



**REQUEST FOR QUALIFICATIONS TO PROVIDE
PROFESSIONAL ENGINEERING DESIGN SERVICES
FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM
(HSIP) CYCLE 11 PROJECT
P.W. 282-25**

HSIPL-5038(028) - Hawk Signals Installation

Qualifications Due Date: Tuesday, January 21, at 4:00 p.m.

Public Works Department
Capital Improvements Division
200 "H" Street
Antioch, CA 94509
(925) 779-7050

INTRODUCTION

The City of Antioch seeks to retain the services of a qualified consulting firm to provide professional civil and environmental engineering design services to support the Engineering Division of the Department of Public Works. Tasks to be performed as part of this contract have the potential to cover a wide range of design services that will support specific design and construction projects, grant applications, and miscellaneous engineering related tasks.

The City of Antioch is requesting proposals from qualified professional engineering consultants, licensed in the State of California, with the intent of entering into an agreement to provide professional engineering design services for a Highway Safety Improvement Program (HSIP) Cycle 11 Project. The project is for Hawk Signal Installation at three locations.

In general, the selected Consultant shall be responsible for the preparation of all improvement plans, preliminary and final cost estimates, and project specifications for these projects.

The deadline for submission of qualifications for this work is 4:00 p.m., Tuesday, January 21, 2025.

BACKGROUND

The City of Antioch successfully received funding through HSIP Cycle 11 to complete improvements prioritizing roadway safety for all users of the City of Antioch roads, including motorists, pedestrians, and bicyclists. Funding is for the following project:

For City improvements to Install Hawk Signals at Trail Crossings to enhance Pedestrian and Bicycle Safety. The scope of work for this project includes providing pedestrian school crossing enhancements, ADA ramps, flashing stop signs, school zone flashing beacons, and LED safety lighting at Delta de Anza Trail crossing at James Donlon Boulevard; Delta de Anza Trail crossing at Lone Tree Way; and Canada Valley Trail crossing at Hillcrest Avenue. The total design and construction cost for this project is \$920,000.

SCOPE OF WORK

All plans and drawings must be drafted by the latest version of AutoCAD Civil 3D. All design data using AutoCAD Civil 3D programs shall be made available to the City upon request and shall become the property of the City for active and future projects.

The work shall comply with the following requirements:

- Current federal, state, and local laws
- Current Caltrans Construction Contract Standards (Plans and Specifications)
- Current Highway Design Manual
- Current City of Antioch Construction Details

For all deliverables completed, a draft shall be submitted to the City's project manager for review and approval. Typically, reports shall include a scale drawing, description of field, office and laboratory procedures used, hardware and software used, and quality assurance procedures used.

The work to be performed may include, but is not limited to the following:

Working on state-funded projects requires in-depth knowledge of the Caltrans Local Assistance Procedures Manual (LAPM), Local Assistance Program Guidelines (LAPG), and other Caltrans requirements. Interested firms shall address in their qualification statements and their ability to provide the following services if selected by the City.

1. PROJECT MANAGEMENT/ADMINISTRATION

The Consultant shall be responsible for project management activities throughout the life of the contract including managing the schedule, budget, setting up meetings, field reviews, and managing the project team. The Consultant must include a kick-off meeting and further appropriate the number of follow-up meetings with City staff. The Consultant may be required to attend a City Council meeting.

Deliverable(s): monthly progress reports, meeting agendas, minutes, and schedule updates.

2. FIELD WORK/PRELIMINARY PLANS/INVENTORY/STANDARDS

This task should include a field visit at the project sites to identify locations and verify existing conditions, evaluate the proposed condition submitted with the grant application, prepare the City inventory, set up a base map for the proposed improvements, and lay out the preliminary improvement plans.

Deliverable(s): preliminary plans, inventory, standards, on-site photos.

3. ENVIRONMENTAL DOCUMENTATION

CEQA Clearance – Consultant shall prepare a Notice of Determination (NOD) or Notice of Exemption (NOE) and file with County of Contra Costa and with the State Clearinghouse at the Governor’s Office of Planning and Research (OPR).

Deliverable(s): CEQA NOD or NOE.

4. PLANS, SPECIFICATIONS, AND ESTIMATE (PS&E)

Upon approval of the preliminary plans and environmental documents, the Consultant shall develop the final plans, project specifications, and an estimate of construction costs following the latest Caltrans, AASHTO, and City standards. The PS&E shall be developed and submitted for City review. The Consultant shall provide reviews at 30%, 60%, 90% and 100%, at a minimum, during the development of the PS&E.

Deliverable(s): 30%, 60%, 90%, and 100% plans (others as required by the City), specifications, and estimate.

5. BIDDING ASSISTANCE

During the bidding and construction phases of the project, the Consultant shall remain available to provide assistance to the City of Antioch staff and/or potential contractors in answering pre-bid questions, and interpretations of the plans and specifications either by email or phone. Furthermore, the Consultant is expected to provide responses to Requests for Information (RFI), and prepare addendums, if necessary. This task should include attendance at the Pre-Bid Meeting.

Deliverable(s): responses to bidder questions.

6. CONSTRUCTION SUPPORT

The Consultant shall attend the Pre-Construction meeting as well as answer any Request for Information as related to the Plans and Specifications. The Consultant shall review submittals as necessary and prepare the final Record Drawings based on the red-line copies of the plan from the Contractor and Inspector.

Deliverable(s): responses to RFIs, submittal approvals, record drawings.

The above services and products represent a general list of the project components. The consultant is expected to prepare a detailed scope of work based upon its knowledge and experience on related projects.

SUBMITTAL REQUIREMENTS

Please include the following information in the proposal submittal:

- Cover letter – Signed letter by an individual authorized to negotiate on behalf of the firm with the budget and scope of services binding for a term of 90 days from the date of submittal to the City.
- Introduction – Provide a brief project description conveying an understanding of the issues.
- Project Manager/Consultant Team – Detail key individuals to be assigned to the project, their qualifications, and respective roles. Provide resumes of key individuals who would perform services under this contract, including all applicable education, experience, licenses, and professional designations.
- Related Experience and References – Provide a complete list of references, including the scope of work performed and contact information. Place emphasis on projects prepared for cities and redevelopment agencies.
- Fee Schedule – Provide a schedule of fees for services, including current dollar/hour billing rates.
- Availability – Identify a window of time indicating availability to start the project. The selected firm will be required to enter into a written contract with the City of Antioch in a form approved by the City Attorney. It is expected that work will commence upon award of contract.
- City's Consultant Contract – Identify any sections of the City's standard design consultant

contract (Attachment "A") that pose significant concerns and would require negotiation/modification in order to be acceptable to consultant.

SUBMISSION INSTRUCTIONS

Three (3) bound, one (1) unbound, and one (one) electronic copy of the proposal **must be submitted no later than 4:00 p.m. on Tuesday, January 21, 2025** to:

Scott Buenting
Acting Public Works Director/City Engineer
City of Antioch
Capital Improvements Division
200 H Street
Antioch, CA 94509

In the event there is not an outstanding response, interviews will be conducted with the two or three firms which were close in evaluation points. Any questions regarding the above should be directed to Scott Buenting at (925) 779-6129, or sbuenting@antiochca.gov.

ATTACHMENTS

- A: City of Antioch Design Consultant Services Agreement
- B: Evaluation Criteria
- C: HSIP Application

ATTACHMENT "A"

**DESIGN CONSULTING SERVICES AGREEMENT BETWEEN
THE CITY OF ANTIOCH AND
[NAME OF CONSULTANT]**

THIS AGREEMENT ("**Agreement**") is made and entered into this ____ day of _____, 202__ ("**Effective Date**") by and between the City of Antioch, a municipal Corporation with its principle place of business at 200 H Street, Antioch, CA 94509 ("**City**") and _____ with its principle place of business at _____ ("**Consultant**") as of _____, 202__, City and Consultant individually are sometimes referred to herein as "**Party**" and collectively as "**Parties.**"

SECTION 1. SERVICES. Subject to the terms and conditions set forth in this Agreement, Consultant shall furnish all technical and professional services including labor, material, equipment, transportation, supervision and expertise to provide to City the services described in the Scope of Work attached as Exhibit A at the time and place and in the manner specified therein. In the event of a conflict in or inconsistency between the terms of this Agreement and Exhibit A, the Agreement shall prevail.

1.1 Term of Services. The term of this Agreement shall begin on the date first noted above and shall end on _____, the date of completion specified in Exhibit A, and Consultant shall complete the work described in Exhibit A prior to that date, unless the term of the Agreement is otherwise terminated or extended, as provided for in Section 8. The time provided to Consultant to complete the services required by this Agreement shall not affect the City's right to terminate the Agreement, as provided for in Section 8.

1.2 Standard of Performance. Consultant represents that it is experienced in providing these services to public clients and is familiar with the plans and needs of City. Consultant shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession in which Consultant is engaged in the geographical area in which Consultant practices its profession.

1.3 Assignment of Personnel. Consultant shall assign only competent personnel to perform services pursuant to this Agreement. In the event that City, in its sole discretion, at any time during the term of this Agreement, desires the reassignment of any such persons, Consultant shall, immediately upon receiving notice from City of such desire of City, reassign such person or persons.

1.4 Time. Consultant shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary to meet the standard of performance provided in Section 1.1 above and to satisfy Consultant's obligations hereunder.

SECTION 2. COMPENSATION. City hereby agrees to pay Consultant a sum not to exceed _____, notwithstanding any contrary indications that may be contained in Consultant's proposal, for services to be performed and reimbursable costs incurred under this Agreement. In the event of a conflict between this Agreement and Consultant's proposal, attached as Exhibit A, regarding the amount of compensation, the Agreement shall prevail. City shall pay Consultant for services rendered pursuant to this Agreement at the time and in the manner set forth below. The payments specified below shall be the only payments from City to Consultant for services rendered pursuant to this Agreement.

Except as specifically authorized by City, Consultant shall not bill City for duplicate services performed by more than one person.

Consultant and City acknowledge and agree that compensation paid by City to Consultant under this Agreement is based upon Consultant's estimated costs of providing the services required hereunder, including salaries and benefits of employees and subcontractors of Consultant. Consequently, the parties further agree that compensation hereunder is intended to include the costs of contributions to any pensions and/or annuities to which Consultant and its employees, agents, and subcontractors may be eligible. City therefore has no responsibility for such contributions beyond compensation required under this Agreement.

2.1 Invoices. Consultant shall submit invoices, not more often than once a month during the term of this Agreement, based on the cost for services performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:

- Serial identifications of progress bills; i.e., Progress Bill No. 1 for the first invoice, etc.;
- The beginning and ending dates of the billing period;
- A Task Summary containing the original contract amount, the amount of prior billings, the total due this period, the balance available under the Agreement, and the percentage of completion;
- At City's option, for each work item in each task, a copy of the applicable time entries or time sheets shall be submitted showing the name of the person doing the work, the hours spent by each person, a brief description of the work, and each reimbursable expense;
- The total number of hours of work performed under the Agreement by Consultant and each employee, agent, and subcontractor of Consultant performing services; and,
- The Consultant's signature.

2.2 Payment Schedule.

2.2.1 City shall make incremental payments, based on invoices received, [according to the payment schedule attached as Exhibit B], for services satisfactorily performed in accordance with the requirements of this Agreement, and for authorized reimbursable costs incurred. City shall have thirty (30) days from the receipt of an invoice that complies with all of the requirements of Section 2.1 to pay Consultant.

2.3 Total Payment. City shall pay for the services to be rendered by Consultant pursuant to this Agreement. City shall not pay any additional sum for any expense or cost whatsoever incurred by Consultant in rendering services pursuant to this Agreement, unless expressly provided for in Section 2.5.

In no event shall Consultant submit any invoice for an amount in excess of the maximum amount of compensation provided above either for a task or for the entire Agreement, unless the Agreement is modified prior to the submission of such an invoice by a properly executed change order or amendment.

2.4 Hourly Fees. Fees for work performed by Consultant on an hourly basis shall not exceed the amounts shown on the following fee schedule in Exhibit B.

2.5 Reimbursable Expenses. Reimbursable expenses are specified below, and shall not exceed _____ (\$ _____). Expenses not listed below are

not chargeable to City. Reimbursable expenses are included in the total amount of compensation provided under this Agreement that shall not be exceeded.

Reimbursable Expenses are:

2.6 Payment of Taxes. Consultant is solely responsible for the payment of employment taxes incurred under this Agreement and any similar federal or state taxes.

2.7 Authorization to Perform Services. The Consultant is not authorized to perform any services or incur any costs whatsoever under the terms of this Agreement until Consultant receives authorization to proceed from the Contract Administrator.

SECTION 3. FACILITIES AND EQUIPMENT. Except as set forth herein, Consultant shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the services required by this Agreement. City shall make available to Consultant only the facilities and equipment listed in this section, and only under the terms and conditions set forth herein.

City shall furnish physical facilities such as desks, filing cabinets, and conference space, as may be reasonably necessary for Consultant's use while consulting with City employees and reviewing records and the information in possession of the City. The location, quantity, and time of furnishing those facilities shall be in the sole discretion of City. In no event shall City be obligated to furnish any facility that may involve incurring any direct expense, including but not limited to computer, long-distance telephone or other communication charges, vehicles, and reproduction facilities.

SECTION 4. INSURANCE REQUIREMENTS. Before beginning any work under this Agreement, Consultant, at its own cost and expense, shall procure insurance against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work by the Consultant and its agents, representatives, employees, and subcontractors. Consultant shall provide proof satisfactory to City of such insurance that meets the requirements of this section and under forms of insurance satisfactory in all respects to the City. Consultant shall maintain the insurance policies required by this section throughout the term of this Agreement. The cost of such insurance shall be included in the Consultant's proposal. Consultant shall not allow any subcontractor to commence work on any subcontract until Consultant has obtained all insurance required herein for the subcontractor(s) and provided evidence thereof to City. Verification of the required insurance shall be submitted and made part of this Agreement prior to execution. Insurers shall have an AM Best rating of no less than A:VII unless otherwise accepted by the City in writing:

4.1 Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. The required insurance limits may be met if an umbrella insurance provision explicitly supplements both the CGL and general aggregate limits to reach the required threshold. If Consultant's services include work within 50 feet of a railroad right of way, the Consultant shall have removed any exclusion on their liability policy limiting coverage for work near a railroad, or shall provide a Railroad Protective Liability policy in favor of the City. Limits for such coverage shall be no less than \$5,000,000.

4.2 Automobile Liability Insurance. ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than **\$1,000,000** per accident for bodily injury and property damage.

4.3 Workers' Compensation Insurance. as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease.

4.4 Professional Liability (Errors and Omissions): Insurance appropriate to the Consultant's profession, with limit no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

4.5 Other Insurance Provisions. Unless otherwise specified below, all insurance policies are to contain, or be endorsed to contain, the following provisions:

4.5.1 Additional Insured Status. The City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations. Additional insured status under the CGL coverage can be provided in the form of an endorsement to the Consultant's insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used). This requirement shall only apply to the CGL and Automobile Liability Insurance policies specified above.

4.5.2 Primary Coverage. For any claims related to this contract, the Consultant's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it. This requirement shall only apply to the CGL and Automobile Liability Insurance policies specified above.

4.5.3 Notice of Cancellation. Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City.

4.5.4 Waiver of Subrogation. Consultant hereby grants to City a waiver of any right to subrogation which any insurer of said Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer. This requirement shall only apply to the CGL, Automobile Liability and Workers' Compensation/Employer's Liability Insurance policies specified above.

4.5.5 Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require the Consultant to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

4.5.6 Claims made policies. If any of the required policies provide claims-made coverage:

4.5.6.1 The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work.

4.5.6.2 Insurance must be maintained and evidence of insurance must be provided **for at least five (5) years after completion of the contract of work.**

4.5.6.3 If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Consultant must purchase “extended reporting” coverage for a minimum of five (5) years after completion of contract work.

4.6 Certificate of Insurance and Endorsements. Consultant shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant’s obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

4.7 Subcontractors. Consultant shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated in this Agreement, including but not limited to naming additional insureds.

4.8 Higher Limits. If the Consultant maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

4.9 Special Risks or Circumstances. City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage or other special circumstances.

4.10 Remedies. In addition to any other remedies City may have if Consultant fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, City may, at its sole option, exercise any of the following remedies, which are alternatives to other remedies City may have and are not the exclusive remedy for Consultant’s breach:

- Obtain such insurance and deduct and retain the amount of the premiums for such insurance from any sums due under the Agreement;
- Order Consultant to stop work under this Agreement or withhold any payment that becomes due to Consultant hereunder, or both stop work and withhold any payment, until Consultant demonstrates compliance with the requirements hereof; and/or,
- Terminate this Agreement.

SECTION 5. INDEMNIFICATION AND CONSULTANT’S RESPONSIBILITIES.

5.1 To the fullest extent permitted by law, Consultant shall defend (with counsel reasonably acceptable to City), indemnify and hold the City, its officials, officers, employees, volunteers, and agents 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 or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Consultant's services or this Agreement, including without limitation the payment of all damages, expert witness fees and attorney's fees and other related costs and expenses. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Consultant, the City, its officials, officers, employees, agents, or volunteers.

5.2 If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance of "design professional" services (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

5.3 Acceptance by City of insurance certificates and endorsements required under this Agreement does not relieve Consultant from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply.

5.4 By execution of this Agreement, Consultant acknowledges and agrees to the provisions of this Section and that it is a material element of consideration, and that these provisions survive the termination of this Agreement.

SECTION 6. STATUS OF CONSULTANT.

6.1 Independent Contractor. At all times during the term of this Agreement, Consultant shall be an independent contractor and shall not be an employee of City. City shall have the right to control Consultant only insofar as the results of Consultant's services rendered pursuant to this Agreement and assignment of personnel pursuant to Subparagraph 1.3; however, otherwise City shall not have the right to control the manner or means by which Consultant accomplishes services rendered pursuant to this Agreement. Notwithstanding any other City, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Consultant and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by City, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of City and entitlement to any contribution to be paid by City for employer contributions and/or employee contributions for PERS benefits.

6.2 Consultant Not Agent. Except as City may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind City to any obligation whatsoever.

SECTION 7. LEGAL REQUIREMENTS.

7.1 Governing Law. The laws of the State of California shall govern this Agreement.

7.2 Compliance with Applicable Laws. Consultant and any subcontractors shall comply with all laws applicable to the performance of the work hereunder.

7.3 Other Governmental Regulations. To the extent that this Agreement may be funded by fiscal assistance from another governmental entity, Consultant and any subcontractors shall comply with all applicable rules and regulations to which City is bound by the terms of such fiscal assistance program.

7.4 Licenses and Permits. Consultant represents and warrants to City that Consultant and its employees, agents, and any subcontractors have all licenses, permits, qualifications, and approvals of whatsoever nature that are legally required to practice their respective professions. Consultant represents and warrants to City that Consultant and its employees, agents, any subcontractors shall, at their sole cost and expense, keep in effect at all times during the term of this Agreement any licenses, permits, and approvals that are legally required to practice their respective professions. In addition to the foregoing, Consultant and any subcontractors shall obtain and maintain during the term of this Agreement valid Business Licenses from City.

7.5 Nondiscrimination and Equal Opportunity. Consultant shall not discriminate, on the basis of a person's race, religion, color, national origin, age, physical or mental handicap or disability, medical condition, marital status, sex, sexual orientation or any other legally protected status, against any employee, applicant for employment, subcontractor, bidder for a subcontract, or participant in, recipient of, or applicant for any services or programs provided by Consultant under this Agreement. Consultant shall comply with all applicable federal, state, and local laws, policies, rules, and requirements related to equal opportunity and nondiscrimination in employment, contracting, and the provision of any services that are the subject of this Agreement, including but not limited to the satisfaction of any positive obligations required of Consultant thereby.

Consultant shall include the provisions of this Subsection in any subcontract approved by the Contract Administrator or this Agreement.

7.6 California Labor Code Requirements. Consultant is aware of the requirements of California Labor Code Sections 1720 et seq. and 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects ("Prevailing Wage Laws"). If the services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It shall be mandatory upon the Consultant and all subconsultants to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code Sections 1771, 1774 and 1775), employment of apprentices (Labor Code Section 1777.5), certified payroll records (Labor Code Sections 1771.4 and 1776), hours of labor (Labor Code Sections 1813 and 1815) and debarment of contractors and subcontractors (Labor Code Section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

If the services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants performing such services must be

registered with the Department of Industrial Relations. Consultant shall maintain registration for the full term of this Agreement and require the same of any subconsultants, as applicable. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

This Agreement may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements. Any stop orders issued by the Department of Industrial Relations against Consultant or any subcontractor that affect Consultant's performance of services, including any delay, shall be Consultant's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Consultant caused delay and shall not be compensable by the City. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Consultant or any subcontractor.

SECTION 8. TERMINATION AND MODIFICATION.

8.1 Termination. City may cancel this Agreement at any time and without cause upon written notification to Consultant.

Consultant may cancel this Agreement upon thirty (30) days' written notice to City and shall include in such notice the reasons for cancellation.

In the event of termination, Consultant shall be entitled to compensation for services performed to the effective date of termination; City, however, may condition payment of such compensation upon Consultant delivering to City any or all documents, photographs, computer software, video and audio tapes, and other materials provided to Consultant or prepared by or for Consultant or the City in connection with this Agreement.

8.2 Extension. City may, in their sole and exclusive discretion, extend the end date of this Agreement beyond that provided for in Subsection 1.1. Any such extension shall require a written amendment to this Agreement, as provided for herein. Consultant understands and agrees that, if City grants such an extension, City shall have no obligation to provide Consultant with compensation beyond the maximum amount provided for in this Agreement. Similarly, unless authorized by the Contract Administrator, City shall have no obligation to reimburse Consultant for any otherwise reimbursable expenses incurred during the extension period.

8.3 Amendments. The parties may amend this Agreement only by a writing signed by all the parties.

8.4 Assignment and Subcontracting. City and Consultant recognize and agree that this Agreement contemplates personal performance by Consultant and is based upon a determination of Consultant's unique personal competence, experience, and specialized personal knowledge. Moreover, a substantial inducement to City for entering into this Agreement was and is the professional reputation and competence of Consultant. Consultant may not assign this Agreement or any interest therein without the prior written approval of the Contract Administrator. Consultant shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors noted in the proposal, without prior written approval of the Contract Administrator.

8.5 Survival. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between City and Consultant shall survive the termination of this Agreement.

8.6 Options upon Breach by Consultant. If Consultant materially breaches any of the terms of this Agreement, City' remedies shall include, but not be limited to, the following:

8.6.1 Immediately terminate the Agreement;

8.6.2 Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Consultant pursuant to this Agreement; and/or

8.6.3 Retain a different consultant to complete the work described in Exhibit A not finished by Consultant in which case the City may charge Consultant the difference between the cost to have a different consultant complete the work described in Exhibit A that is unfinished at the time of breach and the amount that City would have paid Consultant pursuant to Section 2 if Consultant had completed the work.

SECTION 9. KEEPING AND STATUS OF RECORDS.

9.1 Records Created as Part of Consultant's Performance. All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, drawings, records, files, or any other documents or materials, in electronic or any other form, that Consultant prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of the City. Consultant hereby agrees to deliver those documents to the City upon termination of the Agreement. It is understood and agreed that the documents and other materials, including but not limited to those described above, prepared pursuant to this Agreement are prepared specifically for the City and are not necessarily suitable for any future or other use.

9.2 Confidentiality. All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Consultant prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be kept confidential by Consultant. Such materials shall not, without the prior written permission of City, be used by Consultant for any purpose other than the performance of this Agreement nor shall such materials be disclosed publicly. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, shall be deemed confidential. Consultant shall not use the City's name or logo or photographs pertaining to the services under this Agreement in any publication without the prior written consent of the City.

9.3 Consultant's Books and Records. Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other records or documents evidencing or relating to charges for services or expenditures and disbursements charged to the City under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Consultant to this Agreement.

9.4 Inspection and Audit of Records. Any records or documents that Section 9.2 of this Agreement requires Consultant to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of the City. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds TEN

THOUSAND DOLLARS (\$10,000.00), the Agreement shall be subject to the examination and audit of the State Auditor, at the request of City or as part of any audit of City, for a period of three (3) years after final payment under the Agreement.

9.5 Intellectual Property. The City shall have and retain all right, title and interest, including copyright, patent, trade secret or other proprietary rights in all plans, specifications, studies, drawings, estimates, materials, data, computer programs or software and source code, enhancements, documents and any other works of authorship fixed in any tangible medium or expression, including but not limited to physical drawings or other data magnetically or otherwise recorded on computer media (“Intellectual Property”) prepared or developed by or on behalf of Consultant under this Agreement. Consultant further grants to City a non-exclusive and perpetual license to copy, use, modify or sub-license any and all Intellectual Property otherwise owned by Consultant which is the basis or foundation for any derivative, collective, insurrectional or supplemental work created under this Agreement.

SECTION 10. MISCELLANEOUS PROVISIONS.

10.1 Venue. In the event either party brings any action against the other under this Agreement, the parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Contra Costa or in the United States District Court for the Northern District of California.

10.2 Severability. If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

10.3 No Implied Waiver of Breach. The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.

10.4 Successors and Assigns. The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the parties.

10.5 Use of Recycled Products. Consultant shall prepare and submit all reports, written studies and other printed material on recycled paper to the extent it is available at equal or less cost than virgin paper.

10.6 Conflict of Interest. Consultant may serve other clients, but none whose activities within the corporate limits of City or whose business, regardless of location, would place Consultant in a “conflict of interest,” as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Consultant shall not employ any official of City in the work performed pursuant to this Agreement. No officer or employee of City shall have any financial interest in this Agreement that would violate California Government Code Section 1090 *et seq.*

Consultant hereby warrants that it is not now, nor has it been in the previous twelve (12) months, an employee, agent, appointee, or official of the City. If Consultant was an employee, agent, appointee, or official of City in the previous twelve months, Consultant warrants that it did not participate in any manner in the forming of this Agreement. Consultant understands that, if this Agreement is made in violation of Government Code §1090 *et seq.*, the entire Agreement is void and Consultant will not be entitled to any compensation for services performed pursuant to this

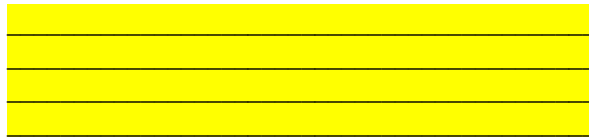
Agreement, including reimbursement of expenses, and Consultant will be required to reimburse the City for any sums paid to the Consultant. Consultant understands that, in addition to the foregoing, it may be subject to criminal prosecution for a violation of Government Code § 1090 and, if applicable, will be disqualified from holding public office in the State of California.

10.7 Inconsistent Terms. If the terms or provisions of this Agreement conflict with or are inconsistent with any term or provision of any attachment or Exhibit attached hereto, then the terms and provisions of this Agreement shall prevail.

10.8 Solicitation. Consultant agrees not to solicit business at any meeting, focus group, or interview related to this Agreement, either orally or through any written materials.

10.9 Contract Administration. This Agreement shall be administered by Scott Buenting ("Contract Administrator"). All correspondence shall be directed to or through the Contract Administrator or his or her designee.

10.10 Notices. Any written notice to Consultant shall be sent to:



Any written notice to City shall be sent to:

Capital Improvements Division
City of Antioch
P. O. Box 5007
Antioch, CA 94531-5007

City of Antioch
P. O. Box 5007
Antioch, CA 94531-5007
Attn: City Attorney

10.11 Integration. This Agreement, including the scope of work attached hereto and incorporated herein as Exhibit A, and all other attachments, represents the entire and integrated agreement between City and Consultant and supersedes all prior negotiations, representations, or agreements, either written or oral.

CITY:

CITY OF ANTIOCH

Bessie Marie Scott
City Manager

Attest:

Melissa Rhodes
City Clerk

Approved as to Form:

Thomas Lloyd Smith
City Attorney

CONSULTANT:

[NAME OF CONSULTANT]

By: _____

Name: _____

Title: _____

By: _____

Name: _____

Title: _____

[Two signatures are required for a corporation or one signature with the corporate bylaws indicating that one person can sign on behalf of the corporation]

ATTACHMENT “B”

Evaluation Criteria

WRITTEN PROPOSAL	MAXIMUM POINTS	REVIEWER SCORE
Introductory Letter - Qualification and experience of the firm, reflects understanding of scope, ability to provide timely services, willingness to sign contract without changes, and responsiveness.	20	
Project Manager - Qualifications and experience of the project manager on overseeing similar projects. Experience with city, state, and federal projects, and procedures and standards.	15	
Project Team - Qualifications and experience of the project team on similar projects.	10	
Quality of Work Plan - Understanding of steps necessary to move the project forward.	15	
SUBTOTAL FOR SHORTLISTING	60	
References	10	
SUBTOTAL WITH REFERENCES	70	
INTERVIEW		
Presentation by Project Manager - Understanding of scope, critical issues, innovation, and solutions.	10	
Presentation by supporting staff - Experience, roles and responsibilities, communication and coordination between consultant staff, agencies, and City.	10	
Q&A - Response to panel's questions.	10	
SUBTOTAL WITH INTERVIEWS	30	
TOTAL	100	
RANKING OF CONSULTANT FIRM (assigned after completion of scoring)		

Panel Member Name: _____

Consultant Firm: _____

ATTACHMENT C

**APPLICATION FORM FOR LOCAL
HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)**Application ID 04-Antioch-2

LAPG 9-A (REV 04/2022)

Page 1 of 5

APPLICATION SUMMARY

This summary page is filled out automatically once the application is completed.

After the application is finalized, please save this PDF form using the exact "Application ID" (shown below) as the file name.

Application ID

Important: Review and follow the [Application Form Instructions](#) step-by-step as you complete the application. Completing an application without referencing the instructions will likely result in an incomplete application or an application with fatal flaws that will be disqualified from the ranking and selection process.

Submitted By (Agency)

Antioch

Application Category

Benefit Cost Ratio (BCR)

Caltrans District

04

Application Number

2

Out of

3

Project Location

Delta de Anza Trail Xing at James Donlan Boulevard; Delta de Anza Trail Xing at Lone Tree Way; and Canada Valley Trail Xing at Hillcrest Avenue

Project Description

Install Hawk Signals at Trail Crossings to enhance Pedestrian and Bicycle Safety.

Total Project Cost

\$920,000

HSIP Funds Requested

\$828,000

Benefit Cost Ratio (BCR)

20.6

**APPLICATION FORM FOR LOCAL
HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)**Application ID 04-Antioch-2

LAPG 9-A (REV 04/2022)

Page 2 of 5

Basic InformationDate: Caltrans District: MPO: Agency: County: Total number of applications being submitted by your agency: Application Number (each application must have a unique number): Check if this application is one of the multiple ones for the same project (please review the form instructions for explanation).**Contact Person Information**Name (Last, First): Position/Title of Contact Person: Email: Telephone: Extension: Address: City: Zip Code:

(Enter only a 5-digit number)

Application Category: **Project Information**

Project Title:

-Be Brief (Limited to 100 Characters)

Project Location:

-Be Brief (Limited to 250 Characters)

-See [Application Form Instructions](#)

Project Description:

-Be Brief (Limited to 250 Characters)

-See [Application Form Instructions](#)**Total Project Cost**

\$920,000

HSIP Funds Requested

\$828,000

Benefit Cost Ratio (BCR)

(Required for a BCR application. Skip for Funding Set-Aside application)

20.6

**APPLICATION FORM FOR LOCAL
HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)**Application ID 04-Antioch-2

LAPG 9-A (REV 04/2022)

Page 3 of 5

1. Project Identification

Describe how the agency identified the project as one of its top safety priorities. Was a data-driven safety evaluation of their entire roadway network completed? Do the proposed project locations represent some of the agency's highest fatal and injury crash concentrations and types of crashes?

(Limited to 5,000 characters)

City of Antioch completed a comprehensive Local Roadway Safety Plan (LRSP) that will implement countermeasures based on a Safe Systems Approach framework, consistent with Countywide Vision Zero adopted in September 2021. During the preparation of the LRSP, stakeholders were identified and engaged throughout the project. In addition, Community Outreach was conducted as part of the project. Community input was solicited by a project website with an interactive map tool platform. City of Antioch located in Contra Costa County covering a total area of just under 30 square miles. The City's estimated population is 111,506 (ACS 2019 1- Year Estimate). The most of the community input was related to speeding, intersection safety and pedestrian safety.

Based on the collision analysis conducted for the LRSP project included a five-year period from 2014 to 2018 from the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS) and the University of California at Berkeley SafeTREC's Transportation Injury Mapping Service (TIMS). Based on the analysis for collisions of all severity, including PDO collisions, 85% collisions occurred at intersections within the City of Antioch. The most common collision types occurring at intersections were broadside and rear-end collisions. The most common primary collision factor for collisions occurring at intersections was unsafe speed and improper turning. About 47 percent of rear-end collisions have occurred due to unsafe speed.

There were a total of 2,920 collisions reported City-wide from 2014 to 2018. Out of these 2,920 collisions, 1,667 collisions (57%) were PDO collisions, 815 collisions (28%) led to complaint of pain, and 291 collisions (10%) led to a visible injury. There were 147 KSI collisions (5% of total) out of which, 122 collisions (4%) led to a severe injury and 25 collisions (1%) led to a fatality. Pedestrian violation was one of the major collision factors observed for KSI collisions. About 22% of KSI collisions have been vehicle-pedestrian collisions.

Delta DeAnza Trail is a paved, multi-use hiking, bicycling and equestrian trail currently spans over 15 miles under existing conditions. This trail is an alternative transportation corridor connecting communities in central and eastern Contra Costa County. It provides access to regional and community parks, many schools and Los Medanos Community College. It connects the cities of Concord, Bay Point, Pittsburg, Antioch and Oakley and provides access to Contra Loma Regional Park (and Black Diamond Mines Regional Preserve) through Antioch Community Park. Between the period of 2016 and 2020, collision resulting into fatality and severe injury have occurred at Delta DeAnza Trail Xing and James Donlan Boulevard.

Canada Valley Trail located in the eastern part of City of Antioch provides connectivity to the regional Delta De Anza and Mokelumne Trail. Between the period of 2016 and 2020, collision resulting into severe injury have occurred at Canada Valley Trail Xing and Hillcrest Avenue.

Installation of Pedestrian Hybrid Beacon at the trail crossings has a potential to greatly enhance pedestrian safety at locations that are noted as being problematic.

2. Prior Attempts to Address the Safety Issues

List all other projects/countermeasures that have been (or are being) deployed at the location(s) within the last 5 years. Applicants must identify all federal and/or state funds that have been used or approved within the proposed project limits within the last 5 years. Normally HSIP funding cannot be used to construct safety countermeasures at the same locations within 5 years.

(Limited to 5,000 characters)

City of Antioch have not received any federal and/or state funds for safety improvements at the project locations within the last 5 years.

APPLICATION FORM FOR LOCAL

Application ID 04-Antioch-2

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

LAPG 9-A (REV 04/2022)

Page 4 of 5

3. Other Comments

Explain here if this project has any special circumstances or if you have other comments. Enter "NA" if none.
(Limited to 5,000 characters)

Not Applicable

**APPLICATION FORM FOR LOCAL
HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)**Application ID 04-Antioch-2

LAPG 9-A (REV 04/2022)

Page 5 of 5

Application Attachments (See [Application Form Instructions](#))Please attach all files as needed. **Note: files may not be attachable if file is open. Close before attach.**

1. Local Roadway Safety Plan (LRSP) Certification (Required for all projects) 1 LRSP Cert.pdf
2. Engineer's Checklist (Required for all projects) 2 checklist app 2.pdf
3. Vicinity map/Location map (Required for all projects) City_of_Antioch_HSIP_Application_2_Vicinity_Map.jpg
4. Project maps/plans showing existing and proposed conditions (Required for all projects) Delta De Anza Trail HAWK crossing HSIP 2 App.pdf
5. Pictures of Existing Condition (Required for all projects) Existing Conditions Pictures for City of Antioch HSIP No. 2.pdf
6. HSIP Analyzer (Required for all projects) Antioch Analyzer HSIP App No. 2.pdf
7. Collision diagram(s) (Required for a BCR application) Collision Diagram for City of Antioch HSIP No. 2.pdf
8. Collision List(s) (Required for a BCR application) COLLISION LIST (version 1).pdf

Warrant Studies

- Check if the project includes new installation of certain traffic control devices (e.g., traffic signals, pedestrian signals, etc.). If yes, Traffic Signal Warrant 4, 5 and/or 7 must be met (CA MUTCD Chapter 4C).

9. Warrant Studies (Required for this project) HAWK Warrant for App 2.pdf

Work on the State Highway System

Does the project include improvements on the State Highway System?

- Yes, and the project will be jointly-funded with Caltrans
(Must be jointly-funded if the project is for intersection safety improvement involving SHS).
A formal Letter of Support from Caltrans District Traffic is required. The letter should include estimates of cost sharing.
- Yes, but the project will not be jointly-funded with Caltrans.
A written correspondence from Caltrans District Traffic is required. The correspondence should indicate that Caltrans does not see issues that would prevent the proposed project from receiving an encroachment permit.
- No.

10. Letter/email of Support from Caltrans (No SHS involved - not required for this project)
11. Additional narration, documentation, letters of support, etc. (Optional)



Local Roadway Safety Plan (LRSP) Certification

Date: September 8, 2022
To: Caltrans Local Assistance
From: City of Antioch
Subject: Local Road Safety Plan (LRSP) Certification

In order to apply for the local Highway Safety Improvement Program (HSIP) funds, an agency must have completed their Local Roadway Safety Plan (LRSP) or an equivalent of the LRSP, such as Systemic Safety Analysis Report (SSAR) or Vision Zero Action Plan. The LRSP or its equivalent must be updated and validated at least every five years. It is strongly recommended that the LRSP (or its equivalent) and its update be approved by the agency's Board or Council.

The City of Antioch certifies that it has completed an LRSP (or its equivalent). The LRSP (or its equivalent) is data driven and facilitates a comprehensive approach to addressing road safety.

You may direct any questions regarding the LRSP to Lori Medeiros at (925) 779-2123 or LMedeiros@antiochca.gov.

Signature:  Title: 



HSIP Cycle 11 Application – Engineer’s Checklist (For BCR Applications)

This application checklist is to be used by the engineer in “responsible charge” of the preparation of this HSIP application, based on the final application and application attachments as submitted to Caltrans. The engineer’s initials and stamp should not be placed until the application has been finalized.

The purpose of this checklist is to ensure all of the primary elements of the application are included and the application is free of errors, allowing the application to be accurately ranked in the statewide selection process. Applications with errors in the supporting data will not be considered in the project selection process.

Special Considerations for Engineers before signing and stamping this document attesting to the accuracy of the application:

Chapter 7; Article 3; Section 6735 of the Professional Engineer’s Act of the State of California requires engineering calculations or reports be either prepared by or under the responsible charge of a licensed civil engineer. Since the corresponding HSIP application defines the scope of work of a future civil construction project and requires complex engineering principles and calculations which are based on the best data available at the time of the application, the application must be signed and stamped by a licensed civil engineer. By signing and stamping this document, the engineer is attesting to this application’s technical information and engineering data upon which local agency’s recommendations, conclusions, and decisions are made. This action is governed by the Professional Engineer’s Act and the corresponding Code of Professional Conduct, under Sections 6775 and 6735.

1. Vicinity map /Location map

Engineer’s Initials: SIB

- a. The project limits must be clearly depicted in relation to the overall agency boundary

2. Project layout-plan showing existing and proposed conditions must:

Engineer’s Initials: SIB

- a. Be to a scale which allows the visual verification of the overall project limits and the construction limits of each safety countermeasure (CM) included in the application’s benefit calculation
- b. Show the full scope of the proposed project, including any non-safety construction items
- c. Show the “Influence Area” for each safety CM included in the application’s benefit calculation
- d. Show all changes to existing lanes and shoulder widths. Label the proposed widths
- e. Show limits of all roadway excavation/demolition
- f. Show agency’s right of way (ROW) lines. (Also show ROW of the State, Railroad, and all other government agencies if applicable)

3. Project cross-section showing existing and proposed conditions.

(Only required for projects with roadway excavation, cut/fill slopes, and changes to lane widths)



Check if not applicable (no initials required when not applicable)

Engineer’s Initials: _____

- a. Show dimension, changes, ROW lines, safety CMs, etc.

4. Countermeasure Selection:

Engineer's Initials: SB

- a. The CMs used are appropriate and reasonable based on the application instructions and the Local Roadway Safety Manual.

5. Crash Data used in the Benefit Cost Ratio (BCR) calculations:

Engineer's Initials: SB

- a. Must be from a reliable and well documented source
- b. Must be within influence area of CMs and must be applied to CMs using generally accepted traffic engineering principles
(Example: If the CM only addresses the northbound lanes of a divided roadway, then southbound crashes should be excluded.)
- c. Must be accurately shown in collision diagrams and collision lists attached to this application
- d. Must be presented in terms of the number of crashes (not the number of injuries and fatalities)
- e. Should be based on the most recent data available and must have a minimum 3 years and maximum 5 years of data (Note: COVID pandemic may have impacted traffic volumes and crash patterns at the project sites. Applicants are allowed to use crash data prior to COVID pandemic if desired)

6. Collision Diagrams (Shown separately by CM or combined)

Engineer's Initials: SB

- a. Should be to scale with crash locations accurately plotted
- b. Reveal collision patterns necessary to justify CMs
- c. The influence area for each CM is shown separately on the diagrams (unless the areas are identical)
- d. All crashes included in the BCR Calculation must be clearly shown within the influence area of that CM
- e. Totals for each Location and/or CM are shown with crashes segregated based on Crash Severity
- f. The totals shown match the data in the Collision Lists and the crash data tables in the HSIP Analyzer

7. Collision Lists (Shown separately by CM or combined)

Engineer's Initials: SB

- a. Totals for each Location and/or CM are shown with crashes segregated based on Crash Severity
- b. If the Lists includes crashes that were not appropriate to include in the BCR calculations, these crashes must be crossed through or removed and not included in the totals
- c. The totals shown match the data in the Collision Diagrams and the crash data tables in the HSIP Analyzer
- d. Each crash is only counted as one, even if there were multiple victims and/or vehicles involved

8. Detailed Engineer's Estimate and Project Cost Estimate (HSIP Analyzer – Sections IV & V)

Engineer's Initials: SB

- a. All likely construction costs associated with the project are identified and included in Section IV (Construction Cost Estimate and Cost Breakdown)
- b. Each of the main project elements are broken out into separate construction items. The costs for the construction items are based on calculated quantities and appropriate corresponding unit costs
- c. For each non-general construction item, the "Countermeasure(s)", "Other Safety" and "Non-safety" components must be properly identified and accounted for
- d. The Total Construction Cost in Section IV must match the "Construction Items – Total Cost" in Section V (Project Cost Estimate) (automatic in the HSIP Analyzer)
- e. The project costs of all phases must be properly accounted for in Section V

9. Benefit Calculation (HSIP Analyzer – Sections III)

Engineer's Initials: SB

- a. The CMs applied are selected properly based on the proposed work for safety improvements;
- b. The crash data time period should be a minimum of 3 years and a maximum of 5 years and the most recent available crash data should be used (Note: COVID pandemic may have impacted traffic volumes and crash patterns at the project sites. Applicants are allowed to use crash data prior to COVID pandemic if desired).
- c. The data in the crash data tables for each location must include only the crashes for the specified crash types and must match those in the Collision Diagrams and the Collision Lists.
- d. The totals for each Location match the totals shown in the Collision Diagrams and Collision Lists
- e. The data transferred to the application form must match the data in the HSIP Analyzer

10. Warrant studies/guidance (Check if not applicable)

 Check if not applicable (no initials required when not applicable)Engineer's Initials: ed

- a. For new signals, Warrant 4, 5 or 7 must be documented as having been met based on the CA MUTCD. For pedestrian signals (including Pedestrian Hybrid Beacon (HAWK)), the justification may be Warrant 4, 5 and/or 7, or passing the test in Figure 4F-1/4F-2 in Chapter 4F of CA MUTCD.

11. Additional narration, documentation, letters of support:

Engineer's Initials: SB

- a. The answers to the "Narrative Questions" in the application form and the HSIP Analyzer are consistent with and support the engineering logic and the calculations in the development of the application's BCR
- b. When needed, clarify non-standard application of countermeasures, crashes and/or costs; appropriate documentation is attached to the application to document the engineering decisions and calculations.

Signature and Stamp Page

Licensed Engineer:

Engineer's Stamp:

Name: Scott Buenting
 Title: Project Manager
 Engineer License Number: C 67422
 Signature: [Handwritten Signature]
 Date: 9/8/22
 Email: sbuenting@antiahca.gov
 Phone: 925-779-7050



To ensure the application's quality and the agency's commitment to deliver the safety project in an expedited manner, the application must be signed by the Agency's Transportation/Traffic Engineering Manager.

By signing this application, the manager is attesting to:

1. All data in the application is accurate and represents the total scope of the planned project;
2. The agency understands the Project Delivery Requirements for the HSIP Program and is prepared to deliver the project per these requirements; and
3. The agency understands if Caltrans staff determine that any of the above requirements are not met, or data is inaccurate, or the application fails to meet the program guidelines and application instructions, the application will be rejected and will not be eligible to receive HSIP funding. Due to time constraints in the evaluation process, applicants will not be notified until after the selection process is complete. Refer to the Application Instructions for more information.

Transportation Manager:

Name: CHARMINE SOLLA, PE, TE, PTOE
 Title: CONSULTANT TRAFFIC ENGINEER
 Signature: Charmine Solla
 Date: 9.8.22

HSIP ANALYZER (for BCR Applications)

Benefit Cost Ratio (BCR) Calculation for Highway Safety Improvement Program (HSIP) Application

Important: Review and follow the step-by-step instructions in the HSIP Analyzer Manual. Completing the HSIP Analyzer without referencing to the manual may result in an application with fatal flaws that will be disqualified from the ranking and selection process.

This is a dynamic form (i.e. later steps vary depending on the data entered in earlier steps). If any error messages appear, please fix the errors prior to proceeding to the next steps.

Save this file using "HA" + Application ID as the file name (e.g. "HA03-Sacramento-01.pdf"). Attach the completed HSIP Analyzer to the last page of the HSIP Application Form.

Section I: General Information

Application ID, Project Location and Project Description (copy from the HSIP Application Form):

Application ID:

04-Antioch-2

Project Location:
(limited to 250 characters)

Delta de Anza Trail Xing at James Donlan Boulevard; Delta de Anza Trail Xing at Lone Tree Way; and Canada Valley Trail Xing at Hillcrest Avenue

Project Description:
(limited to 250 characters)

Install Hawk Signals at Trail Crossings to enhance Pedestrian and Bicycle Safety.

Number of Signalized Intersections:

Number of Non-signalized Intersections:

3

Miles of Roadways*:

*Do not include the length of the intersections that have been accounted for in the number of intersections above.

Section II: Project Schedule

The local agency is expected to deliver the project per [the HSIP Program Delivery requirements](#). Assuming the HSIP Cycle 11 projects selected for funding will be programmed by January 1, 2023, please enter your best estimated dates for the following implementation milestones. Leave blank if not applicable.

Will this project use HSIP funds for Preliminary Engineering (PE) Phase?

Will an external consultant be hired to do the PE work?

Delivery Milestones to be met: PE Authorization by 9/30/2023; CON Authorization by 6/30/2026.

PE Authorization Date:

Environmental Clearance Date:

Right of Way Clearance Date:

Final PS&E Date:

CON Authorization Date:

Construction Contract Award Date:

Construction Completion Date:

Project Close-Out Date:

Section III. Safety Countermeasures, Crash Data and Project Benefit Calculation

The benefit of an HSIP safety project is achieved by reducing potential future crashes due to the application of the safety countermeasures (CMs). In this section, you will need to provide information regarding the historical crash data at the project sites.

Different CMs will reduce crashes of different types during the life of the safety improvements. Depending on the selected CMs for the application, you will be required to fill in one or more crash data tables, for any combination of the five crash types (datasets): "All", "Night", "Ped & Bike", "Emergency Vehicle", and "Animal" (Each of the later four datasets is a sub-dataset of the "All" dataset.)

Note: If a Roundabout CM (S16 or NS04 or NS05) is selected, additional information (such as roundabout configuration and ADT) is required.

For more information regarding crash data, please refer to the Manual for HSIP Analyzer and the Local Roadway Safety Manual.

1. Please indicate the sources of the crash data. Typical sources include Statewide Integrated Traffic Records System (SWITRS), UC Berkeley SafeTREC TIMS, your locally preferred mapping software (such as Crossroads) or any other data sources.

UC Berkeley SafeTREC TIMS

2. Please explain how "incremental approach" has been pursued if CM R15, R16, R17 or R18 is proposed. Please skip this question if none of these CMs are being proposed.

Countermeasure R15 (Widen shoulder), R16 (Curve shoulder widening (outside only)), R17 (Improve horizontal alignment (flatten curves)) and R18 (Flatten crest vertical curve) are not eligible unless they are done as the last step of an "incremental approach".

Applicants need to document they have already installed lower cost and lower impact CMs but the crash rate is unacceptably high. What safety improvements have been pursued and installed at the project sites within the last ten years?

Not Applicable

Step 1: Select safety countermeasuresDoes this application include Signalized Intersections (SI)? Does this application include Non-signalized Intersections (NS)? Does this application include Roadway Segments (R)?

* Normally a BCR application only includes locations of one of the above 3 categories (SI, NS or R). Multiple categories may be selected if the application proposes corridor safety improvements or uses a systemic approach, or the applicant chooses to bundle multiple locations in the same vicinity together.

Non-signalized Intersections (NS):

Click the check box in the 1st column to select up to 3 countermeasures.

Hide unselected countermeasures

View all countermeasures

Select	No.	Countermeasure Name
	1	NS01: Add intersection lighting (NS.I.) (CRF=0.4 for Night crashes; Life=20 yrs; FE=90%)
	2	NS02: Convert to all-way STOP control (from 2-way or Yield control) (CRF=0.5 for All crashes; Life=10 yrs; FE=90%)
	3	NS03: Install signals (CRF=0.3 for All crashes; Life=20 yrs; FE=90%)
	4	NS04: Convert intersection to roundabout (from all way stop) (CRF varies for All crashes; Life=20 yrs; FE=90%)
	5	NS05: Convert intersection to roundabout (from stop or yield control on minor road) (CRF varies for All crashes; Life=20 yrs; FE=90%)
	6	NS05mr: Convert intersection to mini-roundabout (CRF=0.3 for All crashes; Life=20 yrs; FE=90%)
	7	NS06: Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs (CRF=0.15 for All crashes; Life=10 yrs; FE=90%)
	8	NS07: Upgrade intersection pavement markings (NS.I.) (CRF=0.25 for All crashes; Life=10 yrs; FE=90%)
	9	NS08: Install Flashing Beacons at Stop-Controlled Intersections (CRF=0.15 for All crashes; Life=10 yrs; FE=90%)
	10	NS09: Install flashing beacons as advance warning (NS.I.) (CRF=0.3 for All crashes; Life=10 yrs; FE=90%)
	11	NS10: Install transverse rumble strips on approaches (CRF=0.2 for All crashes; Life=10 yrs; FE=90%)
	12	NS11: Improve sight distance to intersection (Clear Sight Triangles) (CRF=0.2 for All crashes; Life=10 yrs; FE=90%)
	13	NS12: Improve pavement friction (High Friction Surface Treatments) (CRF=0.55 for All crashes; Life=10 yrs; FE=90%)
	14	NS13: Install splitter-islands on the minor road approaches (CRF=0.4 for All crashes; Life=20 yrs; FE=90%)
	15	NS14: Install raised median on approaches (NS.I.) (CRF=0.25 for All crashes; Life=20 yrs; FE=90%)
	16	NS15: Create directional median openings to allow (and restrict) left-turns and u-turns (NS.I.) (CRF=0.5 for All crashes; Life=20 yrs; FE=90%)
	17	NS16: Reduced Left-Turn Conflict Intersections (NS.I.) (CRF=0.5 for All crashes; Life=20 yrs; FE=90%)
	18	NS17: Install right-turn lane (NS.I.) (CRF=0.2 for All crashes; Life=20 yrs; FE=90%)
	19	NS18: Install left-turn lane (where no left-turn lane exists) (CRF=0.35 for All crashes; Life=20 yrs; FE=90%)
	20	NS19PB: Install raised medians / refuge islands (NS.I.) (CRF=0.45 for Ped & Bike crashes; Life=20 yrs; FE=90%)
	21	NS20PB: Install pedestrian crossing at uncontrolled locations (new signs and markings only) (CRF=0.25 for Ped & Bike crashes; Life=10 yrs; FE=90%)
	22	NS21PB: Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features) (CRF=0.35 for Ped & Bike crashes; Life=20 yrs; FE=90%)
	23	NS22PB: Install Rectangular Rapid Flashing Beacon (RRFB) (CRF=0.35 for Ped & Bike crashes; Life=20 yrs; FE=90%)
✓	24	NS23PB: Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK)) (CRF=0.55 for Ped & Bike crashes; Life=20 yrs; FE=90%)

Step 2: Click to generate table for project locations, enter the project locations and select countermeasures for each location. If any of the selections have been changed, you must re-click the below button to refresh.

[Click to Generate Table for Project Locations Entry](#)

CMs have been selected. Ok to proceed.

+/- Line	Location No.	Location Description (Intersection Name or Road Limit or General Description)	Click to select Countermeasures	Error Messages (must resolve)
(Non-signalized Intersections)				
3			NS23PB	
	<input type="checkbox"/> + <input type="checkbox"/> -	NSI_1	Delta de Anza Trail Xing at James Donlan Boulevard	
	<input type="checkbox"/> + <input type="checkbox"/> -	NSI_2	Delta de Anza Trail Xing at Lone Tree Way	
<input type="checkbox"/> + <input type="checkbox"/> -	NSI_3	Canada Valley Trail Xing at Hillcrest Avenue		

Step 3: Click to generate tables for crash data and provide crash data. If any changes have been made in the previous two steps, you must re-click to refresh.

[Click to Generate Tables for Crash Data Entry](#)

No crash tables have been created since there are unresolved error messages in the last column of the location table. Please correct first.

Crash Data Period: must be between 3 and 5 years.

from (MM/DD/YYYY): To (MM/DD/YYYY): Crash Data Period (years) = 5

Fill out the crash data table(s) for the crash type(s) as required by the selected countermeasure(s) in Step 2.

Based on the countermeasures selected in Step 2, the crash data types to be provided are:

Crash Data Table for Crash Type: Pedestrians and Bicyclists Involved (P&B)

No.	Location No : Description (from Step 2)	Fatal (P&B)	Severe Injury (P&B)	Other Visible Injury (P&B)	Complaint of Pain (P&B)	PDO (P&B)	Total	ID
1	NSI_1: Delta de Anza Trail Xing at James Donlan Boulevard	1	1	0	1	0	3	
2	NSI_2: Delta de Anza Trail Xing at Lone Tree Way	0	0	0	0	0	0	
3	NSI_3: Canada Valley Trail Xing at Hillcrest Avenue	0	1	0	0	0	1	
	Total	1	2	0	1	0	4	

Step 4: Click to Calculate the project benefit. If any changes have been made in the previous two steps, you must re-click to refresh.

[Click to Perform Benefit Calculation](#)

Benefit Summary:

Benefit by Locations

Location No : Description	[CM1] Benefit	[CM2] Benefit	[CM3] Benefit	Total Benefit
NSI_1: Delta de Anza Trail Xing at James Donlan Boulevard	\$12,702,220	\$0	\$0	\$12,702,220
NSI_2: Delta de Anza Trail Xing at Lone Tree Way	\$0	\$0	\$0	\$0
NSI_3: Canada Valley Trail Xing at Hillcrest Avenue	\$6,251,175	\$0	\$0	\$6,251,175
Sum	\$18,953,395	\$0	\$0	\$18,953,395

Benefit by Countermeasures

No.	Countermeasure	Benefit
1	NS23PB: Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))	\$18,953,395
2	NA	\$0
3	NA	\$0
4	NA	\$0
5	NA	\$0
6	NA	\$0
7	NA	\$0
8	NA	\$0
9	NA	\$0
	TOTAL	\$18,953,395

Section IV. Construction Cost Estimate and Cost Breakdown

The purpose of this section is to:

- Provide a detailed engineer's estimate for construction items. The costs for other phases i.e. Preliminary Engineering (PE), Right of Way (ROW), and Construction Engineering (CE) will be accounted for in the next section.
- Determine the project's maximum Funding Reimbursement Ratio (FRR).

IV.1 Detailed Engineer's Estimate for Construction Items:

Cost breakdown:

For each item, enter cost percentages for this project's safety countermeasures (CMs) and "Other Safety (OS)" respectively (e.g. enter 10 for 10%). The percentage for "Non-safety (NS)" is then calculated. If an item is a general one (such as traffic control, mobilization, etc.), check the "General item" box and the cost breakdown is not needed. A general item will NOT be used in determining the project's overall percentages of countermeasures, other safety and non-safety costs.

	No.	Item Description	Unit	Quantity	Unit Cost	Total	General Item? (Click center to check)	% for CMs	% for OS	% for NS
+ -	1	Hawk Signal	EA	3	250,000	750,000		100 %	0 %	0 %
		Weighted Average (%)						100%		
		Total (\$)				\$750,000				

Contingencies, as % of the above "Total" of the construction items:

(e.g. enter 10 for 10%)

Total Construction Cost (Con Items & Contingencies):

(Rounded up to the nearest hundreds)

IV.2 Funding Reimbursement Ratio

Project's Maximum Funding Reimbursement Ratio = 90.0%

The project's Maximum Funding Reimbursement Ratio is calculated from the least of the FEs of the project's countermeasures and reduced if the non-safety cost percentage is in excess of 10%. See the HSIP Analyzer Manual for details. This is the maximum value allowed to be entered in "HSIP/Total(%)" column in Section II (Project Cost Estimate).

Section V. Project Cost Estimate

All project costs, for all phases and by all funding sources, must be accounted for on this form.

- i. "**Total Cost**": Round all costs up to the nearest hundred dollars.
- ii. "**HSIP/Total (%)**": The maximum allowed is the project's Funding Reimbursement Ratio (FRR) as determined in Section I. Click the button to assign the maximum to all, OR enter if not the maximum.
- iii. "**HSIP Funds**" and "**Local/Other Funds**" are calculated.

Pay attention to the interactive warning/error messages below the table. The messages, if any, must be fixed, or exceptions should be justified in narrative question No. 3 in the HSIP Application Form.

Project's maximum Funding Reimbursement Ratio (FRR)
(from Section I, rounded up to integer)

90 %

To set all "HSIP/Total (%)" in the below table
to the above maximum FRR, click "Set":

Set

Description	Total Cost	HSIP/Total (%)	HSIP Funds	Local/Other Funds
Preliminary Engineering (PE) Phase				
Environmental	\$10,000	90 %	\$9,000	\$1,000
PS&E	\$60,000	90 %	\$54,000	\$6,000
Subtotal - PE	\$70,000	90 %	\$63,000	\$7,000
Right of Way (ROW) Phase				
Right of Way Engineering	\$0	90 %	\$0	\$0
Appraisals, Acquisitions & Utilities	\$0	90 %	\$0	\$0
Subtotal - Right of Way (ROW)	\$0	%	\$0	\$0
Construction (CON) Phase				
Construction Engineering (CE)	\$25,000	90 %	\$22,500	\$2,500
Construction Items	\$825,000 <small>(Read only - from Section I)</small>	90 %	\$742,500	\$82,500
Subtotal - Construction	\$850,000	90 %	\$765,000	\$85,000
PROJECT TOTAL	\$920,000	90 %	\$828,000	\$92,000

Agency does NOT request HSIP funds for PE Phase (automatically checked if PE - HSIP funds is \$0).

Interactive Warning/Error Messages:

If there are any messages in the below box, please fix OR explain justification for exceptions in narrative question No 3 in the HSIP application form.

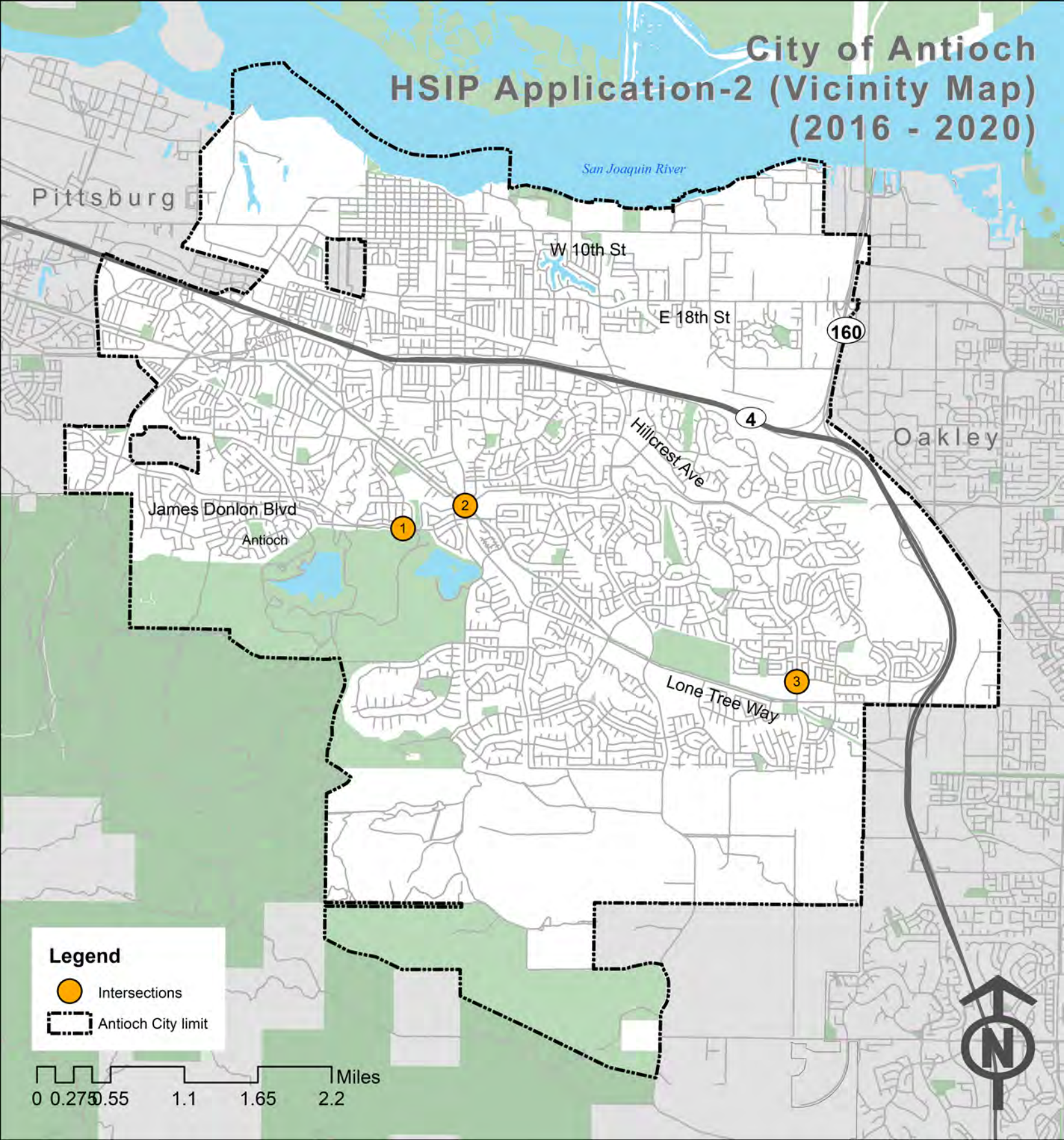
Section VI. Summary

Transfer the "Total Project Cost" , "HSIP Funds Requested" and the BCR to Page 2 of the HSIP Application Form.

Cost, FRR, Benefit and BCR:

Total Project Cost	HSIP Funds Requested	Max. FRR
\$920,000	\$828,000	90%
Total Expected Benefit	Benefit Cost Ratio (BCR)	
18,953,395	20.60	

City of Antioch HSIP Application-2 (Vicinity Map) (2016 - 2020)



Legend

- Intersections
- ▭ Antioch City limit

