locations with sight distance issues	30%	\$10,200	per beacon
S17PB ¹	Install audible pedestrian push button systems	Signalized intersections with crosswalks	25%	\$11,000	Per intersection
S18PB	Install high visibility crosswalk for signalized intersections	Signalized intersections with no marked crossing and pedestrian heads, with significant turning movements	25%	\$74,400	per intersection
S21PB	Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	Signalized Intersections – especially those with high pedestrian activity	60%	\$45,600	per intersection
NS03	Install signals	Unsignalized intersections with significant collision activity where warrants are met	30%	\$378,000	per intersection
NS05mr	Convert intersection to mini-roundabout	Intersections with lower vehicle speeds, with posted speed limits of 30 mph or less	30%	\$100,000	per location
NS06	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	Unsignalized intersections with crash history showing running stop signs	15%	\$8,400	per sign
NS08	Install Flashing Beacons at Stop-Controlled Intersections	Unsignalized intersections with crash history showing running stop signs	15%	\$12,000	per beacon

¹ This countermeasure typically covers pedestrian countdown signal heads, but can be also used for audible pedestrian push buttons

S16, Convert intersection to roundabout (from signal)

For HSIP Cycle 11 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	Varies	20 years
Notes:	<p>This CM only applies to crashes occurring in influence area of the new roundabout. This CM is not intended for mini-roundabouts.</p> <p>The benefit of this CM is calculated using Caltrans procedure. The CRF is dependent on the ADT, project location (Rural/Urban) and the roundabout type (1 lane or 2 lanes). The benefit comes from both the reduction in the number and the severity of the crashes.</p>		
General information			
Where to use:			
Signalized intersections that have a significant crash problem and the only alternative is to change the nature of the intersection itself. Roundabouts can also be very effective at intersections with complex geometry and intersections with frequent left-turn movements.			
Why it works:			
The types of conflicts that occur at roundabouts are different from those occurring at conventional intersections; namely, conflicts from crossing and left-turn movements are not present in a roundabout. The geometry of a roundabout forces drivers to reduce speeds as they proceed through the intersection. This helps keep the range of vehicle speed narrow, which helps reduce the severity of crashes when they do occur. Pedestrians only have to cross one direction of traffic at a time at roundabouts, thus reducing their potential for conflicts.			
General Qualities (Time, Cost and Effectiveness):			
Provision of a roundabout requires substantial project development. The need to acquire right-of-way is likely and will vary from site to site and depends upon the geometric design. These activities may require up to 4 years or longer to implement. Costs are variable, but construction of a roundabout to replace an existing signalized intersection are relatively high. The result is this CM may have reduced relative-effectiveness compared to other CMs.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF: 35 - 67%

S17PB, Install pedestrian countdown signal heads

For HSIP Cycle 11 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	Pedestrian and Bicycle	25%	20 years
Notes:	<p>This CM only applies to "Ped & Bike" crashes occurring in the intersection/crossing with the new countdown heads.</p>		
General information			
Where to use:			
Signals that have signalized pedestrian crossing with walk/don't walk indicators and where there have been pedestrian vs. vehicle crashes.			
Why it works:			
A pedestrian countdown signal contains a timer display and counts down the number of seconds left to finish crossing the street. Countdown signals can reassure pedestrians who are in the crosswalk when the flashing "DON'T WALK" interval appears that they still have time to finish crossing. Countdown signals begin counting down either when the "WALK" or when the flashing "DON'T WALK" interval appears and stop at the beginning of the steady "DON'T WALK" interval. These signals also have been shown to encourage more pedestrians to use the pushbutton rather than jaywalk.			
General Qualities (Time, Cost and Effectiveness):			
Costs and time of installation will vary based on the number of intersections included in this strategy and if it requires new signal controllers capable of accommodating the enhancement. When considered at a single location, these low cost improvements are usually funded through local funding by local crews. However, This CM can be effectively and efficiently implemented using a systematic approach with numerous locations, resulting in moderate cost projects that are more appropriate to seek state or federal funding.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF: 25%

TRAFFIC OPERATIONS POLICY DIRECTIVE

TR-001 (REV 6/2021)

<p>TRAFFIC OPERATIONS POLICY DIRECTIVE</p>	<p>NUMBER: 21 - 06</p>	<p>PAGE: 1 of 3</p>
<p>JASVINDERJIT S. BHULLAR, DIVISION CHIEF (Signature)</p>	<p>DATE ISSUED: June 24, 2021</p>	<p>EFFECTIVE DATE: June 24, 2021</p>
<p>SUBJECT: Touch-free Accessible Pedestrian Signal (APS)</p>	<p>DISTRIBUTION</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> All District Directors <input checked="" type="checkbox"/> All Deputy District Directors - Traffic Operations <input type="checkbox"/> Chief Counsel, Legal Division <p>Headquarters Division/Program Chiefs for:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Construction <input checked="" type="checkbox"/> Design <input type="checkbox"/> Planning <input type="checkbox"/> Safety Programs <input checked="" type="checkbox"/> Additional: <p>Americans with Disabilities Act Infrastructure Program</p>	
<p>DOES THIS DIRECTIVE AFFECT OR SUPERSEDE ANOTHER DOCUMENT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>IF YES, DESCRIBE</p> <p>Supersedes TOPD 12-01 and Memo "Installation of Accessible Pedestrian Signals", dated September 18, 2014</p>	
<p>WILL THIS DIRECTIVE BE INCORPORATED IN A DEPARTMENT MANUAL, GUIDELINE OR STANDARD PLAN? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>IF YES, DESCRIBE</p> <p>Caltrans Standards, Electrical Systems Design Manual</p>	

DIRECTIVE

Touch-free Accessible Pedestrian Signals (APS) shall be installed and activated at signalized pedestrian crossings on the State Highway System (SHS) as a public health safety enhancement and to minimize the spread of contact-related pathogens.

TRAFFIC OPERATIONS POLICY DIRECTIVE**IMPLEMENTATION**

Touch-free APS shall be installed at new signalized pedestrian crossings on the SHS for Capital projects, Encroachment Permit projects, and HM-funded projects.

When a touch-free APS is installed at an existing signalized pedestrian crossing, or in response to an ADA access request, on the SHS, all APS at that location shall be upgraded to Touch-free APS.

When performing maintenance and repair activities, Maintenance should consider using Touch-free APS.

Installation of touch-free APS should not require upgrading of other ADA components (e.g. curb ramps or sidewalks) unless those components are disturbed.

Unsignalized pedestrian crossings at signalized intersections (e.g. intersections with free-right turns) may remain unsignalized.

This guidance applies to Traffic Signals, In-Roadway Warning Lights, Rapid Rectangular Flashing Beacons and Pedestrian Hybrid Beacons.

Touch-free APS shall be installed at signalized pedestrian crossings on the SHS within project limits according to the following schedule:

- Capital Outlay Support (COS) projects that have a Ready to List (RTL) date on or after October 18, 2021
- Encroachment Permit projects that have been approved on or after October 18, 2021
- HM-Funded projects that have an RTL date on or after October 18, 2021

COS projects that are in Construction or have an RTL date before October 18, 2021 may adhere to this policy.

For adoption prior to October 18, 2021, the Office of System Management's Electrical non-standard special provisions (NSSPs) for Touch-free APS shall be used.

DELEGATION

No new delegations of authority are created under this policy.

BACKGROUND

In response to a growing need to advance the implementation of public health safety enhancements, the California Department of Transportation has developed specifications for a Touch-free APS to minimize the spread of contact-related pathogens. The Touch-free APS allows the pedestrian the option to place a "call" to cross the street by either using the pedestrian push button or by waving their hand in front of the Touch-free APS.

R208.2 Where Not Required. Detectable warning surfaces are not required at pedestrian refuge islands that are cut-through at street level and are less than 1.8 meters (6.0 ft) in length in the direction of pedestrian travel.

Advisory R208.2 Where Not Required. Detectable warning surfaces are not required at cut-through pedestrian refuge islands that are less than 1.8 meters (6.0 ft) in length because detectable warning surfaces must extend 610 millimeters (2.0 ft) minimum on each side of the island and be separated by 610 millimeters (2.0 ft) minimum length of island without detectable warning surfaces (see R305.1.4 and R305.2.4). Installing detectable warning surfaces at cut-through pedestrian islands that are less than 1.8 meters (6.0 ft) in length would compromise the effectiveness of detectable warning surfaces. Where a cut-through pedestrian refuge island is less than 1.8 m (6.0 ft) in length and the pedestrian street crossing is signalized, the signal should be timed for a complete crossing of the street.

R209 Accessible Pedestrian Signals and Pedestrian Pushbuttons

R209.1 General. Where pedestrian signals are provided at pedestrian street crossings, they shall include accessible pedestrian signals and pedestrian pushbuttons complying with sections 4E.08 through 4E.13 of the MUTCD (incorporated by reference, see R104.2). Operable parts shall comply with R403.

Advisory R209 Accessible Pedestrian Signals and Pedestrian Pushbuttons. An accessible pedestrian signal and pedestrian pushbutton is an integrated device that communicates information about the WALK and DON'T WALK intervals at signalized intersections in non-visual formats (i.e., audible tones and vibrotactile surfaces) to pedestrians who are blind or have low vision.

R209.2 Alterations. Existing pedestrian signals shall comply with R209.1 when the signal controller and software are altered, or the signal head is replaced.

R210 Protruding Objects.

R210.1 General. Protruding objects shall comply with the applicable requirements in R210.

Sidewalk Buffer

A buffer is a space provided between the pedestrian walkway and the vehicular travel lanes. This buffer enhances both pedestrian comfort and safety. Depending on the type of buffer, it can separate pedestrians from passing vehicles that can present issues such as large mirrors that overhang onto the curb, wind, and splashing water during rain events. The buffer can be landscaped with materials such as grass, flowers, shrubs, or trees, which also provide shade and visually narrow the roadway for drivers, potentially encouraging slower speeds (Ewing, n.d.; Landis et al., 2001). Similar to trees, on-street parking can also serve as a buffer between moving vehicles and pedestrians and can also encourage slower vehicular traffic.

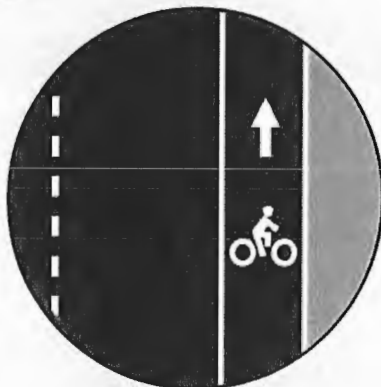
Additional Sidewalk Considerations

There are several other additional considerations when designing sidewalks, including the following:

- Driveway crossing design is important for providing safe, accessible sidewalks. The full sidewalk width should be carried across driveways with minimal change in grade or cross slope. Reducing corner radii encourages drivers to turn more slowly, allowing them to see and stop for crossing pedestrians.
- Ample, consistent, and uninterrupted lighting creates a safe and secure environment for all pedestrians, including customers accessing transit (FHWA, 2021). The FHWA *Lighting Handbook* includes more information about lighting considerations for crosswalks and railroad grade crossings, among other locations (Lutkevich, McLean, and Cheung, 2012). The supplementary *Informational Report on Lighting Design for Midblock Crossing* illustrates lighting layouts at intersection and midblock locations (Gibbons et al., 2008).
- Directional signage installed around heavily-used transit stops helps direct passengers to local points of interest. Signage scaled for pedestrians may be more easily seen by people walking. Graphic elements can help pedestrians to better understand the intent, even those who cannot read English.
- Visual obstructions, such as parked cars, large shrubs, or utility boxes can impair the ability of drivers to see pedestrians at crosswalks. Avoiding installing these obstructions, or relocating them, will improve driver-pedestrian sight distance.
- Curb ramps and detectable warning surfaces are needed to provide an accessible connection between sidewalks and streets.
- Accessible pedestrian signals (APS) provide information on pedestrian signal phases to blind or low-vision pedestrians in audible and vibrotactile formats. These devices indicate when to cross at signalized intersections.

Bicyclist Facility Design

Planning and designing a comprehensive multimodal network to provide access to transit includes considering the variety of types of bicyclists, such as those shown in figure 6, and their needs. Bicyclist facilities that are designed to reduce level of traffic stress and serve the broadest population of rider—through vehicle speed regulation and separation from traffic— have been shown to increase cycling



Safety Benefits:

Bicycle Lane Additions can reduce crashes up to:

49%

for total crashes on urban 4-lane undivided collectors and local roads.⁶

30%

for total crashes on urban 2-lane undivided collectors and local roads.⁶



Separated bicycle lane in Washington, DC.
Source: Alex Baca, Washington Area Bicyclist Association

Separated bicycle lanes may provide further safety benefits. FHWA is anticipating completion of research in Fall 2022.

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://safety.fhwa.dot.gov/provencountermeasures/> and https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf.

Bicycle Lanes

Most fatal and serious injury bicyclist crashes occur at non-intersection locations. Nearly one-third of these crashes involve overtaking motorists¹; the speed and size differential between vehicles and bicycles can lead to severe injury. To make bicycling safer and more comfortable for most types of bicyclists, State and local agencies should consider installing bicycle lanes. These dedicated facilities for the use of bicyclists along the roadway can take several forms. Providing bicycle facilities can mitigate or prevent interactions, conflicts, and crashes between bicyclists and motor vehicles, and create a network of safer roadways for bicycling. Bicycle Lanes align with the Safe System Approach principle of recognizing human vulnerability—where separating users in space can enhance safety for all road users.

Applications

FHWA's *Bikeway Selection Guide* and *Incorporating On-Road Bicycle Networks into Resurfacing Projects* assist agencies in determining which facilities provide the most benefit in various contexts. Bicycle lanes can be included on new roadways or created on existing roads by reallocating space in the right-of-way.

In addition to the paint stripe used for a typical bicycle lane, a lateral offset with painted buffer can help to further separate bicyclists from vehicle traffic. State and local agencies may also consider physical separation of the bicycle lane from motorized traffic lanes through the use of vertical elements like posts, curbs, or vegetation.² Based on international experience and implementation in the United States, there is potential for further safety benefits associated with separated bicycle lanes. FHWA is conducting research on separated bicycle lanes, which includes the development of crash modification factors, to be completed in 2022 to address significant interest on this topic.

¹ Thomas et al. Bicyclist Crash Types on National, State, and Local Levels: A New Look. Transportation Research Record 673(6), 664-676, (2019).

² Separated Bike Lane Planning and Design Guide. FHWA-HEP-15-025, (2015).

³ Park and Abdel-Aty. "Evaluation of safety effectiveness of multiple cross sectional features on urban arterials". Accident Analysis and Prevention, Vol. 92, pp. 245-255, (2016).

⁴ FHWA Tech Advisory Shoulder and Edge Line Rumble Strips, (2011).

⁵ Sandt et al. Pursuing Equity in Pedestrian and Bicycle Planning. FHWA, (2016).

⁶ Avelar et al. Development of Crash Modification Factors for Bicycle Lane Additions While Reducing Lane and Shoulder Widths. FHWA, (2021).

Considerations

- City and State policies may require minimum bicycle lane widths, although these can differ by agency and functional classification of the road.
- Bicycle lane design should vary according to roadway characteristics (e.g., motor vehicle volumes and speed) in order to maximize the facility's suitability for riders of all ages and abilities and should consider the travel needs of low-income populations likely to use bicycles. The *Bikeway Selection Guide* is a useful resource.
- While some in the public may oppose travel lane narrowing if they believe it will slow traffic or increase congestion, studies have found that roadways did not experience an increase in injuries or congestion when travel lane widths were decreased to add a bicycle lane.³
- Studies and experience in US cities show that bicycle lanes increase ridership and may help jurisdictions better manage roadway capacity without increased risk.
- In rural areas, rumble strips can negatively impact bicyclists' ability to ride if not properly installed. Agencies should consider the dimensions, placement, and offset of rumble strips when adding a bicycle lane.⁴
- Strategies, practices, and processes can be used by agencies to enhance their ability to address equity in bicycle planning and design.⁵

**CITY OF RIVERSIDE
LOCAL ROADWAY SAFETY PLAN**



ID	Potential Countermeasures	Where to apply?	Crash Reduction Factor	Per Unit Cost	Unit
NS14	Install raised median on approaches for unsignalized intersections	Unsignalized intersections where related or nearby turning movements affect the safety and operation of an intersection	25%	\$1,068	per LF
NS20PB	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	Unsignalized intersections with high pedestrian activity where sufficient sight distance is available	25%	\$34,800	per intersection
NS22PB	Install Rectangular Rapid Flashing Beacon (RRFB)	Unsignalized intersections and mid-block pedestrian crossings	35%	\$30,000	Per location
R08	Install raised median	Locations with a high number of head-on collisions	25%	\$1,068	per LF
R14	Road Diet (Reduce travel lanes and add a two-way left-turn and bike lanes)	Roadway segments with high number of sideswipe collisions	30%	\$79,200	per mile
R23	Install chevron signs on horizontal curves	Roadway segments that have a significant amount of collision activity at sharp curves.	40%	\$2,400	per sign
R24	Install curve advance warning signs	Roadway segments that have a significant amount of collision activity at sharp curves.	25%	\$2,400	per sign
R25	Install curve advance warning signs (flashing beacon)	Roadway segments that have a significant amount of collision activity at sharp curves.	30%	\$12,000	per beacon
R26	Install dynamic/variable speed warning signs	Roadway segments with a significant number of collisions due to unsafe speeds.	30%	\$22,800	per sign
R28	Install edge-lines and centerlines	Roadway segments with collisions that resulted in run-off-road right/left, head-on, or opposite-direction-sideswipe.	25%	\$100,800	per mile
R32PB	Install bike lanes	Locations with a high number of bicycle collisions	35%	\$76,800	per mile



Urban Bikeway Design Guide

GUIDE NAVIGATION ▾

(<https://nacto.org/publication/urban-bikeway-design-guide/>)

PURCHASE GUIDE ([HTTP://ISLANDPRESS.ORG/BOOK/URBAN-BIKEWAY-DESIGN-GUIDE-SECOND-EDITION](http://islandpress.org/book/urban-bikeway-design-guide-second-edition))



Colored Bike Facilities



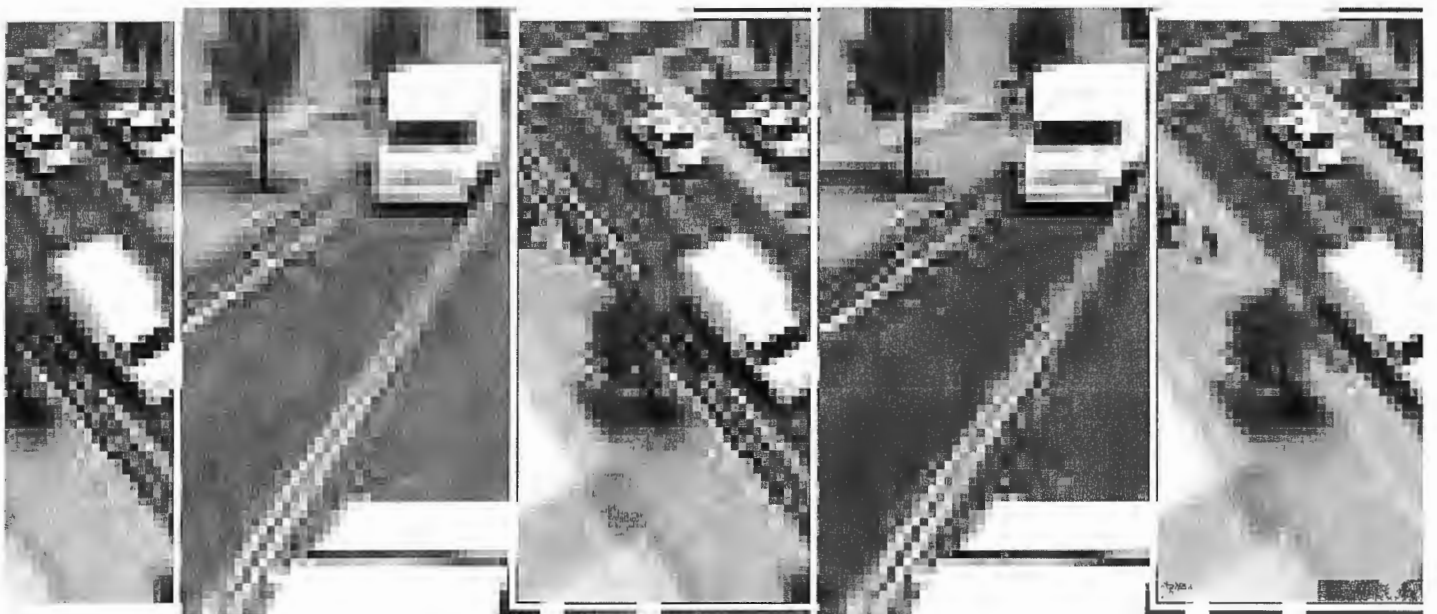
Bike Box - Portland, OR

(https://nacto.org/wp-content/uploads/gallery/2012_coloredbikefacilities/bike-box-lloyd-blvd-portland_or.jpg)

Description

Colored pavement within a bicycle lane increases the visibility of the facility, identifies potential areas of conflict, and reinforces priority to bicyclists in conflict areas and in areas with pressure for illegal parking. Colored pavement can be utilized either as a corridor treatment along the length of a bike lane (<https://nacto.org/cities-for-cycling/design-guide/bike-lanes/>) or cycle track (<https://nacto.org/cities-for-cycling/design-guide/cycle-tracks/>), or as a spot treatment, such as a bike box (<https://nacto.org/cities-for-cycling/design-guide/intersection-treatments/bike-box/>), conflict area, or intersection crossing marking (<https://nacto.org/cities-for-cycling/design-guide/intersection-treatments/intersection-crossing-markings/>). Color can be applied along the entire length of bike lane or cycle track to increase the overall visibility of the facility. Consistent application of color across a bikeway corridor is important to promote clear understanding for all users.

Click on the images below to view 3D concepts of colored bicycle lanes. The configurations shown are based on San Francisco, CA, Portland, OR, and New York City examples.



https://nacto.org/wp-content/uploads/gallery/coloredbikelane_3d/coloredbikelanes_01.html https://nacto.org/wp-content/uploads/gallery/coloredbikelane_3d/coloredbikelanes_02.html https://nacto.org/wp-content/uploads/gallery/coloredbikelane_3d/coloredbikelanes_03.html https://nacto.org/wp-content/uploads/gallery/coloredbikelane_3d/coloredbikelanes_04.html https://nacto.org/wp-content/uploads/gallery/coloredbikelane_3d/coloredbikelanes_05.html

Treatment details can be accessed below under design guidance.

Colored Bike Facility Benefits

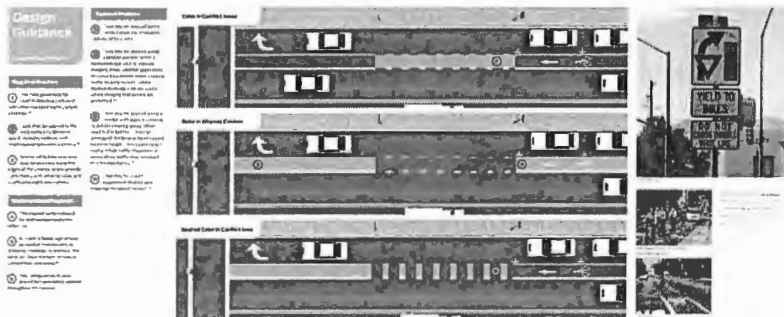
- Promotes the multi-modal nature of a corridor.
- Increases the visibility of bicyclists.
- Discourages illegal parking in the bike lane. [Read More+](#)
- When used in conflict areas, raises motorist and bicyclist awareness to potential areas of conflict. [Read More+](#)
- Increases bicyclist comfort through clearly delineated space. [Read More+](#)
- Increases motorist yielding behavior. [Read More+](#)

- Helps reduce bicycle conflicts with turning motorists. [Read More+](#)

Typical Applications

- Within bike lanes or cycle tracks.
- Across turning conflict areas such as vehicle right turn lanes.
- Across intersections (<https://nacto.org/treatments/intersection-treatments/intersection-crossing-markings/>), particularly through wide or complex intersections where the bicycle path may be unclear. [Read More+](#)
- Across driveways and Stop or Yield-controlled cross-streets.
- Where typical vehicle movements frequently encroach into bicycle space, such as across ramp-style exits and entries where the prevailing speed of turning traffic at the conflict point is low enough that motorist yielding behavior can be expected.
- Color may be applied along an entire corridor, with gaps in coloring to denote crossing areas. [Read More+](#)
- Facility designers should match coloring strategy to desired design outcomes of projects.
- May not be applicable for crossings in which bicycles are expected to yield right of way, such as when the street with the bicycle route has Stop or Yield control at an intersection.

Design Guidance



(<https://nacto.org/wp->

content/uploads/gallery/2012_guidance_images/2012guidance_coloredbikefacilities.jpg)

Guidance for conventional bicycle lanes (<https://nacto.org/treatments/bike-lanes/conventional-bike-lanes/>), intersection crossing markings (<https://nacto.org/treatments/intersection-treatments/intersection-crossing-markings/>), and through bike lanes (<https://nacto.org/cities-for-cycling/design-guide/intersection-treatments/through-bike-lanes/>) may also apply.

- Required
- Recommended
- Optional

Required Features

Green Bike Lane Striping Improvement Example Photos



Existing Photos at Linden & Canyon Crest



Safety Benefits:

RRFBs can reduce crashes up to:

47%

for pedestrian crashes.⁴

RRFBs can increase motorist yielding rates up to:

98%

(varies by speed limit, number of lanes, crossing distance, and time of day).³



RRFBs used at a trail crossing.
Source: LJB

Rectangular Rapid Flashing Beacons (RRFB)

A marked crosswalk or pedestrian warning sign can improve safety for pedestrians crossing the road, but at times may not be sufficient for drivers to visibly locate crossing locations and yield to pedestrians. To enhance pedestrian conspicuity and increase driver awareness at uncontrolled, marked crosswalks, transportation agencies can install a pedestrian actuated Rectangular Rapid Flashing Beacon (RRFB) to accompany a pedestrian warning sign. RRFBs consist of two, rectangular-shaped yellow indications, each with a light-emitting diode (LED)-array-based light source.¹ RRFBs flash with an alternating high frequency when activated to enhance conspicuity of pedestrians at the crossing to drivers.

For more information on using RRFBs, see the Interim Approval in the *Manual on Uniform Traffic Control Devices (MUTCD)*.¹

Applications

The RRFB is applicable to many types of pedestrian crossings but is particularly effective at multilane crossings with speed limits less than 40 miles per hour.² Research suggests RRFBs can result in motorist yielding rates as high as 98 percent at marked crosswalks, but varies depending on the location, posted speed limit, pedestrian crossing distance, one- versus two-way road, and the number of travel lanes.³ RRFBs can also accompany school or trail crossing warning signs.

RRFBs are placed on both sides of a crosswalk below the pedestrian crossing sign and above the diagonal downward arrow plaque pointing at the crossing.¹ The flashing pattern can be activated with pushbuttons or passive (e.g., video or infrared) pedestrian detection, and should be unlit when not activated.

Considerations

Agencies should:²

- Install RRFBs in the median rather than the far-side of the roadway if there is a pedestrian refuge or other type of median.
- Use solar-power panels to eliminate the need for a power source.
- Reserve the use of RRFBs for locations with significant pedestrian safety issues, as over-use of RRFB treatments may diminish their effectiveness.

Agencies shall not:²

- Use RRFBs without the presence of a pedestrian, school or trail crossing warning sign.
- Use RRFBs for crosswalks across approaches controlled by YIELD signs, STOP signs, traffic control signals, or pedestrian hybrid beacons, except for the approach or egress from a roundabout.

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://safety.fhwa.dot.gov/provencountermeasures/> and https://safety.fhwa.dot.gov/ped_bike/step/docs/techSheet_RRFB_2018.pdf.

¹ MUTCD Interim Approval 21 - RRFBs at Crosswalks.

² "Rectangular Rapid Flash Beacon" in PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System, FHWA, (2013).

³ Fitzpatrick et al. "Will You Stop for Me? Roadway Design and Traffic Control Device Influences on Drivers Yielding to Pedestrians in a Crosswalk with a Rectangular Rapid-Flashing Beacon," Report No. TTI-CTS-0010, Texas A&M Transportation Institute, (2016).

⁴ NCHRP Research Report 841 Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments, (2017).

R920-E

Solar-Powered Rectangular Rapid Flashing Beacon Data Sheet



Rectangular rapid flashing beacons (RRFBs) improve pedestrian safety by increasing yield rates to 72-96% at crosswalks*:

- ✓ The benchmark for RRFBs, the R920-E meets MUTCD requirements, including IA-21, and is Buy America compliant
- ✓ Compact and lightweight solar engine
- ✓ Audible pushbutton activation with all ADA compliance features
- ✓ Solar Power Report™ (SPR) prepared for every location to ensure battery longevity

Superior Design and Technology

The R920-E utilizes a self-contained solar engine integrating the Energy Management System (EMS) with an on-board user interface, housed in a compact enclosure together with the batteries and solar panel. MUTCD interim approval IA-21 flash pattern and multiple configurations enable the R920-E to handle all crosswalk applications.

Easy Installation

With its highly efficient and compact design, installation is quick and uncomplicated, dramatically reducing installation costs. Retrofitting can be done where existing sign bases are used to enhance existing marked crosswalks in minutes, and new installations can be completed without the cost of larger poles, new bases, and trenching.

Advanced User Interface

The R920-E comes with an on-board user interface for quick configuration and status monitoring. It allows for simple in-the-field adjustment of flash pattern, duration, intensity, ambient auto adjust, night dimming, and many more. Settings are automatically sent wirelessly to all units in the system.

Reliable

Every solar-powered model is solar-sized by location to ensure year-after-year operation. Carmanah includes a Solar Power Report to prove sustainability over a 12-month period.



MUTCD
compliant



Buy America
compliant



5-year limited
warranty



Solar-sized for
every location

* U.S. Department of Transportation Federal Highways Administration, Publication No. FHWA-HRT-10-043 - "Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks"



Safety Benefits:

10%

reduction of fatal and injury crashes at all locations/types/areas.

15%

reduction of nighttime crashes at all locations/types/areas.

27%

reduction of fatal and injury crashes at rural intersections.

19%

reduction of fatal and injury crashes at 2-lane by 2-lane intersections.

Average Benefit-Cost Ratio

12:1

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://safety.fhwa.dot.gov/provencountermeasures/> and <https://safety.fhwa.dot.gov/intersection/stop/fhwasa18047.pdf>.

Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections

This systemic approach to intersection safety involves deploying a package of multiple low-cost countermeasures, including enhanced signing and pavement markings, at a large number of stop-controlled intersections within a jurisdiction. These countermeasures increase driver awareness and recognition of the intersections and potential conflicts.

There are several benefits to systemically applying multiple low-cost countermeasures at stop-controlled intersections, including,

- Resources are maximized because the treatments are low cost.
- A high number of intersections can receive treatment.
- Improvements are highly cost-effective, with an average benefit-cost ratio of 12:1, even assuming a conservative 3-year service life.



Example of countermeasures on the through approach.
Source: South Carolina DOT



Example of countermeasures on the stop approach.
Source: South Carolina DOT

The low-cost countermeasures for stop-controlled intersections generally consist of the following treatments:

On the Through Approach

- Doubled-up (left and right), oversized advance intersection warning signs, with supplemental street name plaques (can also include flashing beacon).
- Retroreflective sheeting on sign posts.
- Enhanced pavement markings that delineate through lane edge lines.

On the Stop Approach

- Doubled-up (left and right), oversized advance "Stop Ahead" intersection warning signs (can also include flashing beacon).
- Doubled-up (left and right), oversized Stop signs.
- Retroreflective sheeting on sign posts.
- Properly placed stop bar.
- Removal of vegetation, parking, or obstructions that limit sight distance.
- Double arrow warning sign at stem of T-intersections.

AV-200 SERIES: LED ENHANCED TRAFFIC SIGNS

- MUTCD Compliant
- Improves Intersection Safety
- Solar Powered
- Easily Installs on existing sign posts

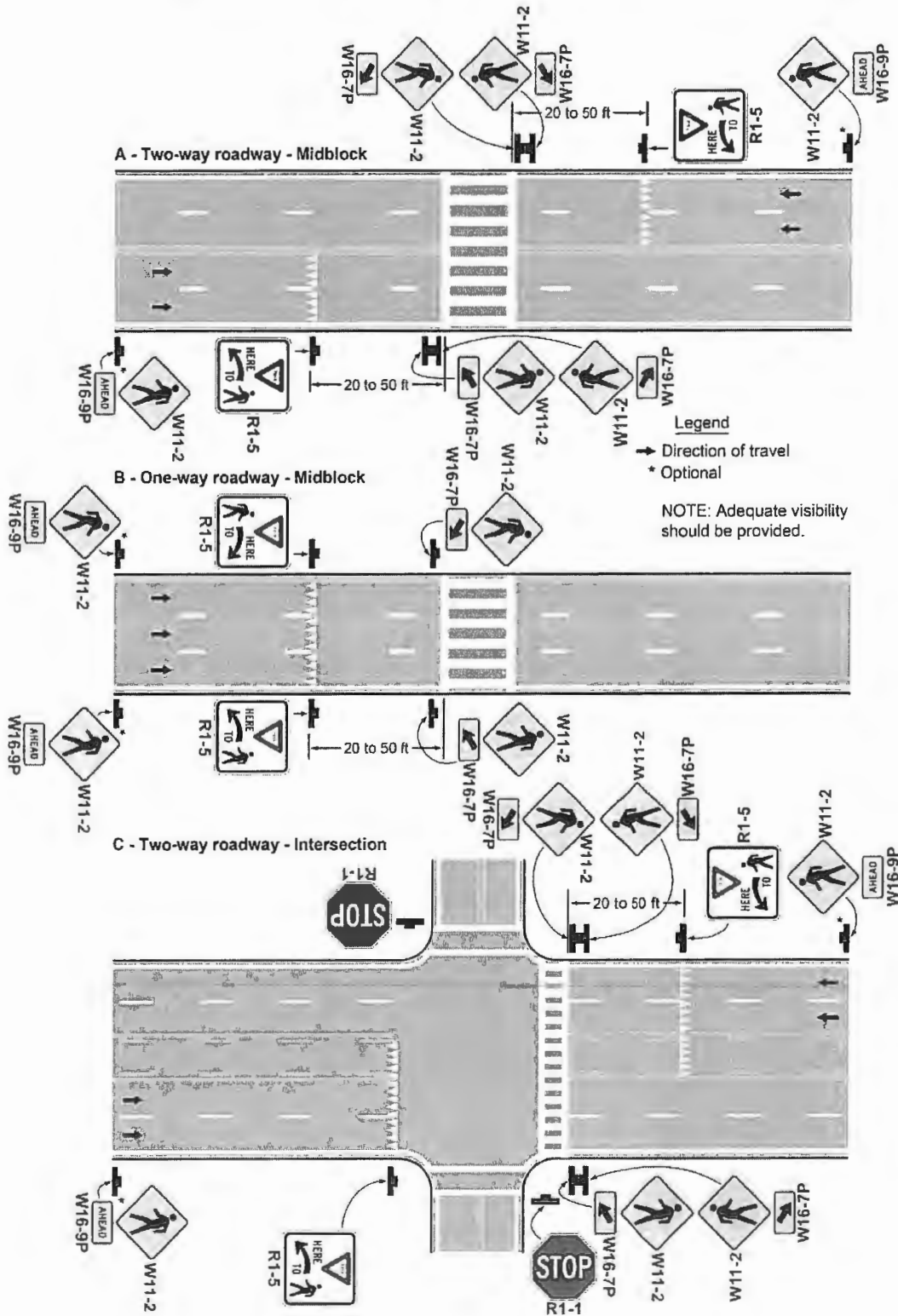


The Availed Technologies AV-200 LED Enhanced Sign has been designed from the ground-up to provide reliable year-round 24 hour operation. Built with industry leading solar and LED technology, it is equipped with:

- Ultra-efficient LEDs and Lenses,
- Integrated maximum power point tracking,
- High-efficiency monocrystalline 20W solar panel,
- The option of 84 or 144 watt-hours of battery capacity.

The AV-200 will operate in challenging solar conditions including cold temperatures, low sun hours, and partial shading. The compact, self-contained design allows for rapid installation on new or existing round, square, U-channel, or wood sign posts.

Figure 3B-17 (CA). Examples of Crosswalk Enhancements at Uncontrolled Multilane Approaches



ORDINANCE NO. 7569

AN ORDINANCE OF THE CITY OF RIVERSIDE, CALIFORNIA ADOPTING
CHAPTER 13.19 OF THE RIVERSIDE MUNICIPAL CODE ESTABLISHING
THE COMPLETE STREETS ORDINANCE

The City Council of the City of Riverside does ordain as follows:

Section 1: Chapter 13.19 is hereby added to the Riverside Municipal Code as follows:

13.19.010 - Purpose and intent.

The purpose and intent of this chapter is to provide guidance on street character, connectivity, access for all users, development of continuous pedestrian paths and urban trails/recreation opportunities, and the inclusion of public gathering spaces equitably placed throughout the City, and to require that roadways within the City be developed according to approved standards and design elements as set forth in the Complete Streets Ordinance.

13.19.020 – Complete Streets Ordinance.

The installation and development of parkways, and streets or highways within the City shall be in accordance with the Complete Streets Ordinance and any revisions, amendments or modifications thereto as set forth by resolution adopted by the City Council.”

Section 2: The City Council has reviewed the matter and, based upon the facts and information contained in the staff reports, administrative record, and written and oral testimony, hereby finds that this ordinance is not subject to CEQA pursuant to Sections 15060(c)(2), 15060(c)(3) and/or 15061(b)(3) of the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, in that it will not result in a direct or reasonably foreseeable indirect physical change in the environment nor have a significant impact on the environment, and is not a project as defined in Section 15378.

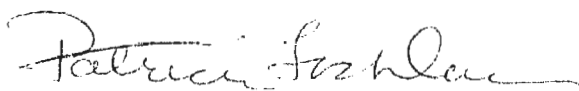
Section 3: The City Clerk shall certify to the adoption of this ordinance and cause publication once in a newspaper of general circulation in accordance with Section 414 of the Charter of the City of Riverside. This ordinance shall become effective on the 30th day after the date of its adoption.

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ADOPTED by the City Council this 7th day of September, 2021.



PATRICIA LOCK DAWSON
Mayor of the City of Riverside

Attest:

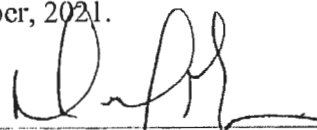


DONESIA GAUSE
City Clerk of the City of Riverside

I, Donesia Gause, City Clerk of the City of Riverside, California, hereby certify that the foregoing ordinance was duly and regularly introduced at a meeting of the City Council on the 17th day of August, 2021, and that thereafter the said ordinance was duly and regularly adopted at a meeting of the City Council on the 7th day of September, 2021, by the following vote, to wit:

- Ayes: Councilmembers Edwards, Cervantes, Fierro, Perry, and Hemenway and Councilwoman Plascencia
- Noes: None
- Absent: Councilmember Conder
- Abstain: None

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Riverside, California, this 9th day of September, 2021.



DONESIA GAUSE
City Clerk of the City of Riverside

CA21-0496
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BOARD OF EDUCATION

Dr. Angelo Farooq, *President* | Mr. Dale Kinnear, *Vice President*
Mr. Thomas R. Hunt, *Clerk* | Mr. Brent Lee, *Member*
Dr. Noemi Hernandez-Alexander, *Member* | Ms. Renee Hill, *Superintendent*



April 10, 2023

SB-821 Grant Program Review Committee

RE: Letter of Support for the City of Riverside's Transportation Development Act (TDA) Article 3 (SB 821) Grant Application for Bicycle & Pedestrian Facilities Grant Application

Dear SB-821 Review Committee,

On behalf of the Riverside Unified School District (RUSD), please accept this formal letter of support for the City of Riverside's TDA Article 3 (SB 821) Grant application for the Riverside's Citywide Bicycle & Pedestrian Facilities Improvement Project. Riverside's proposed project, as outlined in their application, will support our community's efforts to improve pedestrian and bicycle safety at intersections, increase public health by encouraging a more active lifestyle and reduce greenhouse gas emissions as residents are encouraged to walk & bike.

RUSD is committed to the health and safety of students. The Riverside Citywide Bicycle & Pedestrian Facilities Improvement Project, if successfully selected for an award, will result in the construction of high visibility crosswalks, green bike lane striping, flashing LED edge-lit stop signs, rectangular rapid flashing beacons, and audible pedestrian push button systems at various intersection locations near schools in the City of Riverside where all students and their families have access to safe, convenient, and healthy multi-modal transportation options to and from school.

I applaud Riverside's efforts to promote safe opportunities for students and the community to walk and bicycle. We look forward to working more closely with Riverside on this important project.

Sincerely,

A handwritten signature in black ink, appearing to read "Sergio San Martin", written over a horizontal line.

Sergio San Martin
Assistant Superintendent of Operations

RIVERSIDE UNIFIED SCHOOL DISTRICT

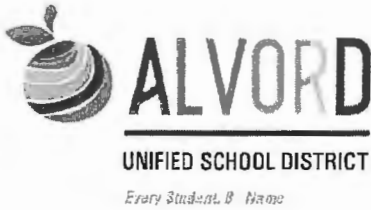
3380 14th Street
Riverside, CA 92501
(951) 788-7135

BUSINESS SERVICES

6050 Industrial Avenue
Riverside, CA 92504
(951) 352-6729

CENTRAL REGISTRATION CENTER

5700 Arlington Avenue
Riverside, CA 92504
(951) 352-1200



April 5, 2023

SB-821 Grant Program Review Committee
RE: Letter of Support for the City of Riverside's Transportation Development Act (TDA) Article 3 (SB 821) Grant Application for Bicycle & Pedestrian Facilities Grant Application

Dear SB-821 Review Committee,

On behalf of Alvord Unified School District (AUSD), I would like to express my support for City of Riverside's TDA Article 3 (SB 821) Grant application for the Riverside's Citywide Bicycle & Pedestrian Facilities Improvement Project. Riverside's proposed project, as outlined in their application, will support our community's efforts to improve pedestrian and bicycle safety at intersections, increase public health by encouraging a more active lifestyle and reduce greenhouse gas emissions as residents are encouraged to walk & bike.

AUSD is committed to the health and safety of students. The Riverside Citywide Bicycle & Pedestrian Facilities Improvement Project, if successfully selected for an award, will result in the construction of high visibility crosswalks, green bike lane striping, flashing LED edge-lit stop signs, rectangular rapid flashing beacons, and audible pedestrian push button systems at various intersection locations near schools in the City of Riverside where all students and their families have access to safe, convenient, and healthy multi-modal transportation options to and from school.

I applaud Riverside's efforts to promote safe opportunities for students and the community to walk and bicycle. We look forward to working more closely with Riverside on this important project!

Sincerely,

Allan J. Mucerino
Superintendent of Schools

SCHOOL BOARD
JULIE A. MORENO
GEORGINA RAMIREZ
ROBERT SCHWANDT
LIZETH VEGA
CAROLYN M. WILSON

SUPERINTENDENT
ALLAN J. MUCERINO

9 KPC Parkway
Corona, CA 92879
P: (951) 509-5070

F: (951) 358-1502

alvordschools.org



@AlvordUnified



April 11, 2023

SB-821 Grant Program Review Committee

RE: Letter of Support for the City of Riverside's Transportation Development Act (TDA) Article 3 (SB 821) Grant Application for Bicycle & Pedestrian Facilities Grant Application

Dear SB-821 Review Committee,

On behalf of Riverside Bicycle Club, I would like to express my support for City of Riverside's TDA Article 3 (SB 821) Grant application for Riverside's Citywide Bicycle & Pedestrian Facilities Improvement Project. Riverside's proposed project, as outlined in their application, will support our community's efforts to improve bicycle and pedestrian safety at intersections, increase public health by encouraging a more active lifestyle and reduce greenhouse gas emissions as residents are encouraged to walk & bike.

The Riverside Bicycle Club is committed to the health and safety of the community. The Riverside Citywide Bicycle & Pedestrian Facilities Improvement Project, if successfully selected for an award, will result in the construction of high visibility crosswalks, green bike lane striping, flashing LED edge-lit stop signs, rectangular rapid flashing beacons, and audible pedestrian push button systems at various intersection locations in the City of Riverside where all residents and their visitors have access to safe, convenient, and healthy multi-modal transportation options to travel throughout the city.

I applaud Riverside's efforts to promote safe opportunities for students and the community to walk and bicycle. We look forward to working more closely with Riverside on this important project!

Sincerely,

Andrew Holybee
President

Riverside Bicycle Club
P.O. Box 55160
Riverside, CA 92517-0160

City of Riverside SB 535 Disadvantaged Communities Map

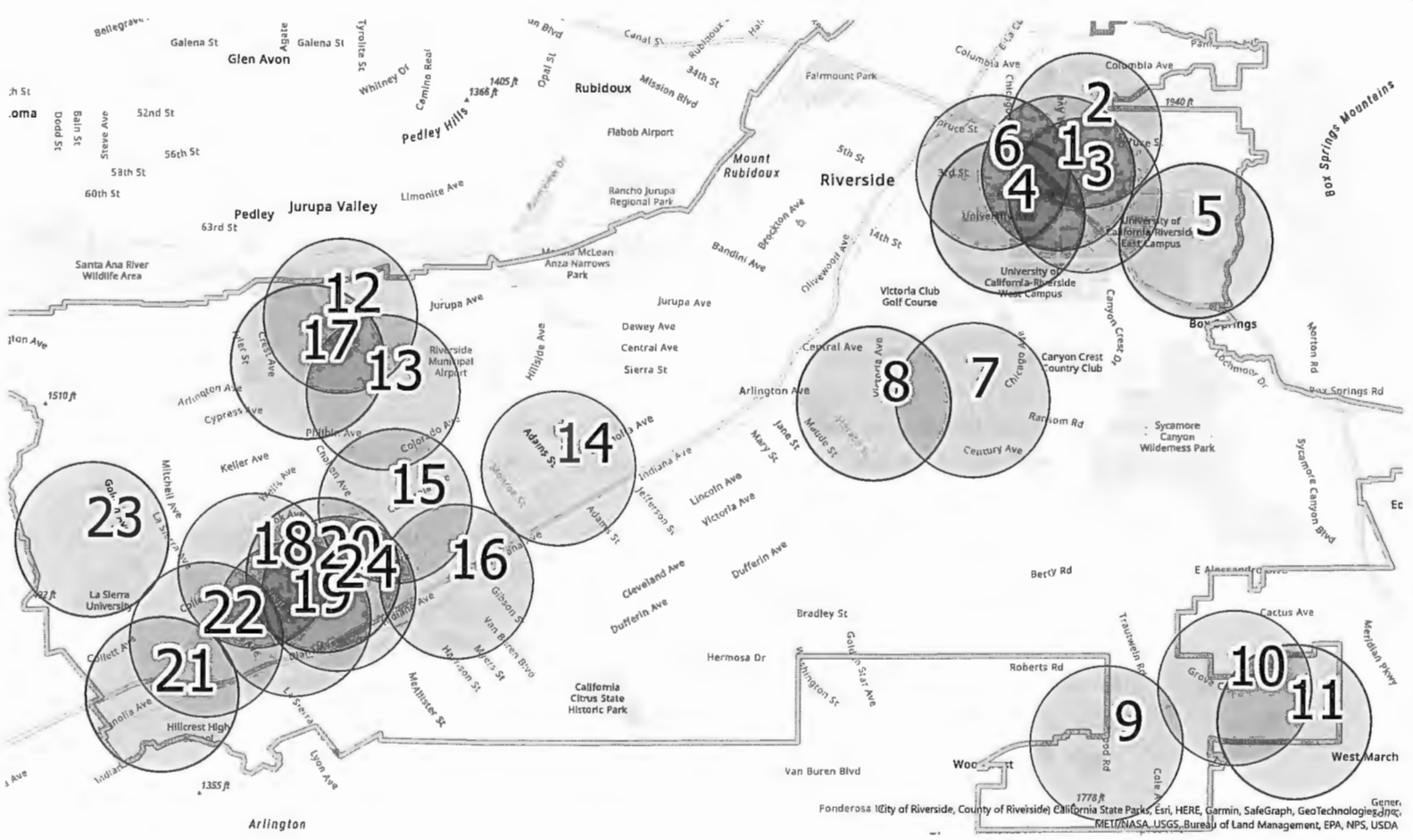
Legend

CalEnviroScreen 4.0 Results

-  > 90 - 100 (Highest Scores)
-  > 80 - 90
-  > 70 - 80
-  > 60 - 70
-  > 50 - 60
-  > 40 - 50
-  > 30 - 40
-  > 20 - 30
-  > 10 - 20
-  0 - 10 (Lowest Scores)

CalEnviroScreen 4.0 High Pollution, Low Population





Fonderosa | City of Riverside, County of Riverside, California State Parks, Eri, HERE, Garmin, SafeGraph, GeoTechnology, Gener, NIET, NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

ATTACHMENT 2

(PROGRAM POLICIES)

RIVERSIDE COUNTY TRANSPORTATION COMMISSION TRANSPORTATION DEVELOPMENT ACT ARTICLE 3 BICYCLE AND PEDESTRIAN FACILITIES PROGRAM ADOPTED POLICIES

Transportation Development Act Policies

1. Up to 5% of Article 3 apportionment can be used to supplement other funding sources used for bicycle and safety education programs; the allocation cannot be used to fully fund the salary of a person working on these programs.
2. Article 3 money shall be allocated for the construction, including related engineering expenses, of the facilities, or for bicycle safety education programs.
3. Money may be allocated for the maintenance of bicycling trails, which are closed to motorized traffic.
4. Facilities provided for the use of bicycles may include projects that serve the needs of commuting bicyclists, including, but not limited to, new trails serving major transportation corridors, secure bicycle parking at employment centers, park and ride lots, and transit terminals where other funds are available.
5. Within 30 days after receiving a request for a review from any city or county, the transportation-planning agency shall review its allocations.
6. Up to 20 percent of the amount available each year to a city or county may be allocated to restripe Class II bicycle lanes.
7. A portion of each city's allocation may also be used to develop comprehensive bicycle and pedestrian plans. Plans must emphasize bike/pedestrian facilities that support utilitarian bike/pedestrian travel rather than solely recreational activities; a maximum of one entire allocation per five years may be used for plan development.
8. Allowable maintenance activities for the local funds are limited to maintenance and repairs of Class I off-street bicycle facilities only.

RCTC Policies

1. The SB 821 Call for Projects will occur on a biennial basis, with a release date of the first Monday of every other February and a close date of the last Thursday of every other April, beginning in 2015.
2. If a project cannot be fully funded, RCTC may recommend partial funding for award. To handle tiebreakers, RCTC will use, in terms of priority, the safety question first then construction readiness.
3. Agencies awarded funds will not be reimbursed for any project cost overruns.
4. Agencies being awarded an allocation will be reimbursed in arrears only upon submitting adequate proof of satisfactory project completion. Claims need to

- include: the claim form, copies of paid invoices, a copy of the Notice of Completion (NOC), and photographs of the completed project.
5. The allocated amount represents the maximum amount eligible for reimbursement. For projects completed under the allocated amount, the agency will be reimbursed at the matching ratio as presented in the application.
 6. An agency will have thirty-six (36) months from the time of the allocation to complete the project. There will be no time extensions granted unless the reason for the delay can be demonstrated. Where substantial progress or a compelling reason for delay can be shown, the agency may be granted administrative extensions in twelve-month increments at the discretion of the Executive Director.
 7. Any programmed and unused Article 3 Program funds will be forfeited unless that agency can a) utilize the unused funds to complete projects that are the same or similar in scope and/or are contiguous to the approved project or b) apply the funds to a project previously submitted under an Article 3 call for projects and approved by the Commission, subject to Executive Director approval.
 8. Design and construction of facilities must conform to the general design criteria for non-motorized facilities as outlined in the Caltrans Highway Design Manual.
 9. Temporary facilities, projects in the bid process, or projects that are under construction will not be funded.
 10. The SB 821 evaluation committee will be comprised of a minimum of five evaluators representing a wide range of interests; such as: accessibility, bicycling, Coachella Valley, public transit, and the region. Staff, consultants, and other representatives from agencies submitting project proposals will not be eligible to participate on the evaluation committee that year.
 11. Following each call, staff will monitor the equity of allocations to Coachella Valley versus Western Riverside County; the allocation should be relative to what the Coachella Valley's share would have been if distributed on a per capita basis (the percentage of funds applied for should also be taken into consideration). If the allocation is often found to be inequitable to the Coachella Valley, staff will recommend adoption of a new policy to correct the imbalance.
 12. Certain costs at times associated with bicycle/pedestrian projects are not eligible when the benefit provided is not the exclusive use of bicyclists/pedestrians, such as: curb and gutter as part of roadway drainage system, driveway ramps installed across sidewalks, and where roadway design standards require a roadway shoulder width that is at least as wide as a standard bike lane.
 13. For each Call for Projects, a city is eligible to submit up to three (3) applications, and the County of Riverside is eligible to submit up to two (2) applications per Supervisorial District.
 14. Each application is limited to a maximum request of 10% of the current Call for Projects programming capacity.
 15. Total award to one jurisdiction is limited to 20% of current Call for Project's programming capacity.
 16. Awarded agencies can commence reimbursable project activities on July 1 of the Call

for Project fiscal year cycle. E.g.: for FY 23/24 Call for Projects, reimbursable work starts on July 1, 2023.

17. Awarded agencies have until October 1 of the Call for Project fiscal year cycle to execute the Memorandum of Understanding (MOU) with RCTC. E.g.: for FY 23/24 Call for Projects, MOUs must be executed by October 1, 2023