



**City Council
Regular Meeting
AGENDA**

(to be held both at the physical and virtual locations below)

Civic Center Council Chamber ♦ 300 Seminary Avenue ♦ Ukiah, CA 95482

To participate or view the virtual meeting, go to the following link: <https://us06web.zoom.us/j/87395356652>

Or you can call in using your telephone only:

- Call (toll free) 1-888-788-0099
- Enter the Access Code: 873 9535 6652
- To Raise Hand enter *9
- To Speak after being recognized: enter *6 to unmute yourself

Alternatively, you may view the meeting (without participating) by clicking on the name of the meeting at www.cityofukiah.com/meetings.

September 18, 2024 - 5:15 PM

-
1. **ROLL CALL**
 2. **PLEDGE OF ALLEGIANCE**
 3. **AB 2449 NOTIFICATIONS AND CONSIDERATIONS**
 4. **PROCLAMATIONS/INTRODUCTIONS/PRESENTATIONS**
 - 4.a. Receive Presentation of Exceptional Employee Recognition Awards.
Recommended Action: Receive a presentation of the Exceptional Employee Recognition Awards.
Attachments: None
 - 4.b. Swearing in New Ukiah Police Officer Michael Jensen.
Recommended Action: Police Chief, Cedric Crook, will swear in the new Ukiah Police Officer, Michael Jensen.
Attachments: None
 5. **PETITIONS AND COMMUNICATIONS**
 6. **APPROVAL OF MINUTES**
 - 6.a. Approval of the Minutes for the September 4, 2024, Regular Meeting.
Recommended Action: Approve the Minutes for the September 4, 2024, Regular Meeting.

Attachments:

1. 2024-09-04 Draft Minutes

7. **RIGHT TO APPEAL DECISION**

Persons who are dissatisfied with a decision of the City Council may have the right to a review of that decision by a court. The City has adopted Section 1094.6 of the California Code of Civil Procedure, which generally limits to ninety days (90) the time within which the decision of the City Boards and Agencies may be judicially challenged.

8. **CONSENT CALENDAR**

The following items listed are considered routine and will be enacted by a single motion and roll call vote by the City Council. Items may be removed from the Consent Calendar upon request of a Councilmember or a citizen in which event the item will be considered at the completion of all other items on the agenda. The motion by the City Council on the Consent Calendar will approve and make findings in accordance with Administrative Staff and/or Planning Commission recommendations.

- 8.a. Approve the Emergency Dispatch Services Contract between the Cities of Ukiah and Fort Bragg and Authorize the City Manager to Make any Necessary, Non-substantive Adjustments to the Agreement as Needed, to Ensure its Successful Implementation.

Recommended Action: Staff recommends that the City Council:

1. ***Consider and approve the agreement between the City of Ukiah and the City of Fort Bragg for the provision of emergency dispatch services for the period of July 1, 2024, through June 30, 2029.***
2. ***Authorize the City Manager to execute the agreement on behalf of the City of Ukiah, with the authority to make any necessary, non-substantive adjustments to the agreement as needed, to ensure its successful implementation.***

Attachments:

1. Fort Bragg Contract 2019 - 2024
2. Fort Bragg Contract 2024 - 2029

- 8.b. Approval of Contract Amendment #2 in the Amount of \$12,000 with Whitchurch Engineering for Additional Design Services for Tenant Improvements and Fire Damage Pertaining to the New Electric Service Center Located at 1350 Hastings Road, and Approval of Corresponding Budget Amendment.

Recommended Action: Authorize the City Manager to sign Contract Amendment #2 with Whitchurch Engineering, in the amount of \$12,000, for additional design services for tenant improvements and fire damage repair pertaining to the new Electric Service Center, and approve corresponding budget amendment.

Attachments:

1. Whitchurch Engineering - Design Svcs Hastings - 2223-108 - Agreement - signed
2. Spec 24-01 - Hastings Tenant Improvements & Fire Damage Repair
3. Whitchurch Engineering Amendment #2

- 8.c. Determination of Notification of Intent to Adjust Curbside Collection and Transfer Station Service Rates.

Recommended Action: Review and confirm the determination of the City Manager of compliance with the provisions of the agreements between the City of Ukiah and Ukiah Waste Solutions, Inc. and Solid Waste Systems, Inc. regarding the company's notice of intent to adjust curbside collection and transfer station rates.

Attachments:

1. UWS Adjustment 2025
2. SWS Adjustment 2025
3. UWS, Curbside Contract
4. SWS, Transfer Station Contract

- 8.d. Review Landfill Closure Financial Plan Update and Authorize the Filing of the Update.

Recommended Action: Receive and file update to the Landfill Closure Financial Plan.

Attachments:

1. 2016-03 CC Reso - Establishing Funding Closure
2. 2024 Landfill Annual Inflation Factor Form_signed

- 8.e. Adoption of an Ordinance Amending the Official Zoning Map and General Plan Land Use Map of the City of Ukiah by Establishing the Community Commercial (C1) Zoning District and Community Commercial (CC) Land Use Designation at 195 Low Gap Road (APN 002-080-39).

Recommended Action: Adopt an Ordinance amending the official zoning map and general plan land use map by establishing the Community Commercial (C1) zoning district and Community Commercial (CC) land use designation at 195 Low Gap Road (APN 002-080-39).

Attachments:

1. Draft Ordinance

- 8.f. Adoption of Ordinance Establishing Procedures for Adopting and Imposing Development Mitigation Fees on Behalf of the Ukiah Valley Fire District.

Recommended Action: Adopt the Ordinance establishing procedures for adopting and imposing development mitigation fees on behalf of the Ukiah Valley Fire District.

Attachments:

1. Fire Development Mitigation Fee Ordinance

- 8.g. Adoption of an Ordinance Amending Chapter 11, Division 3 of the City Code to Require the Manager of a Private, Commercially-Zoned Property to Abate Nuisance Conditions on the Property.

Recommended Action: Adopt Ordinance Amending Chapter 11, Division 3 of the City Code to Require the Manager of a Private, Commercially-Zoned Property to Abate Nuisance Conditions on the Property,

Attachments:

1. Commercial Property Manager Liability Redline
2. Commercial Property Manager Liability Clean

- 8.h. Consider Giving Authorization of \$200,000 Interfund Loan from General Fund to Golf Enterprise Fund for Recycled Water Project Phase 4, and Approve Corresponding Budget Amendments.

Recommended Action: Authorize the interfund loan, not to exceed \$200,000, from the General Fund to the Golf Enterprise Fund for the installation of recycled water distribution equipment and main line to the gravity-fed portion of the Ukiah Valley Golf Course related to the Recycled Water Project Phase 4, and approve corresponding budget amendments.

Attachments:

1. Resolution 2024-____, GF - Golf, 9-18-24
2. LAIF Daily Rate

9. AUDIENCE COMMENTS ON NON-AGENDA ITEMS

The City Council welcomes input from the audience. If there is a matter of business on the agenda that you are interested in, you may address the Council when this matter is considered. If you wish to speak on a matter that is not on this agenda that is within the subject matter jurisdiction of the City Council, you may do so at this time. In order for everyone to be heard, please limit your comments to three (3) minutes per person and not more than ten (10) minutes per subject. The Brown Act regulations do not allow action to be taken on audience comments in which the subject is not listed on the agenda.

10. COUNCIL REPORTS

11. CITY MANAGER/CITY CLERK REPORTS

12. PUBLIC HEARINGS (5:30 PM)

13. UNFINISHED BUSINESS

- 13.a. Receive Report Regarding FEMA's Response and Updated FEMA Floodplain Maps to the City of Ukiah's March 2023 Appeal; Authorize the City Manager to Develop and Submit a Second Appeal; and Take Any Other Action Deemed Necessary.

Recommended Action: 1. Receive report regarding FEMA's most recent response and updated FEMA floodplain maps to the City's 2023 appeal letter, and authorize the City Manager to develop and submit a second appeal.

2. Consider and take any other action deemed necessary.

Attachments:

1. Existing FEMA Floodplain
2. FEMA New Floodplains Proposal 2022
3. L.Huffman re FEMA_031523

14. NEW BUSINESS

- 14.a. Receive Report of the Completed Local Road Safety/Action Plan Completed by the Consultant TJKM.

Recommended Action: Receive report of the completed Local Road Safety/Action Plan completed by the consultant TJKM.

Attachments:

1. F08152024 Ukiah LRSAP Final Report_Amended (002)

- 14.b. Receive Presentation Regarding City of Ukiah Housing Trust Fund 2024 Notice of Funding Availability Process, Authorize City Manager to Negotiate and Execute an Exclusive Negotiating Agreement with PEP Housing, and Approve Corresponding Budget Amendments.

Recommended Action: Receive presentation regarding City of Ukiah Housing Trust Fund 2024 Notice of Funding Availability process; authorize City Manager to negotiate and execute an Exclusive Negotiating Agreement with PEP Housing; and Approve Corresponding Budget Amendments.

Attachments:

1. UHTF-2024-NOFA
2. Addendum1_2024-HTF-NOFA
3. Response1_PEP_Housing_AppForm
4. Response2_RCHDC_AppForm

- 14.c. Discussion and Possible Action to Determine the City's Position on the 2024 Resolution being Considered by the League of California Cities, and Provide Corresponding Voting Instructions to the City of Ukiah's Voting Delegate.

Recommended Action: Staff recommends that the Council provide direction to the voting delegate on the attached League of California Cities Resolution. The City can choose to support, oppose or abstain.

Attachments:

1. 2024 Annual League Resolution Packet

- 14.d. Receive Updates on City Council Committee and Ad Hoc Assignments, and, if Necessary, Consider Modifications to Assignments and/or the Creation/Elimination of Ad Hoc(s).

Recommended Action: Receive report(s). The Council will consider modifications to committee and ad hoc assignments along with the creation/elimination ad hoc(s).

Attachments:

1. 2024 City Council Special Assignments and Ad Hocs

15. CLOSED SESSION - CLOSED SESSION MAY BE HELD AT ANY TIME DURING THE MEETING

- 15.a. **Conference with Legal Counsel – Anticipated Litigation**
(Government Code Section 54956.9(d)(4))
Initiation of litigation (3 cases)
- 15.b. **Conference with Legal Council - Anticipated Litigation**
Government Code Section 54956.9(d)(2)
Significant exposure to litigation (1 case)
- 15.c. **Conference with Legal Counsel – Existing Litigation**
(Government Code Section 54956.9)
Name of case: Ukiah v. Questex, Mendocino County Superior Court Case No. 15-66036
- 15.d. **Conference with Legal Counsel – Existing Litigation**
(Government Code Section 54956.9(d)(1))
Name of case: Vichy Springs Resort v. City of Ukiah, Et Al; Case No. SCUK-CVPT-2018-70200
- 15.e. **Conference with Legal Counsel – Existing Litigation**
(Government Code Section 54956.9(d)(1))
Name of case: Russian River Keepers et al. v. City of Ukiah, Case No. SCUK-CVPT-20-74612
- 15.f. **Conference with Real Property Negotiators**
(Cal. Gov't Code Section 54956.8)
Property: APN Nos: 180-110-12; 180-120-15; 180-120-16
Negotiator: Shannon Riley, Deputy City Manager
Negotiating Parties: GMB Realty Partners, Inc.
Under Negotiation: Price & Terms of Payment
- 15.g. **Conference with Real Property Negotiators**
(Cal. Gov't Code Section 54956.8)
Property: APN Nos: 002-232-05 and 002-282-02
Negotiator: Sage Sangiacomo, City Manager
Negotiating Parties: Bartolomei Trustees
Under Negotiation: Price & Terms of Payment
- 15.h. **Conference with Real Property Negotiators**
(Cal. Gov't Code Section 54956.8)
Property: APN No: 170-150-10-00
Negotiator: Sage Sangiacomo, City Manager
Negotiation Party: Twenty Years of Bliss LLC
Under Negotiation: Price & Terms of Payment
- 15.i. **Conference with Labor Negotiator (54957.6)**
Agency Representative: Sage Sangiacomo, City Manager
Employee Organizations: All Bargaining Units

16. ADJOURNMENT

Please be advised that the City needs to be notified 72 hours in advance of a meeting if any specific accommodations or interpreter services are needed in order for you to attend. The City complies with ADA requirements and will attempt to reasonably accommodate individuals with

disabilities upon request. Materials related to an item on this Agenda submitted to the City Council after distribution of the agenda packet are available for public inspection at the front counter at the Ukiah Civic Center, 300 Seminary Avenue, Ukiah, CA 95482, during normal business hours, Monday through Friday, 8:00 am to 5:00 pm. Any handouts or presentation materials from the public must be submitted to the clerk 48 hours in advance of the meeting; for handouts, please include 10 copies.

I hereby certify under penalty of perjury under the laws of the State of California that the foregoing agenda was posted on the bulletin board at the main entrance of the City of Ukiah City Hall, located at 300 Seminary Avenue, Ukiah, California, not less than 72 hours prior to the meeting set forth on this agenda.

Kristine Lawler, CMC/CPMC
Dated: 9/13/24



AGENDA SUMMARY REPORT

SUBJECT: Receive Presentation of Exceptional Employee Recognition Awards.

DEPARTMENT: Human Resources /
Risk Management

PREPARED BY: Tim Mitchell, H.R./Risk Manager Analyst

PRESENTER: Department Directors, City Manager, and Mayor

ATTACHMENTS:

None

Summary: The Mayor will present selected employees with Exceptional Employee Recognition awards.

Background: The City of Ukiah prioritizes the retention and attraction of outstanding employees and recognizes their role in our goal of providing exceptional customer service. The Exceptional Employee Program recognizes (through a nomination process) and awards those employees or teams of employees who have truly gone above and beyond.

Once each quarter, nominations are considered from the categories of field crews, public safety, and administration.

Discussion: The recipients of the Exceptional Employee program for the third quarter of 2024 are as follows:

Adam Elledge, Police Officer, Police Department: Officer Elledge has been serving the Ukiah community as a Police Officer for over seven years and is an integral part of his Department. For the last four years, Officer Elledge has been in a Detective role and has worked tirelessly to investigate and ensure the successful prosecution of suspects involved in a wide range of crimes. Some notable cases include the arrest and conviction of persons for homicide, shootings, violent assault, crimes against children, and burglary, among many others.

Officer Elledge has volunteered many times during his career to take on additional responsibilities, including becoming a Field Training Officer and Firearms Instructor. As a Field Training Officer, he has invested a great deal of effort in ensuring that our new Officers receive the knowledge and skills necessary to serve our community safely and to the best of their ability. This assignment is crucial in securing the future success of our agency, and in turn quality service for our community.

Officer Elledge regularly seeks to innovate and enhance the services that we provide. Recently, he successfully developed and aided in the implementation of a less lethal force option program. This will add another tool to help us take dangerous subjects into custody with a lower risk of serious injury or death.

Tommy Kita, Utility Services Team Leader, Finance Department: Tommy exemplifies compassion and dedication in his service to the City of Ukiah. In June, while on his route, Tommy encountered an elderly homeowner facing electrical issues that impacted essential functions in his home. Although the problem wasn't on the City's end, and the homeowner couldn't afford an electrician, Tommy didn't stop there. He explored various City's programs, and even when they weren't applicable, found a USDA-funded solution. Tommy personally delivered the necessary application materials to the resident, ensuring he had the

support he needed. Tommy's commitment truly goes above and beyond his regular duties.

Jim Robbins, Housing and Grants Manager, Community Development Department: For the last approximately 27 months, Jim has led the development and conceptualization of the City's Broadband Project. Although tangentially related to grants, Jim had no prior technical knowledge or skills in this area. Jim took the initiative to develop an application for construction of a Citywide public broadband enterprise from just an idea into a full concept and design, and submitted this project to the CPUC for funding. Due to Jim's efforts, on August 8th, we learned the City had been awarded \$5.6 million for Phase 1 of a fiber-optic network. Jim saw a need and innovated/managed multiple parties and people to make what was once a dream into a reality.

Lauren Ruffin, Payroll Administrator, City Manager's Office and Human Resources/Payroll/Risk Management Department: Since joining us as the City's Payroll Administrator in September 2022, Lauren has worked tirelessly to enhance our payroll processes and systems. The diverse mix of workforce functions and full-time, part-time, and seasonal positions presents unique complexities, which Lauren navigates with expertise and skill. She adeptly manages the challenges posed by multiple bargaining unit agreements, ever-changing State and Federal laws, and CalPERs regulations. Her dedication to modernizing processes while ensuring accuracy and compliance exemplifies our core values. Lauren consistently goes above and beyond, demonstrating exceptional professionalism, service, and dedication.

Recommended Action: Receive a presentation of the Exceptional Employee Recognition Awards.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT:

PROPOSED BUDGET AMOUNT:

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: The City Manager's Office and Department Directors

DIVERSITY-EQUITY INITIATIVES (DEI): Goal 3 – Recruit, retain, and advance a community of staff that reflects, values, and celebrates the diversity of the community we serve.

CLIMATE INITIATIVES (CI):

GENERAL PLAN ELEMENTS (GP):

Approved:


Sage Sangiacomo, City Manager



AGENDA SUMMARY REPORT

SUBJECT: Swearing in New Ukiah Police Officer Michael Jensen.

DEPARTMENT: Police

PREPARED BY: Tom Corning, Police Captain

PRESENTER: Cedric Crook, Police Chief.

ATTACHMENTS:

None

Summary: Police Chief, Cedric Crook, will swear in a new Ukiah Police Officer, Michael Jensen.

Background: The Ukiah Police Department is actively looking to recruit qualified candidates and is proud to have Officer Jensen join our team. Officer Jensen is joining the Ukiah Police Department with five years of experience in law enforcement.

Discussion: Join the Ukiah Police Department in welcoming Officer Jensen to our team and to our community.

Recommended Action: Police Chief, Cedric Crook, will swear in the new Ukiah Police Officer, Michael Jensen.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: Police Department

DIVERSITY-EQUITY INITIATIVES (DEI):

CLIMATE INITIATIVES (CI):

GENERAL PLAN ELEMENTS (GP): GP-A6 - Safety Element

Approved: 
Sage Sangiacomo, City Manager

**CITY OF UKIAH
CITY COUNCIL MINUTES
Regular Meeting
CIVIC CENTER COUNCIL CHAMBERS
300 Seminary Avenue, Ukiah, CA 95482
Virtual Meeting Link: <https://us06web.zoom.us/j/82680771960>**

**Ukiah, CA 95482
September 4, 2024
5:15 p.m.**

1. ROLL CALL

Ukiah City Council met at a Regular Meeting on September 4, 2024, having been legally noticed on August 30, 2024. The meeting was held in person and virtually at the following link: <https://us06web.zoom.us/j/82680771960>. Mayor Dueñas called the meeting to order at 5:22 p.m. Roll was taken with the following **Councilmembers Present:** Mari Rodin (*arriving at 5:29 p.m.*), Juan V. Orozco, Susan Sher, Douglas, F. Crane, and Josefina Dueñas. **Staff Present:** Sage Sangiacomo, City Manager; David Rapport, City Attorney; and Kristine Lawler, City Clerk.

MAYOR DUEÑAS PRESIDING.

2. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by David Rapport, City Attorney.

Councilmember Sher led a moment of silence to honor the recently departed ChonTravis, who ran for a City Councilmember seat in 2018, and was a beloved member of the community.

3. AB 2449 NOTIFICATIONS AND CONSIDERATIONS

4. PROCLAMATIONS/INTRODUCTIONS/PRESENTATIONS

a. Proclamation of the Ukiah City Council Recognizing September 16-23, 2024, as Pollution Prevention Week and September 22-29, 2024, as Creek Week in the City of Ukiah.

Presenter: Councilmember Orozco.

Proclamation was received by Jessica Reid, Mendocino County Resource Conservation District.

b. Proclamation of the Ukiah City Council Recognizing September as Hispanic Heritage Month in the City of Ukiah.

Presenter: Mayor Duenas.

Public Comment: Ignacio Ayala, Jackeline Orozco.

Proclamation was received by Ignacio Ayala, School of Performing Arts and Cultural Education (SPACE) Deputy Director and Latino Director.

5. PETITIONS AND COMMUNICATIONS

City Clerk, Kristine Lawler, stated that all communications had been distributed.

6. **APPROVAL OF MINUTES**

a. **Approval of the Minutes for the August 21, 2024, Regular Meeting.**

Motion/Second: Crane/Sher to approve Minutes of August 21, 2024, a regular meeting, as submitted. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

7. **RIGHT TO APPEAL DECISION**

Mayor Duenas read the right to appeal.

8. **CONSENT CALENDAR**

- a. Report of Disbursements for the Month of July 2024 – *Finance*.
- b. Council to Consider Entering into an Agreement (2425-107) with ChargePoint for the Proposed Ukiah Electric Vehicle Charging Stations Project and Authorize City Manager to Execute the Agreement – *Electric Utility*.
- c. Award of Purchase (PO No. 48670) of Three (3) Stryker Power Pro 2 Gurneys – *Fire*.
- d. Award of Purchase (PO No. 48671) of Three (3) Stryker MTS Power Load Systems – *Fire*.
- e. Award of Purchase (PO No. 48672) of Three (3) Lifepak 15 V4 Cardiac Monitor/Defibrillators – *Fire*.
- f. Adoption of an Ordinance Amending Various Sections of the Ukiah City Code to Update the City's Approval Process for Accessory Dwelling Units (ADUs) and Junior Accessory Dwelling Units (JADUs) – *Community Development*.

ORDINANCE NO. 1244

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UKIAH ADDING AND AMENDING VARIOUS SECTIONS OF THE UKIAH CITY CODE REGULATING ACCESSORY DWELLING UNITS

- g. Approval of Contract (2425-108) with Stone Creek Environmental Consulting for Engineering Services Related to the Municipal Separate Storm Sewer Systems Permit Issued by North Coast Regional Water Quality Control Board – *Public Works*.
- h. Receive Report of Contract (2324-104-CO1) Change Order for Gregg Simpson Construction for the Work Related to the Orr Street Bridge Project, and Approve of Corresponding Budget Amendment – *Public Works*.

Motion/Second: Sher/Rodin to approve Consent Calendar Items 8a-8h, as submitted. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

9. **AUDIENCE COMMENTS ON NON-AGENDA ITEMS**

No public comments were received.

10. **COUNCIL REPORTS**

Presenter: Councilmember Sher,

11. CITY MANAGER/CITY CLERK REPORTS

Presenters: Sage Sangiacomo, City Manager; and

- **FEMA Floodplain Update** – Tim Eriksen, Public Works Director / City Engineer.

RECESS: 5:52 – 5:59 P.M. to address technical difficulties.

- **FEMA Floodplain Update, continued** – Tim Eriksen, Public Works Director / City Engineer.
- **Construction Update** – Tim Eriksen, Public Works Director / City Engineer.
- **Palace Hotel Update** – Shannon Riley, Deputy City Manager.

12. PUBLIC HEARINGS (6:15 PM)

a. Possible Introduction by Title Only of an Ordinance to Approve a General Plan Amendment from Low-Density Residential (LDR) to Community Commercial (CC) and a Rezone from Low-Density Residential (R1) to Community Commercial (C1), to Allow for Tenant Improvements to an Existing Structure for Use as a 'Professional Office' at 195 Low Gap Road (APN 002-080-39); File No. 24-9265.

Presenter: Jesse Davis, Chief Planning Manager.

PUBLIC HEARING OPENED AT 6:36 P.M.

Public Comment: Ed Eversole (*applicant*).

PUBLIC HEARING CLOSED AT 6:41 P.M.

Motion/Second: Rodin/Crane to introduce the Ordinance, by title only. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

City Clerk, Kristine Lawler, read the following ordinance title into the record:

AN UNCODIFIED ORDINANCE OF THE CITY COUNCIL AMENDING THE OFFICIAL ZONING MAP AND GENERAL PLAN LAND USE MAP BY ESTABLISHING THE COMMUNITY COMMERCIAL (C1) ZONING DISTRICT AND COMMUNITY COMMERCIAL (CC) LAND USE DESIGNATION AT 195 LOW GAP ROAD (APN 002-080-39).

Motion/Second: Crane/Rodin to introduce the Ordinance to approve a General Plan Amendment from Low-Density Residential (LDR) to Community Commercial (CC) and a Rezone from Low-Density Residential (R1) to Community Commercial (C1) to allow for tenant improvements to an existing structure for use as a 'Professional Office' at 195 Low Gap Road (APN 002-080-39); File No. 24-9265. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

b. Proposed Sewer Rate Adjustments for Fiscal Year 2024-2025: Public Hearing and Consideration for Adoption.

Presenters: Dan Buffalo, Finance Director and Mark Hildebrand, Hildebrand Consulting, LLC.

PUBLIC HEARING OPENED AT 7:27 P.M.

No public comment was received.

PUBLIC HEARING CLOSED AT 7:28 P.M.

Motion/Second: Rodin/Crane to approve the proposed sewer rate adjustments effective October 1, 2024, as outlined in the 2024 Sewer Financial Plan (Sewer Rate Study). Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, and Crane. NOES: None. ABSENT: None. ABSTAIN: Dueñas.

NOTE: 34 protest letters were received.

13. UNFINISHED BUSINESS

14. NEW BUSINESS

a. Possible Introduction, by Title Only, of Ordinance Establishing Procedures for Adopting and Imposing Development Mitigation Fees on behalf of the Ukiah Valley Fire District.

Presenter: Darcy Vaughn, Assistant City Attorney.

Motion/Second: Crane/Sher to introduce the Ordinance, by title only. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

City Clerk, Kristine Lawler, read the following ordinance title into the record:

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UKIAH ESTABLISHING AND IMPLEMENTING A FIRE DISTRICT DEVELOPMENT MITIGATION FEE.

Motion/Second: Rodin/Crane to introduce the Ordinance establishing procedures for adopting and imposing development mitigation fees on behalf of the Ukiah Valley Fire District. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

b. Possible Introduction, by Title Only, of an Ordinance Amending Chapter 11, Division 3 of the City Code to Require the Manager of a Private, Commercially-Zoned Property to Abate Nuisance Conditions on the Property.

Presenter: Darcy Vaughn, Assistant City Attorney.

Motion/Second: Sher/Rodin to introduce the Ordinance, by title only. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

City Clerk, Kristine Lawler, read the following ordinance title into the record:

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UKIAH AMENDING CHAPTER 11, DIVISION 3 OF THE CITY CODE TO REQUIRE THE MANAGER OF A PRIVATE, COMMERCIALY-ZONED PROPERTY TO ABATE NUISANCE CONDITIONS ON THE PROPERTY.

Motion/Second: Sher/Rodin to introduce the Ordinance *amending Chapter 11, Division 3 of the City Code to require the manager of a private, commercially-zoned property to abate nuisance conditions on the property*. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

c. Award of Contract with BKF Traffic Engineers for Design and Engineering Services Related to a Roundabout Design at Low Gap Road and North Bush Street, and Approve Corresponding Budget Amendment.

Presenter: Tim Eriksen, Public Works Director/City Engineer.

Motion/Second: Crane/Rodin to approve of contract (2425-109) award to BKF Traffic Engineers in the amount of \$250,030 for design and engineering services related to a roundabout design at Low Gap Road and North Bush Street, and approve corresponding budget amendment. Motion **carried** by the following roll call votes: AYES: Rodin, Orozco, Sher, Crane, and Dueñas. NOES: None. ABSENT: None. ABSTAIN: None.

Council gave direction to Staff.

d. Receive Updates on City Council Committee and Ad Hoc Assignments and, if Necessary, Consider Modifications to Assignments and/or the Creation/Elimination of Ad hoc(s).

No reports were received.

THE CITY COUNCIL ADJOURNED TO CLOSED SESSION AT 8:11 P.M.

15. CLOSED SESSION

a. Conference with Legal Counsel – Anticipated Litigation

(Government Code Section 54956.9(d)(4))

Initiation of litigation (3 cases)

b. Conference with Legal Council - Anticipated Litigation

Government Code Section 54956.9(d)(2)

Significant exposure to litigation (1 case)

c. Conference with Legal Counsel – Existing Litigation

(Government Code Section 54956.9)

Name of case: Ukiah v. Questex, Mendocino County Superior Court Case No. 15-66036

d. Conference with Legal Counsel – Existing Litigation

(Government Code Section 54956.9(d)(1))

Name of case: Vichy Springs Resort v. City of Ukiah, Et Al; Case No. SCU-K-CVPT-2018-70200

e. Conference with Legal Counsel – Existing Litigation

(Government Code Section 54956.9(d)(1))

Name of case: Russian River Keepers et al. v. City of Ukiah, Case No. SCU-K-CVPT-20-74612

f. Conference with Real Property Negotiators

(Cal. Gov't Code Section 54956.8)

Property: APN Nos: 180-110-07

Negotiator: Shannon Riley, Deputy City Manager

Negotiating Parties: GMB Realty Partners, Inc.

Under Negotiation: Price & Terms of Payment

g. Conference with Real Property Negotiators

(Cal. Gov't Code Section 54956.8)

Property: APN Nos: 002-232-05 and 002-282-02

Negotiator: Sage Sangiacomo, City Manager

Negotiating Parties: Bartolomei Trustees

Under Negotiation: Price & Terms of Payment

h. Conference with Real Property Negotiators

(Cal. Gov't Code Section 54956.8)

Property: APN No: 170-150-10-00

Negotiator: Sage Sangiacomo, City Manager

Negotiation Party: Twenty Years of Bliss LLC

Under Negotiation: Price & Terms of Payment

i. Conference with Labor Negotiator (54957.6)

Agency Representative: Sage Sangiacomo, City Manager

Employee Organizations: All Bargaining Units

No action reported; direction provided to Staff.

16. ADJOURNMENT

There being no further business, the meeting adjourned at 9:45 p.m.

Kristine Lawler, CMC



AGENDA SUMMARY REPORT

SUBJECT: Approve the Emergency Dispatch Services Contract between the Cities of Ukiah and Fort Bragg and Authorize the City Manager to Make any Necessary, Non-substantive Adjustments to the Agreement as Needed, to Ensure its Successful Implementation.

DEPARTMENT: Police

PREPARED BY: Cedric Crook, Police Chief, Marla Swan,
Communications/Records Manager

PRESENTER: Cedric Crook, Police Chief and Marla Swan,
Communications and Records Manager.

ATTACHMENTS:

1. Fort Bragg Contract 2019 - 2024
2. Fort Bragg Contract 2024 - 2029

Summary: City Council will consider authorizing the City Manager to negotiate and enter into an Agreement with the City of Fort Bragg for the provision of police dispatching services.

Background: The City of Ukiah began providing police dispatch services to the City of Fort Bragg in July 2009, under a mutually agreed upon five-year contract. Since then, the Cities of Ukiah and Fort Bragg have maintained a longstanding partnership, renewing the agreement periodically to ensure uninterrupted and high-quality emergency dispatch services. The services provided by Ukiah's dispatch center include handling all emergency 9-1-1 calls, non-emergency police services, and radio communications for the Fort Bragg Police Department.

This collaboration has proven essential for Fort Bragg, as Ukiah's Public Safety Answering Point (PSAP) facilitates the receipt and dispatching of calls for police, fire, emergency medical services, and after-hours public works emergencies. The most recent contract, spanning 2019-2024, outlined provisions for the scope of services, fees, and mutual obligations, allowing for an annual fee adjustment capped at 5% to cover rising operational costs (Attachment 1).

With the conclusion of the 2019-2024 contract, both cities have agreed to continue their collaborative efforts in emergency dispatch services under a new agreement, this time with notable adjustments aimed at addressing the evolving needs of both cities, while maintaining efficient and responsive public safety operations.

Discussion: The approval of this agreement will ensure the continuation of vital emergency dispatch services for both the City of Ukiah and the City of Fort Bragg. The shared service model provides cost efficiencies, improves operational capacity, and enhances public safety for both jurisdictions. The new agreement also reflects updated cost-sharing provisions and includes mechanisms to align Fort Bragg's financial contributions with their actual service usage over time, while maintaining a cooperative and mutually beneficial partnership between the two cities.

The current agreement between the Cities of Ukiah and Fort Bragg for the provision of emergency dispatch services expired in June 2024. Recognizing the importance of continuing this essential service, Staff from both cities have worked diligently to draft a new agreement (Attachment 2) covering the period from July 2024 through June 2029.

This agreement remains consistent with the prior agreements, reflecting the continued mutual benefit derived from Ukiah's provision of 9-1-1 and police dispatch services for Fort Bragg. Noteworthy provisions from the agreement include:

Term and Termination: The term of the new agreement is five years, running from July 1, 2024, through June 30, 2029. Either party may terminate the agreement for any reason with a written 366-day advance notice, ensuring adequate time to make alternative arrangements (Section 3,).

Payment Structure: The compensation structure for dispatch services has been updated to reflect the increasing cost of providing these services. For the 2024-2025 fiscal year, Fort Bragg will pay \$425,577.64 for dispatch services, with an annual increase of approximately \$24,807 in subsequent years. Furthermore, an adjustment has been made, raising the cap on annual fee increases from 5% to 7%, allowing Ukiah the ability to address and adjust fees in line with rising operational costs ().

Cost Per Call and Subsidy: The estimated cost per call for Ukiah's dispatch center, based on using call volume as the matrix, is \$78.04 for fiscal year 2024-2025. This cost includes direct and indirect operating expenses, as well as capital expenditures associated with maintaining the dispatch center. Given Fort Bragg's call volume, the total cost of providing dispatch services would amount to \$878,106 for the year. However, the City of Ukiah recognizes the benefits of a shared service arrangement and the efficiencies gained from handling dispatch services for both cities. One major benefit is the ability to staff more dispatchers, enhancing the overall capacity and responsiveness of the dispatch center. This shared service model also allows for cost-sharing across multiple jurisdictions, spreading out the fixed and capital costs associated with running the dispatch center. As a result, Ukiah has agreed to charge Fort Bragg a significantly lower amount than the full estimated cost, particularly in the early years of the agreement. The reduced rate helps maintain a strong cooperative relationship while ensuring both cities benefit from the economies of scale. Ukiah aims to gradually increase Fort Bragg's contribution over time to more accurately reflect their actual usage, with the goal of aligning the cost to usage ratio in future years ().

Benefits of Shared Services: Shared services in emergency dispatch provide numerous advantages to both cities. By centralizing dispatch services, Ukiah and Fort Bragg can maintain higher staffing levels and invest in better technology and infrastructure than either city could independently. This results in improved response times, greater redundancy in the event of emergencies, and the ability to sustain around-the-clock operations more efficiently. Additionally, by pooling resources, both cities reduce their individual financial burdens while ensuring that high-quality emergency dispatch services are available to their communities. Ukiah, in particular, benefits from this arrangement by being able to maintain a larger and more skilled dispatch workforce, which enhances service delivery not only to Fort Bragg but also to Ukiah's own residents. The shared service model also mitigates risks associated with staff shortages or equipment failures by spreading these operational risks across both cities ().

IT Billable Services: The new agreement introduces a provision for Ukiah to charge Fort Bragg for any IT-related support provided by Ukiah's IT department. Should Fort Bragg require assistance with technical upgrades such as the installation of Mobile Data Terminals (MDTs), Ukiah will bill for these services at specified hourly rates. The agreement allows for an annual increase of up to 5% in these IT service rates, and any rate changes will be communicated to Fort Bragg by February 1st each year ().

Service Scope and Technology: The agreement outlines the detailed scope of services Ukiah will provide, including the handling of emergency 9-1-1 calls, non-emergency calls, radio communications, and the maintenance of essential dispatch technologies. This also includes ensuring compliance with applicable regulations like the Warren 9-1-1 Emergency Assistance Act and the California Commission on Peace Officer Standards & Training (POST). Fort Bragg will remain responsible for providing the necessary equipment on its side, such as radios and MDTs, while Ukiah will manage and maintain the dispatch center's infrastructure ().

Indemnification and Risk Management: Both parties agree to a mutual indemnification clause, with each city holding the other harmless for any negligent or willful misconduct by its own employees. This ensures that

liability is managed appropriately, with each city assuming responsibility for its own actions ().

Annual Review and Communication: Both cities will meet annually to discuss potential updates to the computer-aided dispatch (CAD) system to accommodate any operational changes or updates required by Fort Bragg. This ensures that dispatch services continue to meet the unique needs of Fort Bragg's public safety operations ().

Staff is recommending that Council consider approving the agreement between the City of Ukiah and the City of Fort Bragg for the provision of emergency dispatch services for the period of July 1, 2024, through June 30, 2029; and authorize the City Manager to execute the agreement on behalf of the City of Ukiah, with the authority to make any necessary, non-substantive adjustments to the agreement as needed, to ensure its successful implementation.

Recommended Action: Staff recommends that the City Council:

1. Consider and approve the agreement between the City of Ukiah and the City of Fort Bragg for the provision of emergency dispatch services for the period of July 1, 2024, through June 30, 2029.
2. Authorize the City Manager to execute the agreement on behalf of the City of Ukiah, with the authority to make any necessary, non-substantive adjustments to the agreement as needed, to ensure its successful implementation.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: COU-1314-235-AZ

COORDINATED WITH: Sage Sangiacomo, Ukiah City Manager; Isaac Whippy, Fort Bragg City Manager; Fort Bragg Police Chief Neil Cervenka; Ukiah Finance and IT Department

DIVERSITY-EQUITY INITIATIVES (DEI): N/A

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): GP-A6 - Safety Element

Approved:


Sage Sangiacomo, City Manager

COU No. 1314-235-A2

COPY

AMENDMENT TO AGREEMENT FOR THE PROVISION OF EMERGENCY DISPATCH SERVICES

This agreement for the provision of emergency dispatch services (Agreement) is entered into on March 8th, 2019 ("Effective Date") between the City of Ukiah ("Ukiah") and the City of Fort Bragg ("Fort Bragg") for the purpose of Ukiah providing Dispatch Services to the Fort Bragg Police Department in compliance with the Warren 9-1-1 Emergency Assistance Act (Gov. Code § 53100 et seq.) and other applicable laws. Ukiah and Fort Bragg are referred to in this Agreement as the Parties."

RECITALS:

WHEREAS, Ukiah maintains a Public Safety Answering Point (" PSAP") in its Police Department for dispatching emergency services within the City of Ukiah, including police, fire, emergency medical and after-hours emergency public works/ utility services.

WHEREAS, on July 1, 2009, the Fort Bragg Police Department contracted with Ukiah Police Department to dispatch its public safety officers in response to calls to the 9-1-1 emergency assistance phone number.

WHEREAS, the contract with Ukiah expires on June 30, 2019 and the parties seek to amend the Agreement to extend the term and provide for additional changes.

WHEREAS, the Warren 9-1-1 Emergency Assistance Act requires the Parties to establish and have in operation within their jurisdictions an emergency dispatch system utilizing the 9-1-1 phone number. Such systems may include more than one jurisdiction and may include territory of more than one public agency.

WHEREAS, Government Code Section 6502 authorizes the Parties to contract to jointly exercise any power common to the contracting parties.

In consideration of and reliance upon the above recitals and the terms and conditions as set forth below, the Parties agree as follows.

1. STATEMENT OF PURPOSE AND AUTHORITY

The purpose of this Agreement is to set forth the scope of emergency dispatch services ("Dispatch Services" or " Services") that Ukiah will provide Fort Bragg and the terms and conditions of providing those Services including the charges for Services. Pursuant to its authority under Government Code §§ 53109 and 6502, Fort Bragg hereby authorizes Ukiah to provide Dispatch Services for the Fort Bragg Police Department as more fully described in Exhibit "A", attached hereto and incorporated herein by this reference. Ukiah accepts the duties and obligations described herein, on the general terms and conditions hereinafter set forth in this Agreement.

2. PROVISION OF DISPATCH SERVICES

The Ukiah Police Department through its Dispatch Center will provide Dispatch Services to the Fort Bragg Police Department in accordance with this Agreement.

3. TERM AND TERMINATION

a. The term of this Agreement shall be from July 1, 2019, through June 30, 2024, provided, however, that Ukiah or Fort Bragg may terminate this Agreement for any reason by giving written notice to the other at least 366 days in advance of the effective date of such termination.

b. In the event this Agreement is terminated prior to June 30, 2024, Ukiah shall be paid on a prorated basis for only that portion of the contract term during which Ukiah provided services pursuant to this Agreement.

c. If either Party gives such notice and later retracts the notice prior to the termination date, the other Party may reject any such retraction, in which event the Agreement shall terminate on the date stated in the initial notice of termination.

d. This Agreement may be extended upon the written agreement of both Parties.

4. PAYMENT

For services performed in accordance with this Agreement, payment shall be made to Ukiah on a quarterly basis as provided below. Ukiah shall invoice Fort Bragg on a quarterly basis and all invoices shall be due and payable within thirty (30) days of receipt. The total annual amount of compensation due to Ukiah for providing Services under this Agreement shall be \$ 350,123.78 for FY 2019-20.

In subsequent years, the annual amount may be increased by an amount not to exceed 5.0% each year or an amount equal to the increase in compensation costs for three clerk dispatcher positions as experienced in the previous year, whichever is less. (Note: the total compensation cost for 3 clerk dispatchers in FY 2019/20 is set at \$325,123.78.) Ukiah shall notify Fort Bragg of any proposed increase in the annual payment by February 1st of each year.

5. INDEMNIFICATION AND INSURANCE

a. Each Party shall be liable for the negligent or willfully wrongful acts or omissions of its respective officers and employees in their performance of this Agreement. Each Party shall defend, indemnify and hold harmless the other Party ("Indemnitee") and pay any settlement or judgment based on any claim against that Party ("Indemnitor") for which the Indemnitee is not alleged to be responsible or liable. The

foregoing obligations to defend, indemnify and hold harmless shall be limited to negligent or willfully wrongful acts or omissions of the Indemnitor's officers or employees in their performance of obligations under this Agreement which result in personal injury or property damage. As to a claim in which both Parties are alleged to be responsible or liable for losses or damages relating to the performance of obligations under this Agreement, each Party shall bear the cost of its own defense, but shall be entitled to indemnity in proportion to, and based on, an ultimate judgment, determination, resolution or allocation of proportionate liability or fault.

b. The Parties acknowledge that they are both members of the Redwood Empire Municipal Insurance Fund (REMIF) and are parties to the Memorandum of Coverage issued and amended annually by REMIF. As long as they both remain members of REMIF and are parties to the Memorandum of Coverage, they do not need to furnish evidence of any other insurance coverage. If either Party intends to withdraw from REMIF, it shall give the other Party notice of that intent, not less than sixty (60) days prior to the effective date of that withdrawal. If the party withdrawing from REMIF does not furnish the other party with evidence of insurance satisfactory to that party, that party may terminate this Agreement.

6. WORKERS' COMPENSATION

Each party shall be responsible for work-related injuries to its employees, while they are performing under this Agreement. Each party shall provide workers' compensation coverage for its employees as required by law and agree to waive subrogation as to each other. Each party shall indemnify the other for any liability of the other party arising from a party's failure to provide the workers' compensation coverage required by this agreement or state law.

7. DOCUMENTS

Upon request from Fort Bragg, Ukiah shall promptly make available to Fort Bragg in electronic or other form which Ukiah can reasonably produce from the software utilized by the dispatch center any data relating to the Dispatch Services provided under this Agreement, including, but not limited to, recording of calls to the dispatch center, recording of radio traffic between the dispatch center and Fort Bragg employees, and data files compiled by the CAD system.

8. REPORTS ON COSTS

Ukiah shall provide Fort Bragg with its approved annual budget for the dispatch center, audited financial statements relating to the operation of the dispatch center and an annual accounting of actual expenditures to provide Dispatch Services under this Agreement upon request by Fort Bragg.

9. GENERAL TERMS AND CONDITIONS

a. No relationship of employer and employee is created by this Agreement; it being understood and agreed that Ukiah is a contract service provider. Ukiah is not acting in the capacity of an employee of Fort Bragg and Fort Bragg shall not be liable for any acts or omissions by Ukiah nor for any obligations or liabilities incurred by Ukiah.

b. Ukiah shall have no claim under this Agreement or otherwise, for seniority, vacation time, vacation pay, sick leave, personal time off, overtime, health insurance medical care, hospital care, retirement benefits, social security, disability, Workers' Compensation, or unemployment insurance benefits, civil service protection or employee benefits of any kind.

c. Ukiah shall be solely liable for and obligated to pay directly all applicable payroll taxes (including federal and state income taxes) or contributions for unemployment insurance or retirement pensions or annuities which are imposed by any governmental entity in connection with the labor used or which are measured by wages, salaries or other remuneration paid to its officers, agents or employees and agrees to indemnify and hold Fort Bragg harmless from any and all liability which Fort Bragg may incur because of Ukiah's failure to pay such amounts.

d. In carrying out the work contemplated herein, Ukiah shall comply with all applicable federal and state workers' compensation and liability laws and regulations with respect to the officers, agents and/or employees conducting and participating in the work. Ukiah agrees that such officers, agents, and/ or employees shall not be treated or considered in any way as officers, agents and/ or employees of Fort Bragg.

e. Ukiah does, by this Agreement, agree to perform Dispatch Services at all times in strict accordance with all applicable federal, state and local laws, ordinances, regulations, titles, departmental procedures and currently approved methods and practices in the field of emergency dispatching and that the sole interest of Ukiah is to insure that said Services shall be performed and rendered in a competent, efficient, timely and satisfactory manner.

10. ENTIRE AGREEMENT

This Agreement, including all attachments, exhibits, and any other documents specifically incorporated into this Agreement, shall constitute the entire Agreement between Fort Bragg and Ukiah relating to the subject matter of this Agreement. As used herein, Agreement refers to and includes any documents incorporated herein by reference and any exhibits or attachments. This Agreement supersedes and merges all previous understandings, and all other agreements, written or oral, between the parties and sets forth the entire understanding of the parties regarding the subject matter

thereof. The Agreement may not be supplemented, amended or modified except by a written document signed by both parties.

11. ASSURANCE OF PERFORMANCE

If at any time either party reasonably believes that the other party is not adequately performing its obligations under this Agreement or if Ukiah fails to complete the Dispatch Services as and when required by this Agreement, the party who believes the other party is in breach may request from the other party, after providing reasonable notice of the specific performance deficiencies, prompt written assurances of proper performance and a written plan acceptable to the party giving the notice, to correct the observed deficiencies in the other party's performance. The written assurances shall be provided within ten (10) calendar days of the receipt of the request and thereafter the party providing it shall fully perform in accordance with its written plan. The parties mutually acknowledge and agree that any failure to provide such written assurances and written plan within the required time is a material breach under this Agreement.

12. SURVIVAL

The obligations of this Agreement, which by their nature would continue beyond the termination on expiration of the Agreement shall survive termination or expiration of this Agreement.

13. SEVERABILITY

If a court of competent jurisdiction holds any provision of this Agreement to be illegal, unenforceable, or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected, unless an essential purpose of this Agreement would be defeated by the loss of the illegal, unenforceable, or invalid provision.

14. NOTICES

All notices, requests, demands, or other communications under this Agreement shall be in writing. Notices shall be deemed served for all purposes as follows:

Personal delivery: When personally delivered, notice is effective upon delivery.

First Class Mail: When mailed first class to the last address of the recipient known to the Party giving notice, notice is effective three (3) mail delivery days after deposit in a United States Postal Service office or mailbox.

Certified Mail: When mailed certified mail, return receipt requested, notice is effective on receipt, if delivery is confirmed by a return receipt.

Overnight Delivery: When delivered by overnight delivery (Federal Express, Airborne, United Parcel Service) with charges prepaid or charged to the sender's account, notice is effective on delivery, if delivery is confirmed by the delivery service.

Facsimile transmission: When sent by facsimile to the last facsimile number of the recipient known to the party giving notice, notice is effective on receipt, provided that (a) a duplicate copy of the notice is promptly given by first-class or certified mail or by overnight delivery, or (b) the receiving party delivers a written confirmation of receipt. Any notice given by facsimile shall be deemed received on the next business day if it is received after 5: 00 p. m. (recipient's time) or on a non- business day.

Addresses for purpose of giving notice are as follows:

To UKIAH:

CITY OF UKIAH
300 Seminary Avenue
Ukiah, CA 95482
Attn: CITY MANAGER

To FORT BRAGG:

CITY OF FORT BRAGG
416 N. Franklin Street
Fort Bragg, CA 95437
Attn: CITY MANAGER

Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by the postal authorities, messenger, or overnight delivery service.

Any party may change its address or facsimile number by giving the other party notice of the change in any manner permitted by this Agreement.

15. MISCELLANEOUS PROVISIONS.

a. Governing Law. The interpretation and enforcement of this Agreement shall be governed by California law and any action arising under or in connection with this Agreement must be filed in a Court of competent jurisdiction in Mendocino County.

b. Waiver. No waiver of a breach of any covenant, term, or condition of this Agreement shall be a waiver of any other or subsequent breach of the same or any other covenant, term or condition or a waiver of the covenant, term or condition itself.

c. Authority to Execute. Each signatory to this Agreement represents and warrants that she was authorized to execute this Agreement on behalf of the agency for whom her signature appears and that she executed this Agreement in her authorized capacity on behalf of that agency.

d. Duplicate Originals. This Agreement may be executed in duplicate originals, each bearing the original signature of the Parties. When so signed, each such document shall be admissible in administrative or judicial proceedings as proof of the terms of the Agreement between the Parties.

IN WITNESS WHEREOF, the Parties Hereto have executed this Agreement as of ^{April} ~~March~~ 8, 2019.

CITY OF UKIAH

By: Sgt. Sangiacomo
Sage Sangiacomo
City Manager

CITY OF FORT BRAGG

By: Tabatha Miller
Tabatha Miller
City Manager

APPROVED AS TO FORM:

By: David Rapport
David Rapport
City Attorney

By: Russell Hildebrand
Russell Hildebrand
City Attorney

EXHIBIT A
SERVICES TO BE PROVIDED

1. DEFINITIONS:

A. "Dispatch Services" are those services routinely provided by a primary PSAP, including, but not limited to:

- Receipt, recording, dispatching and forwarding of E911 calls;
- Receipt, recording, dispatching and forwarding of TDD calls;
- Receipt, recording, dispatching and forwarding of non-emergency calls for service;
- Two-way radio communication with mobile, portable, and base station radios;
- Mobile Data Terminals (MDTs);
- Audio recording of radio transmissions conducted on primary use channels;
- Audio recording of E911 calls.

B. "E911" means the enhanced 9-1-1 emergency number system, which will provide an automatic display of the caller's telephone number, subscriber's name and subscriber's location to the dispatcher.

C. "Dispatcher," means a public safety dispatcher, as defined by California Code of Regulations, Title 11, Div. 2, Art. 1, Sec. 1001, subsection (w). " Dispatcher" shall also be synonymous with the Ukiah job classification for the position of "dispatcher".

D. "CAD," means a computer aided dispatch system: a combination of hardware and software, which allows for the input, tracking, recording and reporting of calls for service.

E. "Computer equipment," means computer hardware, software and peripherals.

F. "Calls," means a communication that conveys or requests information, assigns or directs action, or requests services. This includes communications between officers and dispatchers.

G. "May" is permissive.

H. "Should" is desirable.

I. "Shall" is mandatory.

2. EXTENT OF SERVICES:

Subject to Fort Bragg performing its obligations hereunder, Ukiah agrees to provide Dispatch Services to Fort Bragg subject to the following terms and conditions:

A. Radio traffic to and from Fort Bragg Police Department mobile units, portables and base stations will be conducted on the Fort Bragg Police Department radio frequency.

Fort Bragg will remain the licensee for this frequency. Fort Bragg grants Ukiah the right to use the frequency for the purpose of fulfilling this contract. While utilizing the frequency, Ukiah agrees to comply with all applicable rules and regulations of the Federal Communications Commission.

B. Emergency and non- emergency calls for service shall be dispatched according to the Ukiah Police Department CAD protocols, pre-arrival instructions and unit recommendations. Fort Bragg and Ukiah agree to meet not less than annually during the term of this agreement to discuss what CAD changes may be needed to reflect the inherent differences between calls in Fort Bragg and Ukiah jurisdictions.

C. Calls seeking other emergency services, including fire, emergency medical and ambulance services, shall be transferred to (707) 459- 5336, provided however, that if the delay in transferring the call could result in immediate harm or risk of harm in a medical emergency, Ukiah Dispatch may provide some or all dispatch services for that medical emergency, as necessary, to avoid that harm or risk of harm.

D. Radio transmissions by Fort Bragg Police Department personnel to Ukiah Dispatch shall conform to the standards and practices used by Ukiah. This includes, but is not limited to the format for notifying Dispatch of officer initiated activity, the format for requesting automated systems inquiries, and the format for call dispositions.

E. When Ukiah and Fort Bragg calls are handled jointly by one or more dispatchers, the priority assigned to any call will be determined solely by the nature of the call and without regard to whether the call originated from the jurisdiction of Ukiah or Fort Bragg.

F. Fort Bragg is responsible for answering Fort Bragg Police Department business calls during normal business hours of Monday through Friday, 8:00 a. m. to 5: 00 p. m. holidays excluded). Ukiah agrees to accept business calls for the Fort Bragg Police Department only during non- business hours.

3. EQUIPMENT AND PERSONNEL:

A. Ukiah shall provide the personnel, equipment and materials in the dispatch center necessary to provide Dispatch Services to Fort Bragg in compliance with applicable laws regulating the E911 system, continuously twenty- four (24) hours per day, seven days per week, fifty-two (52) weeks per year. Fort Bragg shall provide personnel, equipment and materials required to utilize the Dispatch Services.

B. At its expense and as a condition of Ukiah performing services under this Agreement, Fort Bragg shall facilitate the connection of its radios, emergency phone lines and business phone lines to the Ukiah Dispatch Center so that calls in Fort Bragg to those lines and radio communications within Fort Bragg are received at the Ukiah Dispatch Center.

C. Ukiah shall ensure that its dispatch operations include the necessary equipment and personnel to maintain continuity of Services during periods of disruption of normal services and operations, such as from power failures or disaster incidents.

D. Ukiah shall recruit, select, hire and train the Public Safety Dispatchers called for in this Agreement. Once selected, these individuals shall be employees of Ukiah. Personnel rules and regulations governing employees of Fort Bragg shall not apply to Ukiah employees hired, retained or assigned to fulfill this Agreement.

E. Recruitment, selection, hiring, retention, assignment and training shall conform to the current standards, rules, policies and procedures of Ukiah, the regulations of the California Commission on Peace Officer Standards & Training, and the applicable laws of the state and federal government.

F. Ukiah shall be responsible for maintaining and/ or upgrading personnel, equipment and materials, including without limitation, computer equipment, radio equipment, and MDTs to perform the Dispatch Services in accordance with applicable laws and regulations and in conformance with generally accepted standards and practices for providing Dispatch Services.

4. SCHEDULING:

A. Dispatch scheduling shall be at the discretion of Ukiah. Fort Bragg agrees to keep Ukiah informed of all planned or reasonably foreseeable events that by their nature could require additional dispatch staffing.

c. Authority to Execute. Each signatory to this Agreement represents and warrants that she was authorized to execute this Agreement on behalf of the agency for whom her signature appears and that she executed this Agreement in her authorized capacity on behalf of that agency.

d. Duplicate Originals. This Agreement may be executed in duplicate originals, each bearing the original signature of the Parties. When so signed, each such document shall be admissible in administrative or judicial proceedings as proof of the terms of the Agreement between the Parties.

IN WITNESS WHEREOF, the Parties Hereto have executed this Agreement as of March ____ 2019.

CITY OF UKIAH

By: _____
Sage Sangiacomo
City Manager

CITY OF FORT BRAGG

By: Tabatha Miller
Tabatha Miller
City Manager

APPROVED AS TO FORM:

By: David Rapport
David Rapport
City Attorney

By: _____
Russell Hildebrand
City Attorney

**AGREEMENT FOR THE
PROVISION OF EMERGENCY DISPATCH SERVICES
JULY 2024 – JUNE 2029**

This agreement for the provision of emergency dispatch services (Agreement) dated July 1, 2024 ("Effective Date") between the City of Ukiah ("Ukiah") and the City of Fort Bragg ("Fort Bragg") for the purpose of Ukiah providing Dispatch Services to the Fort Bragg Police Department in compliance with the Warren 9-1-1 Emergency Assistance Act (Gov. Code § 53100 et seq.) and other applicable laws. Ukiah and Fort Bragg are referred to in this Agreement as the Parties."

RECITALS:

WHEREAS Ukiah maintains a Public Safety Answering Point (" PSAP") in its Police Department for dispatching emergency services within the City of Ukiah, including police, fire, emergency medical and after-hours emergency public works/ utility services.

WHEREAS, the City of Fort Bragg on behalf of the Fort Bragg Police Department contracted with The City of Ukiah on behalf of the Ukiah Police Department to dispatch its public safety officers in response to calls to the 9-1-1 emergency assistance phone number.

WHEREAS the Warren 9-1-1 Emergency Assistance Act requires the Parties to establish and have in operation within their jurisdictions an emergency dispatch system. utilizing the 9-1-1 phone number. Such systems may include more than one jurisdiction and may include territory of more than one public agency.

WHEREAS Government Code Section 6502 authorizes the Parties to contract to jointly exercise any power common to the contracting parties.

In consideration of and reliance upon the above recitals and the terms and conditions as set forth below, the Parties agree as follows.

1. STATEMENT OF PURPOSE AND AUTHORITY

The purpose of this Agreement is to set forth the scope of emergency dispatch services that Ukiah will provide Fort Bragg and the terms and conditions of providing those Services including the charges for Services. Pursuant to its authority under Government Code §§ 53109 and 6502, Fort Bragg hereby authorizes Ukiah to provide Dispatch Services for the Fort Bragg Police Department as more fully described in Exhibit "A", attached hereto and incorporated herein by this reference. Ukiah accepts the duties and obligations described herein, on the general terms and conditions hereinafter set forth in this Agreement.

2. PROVISION OF DISPATCH SERVICES

The Ukiah Police Department through its Dispatch Center will provide Dispatch Services to the Fort Bragg Police Department in accordance with this Agreement and as more specifically identified in Exhibit "A" ("Dispatch Services" or "Services").

3. TERM AND TERMINATION

a. The term of this Agreement shall be from July 1, 2024, through June 30, 2029, provided, however, that Ukiah or Fort Bragg may terminate this Agreement for any reason by giving written notice to the other at least 366 days in advance of the effective date of such termination.

b. In the event this Agreement is terminated prior to June 30, 2029, Ukiah shall be paid on a prorated basis for only that portion of the contract term during which Ukiah provided services pursuant to this Agreement.

c. If either Party gives such notice or later retracts the notice prior to the termination date, the other Party may reject any such retraction, in which event the Agreement shall terminate on the date stated in the initial notice of termination.

d. This Agreement may be extended upon the written agreement of both Parties.

4. PAYMENT

For services performed in accordance with this Agreement, payment shall be made to Ukiah on a quarterly basis beginning with the amount provided below. Ukiah shall invoice Fort Bragg on a quarterly basis and all invoices shall be due and payable within thirty (30) days of receipt. The total annual amount of compensation due to Ukiah for providing Services under this Agreement shall be \$ 425,577.64 for FY 24-25.

In subsequent years, the annual amount will be increased by \$24,807.45 for FY 25-26, and by \$24,807.45 for FY 26-27, and by \$24,807.46 for FY 27-28 and an amount not to exceed 7.0% each year thereafter, until contract renewal. Ukiah shall notify Fort Bragg of any proposed increase in the annual payment by February 1st of each year.

5. INDEMNIFICATION AND INSURANCE

a. Each Party shall be liable for the negligent or willfully wrongful acts or omissions of its respective officers, agents, and employees in their performance of this Agreement. Each Party shall defend, indemnify, and hold harmless the other Party ("Indemnitee") and pay any settlement or judgment based on any claim against that Party for which the Indemnifying Party is responsible or liable. The foregoing obligations to defend, indemnify and hold harmless shall be limited to negligent or willfully wrongful

acts or omissions of the Indemnitor's officers, agents, or employees in their performance of the obligations under this Agreement which result in personal injury or property damage. As to a claim in which both Parties are alleged to be responsible or liable for losses or damages relating to the performance of obligations under this Agreement, each Party shall bear the cost of its own defense, but shall be entitled to indemnity in proportion to, and based on, an ultimate judgment, determination, resolution or allocation of proportionate liability or fault.

b. The Parties acknowledge that they are both members of California Intergovernmental Risk Authority (CIRA) and are parties to the Memorandum of Coverage issued and amended annually by CIRA. As long as they both remain members of CIRA and are parties to the Memorandum of Coverage, they do not need to furnish evidence of any other insurance coverage. If either Party intends to withdraw from CIRA, it shall give the other Party notice of that intent, not less than sixty (60) days prior to the effective date of that withdrawal. If the party withdrawing from CIRA does not furnish the other party with evidence of insurance satisfactory to that party, that party may terminate this Agreement.

6. WORKERS' COMPENSATION

Each party shall be responsible for work-related injuries to its employees, while they are performing under this Agreement. Each party shall provide workers' compensation coverage for its employees as required by law and agree to waive subrogation as to each other. Each party shall indemnify the other for any liability of the other party arising from a party's failure to provide the workers' compensation coverage required by this agreement or state law.

7. DOCUMENTS

Upon request from Fort Bragg, Ukiah shall promptly make available to Fort Bragg in electronic or other form which Ukiah can reasonably produce from the software utilized by the dispatch center any data relating to the Dispatch Services provided under this Agreement, including, but not limited to, recording of calls to the dispatch center, recording of radio traffic between the dispatch center and Fort Bragg employees, and data files compiled by the CAD system.

8. REPORTS ON COSTS

Ukiah shall provide Fort Bragg with its approved annual budget for the dispatch center, audited financial statements relating to the operation of the dispatch center and an annual accounting of actual expenditures to provide Dispatch Services under this Agreement upon request by Fort Bragg.

9. GENERAL TERMS AND CONDITIONS

a. No relationship of employer and employee is created by this Agreement; it being understood and agreed that Ukiah is a contract service provider. Ukiah is not acting in the capacity of an employee of Fort Bragg and Fort Bragg shall not be liable for any acts or omissions by Ukiah nor for any obligations or liabilities incurred by Ukiah.

b. Ukiah, its officers, agents, and employees shall have no claim under this Agreement or otherwise, for seniority, vacation time, vacation pay, sick leave, personal time off, overtime, health insurance medical care, hospital care, retirement benefits, social security, disability, Workers' Compensation, or unemployment insurance benefits, civil service protection or employee benefits of any kind.

c. Ukiah shall be solely liable for and obligated to pay directly all applicable payroll taxes (including federal and state income taxes) or contributions for unemployment insurance or retirement pensions or annuities which are imposed by any governmental entity in connection with the labor used or which are measured by wages, salaries or other remuneration paid to its officers, agents or employees and agrees to indemnify and hold Fort Bragg harmless from all liability which Fort Bragg may incur because of Ukiah's failure to pay such amounts.

d. In carrying out the work contemplated herein, Ukiah shall comply with all applicable federal and state workers' compensation and liability laws and regulations with respect to the officers, agents and/or employees conducting and participating in the work. Ukiah agrees that such officers, agents, and/ or employees shall not be treated or considered in any way as officers, agents and/ or employees of Fort Bragg.

e. Ukiah does, by this Agreement, agree to always perform Dispatch Services in strict accordance with all applicable federal, state, and local laws, ordinances, regulations, titles, departmental procedures and currently approved methods and practices in the field of emergency dispatching and that the sole interest of Ukiah is to insure that said Services shall be performed and rendered in a competent, efficient, timely and satisfactory manner.

10. ENTIRE AGREEMENT

This Agreement, including all attachments, exhibits, and any other documents specifically incorporated into this Agreement, shall constitute the entire Agreement between Fort Bragg and Ukiah relating to the subject matter of this Agreement. As used herein, Agreement refers to and includes any documents incorporated herein by reference and any exhibits or attachments. This Agreement supersedes and merges all previous understandings, and all other agreements, written or oral, between the parties and sets forth the entire understanding of the parties regarding the subject matter thereof. The Agreement may not be supplemented, amended, or modified except by a written document signed by both parties.

11. ASSURANCE OF PERFORMANCE

If at any time either party reasonably believes that the other party is not adequately performing its obligations under this Agreement or if Ukiah fails to complete the Dispatch Services as and when required by this Agreement, the party who believes the other party is in breach may request from the other party, after providing reasonable notice of the specific performance deficiencies, prompt written assurances of proper performance and a written plan acceptable to the party giving the notice, to correct the observed deficiencies in the other party's performance. The written assurances shall be provided within ten (10) calendar days of the receipt of the request and thereafter the party providing it shall fully perform in accordance with its written plan. The parties mutually acknowledge and agree that any failure to provide such written assurances and written plan within the required time is a material breach under this Agreement.

12. SURVIVAL

The obligations of this Agreement, which by their nature would continue beyond the termination on expiration of the Agreement shall survive termination or expiration of this Agreement.

13. SEVERABILITY

If a court of competent jurisdiction holds any provision of this Agreement to be illegal, unenforceable, or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected, unless an essential purpose of this Agreement would be defeated by the loss of the illegal, unenforceable, or invalid provision.

14. NOTICES

All notices, requests, demands, or other communications under this Agreement shall be in writing. Notices shall be deemed served for all purposes as follows:

Personal delivery: When personally delivered, notice is effective upon delivery.

First Class Mail: When mailed first class to the last address of the recipient known to the Party giving notice, notice is effective three (3) mail delivery days after deposit in a United States Postal Service office or mailbox.

Certified Mail: When mailed certified mail, return receipt requested, notice is effective on receipt, if delivery is confirmed by a return receipt.

Overnight Delivery: When delivered by overnight delivery (Federal Express, Airborne, United Parcel Service) with charges prepaid or charged to the sender's account, notice is effective on delivery, if delivery is confirmed by the delivery service.

Facsimile transmission: When sent by facsimile to the last facsimile number of the recipient known to the party giving notice, notice is effective on receipt, provided that (a) a duplicate copy of the notice is promptly given by first-class or certified mail or by overnight delivery, or (b) the receiving party delivers a written confirmation of receipt. Any notice given by facsimile shall be deemed received on the next business day if it is received after 5: 00 p. m. (recipient's time) or on a non- business day.

Addresses for purpose of giving notice are as follows:

To UKIAH: CITY OF UKIAH
300 Seminary Avenue
Ukiah, CA 95482
Attn: CITY MANAGER

To FORT BRAGG: CITY OF FORT BRAGG
416 N. Franklin Street
Fort Bragg, CA 95437
Attn: CITY MANAGER

Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by the postal authorities, messenger, or overnight delivery service.

Any party may change its address or facsimile number by giving the other party notice of the change in any manner permitted by this Agreement.

15. MISCELLANEOUS PROVISIONS.

a. Governing Law. The interpretation and enforcement of this Agreement shall be governed by California law and any action arising under or in connection with this Agreement must be filed in a Court of competent jurisdiction in Mendocino County.

b. Waiver. No waiver of a breach of any covenant, term, or condition of this Agreement shall be a waiver of any other or subsequent breach of the same or any other covenant, term or condition or a waiver of the covenant, term or condition itself.

c. Authority to Execute. Each signatory to this Agreement represents and warrants that she was authorized to execute this Agreement on behalf of the agency for whom her signature appears and that she executed this Agreement in her authorized capacity on behalf of that agency.

d. Duplicate Originals. This Agreement may be executed in duplicate originals, each bearing the original signature of the Parties. When so signed, each such document shall be admissible in administrative or judicial proceedings as proof of the terms of the Agreement between the Parties.

IN WITNESS WHEREOF, the Parties Hereto have executed this Agreement as of July 1, 2024.

CITY OF UKIAH

By: _____
Sage Sangiacomo
Ukiah City Manager

CITY OF FORT BRAGG

By: _____
Isaac Whippy
Fort Bragg City Manager

APPROVED AS TO FORM:

By: _____
David Rapport
Ukiah City Attorney

By: _____
Baron J. Bettenhausen
Fort Bragg City Attorney

EXHIBIT A
SERVICES TO BE PROVIDED

1. DEFINITIONS:

A. "Dispatch Services" are those services routinely provided by a primary PSAP, including, but not limited to:

- Receipt, recording, dispatching, and forwarding of E911 calls.
- Receipt, recording, dispatching, and forwarding of TDD calls.
- Receipt, recording, dispatching, and forwarding of Text to 9-1-1.
- Receipt, recording, dispatching, and forwarding of non-emergency calls for service.
- Two-way radio communication with mobile, portable, and base station radios.
- Mobile Data Terminals (MDTs).
- Audio recording of radio transmissions conducted on primary use channels.
- Audio recording of E911 calls.

B. "E911" means the enhanced 9-1-1 emergency number system, which will provide an automatic display of the caller's telephone number, subscriber's name and subscriber's location to the dispatcher.

C. "Dispatcher," means a public safety dispatcher, as defined by California Code of Regulations, Title 11, Div. 2, Art. 1, Sec. 1001, subsection (w). "Dispatcher" shall also be synonymous with the Ukiah job classification for the position of "dispatcher".

D. "CAD," means a computer aided dispatch system: a combination of hardware and software, which allows for the input, tracking, recording, and reporting of calls for service.

E. "Computer equipment," means computer hardware, software, and peripherals.

F. "Calls," means a communication that conveys or requests information, assigns or directs action, or requests services. This includes communications between officers and dispatchers.

G. "May" is permissive.

H. "Should" is desirable.

I. "Shall" is mandatory.

2. EXTENT OF SERVICES:

Subject to Fort Bragg performing its obligations hereunder, Ukiah agrees to provide Dispatch Services to Fort Bragg subject to the following terms and conditions:

A. Radio traffic to and from Fort Bragg Police Department mobile units, portables and

base stations will be conducted on the Fort Bragg Police Department radio frequency. Fort Bragg will remain the licensee for this frequency. Fort Bragg grants Ukiah the right to use the frequency for the purpose of fulfilling this contract. While utilizing the frequency, Ukiah agrees to comply with all applicable rules and regulations of the Federal Communications Commission.

B. Emergency, non- emergency and text calls for service shall be dispatched according to the Ukiah Police Department CAD protocols, pre-arrival instructions and unit recommendations. Fort Bragg and Ukiah agree to meet not less than annually during the term of this agreement to discuss what CAD changes may be needed to reflect the inherent differences between calls in Fort Bragg and Ukiah jurisdictions.

C. Calls seeking other emergency services, including fire, emergency medical and ambulance services, shall be transferred to (707) 459-5336, provided however, that if the delay in transferring the call could result in immediate harm or risk of harm in a medical emergency, Ukiah Dispatch may provide some or all dispatch services for that medical emergency, as necessary, to avoid that harm or risk of harm.

D. Radio transmissions by Fort Bragg Police Department personnel to Ukiah Dispatch shall conform to the standards and practices used by Ukiah. This includes but is not limited to the format for notifying Dispatch of officer-initiated activity, the format for requesting automated systems inquiries, and the format for call dispositions.

E. When Ukiah and Fort Bragg calls are handled jointly by one or more dispatchers, the priority assigned to any call will be determined solely by the nature of the call and without regard to whether the call originated from the jurisdiction of Ukiah or Fort Bragg.

F. Fort Bragg is responsible for answering Fort Bragg Police Department business calls during normal business hours of Monday through Friday, 8:00 a. m. to 5: 00 p. m. (holidays excluded). Ukiah agrees to accept business calls for the Fort Bragg Police Department only during non-business hours.

3. EQUIPMENT AND PERSONNEL:

A. Ukiah shall provide and maintain the personnel, equipment, and materials in the dispatch center necessary to deliver Dispatch Services to Fort Bragg, in compliance with applicable E911 regulations, continuously twenty-four (24) hours per day, seven days per week, fifty-two (52) weeks per year. Fort Bragg shall be responsible for providing the personnel, equipment, and materials necessary to utilize these Dispatch Services.

B. As a condition of Ukiah performing services under this Agreement, Fort Bragg, at its own expense, shall facilitate the connection of its radios, emergency phone lines, and business phone lines to the Ukiah Dispatch Center, ensuring that calls and radio communications within Fort Bragg are properly received by the Ukiah Dispatch Center.

C. Ukiah shall ensure that its dispatch operations include the necessary equipment and personnel to maintain continuity of services during disruptions, such as power failures or disaster incidents.

D. Ukiah shall recruit, select, hire, and train the Public Safety Dispatchers required under this Agreement. These individuals shall be employees of Ukiah, and Fort Bragg's personnel rules and regulations shall not apply to them.

E. All recruitment, selection, hiring, retention, assignment, and training shall comply with Ukiah's current standards, rules, policies, and procedures, as well as the regulations of the California Commission on Peace Officer Standards & Training and applicable state and federal laws.

F. Ukiah shall be responsible for maintaining and upgrading the personnel, equipment, and materials necessary for Dispatch Services, including computer equipment, radio equipment, and the software used on Mobile Data Terminals (MDTs). Fort Bragg shall be responsible for the purchase and installation of MDTs and any additional licenses required for the software on Fort Bragg's MDTs, while Ukiah will maintain and upgrade the CAD program used on these devices.

Ukiah's IT department may assist Fort Bragg with the installation of MDTs upon request. Ukiah will charge Fort Bragg for these IT services at the rates specified in Attachment A, "IT Billable Hours and Rates." Ukiah's IT department must bill Fort Bragg within 30 days of rendering these services. The agreement allows for an annual increase of up to 5.0% in IT billable hours and rates. Ukiah must notify Fort Bragg of any proposed rate changes by February 1st each year; if no notification is given, a 5.0% increase will automatically apply from July 1st of the same year.

4. SCHEDULING:

- A. Dispatch scheduling shall be at the discretion of Ukiah. Fort Bragg agrees to keep Ukiah informed of all planned or reasonably foreseeable events that by their nature could require additional dispatch staffing.

ATTACHMENT A

IT BILLABLE HOURS AND RATES

Time of Service	Rates
Business Hours Monday – Friday, 8:00am – 5:00pm	On site : (T=Tier) / Hour T1-\$155 T2-\$180 T3-\$215 Remote : (T=Tier) / Hour T1-\$125 T2-\$150 T3-\$185
After Hours Monday – Friday, 5:00pm – 11:00pm Saturday, 9:00am – 5:00pm	On site : (T=Tier) / Hour T2-\$215 T3-\$235 Remote : (T=Tier) / Hour T2-\$175 T3-\$200
Overnight Monday – Friday, 11:00pm – 8:00am Saturday, 5:00pm – Monday, 8:00am	On site : (T=Tier) / Hour T2-\$250 T3-\$300 Remote : (T=Tier) / Hour T2-\$225 T3-\$250
Holidays	On site : (T=Tier) / Hour T2-\$300 T3-\$350 Remote : (T=Tier) / Hour T2-\$275 T3-\$325

Problem Severity	Initial Response Time	Escalation	Expected Time to Resolution
Emergency (Business Hours)	1 hour	N/A	Determined by the nature of the event - normally 4 hours
Critical – Site Impact	2 hours/next business day	1 hour	Determined by the nature of the event – normally 8 hours
Major – Departmental Impact	4 hours/next business day	4 hour	Determined by the nature of the event – normally 8 hours
Normal – User Impact	8 hours/next business day	8 hour	Determined by the nature of the event
Nuisance Issues	16 hours/2 nd business day	4 hour	Determined by the nature of the event



AGENDA SUMMARY REPORT

SUBJECT: Approval of Contact Amendment #2 in the Amount of \$12,000 with Whitchurch Engineering for Additional Design Services for Tenant Improvements and Fire Damage Pertaining to the New Electric Service Center Located at 1350 Hastings Road, and Approval of Corresponding Budget Amendment.

DEPARTMENT: Electric Utility

PREPARED BY: Cindy Sauers, Electric Utility Director

PRESENTER: Cindy Sauers, Electric Utility Director

ATTACHMENTS:

1. Whitchurch Engineering - Design Svcs Hastings - 2223-108 - Agreement - signed
2. Spec 24-01 - Hastings Tenant Improvements & Fire Damage Repair
3. Whitchurch Engineering Amendment #2

Summary: The City Council will consider approving contract Amendment #2 pertaining to the new Electric Service Center in the amount of \$12,000, with Whitchurch Engineering for additional design services for tenant improvements and fire damage repair, and approval of the corresponding budget amendment.

Background: The City Council approved the purchase of a building at 1350 Hastings Road to be used as the Electric Service Center to centralize all operations of the Utility. The roofing, grading, fencing and other site improvements were completed in February 2023. Phase 2 of the project consisted of the renovation of the interior of the building to convert the existing suites to office space, a conference room, and a warehouse. Ren-Alexander Design was contracted for Architectural Services and Whitchurch Engineering was contracted for structural, mechanical, and electrical engineering services (Attachment 1). On the morning of March 8, 2023, a fire broke out due to an electrical failure of a bathroom ceiling fan. Following the fire, both firms assessed the damage and revised the plans and specifications to include fire damage repair.

On December 6, 2023, Council adopted the new plans and specifications, (Attachment 2), for tenant improvements and fire damage repair and authorized Staff to advertise for bids. Council awarded the bid to Kirby Construction Company on March 6, 2024.

Discussion: During the demolition phase of the project, fire damage was uncovered that was concealed during the original inspection, requiring additional structural engineering to be completed on an adjacent truss. Subsequent Requests for Information (RFI) have been issued by Kirby that will require redesign of the mechanical systems and drawing revisions pertaining to the duct. Please refer to Attachment 3 for details pertaining to this Amendment.

Staff recommends approving contract Amendment #2 in the amount of \$12,000, bringing the total contract amount to \$120,558, and the corresponding budget amendment.

Recommended Action: Authorize the City Manager to sign Contract Amendment #2 with Whitchurch Engineering, in the amount of \$12,000, for additional design services for tenant improvements and fire damage repair pertaining to the new Electric Service Center, and approve corresponding budget amendment.

BUDGET AMENDMENT REQUIRED: Yes

CURRENT BUDGET AMOUNT: 80126100.80220.17023; \$0

PROPOSED BUDGET AMOUNT: 80126100.80220.17023; \$12,000

FINANCING SOURCE: 2022 Electric Lease Revenue Bonds

PREVIOUS CONTRACT/PURCHASE ORDER NO.: Contract 2223-108

COORDINATED WITH: Mary Horger, Financial Services Manager

DIVERSITY-EQUITY INITIATIVES (DEI):

CLIMATE INITIATIVES (CI):

GENERAL PLAN ELEMENTS (GP):

Approved: 
Sage Sangiacomo, City Manager

AGREEMENT FOR
PROFESSIONAL CONSULTING SERVICES
[Design Professional]

This Agreement, made and entered into this 20th day of September, 2022 ("Effective Date"), by and between CITY OF UKIAH, CALIFORNIA, hereinafter referred to as "City" and Whitchurch Engineering, Inc., a corporation organized and in good standing under the laws of the state of California, hereinafter referred to as "Consultant".

RECITALS

This Agreement is predicated on the following facts:

- a. City requires consulting services related to Professional Design Services for the Tenant Improvements at the Hastings Electric Service Center.
- b. Consultant represents that it has the qualifications, skills, experience and properly licensed to provide these services, and is willing to provide them according to the terms of this Agreement.
- c. City and Consultant agree upon the Scope-of-Work and Work Schedule attached hereto as Attachment "A", describing contract provisions for the project and setting forth the completion dates for the various services to be provided pursuant to this Agreement.

TERMS OF AGREEMENT

1.0 DESCRIPTION OF PROJECT

- 1.1 The Project is described in detail in the attached Scope-of-Work (Attachment "A").

2.0 SCOPE OF SERVICES

- 2.1 As set forth in Attachment "A".
- 2.2. Additional Services. Additional services, if any, shall only proceed upon written agreement between City and Consultant. The written Agreement shall be in the form of an Amendment to this Agreement.

3.0 CONDUCT OF WORK

- 3.1 Time of Completion. Consultant shall commence performance of services as required by the Scope-of-Work upon receipt of a Notice to Proceed from City. Consultant shall complete the work by February 6, 2023, and shall complete the work to the City's reasonable satisfaction, even if contract disputes arise or Consultant contends it is entitled to further compensation.

4.0 COMPENSATION FOR SERVICES

- 4.1 Basis for Compensation. For the performance of the professional services of this Agreement, Consultant shall be compensated on a time and expense basis not to exceed a guaranteed maximum dollar amount of \$104,918. Labor charges shall be based upon hourly billing rates for the various classifications of personnel employed by Consultant to perform the Scope of Work as set forth in the attached Attachment B, which shall include all indirect costs and

expenses of every kind or nature, except direct expenses. The direct expenses and the fees to be charged for same shall be as set forth in Attachment B. Consultant shall complete the Scope of Work for the not-to-exceed guaranteed maximum, even if actual time and expenses exceed that amount.

- 4.2 Changes. Should changes in compensation be required because of changes to the Scope-of-Work of this Agreement, the parties shall agree in writing to any changes in compensation. "Changes to the Scope-of-Work" means different activities than those described in Attachment "A" and not additional time to complete those activities than the parties anticipated on the date they entered this Agreement.
- 4.3 Sub-contractor Payment. The use of sub-consultants or other services to perform a portion of the work of this Agreement shall be approved by City prior to commencement of work. The cost of sub-consultants shall be included within guaranteed not-to-exceed amount set forth in Section 4.1.
- 4.4 Terms of Payment. Payment to Consultant for services rendered in accordance with this contract shall be based upon submission of monthly invoices for the work satisfactorily performed prior to the date of invoice less any amount already paid to Consultant, which amounts shall be due and payable thirty (30) days after receipt by City. The invoices shall provide a description of each item of work performed, the time expended to perform each task, the fees charged for that task, and the direct expenses incurred and billed for. Invoices shall be accompanied by documentation sufficient to enable City to determine progress made and the expenses claimed.

5.0 ASSURANCES OF CONSULTANT

- 5.1 Independent Contractor. Consultant is an independent contractor and is solely responsible for its acts or omissions. Consultant (including its agents, servants, and employees) is not City's agent, employee, or representative for any purpose.

It is the express intention of the parties hereto that Consultant is an independent contractor and not an employee, joint venturer, or partner of City for any purpose whatsoever. City shall have no right to, and shall not control the manner or prescribe the method of accomplishing those services contracted to and performed by Consultant under this Agreement, and the general public and all governmental agencies regulating such activity shall be so informed.

Those provisions of this Agreement that reserve ultimate authority in City have been inserted solely to achieve compliance with federal and state laws, rules, regulations, and interpretations thereof. No such provisions and no other provisions of this Agreement shall be interpreted or construed as creating or establishing the relationship of employer and employee between Consultant and City.

Consultant shall pay all estimated and actual federal and state income and self-employment taxes that are due the state and federal government and shall furnish and pay worker's compensation insurance, unemployment insurance and any other benefits required by law for himself and his employees, if any. Consultant agrees to indemnify and hold City and its officers, agents and employees harmless from and against any claims or demands by federal, state or local government agencies for any such taxes or benefits due but not paid by Consultant, including the legal costs associated with defending against any audit, claim, demand or law suit.

Consultant warrants and represents that it is a properly licensed professional or professional organization with a substantial investment in its business and that it maintains its own offices and staff which it will use in performing under this Agreement.

- 5.2 Conflict of Interest. Consultant understands that its professional responsibility is solely to City. Consultant has no interest and will not acquire any direct or indirect interest that would conflict with its performance of the Agreement. Consultant shall not in the performance of this Agreement employ a person having such an interest. If the City Manager determines that the Consultant has a disclosure obligation under the City's local conflict of interest code, the Consultant shall file the required disclosure form with the City Clerk within 10 days of being notified of the City Manager's determination.

6.0 INDEMNIFICATION

- 6.1 Insurance Liability. Without limiting Consultant's obligations arising under Paragraph 6.2 Consultant shall not begin work under this Agreement until it procures and maintains for the full period of time allowed by law, surviving the termination of this Agreement insurance against claims for injuries to persons or damages to property, which may arise from or in connection with its performance under this Agreement.

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. Insurance Services Office ("ISO) Commercial General Liability Coverage Form No. CG 20 10 10 01.
2. ISO Form No. CA 0001 (Ed. 1/87) covering Automobile Liability, Code 1 "any auto" or Code 8, 9 if no owned autos and endorsement CA 0025.
3. Worker's Compensation Insurance as required by the Labor Code of the State of California and Employers Liability Insurance.
4. Errors and Omissions liability insurance appropriate to the consultant's profession. Architects' and engineers' coverage is to be endorsed to include contractual liability.

B. Minimum Limits of Insurance

Consultant shall maintain limits no less than:

1. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, the general aggregate limit shall apply separately to the work performed under this Agreement, or the aggregate limit shall be twice the prescribed per occurrence limit.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.

3. Worker's Compensation and Employers Liability: Worker's compensation limits as required by the Labor Code of the State of California and Employers Liability limits of \$1,000,000 per accident.
4. Errors and Omissions liability: \$1,000,000 per occurrence.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to the City, its officers, officials, and employees; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

D. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages

- a. The City, its officers, officials, and employees are to be covered as additional insureds as respects; liability arising out of activities performed by or on behalf of the Consultant, premises owned, occupied or used by the Consultant, or automobiles owned, hired or borrowed by the Consultant for the full period of time allowed by law, surviving the termination of this Agreement. The coverage shall contain no special limitations on the scope-of-protection afforded to the City, its officers, officials, and employees.
- b. The Consultant's insurance coverage shall be primary insurance as respects to the City, its officers, officials, and employees. Any insurance or self-insurance maintained by the City, its officers, officials, and employees shall be in excess of the Consultant's insurance and shall not contribute with it.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officers, officials, or employees.
- d. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2. Worker's Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the City, its officers, officials, and employees for losses arising from Consultant's performance of the work, pursuant to this Agreement.

3. Professional Liability Coverage

If written on a claims-made basis, the retroactivity date shall be the effective date of this Agreement. The policy period shall extend from one year of the date of the final approved invoice for this project.

4. All Coverages

Each Insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.

E. Acceptability of Insurers

Insurance is to be placed with admitted California insurers with an A.M. Best's rating of no less than A- for financial strength, AA for long-term credit rating and AMB-1 for short-term credit rating.

F. Verification of Coverage

Consultant shall furnish the City with Certificates of Insurance and with original Endorsements effecting coverage required by this Agreement. The Certificates and Endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The Certificates and Endorsements are to be on forms provided or approved by the City. All Certificates and Endorsements are to be received and approved by the City before Consultant begins the work of this Agreement. The City reserves the right to require complete, certified copies of all required insurance policies, at any time. If Consultant fails to provide the coverages required herein, the City shall have the right, but not the obligation, to purchase any or all of them. In that event, after notice to Consultant that City has paid the premium, the cost of insurance may be deducted from the compensation otherwise due the contractor under the terms of this Contract.

G. Subcontractors

Consultant shall include all sub-contractors or sub-consultants as insured under its policies or shall furnish separate certificates and endorsements for each sub-contractor or sub-consultant. All coverage for sub-contractors or sub-consultants shall be subject to all insurance requirements set forth in this Paragraph 6.1.

6.2 Indemnification. Notwithstanding the foregoing insurance requirements, and in addition thereto, Consultant agrees, for the full period of time allowed by law, surviving the termination of this Agreement, to indemnify the City for any claim, cost or liability that arises out of, or pertains to, or relates to any negligent act or omission or the willful misconduct of Consultant and its agents in the performance of services under this contract, but this indemnity does not apply to liability for damages for death or bodily injury to persons, injury to property, or other loss, arising from the sole negligence, willful misconduct or defects in design by the City, or arising from the active negligence of the City.

"Indemnify," as used herein includes the expenses of defending against a claim and the payment of any settlement or judgment arising out of the claim. Defense costs include all costs associated with defending the claim, including, but not limited to, the fees of attorneys, investigators, consultants, experts and expert witnesses, and litigation expenses.

References in this paragraph to City or Consultant, include their officers, employees, agents, and subcontractors.

7.0 CONTRACT PROVISIONS

- 7.1 Documents and Ownership of Work. All documents furnished to Consultant by City and all documents or reports and supportive data prepared by Consultant under this Agreement are owned and become the property of the City upon their creation and shall be given to City immediately upon demand and at the completion of Consultant's services at no additional cost to City. Deliverables are identified in the Scope-of-Work, Attachment "A". All documents produced by Consultant shall be furnished to City in digital format and hardcopy. Consultant shall produce the digital format, using software and media approved by City.
- 7.2 Governing Law. Consultant shall comply with the laws and regulations of the United States, the State of California, and all local governments having jurisdiction over this Agreement. The interpretation and enforcement of this Agreement shall be governed by California law and any action arising under or in connection with this Agreement must be filed in a Court of competent jurisdiction in Mendocino County.
- 7.3 Entire Agreement. This Agreement plus its Attachment(s) and executed Amendments set forth the entire understanding between the parties.
- 7.4 Severability. If any term of this Agreement is held invalid by a court of competent jurisdiction, the remainder of this Agreement shall remain in effect.
- 7.5 Modification. No modification of this Agreement is valid unless made with the agreement of both parties in writing.
- 7.6 Assignment. Consultant's services are considered unique and personal. Consultant shall not assign, transfer, or sub-contract its interest or obligation under all or any portion of this Agreement without City's prior written consent.
- 7.7 Waiver. No waiver of a breach of any covenant, term, or condition of this Agreement shall be a waiver of any other or subsequent breach of the same or any other covenant, term or condition or a waiver of the covenant, term or condition itself.
- 7.8 Termination. This Agreement may only be terminated by either party: 1) for breach of the Agreement; 2) because funds are no longer available to pay Consultant for services provided under this Agreement; or 3) City has abandoned and does not wish to complete the project for which Consultant was retained. A party shall notify the other party of any alleged breach of the Agreement and of the action required to cure the breach. If the breaching party fails to cure the breach within the time specified in the notice, the contract shall be terminated as of that time. If terminated for lack of funds or abandonment of the project, the contract shall terminate on the date notice of termination is given to Consultant. City shall pay the Consultant only for services performed and expenses incurred as of the effective termination date. In such event, as a condition to payment, Consultant shall provide to City all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared by the Consultant under this Agreement. Consultant shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder, subject to off-set for any direct or consequential damages City may incur as a result of Consultant's breach of contract.

7.9 Execution of Agreement. This Agreement may be executed in duplicate originals, each bearing the original signature of the parties. Alternatively, this Agreement may be executed and delivered by facsimile or other electronic transmission, and in more than one counterpart, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. When executed using either alternative, the executed agreement shall be deemed an original admissible as evidence in any administrative or judicial proceeding to prove the terms and content of this Agreement.

8.0 NOTICES

Any notice given under this Agreement shall be in writing and deemed given when personally delivered or deposited in the mail (certified or registered) addressed to the parties as follows:

CITY OF UKIAH
ELECTRIC UTILITY DEPARTMENT
300 SEMINARY AVENUE
UKIAH, CALIFORNIA 95482-5400

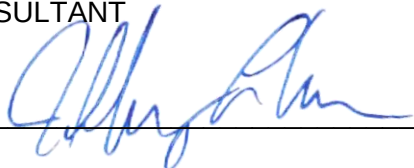
WHITCHURCH ENGINEERING, INC.
JEFFREY LAIKAM, PE
610 9TH STREET
FORTUNA, CALIFORNIA 95540

9.0 SIGNATURES

IN WITNESS WHEREOF, the parties have executed this Agreement the Effective Date:

CONSULTANT

BY:



09/26/2022

Date

PRINT NAME: Jeffrey Laikam, PE

68-0482707

IRS IDN Number

CITY OF UKIAH

BY:



SAGE SANGIACOMO
CITY MANAGER

Nov 9, 2022

Date

ATTEST

Kristine Lawler

Kristine Lawler (Nov 9, 2022 10:40 PST)

KRISTINE LAWLER
CITY CLERK

Nov 9, 2022

Date

**Whitchurch Engineering, Inc. RFP Response for Professional Design Services
Tenant Improvements at the Hastings Electric Service Center**

B. Project Understanding and Proposed Approach

Whitchurch Engineering (WEI) reviewed the Request for Proposal, Scope of Work and 30% design drawings (100% Schematic Drawing Set by Ren/Alexander Design) to develop our approach to this project. Our goal, as the prime consultant, is to provide building design in accordance with the 30% design drawings that will satisfy the City of Ukiah's requirements and requests for the building. As a multidisciplinary engineering firm, WEI will provide engineering for all aspects (structural, mechanical, electrical, plumbing and Title 24) of the tenant improvements. WEI employs a wide range of licensed Civil Engineers, two of which possess a Master of Science degree in structural engineering, licensed Mechanical Engineers and a licensed Electrical Engineer. Our intention is to self-perform all of the engineering tasks with the exception of the Title 24 calculations which will be subcontracted.

The staff structure utilized to manage this project will be the following:

1. Principal/Senior Management – Senior management will perform the final quality control review prior to sending deliverables out to the client.
2. Project manager (licensed civil engineer who formerly held a Type A California Contractor's License) duties will:
 - a. Coordinate between the client and architect, and the WEI design team
 - b. Provide tasks for discipline supervisors to assign
 - c. Provide initial scheduling information and biweekly schedule reports to the client
 - d. Track discipline costs
3. Discipline supervisors (Civil with emphasis in structural and MEP supervisor)
 - a. Coordinate with project manager, the client and the design engineers
 - b. Assign discrete engineering tasks to lead design engineers
 - c. Provide checking and verifying for each design deliverable
 - d. Assist with discipline specific cost benefit analysis for alternatives in design
4. Design Engineers
 - a. Perform task assignments as provided by the discipline supervisor
 - b. Perform calculations as required by design task
 - c. Alter/Create drawings to support calculation and design requirements
 - d. Provide schedule updates biweekly to support project manager
5. Drafter
 - a. Draft discipline specific plan sheets as requested by each design engineer (mechanical, electrical, plumbing, structural)
 - b. Revise drawings per design engineer requests
 - c. Create electronic and paper format drawing sets for submittal

WEI works frequently with architects developing engineered construction drawings from 30% design drawings. If selected for this project, our priority would be to assist the architect and client to select the optimal design for the building's final end use. We will perform this assistance by answering the following questions and analyzing the design criteria for the client and architect to select the correct building configuration. This list of questions is preliminary but represents our initial design approach:

1. Determine the weight (live load) that could be stored above the offices without altering the existing concrete slab.
2. Determine the quantity of slab to be replaced to achieve a targeted storage load (125/250 psf).
3. Determine the quantity and placement of HVAC units for the proposed building configuration.
4. Determine the quantity of climate zones that can be provided with standard HVAC equipment.
5. Evaluate costs associated with selection/design of a sophisticated climate zone configuration.
6. Identify potential subpanel locations.

The project flow will follow this outline:

1. Preliminary information gathering
2. Configuration decision making based on preliminary information gathering
3. Preparation of 60% construction documents which includes structural calculations and drawings as well as mechanical, electrical and plumbing calculations and drawings.
4. Architect and Client confirmation review (approx. 1 week duration)
5. Preparation of 95% final design construction documents
6. Submittal of 95% final design construction documents to Building Department
7. Plan check response
8. Resubmittal of 100% final design construction documents
9. Issuance of Building Permit/ Bidding
10. Construction begins

After the preliminary design information is gathered and configuration decisions are confirmed, creation of the final design construction documents will be initiated. The project manager will provide biweekly project updates to ensure the drawings and other documentation are progressing appropriately. At the 60% level of completion, each discipline will submit its drawing set to the project manager to confirm design intent and verify that the architect and client design requirements are satisfied. This review of drawings by the client and architect will be allocated one week of review time to maintain the schedule. The specific disciplines may submit their drawings on a staggered time line. After the client and architect review of the 60% drawings, comments will be addressed and the final design construction drawings will be taken to the 95% level of completion and submitted to the building department. Plan check comments will be addressed. Final design construction documents will be issued.

C. Project Team

Our team is comprised of experienced design engineers and supporting personnel. Each having a specialty that relates to the proposed project. Below are their brief bio's. Resumes can be found in Appendix 1.

Jeffrey Laikam, PE – Engineering Manager/Team Lead

Mr. Laikam has more than 22 years of experience, including a combined eighteen years with Whitchurch Engineering with eight years serving as Senior Design Engineer and Engineering Supervisor for the Humboldt Bay Power Plant (HBPP) nuclear decommissioning project. Managing the Fortuna Office engineering staff, his expertise includes contract and project management, land development, work planning and scheduling, development of proposals, client development and project budget, schedule and scope management. He also serves as Scotia Community Services District Engineer and City of Ferndale Deputy City Engineer.

Derek Long, PE – Project Manager

Derek is a licensed professional civil engineer and general contractor with 10 years of progressive experience, including engineering support services for the Humboldt Bay Power Plant (HBPP) nuclear decommissioning project. His expertise includes project management, structural design and implementation, land development, work planning and scheduling, budget control, and permit assistance. His additional highlights are building/facility construction & demolition, subdivision improvements, construction oversight & inspections, storm drainage, roadway improvements, fire water and domestic water system modifications, and sewer system improvements.

Aaron Bennett, PE, ME – Mechanical Engineering Supervisor

Mr. Bennett has 17 years experience and is a self-motivated Senior Engineer having worked in nuclear decommissioning, demolition, restoration, and construction industries for over 12 years. He is a licensed Senior Civil Engineer, licensed Mechanical Engineer, and experienced Project Planner. He understands the necessity for establishment and maintenance of good client and stakeholder relationships for successful project completion. Aaron recently completed the Humboldt Bay Power Plant Decommissioning and Restoration Project. He retained over project entirety for engineering and planning expertise for site owner during self-performed scope and later as a subcontractor to the prime civil works contractor. He is well diversified in all aspects of project planning and engineering with excellent understanding of field construction support needs and intelligent site infrastructure planning.

Brett Whitchurch, PE – Structural Design Supervisor

Brett started his engineering career as a summer intern for the strictly regulated Humboldt Bay Power Plant (HBPP) decommissioning project. This site was scrutinized by the California Coastal Commission and the Nuclear Regulatory Commission because of its location in Humboldt Bay and onsite materials. Since that time, his primary focus is utilizing his structural expertise for commercial structures and multi-family housing projects. Brett provides structural design and calculation resolving California Coastal Commission requirements for high seismic load and wind values applied to structures through design. Brett is currently preparing for the SE (Structural Engineer) exam.

Brian Finck, EE – Electrical Engineering

Brian is a licensed professional electrical engineer with more than 25 years' experience. He specializes in control systems design, engineering for forestry products, water quality products, signaling systems and solar powered radar. He has spent a majority of his career working with Caltrans and provided his electrical expertise to the Humboldt Bay Power Plant decommissioning project. Project highlights include a 500kv switchyard design, 57kv substation design, and preliminary design on high voltage systems.

Chad Pasquini - Certified Building Official

Chad has spent his entire career in the building industry. His most recent 19-years has been as a Certified Building Official, Building Inspector, Plans Examiner, and Code Enforcement Officer ensuring the health and safety of the public. His experience encompasses a full range of development review from residential additions through large commercial projects. He ensures compliance with all applicable building and energy codes, coordinates and schedules with permitting agencies and helps to expedite plan issuance. Chad aids architects, contractors, designers, engineers, and home owners to achieve their goals in completing building projects from the ground up such as new single-family residences, residential remodels and additions, land use permits, commercial tenant improvements, new commercial construction, and hotels, apartments, and multi-story buildings.

Abbey Technical Services – Subconsultant for Title 24 Energy Calculations

Established in 1985 By William N. Abbey to provide California Title 24 energy calculation. Anne M. McQueeney came on board in 1990 and mentored with Bill for 11 years before purchasing the business in 2001. Anne has done thousands of energy calculations for residential and commercial buildings throughout all 16 climate zones in the California. Anthony K. McQueeney, her son, has been learning the Energy Code since 2020 and has since become a Certified Energy Analyst through the California Association of Building Energy Consultants. Anthony is now working on taking over the business and continuing to provide accurate and valuable T24 Services throughout the California.

**Whitchurch Engineering, Inc. RFP Response for Professional Design Services
Tenant Improvements at the Hastings Electric Service Center**

Multi-Use New Construction, Humboldt County, Eureka, CA

Working with McSorley Architecture, this state-of-the-art multi-use structure contains commercial/retail space and multi-family residences including a rooftop patio. Design and engineering are currently at 100% and the project is in bidding phase.

Client: Garrett McSorely, McSorely Architecture

Phone: 707.633.9283

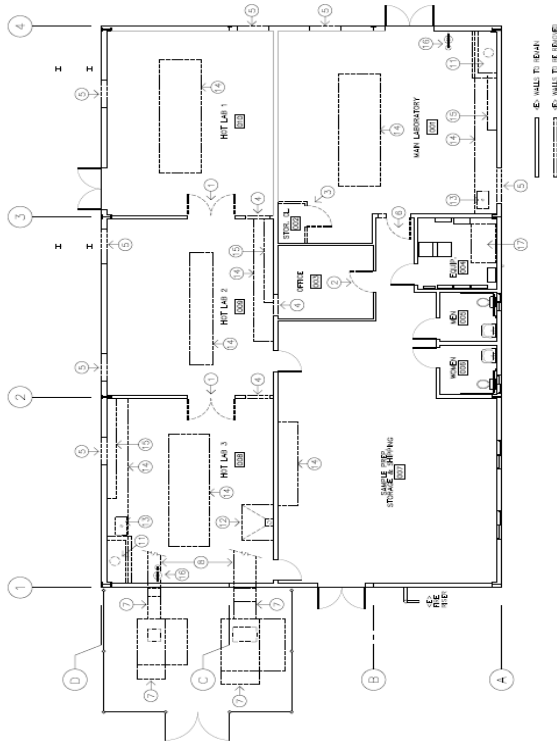
Email: garrett.mcsorley@gmail.com



WEI provided:

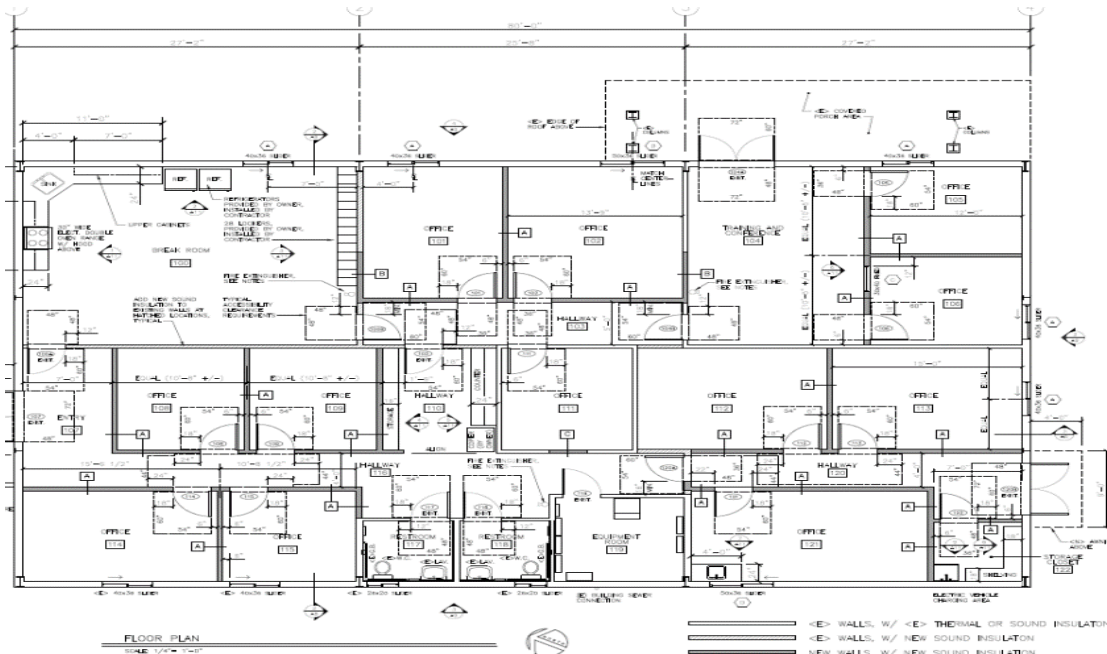
- Structural calculations
- Roof framing details
- Multi-floor framing details
- Structural Notes, Sections, Detailing throughout
- Foundation Plans
- Electrical Power/Communication Plan
- Floor plan layout and equipment locations
- Electrical Notes & Energy Notes
- Service Load Demand and Connected Load calculations (NEC 220)
- Voltage Drop Calculations
- Single-Line Diagram for Current Carrying Conductors
- Grounding - Diagram (NEC 250)
- Electrical Equipment Selection
- Conductor / Conduit sizing and Specifications
- Lighting Plan and Schedule
- Lighting Calculations (Title 24)
- Panel Schedules / Load Balancing
- Sales area Equipment and Raceway Specifications / Notes

Humboldt Bay Power Plant – Building conversion, Humboldt County, Eureka, CA



WEI was tasked to convert a previous laboratory/shipping and storage building into usable office space. This included twelve private offices, entry area, training and conference room, break room and storage closet. Work involved both demolition and new construction. Some existing interior and exterior walls were removed, along with existing doors and frames. All interior and exterior components of the mechanical system were also removed. New office spaces, HVAC, interior windows, doors, cabinetry, counters and shelving were designed. Electrical and plumbing systems were revised. Seismic and structural design for the associated mechanical equipment was provided along with egress and accessibility access, parking lot areas, grading and drainage designs. As Engineers of Record, certification was submitted to the building department to obtain occupancy permitting confirming plans were to current code requirements.

Client: Kristin Zaitz, PG&E, Civil/Systems
Engineering Manager
Phone: 805-550-2632
Email: KMMh@pge.com



**Whitchurch Engineering, Inc. RFP Response for Professional Design Services
Tenant Improvements at the Hastings Electric Service Center**

Orr Creek Commons II - Mendocino County, Ukiah

Currently under construction, WEI worked closely with Lapotre Architects on this 40-unit multi-family residential development for the Rural Community Housing Development Corporation (RCHDC).

Client: Philippe Lapotre, Lapotre Architects

Phone: 707.442-8867

Email: plapotre@plarchitect.com

WEI Provided:

- Roof Framing plans
- 2nd Floor Framing Plans
- Foundation Plans
- Structural Notes
- Structural Sections
- Structural Details
- Structural calculations
- Address structural plan check comments
- Attend 30%, 60% and 90% coordination meetings
- Electrical Power/Communication Plan & Electrical Notes
- Electrical load calculations
- One-Line Diagram for electrical and grounding
- Electrical equipment schedule
- Equipment specifications (report)
- Lighting Plan
- Lighting calcs
- Lighting schedule
- Panel Schedules
- Prepare PG&E electrical application
- Plumbing Plans
- HVAC and Ducting Plans
- Prepare plumbing calculations
 - Total developed length diagram
 - Fixture unit table
 - Details
- Plumbing fixture schedule and pipe schedule
- Prepare HVAC sizing and ventilation calculations
- Gas meter calcs, meter sizing and layout
- Mechanical equipment schedule
 - Equipment specifications (report)
 - Sequence of operations



G. Exceptions

1. RFP - Attachment A, Insurance Requirements for Consultants: General Liability (GL) insurance requires “operations, products and completed operations, as applicable”. This requested GL coverage applies more to companies that manufacture/sell products and/or perform construction or installation at clients’ homes or business. As engineers we provide a professional service and this type of coverage is more appropriate under our Professional Liability. If awarded the project, WEI would request this coverage be removed from the GL requirements.
2. Also, for Insurance, the request to cover volunteers as additional insured is too broad. Our GL would be vulnerable as the work we are providing would not encompass the use of volunteers. Volunteers may be utilized at a different capacity by other organizations however, as engineers we cannot control who is onsite and should not be responsible for the actions of others beyond our control. Our GL is typically written to cover The City, its officers, officials, and employees only and we would ask for volunteers to be removed from this requirement.



Appendix 1 - Resumes





Jeffrey Laikam, Professional Engineer, Engineering Manager

Mr. Laikam has more than 22 years of experience, including a combined eighteen years with Whitchurch Engineering with eight years serving as Senior Design Engineer and Engineering Supervisor for the Humboldt Bay Power Plant (HBPP) nuclear decommissioning project. Managing the Fortuna Office engineering staff, his expertise includes contract and project management, land development, work planning and scheduling, development of proposals, client development and project budget, schedule and scope management. He also serves as Scotia Community Services District Engineer and City of Ferndale Deputy City Engineer.

SELECT PROJECT EXPERIENCE

**Scotia Community Services District
District Engineer**
Scotia

**Kreations AutoBody – Commercial
Remodel, Addition, Tenant
Improvements 13,026 sq ft**
Fortuna

**PG&E, Humboldt Bay Power Plant
Building Remodel from
laboratory/shipping to office space**
Eureka

**Blue Lake Rancheria, New 20,000 sq ft
facility with 80,000 parking area**
Blue Lake

**Fortuna Senior Center – New 7,700 sq
ft Building**
Fortuna

**New Commercial Structure, 10,000 sq
ft including 6,000 outpatient medical
facility**
Oroville

**Moorpark, Multi-Family Development
11-Structures including community
building and covered parking**
Moorpark

**Fortuna Fire Department – New 6,380
sq ft Commercial Structure**
Fortuna

**Commercial Tenant Improvements,
building design for 1,600 sq ft
addition**
Eureka

Ferndale Deputy City Engineer
Ferndale

**Scotia Community Services District,
Scotia Museum, Remodel and
Accessibility Improvements**
Scotia

**Orr Creek Commons
Multi-Story Affordable Senior
Housing Development Phases I & II,
80-Units**
Ukiah

**The Plateau - Multi-Story Housing
Project – 23 Senior Units, 20
Supportive Housing Units, 25 Family
Townhomes**
Fort Bragg

**Sunset Apartments - Multi-Story,
Multi-Phased, 43-units Phase 1**
Eureka

**Oak Valley Villas – Site Civil
Engineering for New Multi-family
Residential Housing**
Clear Lake

**The Cottages at Rigby – 26
Residential Housing Units Plus
Common Use Building & Laundry
Facility, Site Civil, Structural,
Construction Inspections**
Rio Dell

**County of Humboldt – Veterans Hall
Accessibility Modifications /
Upgrades**
Ferndale

EDUCATION

B.S., Environmental
Resources Engineering
Humboldt State University

REGISTRATIONS

Licensed Professional
Engineer
CA 68586

Qualified Stormwater
Pollution Prevention Plans
(SWPPP) Developer and
Practitioner
CA 23928

AREAS OF EXPERTISE

Project Management

Contract Management

Budget Control/Analysis

Proposal Review

Land Development

Permit Assistance

Project Scheduling

TOTAL YEARS EXPERIENCE

22 years



Derek Long, Professional Engineer, Project Manager

Derek is a licensed professional civil engineer and general contractor with 10 years of progressive experience, including engineering support services for the Humboldt Bay Power Plant (HBPP) nuclear decommissioning project. His expertise includes project management, structural design and implementation, land development, work planning and scheduling, budget control, and permit assistance. His additional highlights are building/facility construction & demolition, subdivision improvements, construction oversight & inspections, storm drainage, roadway improvements, fire water and domestic water system modifications, and sewer system improvements.

SELECT PROJECT EXPERIENCE

EDUCATION

B.S., Civil Engineering
Gonzaga University
Spokane Washington

REGISTRATIONS

Licensed Professional
Engineer
CA 85055

Licensed General
Engineering Contractor
CA 1041498

Qualified Stormwater
Pollution Prevention Plans
(SWPPP) Developer
CA 85055

AREAS OF EXPERTISE

Project Management

AutoCAD Civil 3D

RISA-3D and Stru-Calc
Structural Analysis

Site Civil Engineering

Construction Oversight

TOTAL YEARS

EXPERIENCE

10 years

Fortuna Senior Center – New 7,700 sq ft Building

Fortuna

Fortuna Fire Department – New Three Story Training Facility

Fortuna

Wendt Construction - Tenant Improvements, 19,200 sq ft Multi-Use Building

Rio Dell

New Commercial Structure - 10,000 sq ft including 6,000 outpatient medical facility

Oroville

Scotia Community Services District - Parks Accessibility Upgrades including Restroom

Scotia

Eel River Brewing Company – Tenant Improvements including new Warehouse and Office Space

Fortuna

Oak Valley Villas – Site Civil Engineering for New Multi-family Residential Housing

Clear Lake

Resident Owned Parks – Construction Oversight for Gas/Electric System Upgrades

Arcata

Dayle's Diesel - New 9,600 sq ft Commercial Repair Shop and Office Space

Fortuna

Double D Steak House – Accessibility Compliance, Outdoor Seating addition

Fortuna

Lucina Holdings – Tenant Improvements, Mechanical Design for Medical Office

Fortuna



Aaron Bennett, Mechanical & Civil Engineer, Engineering Supervisor

Aaron is an experienced civil and mechanical engineer with a keen understanding of maintaining strong client and stakeholder relationships culminating in successful project completions. He has provided his expertise in project planning, design, and field construction support for residential, commercial, and industrial projects. Aaron provides intelligent site infrastructure planning for complex projects and thrives in an environment of strict timelines and budgetary constraints. In a supervisory role, Aaron is responsible for the mechanical engineering department's project management and staff relating to design and support for all aspects of the company's mechanical projects.

SELECT PROJECT EXPERIENCE

EDUCATION

B.S., Mechanical
Engineering, University of
Idaho

REGISTRATIONS

Licensed Professional
Engineer
CA No. 79365 PE
CA No. 38514 ME

AREAS OF EXPERTISE

Project Stakeholder
Coordination

Schedule Development &
Optimization

Mechanical Design Review
& Development

Instrumentation &
Equipment
Troubleshooting

Risk Mitigation & Hazard
Evaluation

Technical & Contract
Oversight

**TOTAL YEARS
EXPERIENCE**

17 years

**Eureka Mall Space #33 7,968 sq ft
Merchant/Retail Conversion to Office
Space**
Eureka

**Orr Creek Commons
Multi-Story Affordable Housing
Development Phases I & II**
Ukiah

**The Plateau - Multi-Story Housing
Project – 23 Senior Units, 20 Supportive
Housing Units, 25 Family Townhomes**
Fort Bragg

**Sunset Apartments - Multi-Story, Multi-
Phased, 43-units Phase 1**
Eureka

**Pine Hill, Multi-Story, Multi-Phased
Affordable Housing**
Eureka

**Mixed Use Multi-Family, Commercial,
Retail Building**
Eureka

**Blue Lake Rancheria – Multi-Story
20,000 sq ft facility**
Blue Lake

**Eureka Rescue Mission – Women's
Shelter Renovation**
Eureka

**Eureka Natural Foods – Dining
Expansion
Utility Relocation**
Eureka

**New Commercial Structure, 10,000 sq
ft including 6,000 outpatient medical
facility**
Oroville

**Blue Lake Rancheria, New 20,000 sq ft
facility with 80,000 parking area**
Blue Lake

**Mendocino Animal Hospital Tenant
Improvements - Mechanical**
Ukiah

**Market Expansion, Tenant
Improvements, Addition, Commercial
Kitchen, South State Street**
Ukiah

**Fortuna Fire Department – New 6,380
sq ft Commercial Structure**
Fortuna

**Fortuna Senior Center – New 7,700 sq
ft Building**
Fortuna

**PG&E, Humboldt Bay Power Plant
Building Remodel from
laboratory/shipping to office space**
Eureka

**RCHCD Emergency Electrical Power
Systems calculations and design**
Ukiah

**Scotia Community Services District,
Scotia Museum, Remodel/Mechanical
and Accessibility Improvements**
Scotia

**Resident Owned Parks – Electrical
Distribution Upgrade**
Eureka



Brett Whitchurch, Professional Engineer, Structural Supervisor

Brett started his engineering career as a summer intern for the strictly regulated Humboldt Bay Power Plant (HBPP) decommissioning project. This site was scrutinized by the California Coastal Commission and the Nuclear Regulatory Commission because of its location in Humboldt Bay and onsite materials. Since that time, his primary focus is utilizing his structural expertise for commercial structures and multi-family housing projects. Brett provides structural design and calculation resolving California Coast Commission requirements for high seismic load and wind values applied to structures through design. Brett is currently preparing for the SE (Structural Engineer) exam.

SELECT PROJECT EXPERIENCE

EDUCATION

B.S., Civil Engineering,
Emphasis in Structural,
University of California,
Davis

M.S., Civil Engineering,
Emphasis in Structural,
University of California,
Davis

REGISTRATIONS

Licensed Professional
Engineer
CA No. 90914

AREAS OF EXPERTISE

Structural Design and
Review

Technical Writing

Engineering Evaluations

RISA-3D Advanced
Structural Modeling and
Dynamic Analysis
Modeling

TOTAL YEARS EXPERIENCE

10 years

**Eureka Mall Space #33 7,968 sq ft
Merchant/Retail Conversion to Office
Space**
Eureka

**PG&E, Humboldt Bay Power Plant
Building Remodel from
laboratory/shipping to office space**
Eureka

**Blue Lake Rancheria, New 20,000 sq ft
facility with 80,000 parking area**
Blue Lake

**Orr Creek Commons
Multi-Story Affordable Senior Housing
Development Phases I & II, 80-Units**
Ukiah

**Willow Terrace - Multi-Story, 38-Unit
Supportive Housing Development**
Ukiah

**The Plateau - Multi-Story Housing
Project – 23 Senior Units, 20
Supportive Housing Units, 25 Family
Townhomes**
Fort Bragg

**Mixed Use Multi-Family, Four Story,
Commercial, Retail Building**
Eureka

**Sunset Apartments - Multi-Story,
Multi-Phased, 43-units Phase 1**
Eureka

**Southern Trinity Health Services, Tenant
Improvements converting an old
hardware store to a medical & dental
clinic**
Scotia

**Frito Lay New 7,283 sq ft Distribution
Center including Warehouse, Offices, &
Conference Room**
Blue Lake

**Market Expansion, Tenant
Improvements, Addition, Commercial
Kitchen, South State Street**
Ukiah

**Harbers Insurance Office Remodel and
Addition, 4,158 sq ft**
Fortuna

**Kreations AutoBody – Commercial
Remodel, Addition, Tenant
Improvements 13,026 sq ft**
Fortuna

**Moorpark, Multi-Family Development
11-Structures including community
building and covered parking**
Moorpark

**Elk Valley Casino, 43,160 sq ft and
Associated Development Improvements**
Crescent City



Brian Finck, Professional Electrical Engineer

Brian is a licensed professional electrical engineer with more than 25 years' experience. He specializes in control systems design, engineering for forestry products, water quality products, signaling systems and solar powered radar. He has spent a majority of his career working with Caltrans and provided his electrical expertise to the Humboldt Bay Power Plant decommissioning project. Project highlights include a 500kv switchyard design, 57kv substation design, and preliminary design on high voltage systems.

SELECT PROJECT EXPERIENCE

PG&E, Humboldt Bay Power Plant Building Remodel from laboratory/shipping to office space
Eureka

The Plateau - Multi-Story Housing Project – 23 Senior Units, 20 Supportive Housing Units, 25 Family Townhomes
Fort Bragg

Redwood Coast – Humboldt County Airport – Construction Renovation Electrical Inspections
McKinleyville

CalFire - Rohnerville Air Attack Base Upgrades – Electrical Plans
Fortuna

Humboldt Bay Power Plant Decommissioning – Eureka Decommissioning Electrical Engineer

- Provide Electrical Field Support for Caisson Ventilation
- Provide Electrical Field Support for Ground Water Treatment System (GWTS)
- Review / Approve Electrical Plans by others
- Support ISFSI Electrical Activities
- Write Design Change Notices (DCNs), Field Change Notices, and Work Instruction to provide direction for field staff

Electrical Engineering

- 500 kv switchyard design, site layout, four position ring bus, grounding design and details, raceway and lighting details bus connection details, control and protection, AC and DC station service, review/approve work by others
- 57 kv substation design, soil resistivity testing, 3.0 MVar capacitor bank control and protection design
- 72 kv breaker replacement, bus connection details, wiring schematics and diagrams
- Designed, Tested, Wrote Ladder Logic & Started PLC controlled systems
- Allen-Bradley PLC-5, SLC-500, IMC S Class Motion Controllers, Modicon, Square D, Westinghouse
- Tested & Started Allen-Bradley Drive Control Systems, AC & DC Drive Systems, Baldor AC Drives
- Programmed MMI's, PanelView, Wonderware
- Preliminary design on High Voltage Systems
- Conducted Fault Studies
- Prepared Conduit & Feeder Schedule
- One-Line Diagrams
- Switch Gear Detailing
- Underground Detailing
- Substation Design

EDUCATION

B.S., Electrical Engineering
University of North Dakota

REGISTRATIONS

Licensed Professional
Electrical Engineer
CA 17756

AREAS OF EXPERTISE

Electrical Field Support

Plan Review

Conduit/Feeder Schedules

Electrical Diagrams

Substation Design

COMPANY EXPERIENCE

Whitchurch Engineering
Project Based
2018 – Present

Lutech Resources
Project Based
Jan 2015 -Present

Caltrans (State of CA)
Project Based
June 2000 – Present

Daqota Systems, Inc
Project Based
June 1999 – Jan 2015

Black & Veatch
June 1999 – June 2000

TOTAL YEARS EXPERIENCE

25 years



Chad Pasquini, Certified Building Official

Chad has spent his entire career in the building industry. His most recent 19-years has been as a **Certified Building Official**, Building Inspector, Plans Examiner, and Code Enforcement Officer ensuring the health and safety of the public. His experience encompasses a full range of development review from residential additions through large commercial projects. This includes working with residents and their agents to resolve and remediate code violations. He ensures compliance with all applicable building and energy codes, coordinates and schedules with permitting agencies and helps to expedite plan issuance. Chad aids architects, contractors, designers, engineers, and home owners to achieve their goals in completing building projects from the ground up such as new single-family residences, residential remodels and additions, land use permits, commercial tenant improvements, new commercial construction, and hotels, apartments, and multi-story buildings.

EDUCATION

Butte College, CA
Building Inspection
Technology Certification

REGISTRATIONS

I.C.C. Certified Building
Inspector, 5116805-10

I.A.P.M.O. Certified
Mechanical Inspector,
090648

I.A.P.M.O. Certified
Plumbing Inspector,
098501

I.C.C. Certified Electrical
Inspector, 5116805-E1

I.C.C. Certified Building
Plans Examiner, 5116805-
B3

C.A.C.E.O. Certified Code
Enforcement Officer 1

I.C.C. Certified Building
Official, 5116805

TOTAL YEARS EXPERIENCE

19 years

SELECT PROJECT EXPERIENCE

Building Official/Plans Examiner
City of Arcata – 2003 to 2016

Chief Building Official
Humboldt County – 2017 to 2019

**PG&E, Humboldt Bay Power Plant
Building Remodel from
laboratory/shipping to office space**
Eureka

**Frito Lay New 7,283 sq ft Distribution
Center including Warehouse, Offices, &
Conference Room**
Blue Lake

**County of Humboldt – Accessibility
Design and Permitting Assistance –
County Administrative Offices**
Eureka

**County of Humboldt – Accessibility
Design and Permitting Assistance –
Humboldt County Airport**
McKinleyville

**Market Expansion, Tenant
Improvements, Addition, Commercial
Kitchen, South State Street**
Ukiah

**Yurok Tribe Emergency Operations
Center, 18,652 sq ft community
shelter/operations center - 3rd Party
Inspections**
Klamath

**Kreations AutoBody – Commercial
Remodel, Addition, Tenant
Improvements 13,026 sq ft**
Fortuna

**Fortuna Senior Center – New 7,700 sq ft
Building**
Fortuna

**Scotia Community Services District,
Scotia Museum, Remodel and
Accessibility Improvements**
Scotia

**Mixed Use, Multi-Story, Multi-Family,
Commercial, Retail Building**
Inspector of Record
Eureka

**County of Humboldt – Accessibility
Design and Permitting Assistance –
Clam Beach**
McKinleyville

**Mixed Use, Multi-Story, Multi-Family,
Commercial, Retail Building**
Inspector of Record
Eureka

**Phyllis Rex Samoa Coast Townhomes –
Multi-Story - 80-unit affordable
housing complex**
Inspector of Record
Samoa

**Strombeck Apartment Complex –
Multi-Story – 60 units**
Inspector or Record
Arcata

**Danco Senior Housing Development –
Multi-Story**
Inspector of Record
Arcata

ID	Task Name	Duration	Start	Finish	September 2022					October 2022					November 2022					December 2022					January 2023					February 2023								
					24	29	3	8	13	18	23	28	3	8	13	18	23	28	2	7	12	17	22	27	2	7	12	17	22	27	1	6	11	16	21	26	31	5
1	<u>Hastings Electric Service Center Tenant Improvements</u>																																					
2	Preliminary Information Gathering	5 days	Tue 9/27/22	Mon 10/3/22																																		
3	Configuration Decision Making (All Scopes)	4 days	Tue 10/4/22	Fri 10/7/22																																		
4	Preparation of 60% Construction Documents	25 days	Mon 10/10/22	Fri 11/11/22																																		
5	Structural	20 days	Mon 10/10/22	Fri 11/4/22																																		
6	Mechanical	20 days	Mon 10/10/22	Fri 11/4/22																																		
7	Electrical	25 days	Mon 10/10/22	Fri 11/11/22																																		
8	Plumbing	10 days	Mon 10/10/22	Fri 10/21/22																																		
9	Architect and Clieint Confirmation Reviews (All Scopes)	5 days	Mon 11/14/22	Fri 11/18/22																																		
10	Preparation of 95% Final Design / Constructon Documents	20 days	Mon 11/21/22	Fri 12/16/22																																		
11	Submittal of 95% Final Design / Construction Documents	1 day	Mon 12/19/22	Mon 12/19/22																																		
12	Plan Check (assume 30-calendar days) by City of Ukiah	23 days	Mon 12/19/22	Wed 1/18/23																																		
13	Address Plan Check Comments (if any) and prepare for 100% Submittal	12 days	Thu 1/19/23	Fri 2/3/23																																		
14	Submit 100% Final Design / Construction Documents for Permitting	1 day	Mon 2/6/23	Mon 2/6/23																																		
15																																						
Project: Simple Project Plan Date: Fri 9/16/22		Task		Project Summary		Manual Task		Start-only		Deadline																												
		Split		Inactive Task		Duration-only		Finish-only		Progress																												
		Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress																												
		Summary		Inactive Summary		Manual Summary		External Milestone																														
Page 1																																						

Fee Proposal

Total Contract Price (Not to Exceed): \$91,300

1. Structural Scope: \$28,500

Percentage of Scope Task	Title	Hours per Scope Task	Rate Per Hour
10%	Principal/Senior Management	12	\$205
15%	Project Manager	26	\$130
20%	Discipline Supervisors	35	\$140
35%	Design Engineers	96	\$90
20%	Drafter	55	\$90
Expenses	Max 4 Site Visits for Inspections and Initial Walkdown @ \$100 hr	32	\$3,200
	Miles = 1144	\$0.85	\$972.50

2. Mechanical Engineering Scope: \$30,000

Percentage of Scope Task	Title	Hours per Scope Task	Rate Per Hour
10%	Principal/Senior Management	16	\$180
15%	Project Manager	32	\$130
20%	Discipline Supervisors	33	\$165
35%	Design Engineers	92	\$105
20%	Drafter	62	\$90
Expenses	Max 2 Site Visits for Inspections and Initial Walkdown @ \$105 hr	16	\$1,680
	Miles = 572	\$0.85	\$486.20

3. Electrical Engineering Scope: \$22,000

Percentage of Scope Task	Title	Hours per Scope Task	Rate Per Hour
10%	Principal/Senior Management	10	\$180
15%	Project Manager	22	\$130
20%	Discipline Supervisors	21	\$175
35%	Design Engineers	62	\$105
20%	Drafter	42	\$90
Expenses	Max 2 Site Visits for Inspections and Initial Walkdown @ \$175 hr	16	\$2,800
	Miles = 572	\$0.85	\$486.20

4. Plumbing Scope: \$8,300

Percentage of Scope Task	Title	Hours per Scope Task	Rate Per Hour
10%	Principal/Senior Management	4	\$180
15%	Project Manager	8	\$130
20%	Discipline Supervisors	7	\$165
35%	Design Engineers	20	\$105
20%	Drafter	13	\$90
Expenses	Max 2 Site Visits for Inspections and Initial Walkdown @ \$105 hr	16	\$1,680
	Miles = 572	\$0.85	\$486.20

5. Title 24 Scope: \$2,500 - Sub Consultant Abbey Technical Services – 25 hours @ \$100/hr

This Proposal does not include the following services in the Total Contract Price.

Fees to complete these services will be billed Time & Materials at the rates outlined below:

Task	Cost
Site Visits in addition to those listed in task items 1-5	\$130/hr plus mileage
Meetings in addition to those listed in task items 1-5	\$105-\$180 /hr plus mileage
Response to RFI's	\$130 /hr
Preparation of Bid Documents	\$130/hr
Significant Design Changes after 60% Review by Client and Architect	\$105-\$180/hr
Permitting Fees due to City of Ukiah for Application, Plan Check, or Permit Issuance – See City of Ukiah Fee Schedule	
Review of Fire Suppression submittal	\$165/hr
Existing Utility Location	\$105-\$175/hr plus travel and locator expenses
Design of Water Connection for Fire Suppression System	\$105-\$180/hr
Response to Plan Check by outside agency	\$105-\$205/hr
Final Installation Proof of Operation	\$105/hr
Air Balance Testing	\$105/hr
Design for Use and Storage of Hazardous Materials and/or Control Areas	\$105-\$165/hr
Supplier Equipment Inspection and Testing	\$105-\$165/hr
As-built drawing preparation/creation	\$105-\$165/hr

Firms Hourly Rate Schedule:

- Senior Engineer	\$ 115 - 220 /hr	- Project Engineer	\$ 75 - 130 /hr
- Surveyor	\$ 85 - 150 /hr	- Survey Tech	\$ 75 - 110 /hr
- Drafting/Technical	\$ 55 - 95 /hr	- Administration	\$ 45 - 80 /hr
- Designer	\$ 75 - 120 /hr	- Survey Equipment	\$ 300 per day
- Subject Matter Expert	\$ 90 - 225 /hr	- Materials	Cost plus 20%
- Sub-consultants	Cost plus 20%	- Mileage	\$0.85/mile

Addendum #1

1. Construction Administration: All Disciplines: \$13,617.20

Task Description	Hours	Rate Per Hour/Mile	Total Cost
Project Coordination to include: Walkdown, Kickoff, and Bi-Monthly Progress Meetings	20	\$130	\$2,600
Construction Assistance to include: • RFI Response • Design Changes • Design/Specification Clarifications • Submittal Review	50	\$130	\$6,500
Construction Inspections – In addition to those listed above	16	\$100	\$1,600
Mileage @ 572 miles per trip (assumed 6 trips)		\$0.85	\$2917.20
Total			\$13,617.20

Assumptions:

1. Project duration 4 months with 2 project coordination meetings per month (Remote meetings).
2. One contractor site walkdown (in person) and one project kickoff meeting (Remote meeting).
3. Assumed 2 hours per RFI Response and 15 RFIs total. Additional RFI response will be provided on a time and materials basis as required.
4. Design Changes based on unidentified conditions or constructability issues. Changes in Design Scope are not included.
5. Submittal Reviews limited to items specified on approved Final Design Drawings.
6. Construction Inspections/Special Inspections limited to items requiring inspection as specified on approved Final Design Drawings, i.e. Shear Wall Nailing (two inspections), Epoxy Rod Installation (two inspections), Footing, Rebar, and Concrete testing (one inspection).

CITY OF UKIAH
MENDOCINO COUNTY, CALIFORNIA

SPECIAL PROVISIONS
FOR
CITY OF UKIAH ELECTRIC SERVICE CENTER
TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR
SPECIFICATION NO. 24-01

MANDATORY PRE-BID MEETING

11 A.M., FEBRUARY 7, 2023
ELECTRIC SERVICE CENTER
1350 HASTINGS ROAD
UKIAH, CALIFORNIA 95482

CITY OF UKIAH
DEPARTMENT OF ELECTRIC UTILITY
300 Seminary Avenue
Ukiah, California 95482-5400

Bids Open: February 22, 2024
2:00 p.m.
Office of City Clerk

CITY OF UKIAH
MENDOCINO COUNTY, CALIFORNIA

CITY COUNCIL:

JOSEFINA DUENAS - MAYOR
DOUGLAS CRANE – VICE-MAYOR
SUSAN SHER – COUNCIL MEMBER
JUAN OROZCO – COUNCIL MEMBER
MARI RODIN– COUNCIL MEMBER

SAGE SANGIACOMO – CITY MANAGER
CINDY SAUERS – DIRECTOR OF ELECTRIC UTILITY
MARY HORGER – FINANCIAL SERVICES MANAGER
KRISTINE LAWLER – CITY CLERK
R. ALLEN CARTER - CITY TREASURER

CITY OF UKIAH
DEPARTMENT OF ELECTRIC UTILITY
JANUARY 2024

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SUPPORTING PRODUCT DATA AND CUT SHEETS

**CITY OF UKIAH, MENDOCINO COUNTY, CALIFORNIA
NOTICE TO BIDDERS FOR
CITY OF UKIAH ELECTRIC SERVICE CENTER
TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR
SPECIFICATION NO. 24-01**

NOTICE IS HEREBY GIVEN that sealed standard proposals for CITY OF UKIAH ELECTRIC SERVICE CENTER TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR will be received at the Office of the City Clerk, Ukiah Civic Center, 300 Seminary Avenue, Ukiah California until 2:00 p.m. on Thursday, February 22, 2024. Bids shall be addressed to the City Clerk and shall be endorsed "CITY OF UKIAH ELECTRIC SERVICE CENTER TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR." Bids are required for the entire work described herein. No fax bids will be accepted. As soon thereafter as possible, the bids will be publicly opened and read in the Council Chambers at 300 Seminary Avenue, Ukiah. The bid opening will also be visible via live streaming at <http://www.cityofukiah.com/meetings/>.

ENGINEER'S ESTIMATE OF QUANTITIES

Item No.	Description	Quantity	Unit of Measure
1.	CSI DIVISION 01 – GENERAL REQUIREMENTS	1	Lump Sum
2.	CSI DIVISION 02 – EXISTING CONDITIONS	1	Lump Sum
3.	CSI DIVISION 03 - CONCRETE	1	Lump Sum
4.	CSI DIVISION 04 – MASONRY	1	Lump Sum
5.	CSI DIVISION 05 – METALS	1	Lump Sum
6.	CSI DIVISION 06 – WOOD, PLASTICS & COMPOSITES	1	Lump Sum
7.	CSI DIVISION 07 – THERMAL & MOISTURE PROTECTION	1	Lump Sum
8.	CSI DIVISION 08 - OPENINGS	1	Lump Sum
9.	CSI DIVISION 09 - FINISHES	1	Lump Sum
10.	CSI DIVISION 10 – SPECIALTIES	1	Lump Sum
11.	CSI DIVISION 12 - FURNISHINGS	1	Lump Sum
12.	CSI DIVISION 13 – SPECIAL CONSTRUCTION	1	Lump Sum
13.	CSI DIVISION 14 – CONVEYING EQUIPMENT	1	Lump Sum
14.	CSI DIVISION 21 – FIRE SUPPRESSION	1	Lump Sum
15.	CSI DIVISION 22 - PLUMBING	1	Lump Sum
16.	CSI DIVISION 23 - HVAC	1	Lump Sum
17.	CSI DIVISION 25 – INTEGRATED AUTOMATION	1	Lump Sum
18.	CSI DIVISION 26 – ELECTRICAL	1	Lump Sum
19.	CSI DIVISION 27 – COMMUNICATIONS	1	Lump Sum
20.	CSI DIVISION 28 – ELECTRONIC SAFETY & SECURITY	1	Lump Sum
21.	CSI DIVISION 31 – EARTHWORK	1	Lump Sum
22.	CSI DIVISION 32 – EXTERIOR IMPROVEMENTS	1	Lump Sum
23.	CSI DIVISION 33 - UTILITIES	1	Lump Sum

Plans and Special Provisions may be inspected and/or copies obtained from the City's website at www.cityofukiah.com/purchasing. No bid will be considered unless it is made on the forms furnished by the City and is made in accordance with the details of the Special Provisions. Each bidder must be licensed as required by law. Further information regarding the work or these specifications can be obtained by calling Mary Horger, Financial Services Manager at (707) 463-6233 or by email at mhorger@cityofukiah.com.

A MANDATORY PRE-BID MEETING will be held at 11:00 a.m., February 7, 2024, at the Electric Utility Service Center located at 1350 Hastings Road, Ukiah, California 95482.

The City Council reserves the right to reject any or all bids and to determine which proposal is, in its opinion, the lowest responsive bid by a responsible bidder and which it deems in the best interest of the City to accept. The City Council also reserves the right, but not the obligation, to waive any irregularity or failure to strictly comply with the bidding requirements, that the City determines in the reasonable exercise of its discretion does not provide the bidder with a competitive advantage over other bidders.

No contractor or subcontractor may be listed on a bid proposal for a public works unless registered with the Department of Industrial Relations ("DIR") pursuant to Labor Code section 1725.5 except as allowed under Labor Code section 1771.1(a). The prime contractor shall be responsible for posting job site notices as prescribed by regulation. This project is subject to compliance monitoring and enforcement by the DIR.

Pursuant to provisions of Section 1770, including amendments thereof, of the Labor Code of the State of California, the DIR Director has ascertained the general prevailing rate of wages for straight time, overtime, Saturdays, Sundays and Holidays including employer payment for health and welfare, vacation, pension and similar purposes for the City of Ukiah. Copies of his General Prevailing Wage Determination are available on the Internet at web address: <http://www.dir.ca.gov/DLSR/PWD/> The prime contractor for the work herein shall possess a current, valid State of California, Class B – General Building Contractor's License. Pursuant to California Public Contract Code §22300, this contract includes provisions that allow substitutions of certain types of securities in lieu of the City withholding a portion of the partial payments due the Contractor to insure performance under this contract.

By order of the City Council, City of Ukiah, County of Mendocino, State of California.

Dated: **Jan 18, 2024**

Kristine Lawler
Kristine Lawler (Jan 18, 2024 08:22 PST)

Kristine Lawler, City Clerk, City of Ukiah, California

PUBLISH ONCE: January 24, 2024

INSTRUCTIONS TO BIDDERS

CITY OF UKIAH ELECTRIC SERVICE CENTER TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR shall be performed in accordance with the Plans and Special Provisions therefor adopted, to which special reference is hereby made.

Each bidder must supply all the information required by the bid documents and Special Provisions.

Minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award of any contract entered into pursuant to this advertisement. Women will be afforded equal opportunity in all areas of employment. However, the employment of women shall not diminish the standards or requirements for the employment of minorities.

All proposals or bids shall be accompanied by a cashier's check or certified check payable to the order of the City of Ukiah amounting to 10 percent of the bid, or by a bond in said amount and signed by the bidder and a corporate surety, payable to said City. Said check shall be forfeited, or said bond shall become payable to said City in case the bidder depositing the same does not, within fifteen (15) days after written notice that the contract has been awarded to him: (a) enter into a contract with the City and (b) furnish certificates of insurance and endorsements, a bond of faithful performance and a payment bond as described in the Special Provisions.

No bidder shall withdraw his or her bid for a period of thirty (30) calendar days after the date set by the City for the opening thereof.

The Contractor and any subcontractors shall each possess a valid City of Ukiah Business License prior to the start of any work.

The Contractor shall furnish a project schedule to the Engineer prior to the start of any work and start work as scheduled.

The work is to be completed within ONE HUNDRED EIGHTY (180) calendar days. The Contractor will pay to the City the sum of five hundred (\$500.00) dollars per day for each and every calendar day's delay beyond the time prescribed.

The staff shall notify a bidder by telephone, email or fax, if it intends to recommend the rejection of the bidder's bid. Any bid protest must be filed with the City Clerk not more than five calendar days following the bid opening, or 2 calendar days following notice that staff is recommending the rejection of a bid. If any such timely written protest is filed, all bidders shall be provided a copy of the protest within 2 calendar days of its receipt, which may be delivered to the bidders as an email attachment or by fax. All such bidders may file with the City Manager a written objection or other response to the protest.

All objections or responses filed not more than 5 days after receipt of the written protest will be presented to the City Council at its next regular meeting occurring not less than 12 calendar days following the bid opening. The City Council will resolve the bid protest at that meeting based on the written protest, any staff recommendation and all timely written objections and responses. In accordance with the Brown Act, any person may address the City Council on this item during the meeting. The City Council action on the protest shall represent a final decision by the City on the protest.

Examination of Site, Drawings, Etc.

A mandatory pre-bid conference will be held at 11 a.m., February 7, 2024, at the project site located at 1350 Hastings Road, Ukiah, California 95482, to fully acquaint interested Contractors with local conditions, construction and labor required so that he or she may fully understand the facilities, difficulties and restrictions attending the execution of the work under the Contract. Failure to attend the mandatory bid conference will be just cause for the bid to be rejected as non-responsive. Bidders shall thoroughly examine and be familiar with the Plans and Special Provisions.

Oral statements or instructions made during this visit will not constitute an amendment to this solicitation. The City will determine the appropriate action necessary, if any, and may issue a written amendment to the bid request.

Each bidder shall visit the site of the proposed work and fully acquaint himself with local conditions, construction and labor required so that he or she may fully understand the facilities, difficulties and restrictions attending the execution of the work under the Contract. Bidders shall thoroughly examine and be familiar with the Plans and Special Provisions. The failure of any bidder to receive or examine any form, instrument, addendum, or other document, or to visit the site and acquaint himself with conditions there existing, shall in no way relieve the bidder from any obligation with respect to his or her proposal or to the contract. The drawings for the work show conditions as they are supposed or believed by the Engineer to exist; but, it is neither intended nor shall it be inferred that the conditions as shown thereon constitute a representation by the Engineer, the City or its officers that such conditions are actually existent, nor shall the City, the Engineer or any of their officers or representatives be liable for any loss sustained by the Contractor as a result of a variance between the conditions shown on the drawings and the conditions actually revealed during the progress of the work or otherwise.

The bidder's attention is directed to the possible existence of obstructions and public improvements within the limits of the work or adjacent thereto, which may or may not be shown on the Drawings. Any bid shall take into consideration that conditions may exist underground or otherwise that are not known to the City or easily detected during a site inspection that could impact the time or cost of completing the project. The City expects the bids to anticipate such conditions so that it can know for budgeting and other purposes the total cost to complete the project before accepting a bid and undertaking the legal obligation to construct the project. In awarding the contract the City relies on the contractor's representation that its bid anticipates differing site conditions and the additional time or cost that such conditions may necessitate.

The bidder shall investigate to his or her satisfaction the conditions to be encountered, the character, quality and quantities of work to be performed and materials to be furnished and the requirements of the Plans, Special Provisions, Standard Specifications, Standard Plans, and Contract Documents. The submission of a proposal shall be considered conclusive evidence that the bidder has made such examination and has accepted the project workplace as a safe workplace to perform the work of the Contract.

Bidder Inquiries and Questions

Inquiries and questions must be submitted in writing via fax or email to the following designated contact person:

Mary Horger, Financial Services Manager
Email: mhorger@cityofukiah.com

The City reserves the right to not respond to inquiries or questions submitted within 3 business days of the bid opening.

Location of the Work

All of the work to be performed is within the City of Ukiah. Project is located at 1350 Hastings Road, Ukiah, California 95482.

GENERAL CONDITIONS

SECTION 1. PROPOSAL REQUIREMENTS AND GENERAL CONDITIONS

1-01. Definitions. Whenever any word or expression defined in this section, or pronoun used in its stead, occurs in these contract documents, it shall have and is mutually understood to have the meaning given:

- a. "City of Ukiah" or "City" shall mean the City of Ukiah, Mendocino County, California, acting through its City Council or any other board, body, official or officials to which or to whom the power belonging to the Council shall by virtue of any act or acts, hereafter pass or be held to appertain.
- b. "Engineer" shall mean the Engineer duly and officially appointed by the City to supervise and direct the work of construction under this contract, acting personally or through agents or assistants duly authorized by him, such agents or assistants acting within the scope of the particular duties entrusted to them.
- c. "Inspector" shall mean the engineering or technical inspector or inspectors duly authorized or appointed by the Engineer, limited to the particular duties entrusted to him or her or them.
- d. "Contractor" shall mean the party entering into contract with the City of Ukiah for the performance of work covered by this contract and his or her authorized agents or legal representatives.
- e. "Date of signing of contract" or words equivalent thereto, shall mean the date upon which this contract, with the signature of the Contractor affixed, together with the prescribed bonds, shall be or shall have been delivered to the City or its duly authorized representatives.
- f. "Day" or "days", unless herein otherwise expressly defined, shall mean a calendar day or days of twenty-four hours each.
- g. "The work" shall mean and include all the work specified, indicated, shown or contemplated in the contract to construct the improvement, including all alterations, amendments or extensions thereto made by contract change order or other written orders of the Engineer.
- h. "Contract drawings", "drawings", "plans" shall mean and include 1) all drawings or plans which may have been prepared by or on behalf of the City, as a basis for proposals, when duly signed and made a part of this contract by incorporation or reference, 2) all drawings submitted in pursuance of the terms of this contract by the successful bidder with his or her proposal and by the Contractor to the City if and when approved by the Engineer and 3) all drawings submitted by the Engineer to the Contractor during the progress of the work as provided for herein.
- i. Where "as shown", "as indicated", "as detailed" or words of similar import are used, it shall be understood that reference to the drawings accompanying these Special Provisions is made unless stated otherwise.

Where "as directed", "as permitted", "approved" or words of similar import are used, it shall be understood that the direction, requirements, permission, approval or acceptance of the Engineer is intended unless stated otherwise.

As used herein, "provide" or "install" shall be understood to mean "provide or install complete in place", that is, "furnish and install". "Shall" is mandatory; "may" is permissive.

1-02. Examination of Plans, Special Provisions and Site of Work. The bidder shall examine carefully the Proposal, Plans, Special Provisions, Contract forms and the site of the work contemplated therefor. It will be assumed that the bidder has investigated to his or her satisfaction the conditions to be encountered and the character, quality and requirements of all Plans, Special Provisions, Standard Specifications, and Standard Plans involved.

1-03. Proposal. Bids shall be made on the blank forms prepared by the City. All bids shall give the prices bid, both in writing and in figures and shall be signed by the bidder or his or her authorized representative, with his or her address. If the bid is made by an individual or partner, his or her name and the post office address of his or her business or partnership, along with his or her signature or the signature of one or more partners must be shown; if made by a corporation, the bid shall show the name of the state under the laws of which the corporation is chartered, the name of the corporation and the title of the person who signs on behalf of the corporation.

Each proposal shall be enclosed in a sealed envelope, endorsed as specified in the notice to bidders. Bidders are warned against making erasures or alterations of any kind and proposals which contain omissions, erasures, conditions, alterations, additions not called for, additional proposals or irregularities of any kind may be rejected.

1-04. Withdrawal of Bids. Any bid may be withdrawn at any time prior to the hour fixed in the notice to bidders for the openings of bids, provided that a request in writing, executed by the bidder or his or her duly authorized representative, for the withdrawal of such bid is filed with the City. The withdrawal of a bid will not prejudice the right of a bidder to file a new bid.

1-05. Public Opening of Bids. Bids will be opened and read publicly at the time and place indicated in the notice to bidders. Bidders or their agents are invited to be present.

1-06. Bid Guaranty. Each bid must be accompanied by a certified check, cashier's check or bidder's bond executed by an admitted surety insurer, payable to the order of the City of Ukiah in an amount not less than 10 percent of the bid as a guarantee that the bidder will enter into a contract, if awarded the work.

1-07. Qualification of Bidders. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]. No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. The prime contractor shall be responsible for posting job site notices as prescribed by regulation. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

Each bidder shall be licensed under the provisions of Chapter 9, Division 3 of the Business and Professions Code and shall be skilled and regularly engaged in the general class or type of work called for under this contract. A statement setting forth this experience and business standing shall be submitted by each bidder on the form provided herewith. It is the intention of the City to award a contract only to a bidder who furnishes satisfactory evidence that he or she has the requisite experience and ability and that he or she has sufficient capital, facilities and equipment to enable him or her to prosecute the work successfully and promptly within the time and in the manner agreed.

In determining the degree of responsibility to be credited to a bidder, the City may weigh evidence that the bidder or his or her personnel charged with the responsibility in the work, has performed satisfactorily other contracts of like nature and magnitude or comparable difficulty at similar rates of progress.

1-08. Disqualification of Bidders. More than one bid from an individual business, partnership, corporation or association, under the same or different names, will not be considered. Reasonable grounds for believing that any bidder is financially interested in more than one bid for the work will cause the rejection of all bids in which he or she is so interested. If there is reason to believe that collusion exists among the bidders, none of the participants in such collusion will be considered. Bids in which the prices obviously are unbalanced may be rejected.

1-09. Identification of Subcontractors. All bids shall comply with the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 and following) and shall set forth:

- (a) The name and the location of the place of business of each subcontractor who will perform work or labor, or render service to the prime contractor in or about the construction of the work, or to a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work according to detailed drawings contained in the plans and Special Provisions, in an amount in excess of one-half of 1 percent of the prime contractor's total bid.

(b) The portion of the work which will be done by each such subcontractor. The prime contractor shall list only one subcontractor for each such portion defined by the prime contractor in his or her bid.

1-10. General Provisions of the Standard Specifications. All provisions of the General Provisions, Sections 1 through 11, of the Standard Specifications, shall be applicable to the contract except as modified by these Special Provisions. The Standard Specifications are set forth in Section 12-06 of these Special Provisions.

1-11. Addenda. If it becomes necessary to revise any part of these plans and specifications after they have been released, the City will issue an addendum containing the revision. All addenda will be posted on the City's website at www.cityofukiah.com/purchasing with the rest of the bid documents. Anyone who intends to submit a bid in response to this Request for Bid must check the website frequently for any posted addenda. Anyone submitting a bid will be deemed to have seen and agreed to be bound by the posted addenda.

SECTION 2. AWARD AND EXECUTION OF CONTRACT

2-01. Award of Contract. Award of the contract, if it be awarded, will be to the lowest responsible bidder whose bid complies with all the specified requirements. The award, if made, will be made within thirty (30) days after opening of the bids. The City reserves the right to reject any and all bids and to waive any irregularity in the proposal not pertaining to cost.

2-02. Return of Proposal Guaranties. All bid guaranties will be held until the contract has been fully executed, after which they will be returned upon request to the respective bidders whose bids they accompany.

2-03. Execution of Contract. The contract agreement shall be executed in duplicate by the successful bidder and returned, together with the contract bonds, insurance certificates and endorsements, within fifteen (15) days after written notice of the award of the contract. After execution by the City; one copy shall be filed with the City and one copy shall be returned to the Contractor. If the bidder fails or refuses to enter into the contract agreement within the required time, then the bid guaranty accompanying the bid shall be forfeited to the City.

SECTION 3. SCOPE AND INTENT OF CONTRACT

3-01. Effect of Inspection and Payments. Neither the inspection by the Engineer or an inspector, nor any order, measurement or approved modification, nor certificate or payment of money, nor acceptance of any part or whole of the work, nor any extension of time, nor any possession by the City or its agents, shall operate as a waiver of any provision of this contract or of any power reserved therein to the City, or of any right to damages thereunder; nor shall any breach of this contract be held to be a waiver of any subsequent breach. All remedies shall be construed as cumulative.

3-02. Effect of Extension of Time. The granting of any extension of time on account of delays which, in the judgement of the City, are avoidable delays shall in no way operate as a waiver on the part of the City of its rights under this contract.

3-03. Extra Work. If extra work orders are given in accordance with provisions of this contract, such work shall be considered a part hereof and shall be subject to each and all of its terms and requirements.

3-04. Assignment of Contract. The contract may be assigned or sublet in whole or in part only upon the written consent of the City acting through its authorized agents. Consent will not be given to any proposed assignment which would relieve the original contractor or its surety of their responsibilities under the contract nor will the Engineer consent to any assignment of a part of the work under the contract.

3-05. Subcontractors. The Contractor shall be as fully responsible for the acts and omissions of his or her subcontractors and of persons either directly or indirectly employed by them, as he or she is for the acts and omissions of persons directly employed by him.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the terms of this Contract which are applicable to the work of subcontractors.

Nothing contained in this contract shall be construed to create or shall be relied upon to create any contractual relationship between any subcontractor and the City and no action may be brought by any subcontractor against the City based on this contract.

3-06. Interpretation of Special Provisions and Drawings. The Special Provisions and the Contract Drawings are intended to be explanatory of each other. Any work indicated in the Contract Drawings and not in the Special Provisions, or vice versa, is to be executed as if indicated in both. In case of a discrepancy or conflict between the Technical Specifications and Contract Plans, the Technical Specifications shall govern. All work shown on the Contract Drawings, the dimensions of which are not figured, shall be accurately followed to the scale to which the drawings are made, but figured dimensions are in all cases to be followed, where given, though they differ from scaled measurements. Large scale drawings shall be followed in preference to small scale drawings. Should it appear that the work to be done, or any of the matters relative thereto, are not sufficiently detailed or explained in these contract documents, including the contract drawings, the Contractor shall apply to the Engineer for such further explanations as may be necessary and shall conform thereto as part of this contract, so far as may be consistent with the terms of this contract. In the event of any doubt or questions arising respecting the true meaning of the Special Provisions, reference shall be made to the Engineer and his or her decision thereon shall be final. If the Contractor believes that a clarification or interpretation justifies an increase in the contract price or contract time, the Contractor must comply with the written notice provisions of Sections 9-05 and 10-07 of these Special Provisions. Contractor's attention is directed to Section 12-06 of the Technical Specifications regarding the Standard Specifications and Standard Plans.

3-07. Addenda. If it becomes necessary to revise any part of these plans and specifications after they have been released, the City will issue an addendum containing the revision. All addenda will be posted on the City's website at www.cityofukiah.com/purchasing with the rest of the bid documents. Anyone who intends to submit a bid in response to this Request for Bid must check the website frequently for any posted addenda. Anyone submitting a bid will be deemed to have seen and agreed to be bound by the posted addenda.

3-08. Liability of City Officials. No city official, nor the Engineer, nor any authorized assistant of any of them, shall be personally responsible for any liability arising under this contract.

3-09. Dispute Resolution. Claims of \$375,000 or less by the Contractor that arise under this Contract are subject to the mandatory dispute resolutions provisions in Public Contract Code Sections 20104-20104.6.

SECTION 4. BONDS

4-01. Faithful Performance Bond. As a part of the execution of this contract, the Contractor shall furnish a bond of a surety company or other securities providing equivalent protection such as cash, letter of credit, or certificates of deposit, acceptable to the City, conditioned upon the faithful performance of all covenants and stipulations under this contract. The amount of the bond shall be 100 percent of the total contract price, as this sum is set forth in the agreement.

4-02. Material and Labor Bond. As a part of the execution of this contract, the Contractor shall furnish a bond of a surety company or other securities providing equivalent protection such as cash, letter of credit or certificates of deposit acceptable to the City in a sum not less than 50 percent of the total contract price, as this sum is set forth in the agreement for the payment in full of all persons, companies or corporations who perform labor upon or furnish materials to be used in the work under this contract, in accordance with the provisions of Sections 3247 through 3252 inclusive of the Civil Code of the State of California and any acts amendatory thereof.

4-03. Defective Material and Workmanship Bond. As a condition precedent to the completion of this contract, the Contractor shall furnish a bond of a surety company acceptable to the City in an amount not less than 5 percent (5%) of the final contract price, to hold good for a period of one (1) year after the completion and acceptance of the work, to protect the City against the results of defective materials, workmanship and equipment during that time. This bond shall be delivered to the City before the final payment under this contract will be made.

4-04. Notification of Surety Companies. The surety companies shall familiarize themselves with all of the conditions and provisions of this contract and they waive the right of special notification of any change or modification of this contract or of extension of time, or decreased or increased work, or of the cancellation of the

contract, or of any other act or acts by the City or its authorized agents, under the terms of this contract; and failure to so notify the aforesaid surety companies of changes shall in no way relieve the surety companies of their obligation under this contract.

SECTION 5. INSURANCE REQUIREMENTS FOR CONTRACTORS (WITH CONSTRUCTION RISKS)

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his or her agents, representatives, employees or subcontractors.

5-01. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial Liability Coverage (occurrence form CG 0001).
2. Insurance Services Office form number CA 0001 (Ed. 1/87) covering Automobile Liability, code 1 (any auto).
3. Worker's Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Course of Construction insurance covering for "all risks" of loss.

5-02. Minimum Limits of Insurance

Contractor shall maintain limits no less than:

1. General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and property damage including operations, products and completed operations. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: \$2,000,000 per accident for bodily injury and property damage.
3. Employer's Liability: \$1,000,000 per accident for bodily injury and property damage.
4. Course of Construction: Completed value of the project with no co-insurance penalty provisions.

5-03. Deductibles and Self-insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.

5-04. Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City, its officers, officials, employees and volunteers are to be covered as Additional Insured with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the contractor; and with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance, or as a separate owner's policy.

2. The workers' compensation policy is to be endorsed with a waiver of subrogation. The insurance company, in its endorsement, agrees to waive all rights of subrogation against the City, its officers, officials, employees and volunteers for losses paid under the terms of this policy which arises from the work performed by the named insured for the City.
3. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees or volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
4. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City.
5. Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of Civil Code.
6. Course of Construction policies shall contain the following provisions:
 - a.) The City shall be named as loss payee.
 - b.) The insurer shall waive all rights of subrogation against the City.

5-05. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than the following:

A++ VII	A- VIII
A+ VII	B++ X
A VII	B+ X

5-06. Verification of Coverage. Contractor shall furnish the City with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements shall be on forms provided by the City or on other than the City's forms, provided those endorsements or policies conform to the requirements. All certificates and endorsements are to be received within 15 days from written notice of contract award, and the work shall not commence until the certificates and endorsements have been approved by the City. The City reserves the right to require complete certified copies of all required insurance policies, including endorsements affecting the coverage required by these Special Provisions at any time.

5-07. Subcontractors. Contractor shall include all subcontractors as insureds 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 herein.

SECTION 6. RESPONSIBILITIES AND RIGHTS OF CONTRACTOR

6-01. Legal Address of Contractor. Both the address given in the proposal and the Contractor's office in the vicinity of the work are hereby designated as places to either of which drawings, samples, notices, letters or other articles or communications to the Contractor may be mailed or delivered. The delivery at either of these places of any such thing from the City or its agents to the Contractor shall be deemed sufficient service thereof upon the Contractor and the date of such service shall be the date of such delivery. The address named in the proposal may be changed at any time by notice in writing from the Contractor to the City. Nothing herein contained shall be deemed to preclude or render inoperative the service of any drawing, sample, notice, letter or other article or communication to or upon the Contractor personally.

6-02. Office of Contractor at Site. During the performance of this contract, the Contractor shall maintain a suitable office at the site of the work which shall be the headquarters of a representative authorized to receive drawings and any such thing given to the said representatives or delivered at the Contractor's office at the site of work in his or her absence shall be deemed to have been given to the Contractor.

6-03. Attention to Work. The Contractor shall give his or her personal attention to and shall supervise the work to the end that it shall be prosecuted faithfully and when he or she is not personally present on the work, he or she shall at all reasonable times be represented by a competent superintendent or foreman who shall receive and obey all instructions or orders given under this contract and who shall have full authority to execute the same and to supply materials, tools and labor without delay and who shall be the legal representative of the Contractor. The Contractor shall be liable for the faithful observance of any instructions delivered to him or her or to his or her authorized representative.

6-04. Liability of Contractor. The Contractor shall do all of the work and furnish all labor, materials, tools and appliances, except as otherwise herein expressly stipulated, necessary or proper for performing and completing the work herein required in the manner and within the time herein specified. The mention of any specific duty or liability imposed upon the Contractor shall not be construed as a limitation or restriction of any general liability or duty imposed upon the Contractor by this contract, said reference to any specific duty or liability being made herein merely for the purpose of explanation.

The right of general supervision by the City shall not make the Contractor an agent of the City and the liability of the Contractor for all damages to persons or to public or private property, arising from the Contractor's execution of the work, shall not be lessened because of such general supervision.

Until the completion and final acceptance by the City of all the work under and implied by this contract, the work shall be under the Contractor's responsible care and charge. The Contractor shall rebuild, repair, restore and make good all injuries, damages, re-erections and repairs, occasioned or rendered necessary by causes of any nature whatsoever, excepting only acts of God and none other, to all or any portions of the work, except as otherwise stipulated.

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless the City and its officers, directors, agents and employees from and against all claims, damages, losses and expenses including but not limited to attorneys' fees, costs of suit, expert witness fees and expenses and fees and costs of any necessary private investigators arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, other than the work itself, including the loss of use resulting therefrom and (2) is caused in whole or in part by any act or omission of the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder, or by the negligence or omission of a party indemnified herein.

In any and all claims against the City or any of its agents or employees by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' or workmen's compensation acts, disability benefit acts, or other employee benefit acts. The obligation to indemnify shall extend to and include acts of the indemnified party which may be negligent or omissions which may cause negligence.

The City shall have the right to estimate the amount of such damage and to cause the City to pay the same and the amount so paid for such damage shall be deducted from the money due the Contractor under this contract; or the whole or so much of the money due or to become due the Contractor under this contract as may be considered necessary by the City, shall be retained by the City until such suits or claims for damages shall have been settled or otherwise disposed of and satisfactory evidence to that effect furnished to the City.

6-05. Protection of Persons and Property. The Contractor shall furnish such watchman, guards, fences, warning signs, walks and lights as shall be necessary and shall take all other necessary precautions to prevent damage or injury to persons or property.

All property line fences and improvements in the vicinity of the work shall be protected by the Contractor and, if they are injured or destroyed, they and any other property injured by the Contractor, his or her employees or agents, shall be restored to a condition as good as when he or she entered upon the work.

6-06. Protection of City Against Patent Claims. All fees, royalties or claims for any patented invention, article or method that may be used upon or in any manner connected with the work under this contract shall be included in the price bid for the work and the Contractor and his or her sureties shall protect and hold the City, together with all of its officers, agents, servants and employees, harmless against any and all demands made for such fees or claims brought or made on account of this contract. The Contractor shall, if requested by the Engineer, furnish acceptable proof of a proper release from all such fees or classes.

Should the Contractor, his or her agents, servants or employees, or any of them be enjoined from furnishing or using any invention, article, material or appliance supplied or required to be supplied or used under this contract, the Contractor shall promptly substitute other articles, materials or appliance, in lieu thereof, of equal efficiency, quality, finish, suitability and market value and satisfactory in all respects to the Engineer. Or, in the event that the Engineer elects, in lieu of such substitution, to have supplied and to retain and use, any such invention, article, material or appliance, as may by this contract be required to be supplied, in that event the Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for the City, its officers, agents, servants and employees, or any of them, to use such invention, article, material or appliance without being disturbed or in any way interfered with by any proceeding in law or equity on account thereof. Should the Contractor neglect or refuse to make the substitution promptly, or to pay such royalties and secure such licenses as may be necessary, then in that event the Engineer shall have the right to make such substitution, or the City may pay such royalties and secure such licenses and charge the cost thereof against any money due to the Contractor from the City or recover the amount thereof from him or her and his or her sureties notwithstanding final payment under this contract may have been made.

6-07. Protection of Contractor's Work Property. The Contractor shall protect his or her work, supplies and materials from damage due to the nature of the work, the action of the elements, trespassers, or any cause whatsoever under his or her control, until the completion and acceptance of the work. Neither the City nor any of its agents assumes any responsibility for collecting indemnity from any person or persons causing damage to the work of the Contractor.

6-08. Regulations and Permits. The Contractor shall secure and pay for all permits, give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Plans and Special Provisions are at variance therewith, he or she shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided in the contract for changes in the work. The contractor and any subcontractors shall each secure and maintain a valid City of Ukiah Business License. The City of Ukiah will issue a no fee encroachment permit to the Contractor allowing him or her to perform work within City right of way or within City property after the Contract Documents have been executed and insurance certificates and endorsements have been approved by the City.

6-09. Construction Utilities. The Contractor shall be responsible for providing for and in behalf of his or her work under this contract, all necessary utilities, such as special connection to water supply, telephones, power lines, fences, roads, watchmen, suitable storage places, etc.

6-10. Approval of Contractor's Plans. The approval by the Engineer of any drawing or any method of work proposed by the Contractor in accordance with paragraph 8-06 shall not relieve the Contractor of any of his or her responsibility for his or her errors therein and shall not be regarded as any assumption of risk or liability by the City or any officer or employee thereof and the Contractor shall have no claim under this contract on account of the failure or partial failure or inefficiency of any plan or method so approved. Such approval shall be considered to mean merely that the Engineer has no objection to the Contractor's using, upon his or her own full responsibility the plan or method approved.

6-11. Suggestions to the Contractor. Any plan or method of work suggested by the Engineer to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor; and the Engineer and the City shall assume no responsibility thereof.

6-12. Termination of Unsatisfactory Subcontracts. Should any subcontractor fail to perform in a satisfactory manner the work undertaken by him, such subcontract shall be terminated immediately by the Contractor upon notice from the Engineer.

6-13. Preservation of Stakes and Marks. The Contractor shall preserve carefully bench marks, reference points and stakes and in case of destruction he or she shall replace his or her stakes, reference points and bench marks and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance. Contractor's attention is directed to Section 7-03 of these Special Provisions.

6-14. Assistance to Engineer. At the request of the Engineer the Contractor shall provide men from his or her force and tools, stakes and other materials to assist the Engineer temporarily in making measurements and surveys and in establishing temporary or permanent reference marks. Payment for such materials and assistance will be made as provided for under the caption "Extra Work," provided, however, that the cost of setting stakes and marks carelessly lost or destroyed by the Contractor's employees will be assessed to the Contractor.

6-15. Removal of Condemned Materials and Structures. The Contractor shall remove from the site of the work, without delay, all rejected and condemned materials or structures of any kind brought to or incorporated in the work and upon his or her failure to do so, or to make satisfactory progress in so doing, within forty-eight (48) hours after the service of a written notice from the Engineer, the condemned material or work may be removed by the City and the cost of such removal shall be taken out of the money that may be due or may become due the Contractor on account of or by virtue of this contract. No such rejected or condemned material shall again be offered for use by the Contractor under this Contract.

6-16. Proof of Compliance with Contract. In order that the Engineer may determine whether the Contractor has complied with the requirements of this contract, not readily enforceable through inspection and tests of the work and materials, the Contractor shall, at any time when requested, submit to the Engineer properly authenticated documents or other satisfactory proofs as to his or her compliance with such requirements.

6-17. Errors and Omissions. If the Contractor, in the course of the work, finds any errors or omissions in plans or in the layout as given by survey points and instruction, or if he or she finds any discrepancy between the plans and the physical conditions of the locality, he or she shall immediately inform the Engineer, in writing and the Engineer shall promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

6-18. Cooperation. The Contractor shall cooperate with all other contractors who may be performing work in behalf of the City and workmen who may be employed by the City on any work in the vicinity of the work to be done under this contract with the work of such contractors or workmen. he or she shall make good promptly, at his or her own expense, any injury or damage that may be sustained by other contractors or employees of the City at his or her hands.

Any difference or conflict which may arise between the Contractor and other contractors, or between the contractor and workmen of the City in regard to their work shall be adjusted and determined by the Engineer. If the work of the Contractor is delayed because of any acts or omissions of any other contractor or of the City, the Contractor shall on that account have no claim against the City other than for an extension of time.

6-19. Right of Contractor to Stop Work. Under the following conditions the Contractor shall have the right, if he or she so desires, to stop the work and terminate the contract upon ten (10) days written notice to the Engineer and recover from the City payment for all work actually performed and for all satisfactory materials actually delivered to the site of the work for permanent incorporation therein, all as may be shown by the estimate of the Engineer.

- (1) If the work is stopped under an order of any court or other competent public authority for a period of time of three (3) months through no act or fault of the Contractor or of anyone employed by him.
- (2) If the Engineer fails to issue the monthly certificate for payment in accordance with the terms of this contract.
- (3) If the City fails to pay the Contractor within sixty (60) days after it shall have become due, as provided by the terms of this contract, any sum certified by the Engineer or awarded by the City.

All provided that if such action to terminate the contract be not instituted by the Contractor within ten (10) days after the alleged existence of such condition and if written notice of such action be not at that time delivered to the City and the Engineer, then such right shall lapse until another occasion arises according to this section.

6-20. Hiring and Dismissal of Employees. The Contractor shall employ only such foremen, mechanics and laborers as are competent and skilled in their respective lines of work and whenever the Engineer shall notify the Contractor that any person on the work is, in his or her opinion, incompetent, unfaithful, intemperate or disorderly, or refuses to carry out the provisions of this contract, or uses threatening or abusive language to any person on the work representing the City, or is otherwise unsatisfactory, such person shall be discharged immediately from the work and shall not be re-employed upon it except with the consent of the Engineer.

6-21. Wage Rates.

1. Contractor shall pay all mechanics and laborers employed or working upon the site of the work unconditionally and without subsequent deductions or rebate on any account the full amounts due at the time of payment at wage rates not less than those contained in the applicable prevailing wage determination, regardless of any contractual relationship which may be alleged to exist between the Contractor and subcontractors and such laborers and mechanics.
2. Contractor shall comply with the California Labor Code Section 1775. In accordance with said Section 1775, Contractor shall forfeit as a penalty to the Owner, \$50.00 (or the higher minimum penalty as provided in Section 1775(B)(ii) – (iii)) for each calendar day or portion thereof, for each workman paid less than the stipulated prevailing rates for such work or craft in which such workman is employed for any work done under the Contract by him or her or by any subcontractor under him or her in violation of the provisions of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. In addition to said penalty and pursuant to Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each workman for each calendar day or portion thereof for which each workman was paid less than the stipulated prevailing wage rate shall be paid to each workman by the Contractor.
3. Pursuant to the provision of Section 1770 of the Labor Code of the State of California, Owner has ascertained the general prevailing rate of wages (which rate includes employer payments for health and welfare, vacation, pension and similar purposes) applicable to the work to be done, for straight time work. The holiday wage rate listed shall be applicable to all holidays recognized in the collective bargaining agreement of the particular craft, classification or type of workmen concerned. Copies of the General Prevailing Wage Determination are available on the Internet at web address: <http://www.dir.ca.gov/DLSR/PWD> The Contractor shall post the wage determination at the site of work in a prominent place where it can easily be seen by the workers.
4. City will not recognize any claim for additional compensation because the Contractor has paid any rate in excess of the prevailing wage rate obtained by the Contractor. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his or her bid and will not in any circumstances be considered as the basis for a claim against the City.
5. The Labor Commissioner through the Division of Labor Standards Enforcement (DLSE) may at any time require contractors and subcontractors to furnish electronic certified payroll records directly to DLSE. Commencing with contracts awarded or after April 1, 2015, all contractors and subcontractors must furnish electronic certified payroll records directly to the DLSE.
6. Travel and Subsistence Payments.

Contractor shall make travel and subsistence payments to each workman needed to execute the work in accordance with the requirements in Section 1773.8 of the Labor Code (Chapter 880, Statutes of 1968).
7. Apprentices.

Attention is directed to the provisions in Sections 1777.5 (Chapter 1411, Statutes of 1968) and 1777.6 of the California Labor Code concerning the employment of apprentices by the Contractor

or any subcontractor under him. Contractor and any subcontractor under him or her shall comply with the requirements of said sections in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

6-22. Cleaning Up. The Contractor shall not allow the site of the work to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction period. The Engineer shall have the right to determine what is or is not waste material or rubbish and the place and manner of disposal.

On or before the completion of the work, the Contractor shall without charge therefore carefully clean out all pits, pipes, chambers or conduits and shall tear down and remove all temporary structures built by him or her and shall remove rubbish of all kind from any of the grounds which he or she has occupied and leave them in first class condition.

6-23. Guaranty. All work shall be guarantied for a period of one year from the date of acceptance by the City. The Contractor shall promptly make all needed repairs arising out of defective materials, workmanship and equipment.

The City is hereby authorized to make such repairs if within ten days after the mailing of a notice in writing to the Contractor or his or her agent, the Contractor shall neglect to make or undertake with due diligence the aforesaid repairs, provided, however, that in case of an emergency where, in the opinion of the City delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor and the Contractor shall pay the costs thereof.

Pursuant to the provisions of Section 4-03 of these Special Provisions, the Contractor shall furnish a Defective Material and Workmanship Bond in an amount not less than 5 percent of the final contract price, which shall be effective for a period of one (1) year after the completion and acceptance of the work.

SECTION 7. RESPONSIBILITIES AND RIGHTS OF CITY

7-01. Authority of the Engineer. All work done under this contract shall be done in a workmanlike manner and shall be performed to the reasonable satisfaction of the Engineer, who shall have general supervision of all work included hereunder. To prevent disputes and litigation, the Engineer (1) shall in all cases determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract, (2) shall decide all questions relative to the true construction, meaning and intent of the Special Provisions and Drawings, (3) shall decide all questions which may arise relative to the classifications and measurements of quantities and materials and the fulfillment of this contract and (4) shall have the power to reject or condemn all work or material which does not conform to the terms of this contract. his or her estimate and decision in all matters shall be a condition precedent to an appeal for arbitration, or the right of the Contractor to receive, demand, or claim any money or other compensation under this agreement and a condition precedent to any liability on the part of the City to the Contractor on account of this contract. Whenever the Engineer shall be unable to act, in consequence of absence or other cause, then such engineer as the Engineer or the City shall designate, shall perform any and all of the duties and be vested with any or all of the powers herein given to the Engineer.

7-02. Inspection. The City will provide engineering personnel for the inspection of the work.

The Engineer and his or her representatives shall at all times have access to the work whenever it is in preparation or progress and the Contractor shall provide proper facilities for such access and inspection.

If the Special Provisions, the Engineer's instruction, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection and, if the inspection is by an authority other than the Engineer, of the date fixed for such inspection. Inspections by the Engineer shall be promptly made at the source of supply where practicable. If any work shall be covered up

without approval or consent of the Engineer, it must, if required by the Engineer, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Engineer and, if so ordered, the work must be uncovered by the Contractor. If such work is found to be in accordance with the contract documents, the City shall pay the cost of re-examination and replacement. If such work is not in accordance with the contract documents, the Contractor shall pay such cost.

Properly authorized and accredited inspectors shall be considered to be the representatives of the City limited to the duties and powers entrusted to them. It will be their duty to inspect materials and workmanship of those portions of the work to which they are assigned, either individually or collectively, under instructions of the Engineer and to report any and all deviations from the Drawings, Special Provisions and other contract provisions which may come to their notice. Any inspector may be considered to have the right to order the work entrusted to his or her supervision stopped, if in his or her opinion such action becomes necessary, until the Engineer is notified and has determined and ordered that the work may proceed in due fulfillment of all contract requirements.

7-03. Surveys. Contractor shall furnish all land surveys, establish all base lines and bench marks and make sufficient detailed surveys needed for working points, lines and elevations. The Contractor shall develop all slope stakes and batter boards. Contractor shall also develop all additional working points, lines and elevations as he or she may desire to facilitate his or her methods and sequence of construction.

7-04. Rights-of-Way. The City will provide all necessary rights-of-way and easements in or beneath which work will be performed by the Contractor under this contract.

7-05. Retention of Imperfect Work. If any portion of the work done or material furnished under this contract shall prove defective and not in accordance with the Plans and Special Provisions, and if the imperfection in the same shall not be of sufficient magnitude or importance to make the work dangerous or undesirable, the Engineer shall have the right and authority to retain such work instead of requiring the imperfect work to be removed and reconstructed, but he or she shall make such deductions therefor in the payments due or to become due the Contractor as may be just and reasonable.

7-06. Changes in the Work. The Engineer shall have the right, in writing, to order additions to, omissions from, or corrections, alterations and modifications in the line, grade, form, dimensions, plan, or kind or amount of work or materials herein contemplated, or any part thereof, either before or after the beginning of construction. However, the arithmetical sum of the cost to the City of additions and subtractions from the work under this contract shall not exceed 10 percent of original contract amount or \$5,000, whichever is the greater, unless based upon a supplementary agreement to be made therefore.

The order of such additions, omissions, corrections, alterations and modifications shall be in writing and signed by the Engineer and, in order, shall then be binding upon the Contractor. The Contractor shall proceed with the work as changed and the value of such change shall be determined as provided for in section 10-07 of these Special Provisions.

Such alterations shall in no way affect, vitiate, or make void this contract or any part thereof, except that which is necessarily affected by such alterations and is clearly the evident intention of the parties to this contract.

7-07. Additional Drawings by City. The drawings made a part of this contract at the time of its execution are intended to be fairly comprehensive and to indicate in more or less detail the scope of the work. In addition to these drawings, however, the Engineer shall furnish such additional drawings from time to time during the progress of the work as are necessary to make clear or to define in greater detail the intent of the Special Provisions and the contract drawings and the Contractor shall make his or her work conform to all such drawings.

7-08. Additional and Emergency Protection. Whenever, in the opinion of the Engineer, the Contractor has not taken sufficient precautions for the safety of the public or the protection of the works to be constructed under this contract, or of adjacent structures or property which may be injured by the processes of construction on account of such neglect and whenever, in the opinion of the Engineer, an emergency shall arise and immediate action shall be considered necessary in order to protect public or private, personal or property interest, then and in that event, the Engineer, with or without notice to the Contractor may provide suitable protection to the said interests by

causing such work to be done and such material to be furnished as shall provide such protection as the Engineer may consider necessary and adequate.

The cost and expense of such work and material so furnished shall be borne by the Contractor and, if the same shall not be paid on presentation of the bills therefor, then such costs shall be deducted from any amounts due or to become due the Contractor.

The performance of such emergency work under the direction of the Engineer shall in no way relieve the Contractor from any damages which may occur during or after such precaution has been taken by the Engineer.

7-09. Suspension of Work. The City may at any time suspend the work or any part thereof by giving five (5) days written notice to the Contractor. The work shall be resumed by the Contractor within ten (10) days after the date fixed in the written notice from the City to the Contractor so to do. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this contract as a result of such suspension.

If the work, or any part thereof, shall be stopped by the notice in writing aforesaid and if the City does not give notice in writing to the Contractor to resume work at a date within ten (10) days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work so suspended and he or she will be entitled to the estimates and payments for all work done on the portions so abandoned, if any, plus 5 percent of the value of the work so abandoned, to compensate for loss of overhead, plant expense and anticipated profit.

7-10. Right of City to Terminate Contract. If the Contractor should be adjudged a bankrupt, or if he or she should make a general assignment for the benefit of his or her creditors, or if a receiver should be appointed on account of his or her insolvency, or if he or she should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply sufficient properly skilled workmen or proper materials, or if he or she should fail to make prompt payments to subcontractors or for material or labor, or persistently disregard laws, ordinances or the instructions of the Engineer, or otherwise be guilty of a substantial violation of any provision of the contract, then the City, upon the certificate of the Engineer that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor seven days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools and appliances and finish the work by whatever method the City may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the City. The expense incurred by the City as herein provided and the damage incurred through the Contractor's default, shall be certified by the Engineer. In the event that a termination under this section is determined to be improper, such termination shall be deemed a constructive termination for convenience taken pursuant to section 7-12 below.

7-11. Use of Completed Portions. The City shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work or such portions which may not have expired; but such taking possession and using shall not be deemed an acceptance of any work not completed in accordance with the contract documents. If such prior use increases the cost of or delays the work, the Contractor shall be entitled to such extra compensation, or extension of time or both, as the Engineer may determine.

7-12. Right of City to Terminate Contract for Convenience. The City may terminate performance of the work called for by the contract documents in whole or, from time to time, in part, if the City determines that a termination is in the City's best interest. The Contractor shall terminate all or any part of the work upon delivery to the Contractor of a notice of termination specifying that the termination is for the convenience of the City, the extent of termination, and the effective date of such termination. After receipt of notice of termination, and except as directed by the Engineer, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this termination for convenience clause, immediately proceed with the following obligations:

1. Stop work as specified in the notice.
2. Complete any work specified in the notice of termination in a least cost/shortest time manner while still maintaining the quality called for under the contract documents.

3. Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the contract documents is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
4. Terminate all subcontracts to the extent that they relate to the portions of the work terminated.
5. Place no further subcontracts or orders, except as necessary to complete the continued portion of the contract.
6. Submit to the Engineer, within ten (10) calendar days from the effective date of the notice of termination, all of the usual documentation called for by the contract documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the effective date of the notice of termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the City's exercise of its right to terminate this Contract pursuant to this clause, which costs the contractor is authorized under the contract documents to incur, shall: (1) be submitted to and received by the Engineer no later than 30 calendar days after the effective date of the notice of termination; (2) describe the costs incurred with particularity; and (3) be conspicuously identified as "Termination Costs occasioned by the City's Termination for Convenience."

Termination of the contract shall not relieve Surety of its obligation for any just claims arising out of or relating to the work performed. In the event that the City exercises its right to terminate this contract pursuant to this clause, the City shall pay the Contractor, upon the Contractor's submission of the documentation required by this clause and other applicable provisions of the contract documents, the following amounts:

All actual reimbursable costs incurred according to the provisions of this contract.

1. A reasonable allowance for profit on the cost of the Work performed, provided Contractor establishes to the satisfaction of the Engineer that it is reasonably probable that Contractor would have made a profit had the contract been completed and provided further, that the profit allowed shall in no event exceed fifteen (15%) percent of the costs.
2. A reasonable allowance for Contractor's administrative costs in determining the amount payable due to termination of the contract under this Article.

Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the City may immediately order Contractor to cease work on the project until such safety or liability issues are addressed to the satisfaction of the City or the contract is terminated.

SECTION 8. WORKMANSHIP, MATERIALS and EQUIPMENT

8-01. General Quality. Materials and equipment shall be new and of a quality equal to that specified or approved. Work shall be done and completed in a thorough and workmanlike manner.

8-02. Quality in Absence of Detailed Specifications. Whenever under this contract it is provided that the Contractor shall furnish materials or manufactured articles or shall do work for which no detailed specifications are set forth, the materials or manufactured articles shall be of the best grade in quality and workmanship obtainable in the market from firms of established good reputation, or, if not ordinarily carried in stock, shall conform to the usual standards for first-class materials or articles of the kind required, with due consideration of the use to which they are to be put. In general, the work performed shall be in full conformity and harmony with the intent to secure the best standard of construction and equipment of the work as a whole or in part.

8-03. Materials and Equipment Specified by Name. Whenever any material or equipment is indicated or specified by patent or proprietary name or by the name of the manufacturer, such specification shall be considered as used for the purpose of describing the material or equipment desired and shall be considered as followed by the words "or approved equal". The Contractor may offer any material or equipment which shall be equal in every respect to that specified, provided that written approval first is obtained from the Engineer.

8-04. Source of Materials. Price, fitness and quality being equal, preference shall be given by the Contractor for supplies grown, manufactured or produced in the State of California and, next, for such products partially produced in this State in accordance with Government Code Section 4332.

8-05. Storage of Materials. Materials shall be so stored to ensure the preservation of their quality and fitness for the work. They shall be so located and disposed that prompt and proper inspection thereof may be made.

8-06. Drawings, Samples and Tests. As soon as possible after execution of the contract, the Contractor shall submit to the Engineer, in quintuplicate, sufficient information including, if necessary, assembly and detail drawings to demonstrate fully that the equipment and materials to be furnished comply with the provisions and intent of these Special Provisions and Drawings. If the information thus submitted indicates the equipment or materials is acceptable, the Engineer will return one copy stamped with his or her approval; otherwise, one copy will be returned with an explanation of why the equipment or material is unsatisfactory. The Contractor shall have no claims for damages or for extension of time on account of any delay due to the revision of drawings or rejection of material. Fabrication or other work performed in advance of approval shall be done entirely at the Contractor's risk. After approval of equipment or material, the Contractor shall not deviate in any way from the design and specifications given without the written consent of the Engineer.

When requested by the Engineer, a sample or test specimens of the materials to be used or offered for use in connection with the work shall be prepared at the expense of the Contractor and furnished by him or her in such quantities and sizes as may be required for proper examination and tests, with all freight charges prepaid and with information as to their sources.

All samples shall be submitted before shipment and in ample time to permit the making of proper tests, analyses, or examination before the time at which it is desired to incorporate the material into the work. All tests of materials furnished by the Contractor shall be made by the Engineer. Samples shall be secured and tested whenever necessary to determine the quality of the material.

SECTION 9. PROSECUTION OF WORK

9-01. Equipment and Methods. The work under this contract shall be prosecuted with all materials, tools, machinery, apparatus and labor and by such methods as are necessary to the complete execution of everything described, shown, or reasonably implied. If at any time before the beginning or during the progress of the work, any part of the Contractor's plant or equipment, or any of his or her methods of execution of the work, appear to the Engineer to be unsafe, inefficient, or inadequate to insure the required quality or the rate of progress of the work, he or she may order the Contractor to increase or improve his or her facilities or methods and the Contractor shall comply promptly with such orders; but, neither compliance with such orders nor failure of the Engineer to issue such orders shall relieve the Contractor from his or her obligation to secure the degree of safety, the quality of the work and the rate of progress required of the Contractor. The Contractor alone shall be responsible for the safety, adequacy and efficiency of his or her plant, equipment and methods.

9-02. Time of Completion. The Contractor shall promptly begin the work under this contract and shall complete and make ready for full use all portions of the project made the subject of this contract within the time set forth in the agreement bound herewith.

9-03. Avoidable Delays. Avoidable delays in the prosecution or completion of the work shall include all delays which might have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor. The City will consider as avoidable delays within the meaning of this contract (1) delays in the prosecution of parts of the work, which may in themselves be unavoidable, but do not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole work within the time herein specified, (2) reasonable loss of time resulting from the necessity of submitting plans to the Engineer for approval and from the making of surveys, measurements, inspections, and testing and (3) such interruptions as may occur in the prosecution of the work on account of the reasonable interference of other contractors employed by the City which do not necessarily prevent the completion of the whole work within the time herein specified.

9-04. Unavoidable Delays. Unavoidable delays in the prosecution or completion of the work under this contract shall include all delays which may result, through cause beyond the control of the Contractor and which he or she could not have provided against by the exercise of care, prudence, foresight and diligence. Orders issued by the City changing the amount of work to be done, the quantity of material to be furnished or the manner in which the work is to be prosecuted and unforeseen delays in the completion of the work of other contractors under contract with the City will be considered unavoidable delays, so far as they necessarily interfere with the Contractor's completion of the whole of the work. Delays due to normally adverse weather conditions will not be regarded as unavoidable delays. However, truly abnormal amounts of rainfall, temperatures or other weather conditions for the

location of the work and time of year may be considered as unavoidable delays if those conditions necessarily cause a delay in the completion of the work.

9-05. Notice of Delays. Whenever the Contractor foresees any delay in the prosecution of the work and, in any event, immediately upon the occurrence of any delay which the contractor regards as an unavoidable delay, he or she shall notify the Engineer in writing of the probability of the occurrence of such delay and its cause, in order that the Engineer may take immediate steps to prevent, if possible, the occurrence or continuance of the delay, or, if this cannot be done, may determine whether the delay is to be considered avoidable or unavoidable, how long it continues and to what extent the prosecution and completion of the work are to be delayed thereby.

9-06. Extension of Time. Should any delays occur which the Engineer may consider unavoidable, as herein defined, the Contractor shall, pursuant to his or her application, be allowed an extension of time proportional to said delay or delays, beyond the time herein set forth, in which to complete this contract; and liquidated damages for delay shall not be charged against the Contractor by the City during an extension of time granted because of unavoidable delay or delays.

Any claim by Contractor for a time extension based on unavoidable delays shall be based on written notice delivered to the Engineer within 15 days of the occurrence of the event giving rise to the claim. Failure to file said written notice within the time specified shall constitute a waiver of said claim. Notice of the full extent of the claim and all supporting data must be delivered to the Engineer within 45 days of the occurrence unless the Engineer specifies in writing a longer period. All claims for a time extension must be approved by the Engineer and incorporated into a written change order.

9-07. Unfavorable Weather and Other Conditions. During unfavorable weather and other conditions, the Contractor shall pursue only such portions of the work as shall not be damaged thereby. No portions of the work whose satisfactory quality or efficiency will be affected by any unfavorable conditions shall be constructed while these conditions remain, unless, by special means or precautions approved by the Engineer, the Contractor shall be able to overcome them.

The Contractor shall be granted a time extension of one day for each unfavorable weather day which prevents him or her from placing concrete forms or placing and finishing concrete or asphalt concrete. Such unfavorable weather day is defined as a rain day where precipitation prevents the contractor from performing the work more than four (4) continuous hours within the authorized work period or a temperature day where the ambient temperature is below that specified for the placement of materials associated with the controlling work item for more than four (4) continuous work hours of the authorized work period.

9-08. Saturday, Sunday, Holiday and Night Work. No work shall be done between the hours of 6 p.m. and 7 a.m., nor on Saturdays, Sundays or legal holidays except such work as is necessary for the proper care and protection of work already performed, or except in cases of absolute necessity and in any case only with the permission of the Engineer.

It is understood, however, that night work may be established as a regular procedure by the Contractor if he or she first obtains the written permission of the Engineer and that such permission may be revoked at any time by the Engineer if the Contractor fails to maintain at night adequate force and equipment for reasonable prosecution and to justify inspection of the work.

9-09. Hours of Labor. Eight (8) hours of labor shall constitute a legal day's work and the Contractor or any subcontractor shall not require or permit more than eight hours of labor in a day from any person employed by him or her in the performance of the work under this contract, unless paying compensation for all hours worked in excess of eight (8) hours per day at not less than 1½ times the basic rate of pay. The Contractor shall forfeit to the City, as a penalty, the sum of twenty-five dollars (\$25.00) for each workman employed in the execution of the contract by him or her or by any subcontractor, for each calendar day during which such laborer, workman, or mechanic is required or permitted to labor more than eight hours in violation of the provisions of Section 1810 to 1816, inclusive, (Article 3, Chapter 1, Part 7, Division 2) of the Labor Code of the State of California and any acts amendatory thereof.

SECTION 10. PAYMENT

10-01. Certification by Engineer. All payments under this contract shall be made upon the presentation of certificates in writing from the Engineer and shall show that the work covered by the payments has been done and the payments thereof are due in accordance with this contract.

10-02. Progress Estimates and Payment. The Engineer shall, within the first seven (7) days of each month, make an estimate of the value of the work performed in accordance with this contract during the previous calendar month.

The first estimate shall be of the value of the work satisfactorily completed in place and meeting the requirements of the contract. And every subsequent estimate, except the final estimate, shall be of the value of the work satisfactorily completed in place since the last preceding estimate was made; provided, however, that should the Contractor fail to adhere to the program of completion fixed in this contract, the Engineer shall deduct from the next and all subsequent estimates the full calculated accruing amount of the liquidated damages to the date of said estimate, until such time as the compliance with the program has been restored.

The estimate shall be signed by the Engineer and, after approval, the City shall pay or cause to be paid to the Contractor in the manner provided by law, an amount equal to 95 percent of the estimated value of the work satisfactorily performed and complete in place.

10-03. Substitution of Securities.

1. At such times that Public Contract Code Section 22300 is in effect Contractor may propose the substitution of securities of at least equal market value for any moneys to be withheld to ensure performance under the Contract. Market value shall be determined as of the day prior to the date such substitution is to take place. Such substitution shall be made at the request and expense of the Contractor. The securities shall be one or more of the following types:

(a) Bonds or interest-bearing notes or obligations of the United States, or those for which the faith and credit of the United States are pledged for the payment of principal and interest.

(b) Bonds or interest-bearing notes on obligations that are guaranteed as to principal and interest by a federal agency of the United States.

(c) Bonds of the State of California, or those for which the faith and credit of the State of California are pledged for the payment of principal and interest.

(d) Bonds or warrants, including, but not limited to, revenue warrants, of any county, city, metropolitan water district, California water district, California water storage district, irrigation district in the State of California, municipal utility district, or school district of the State of California, which are rated by Moody's or Standard and Poor as A or better.

(e) Bonds, consolidated bonds, collateral trust debentures, consolidated debentures, or other obligations issued by federal land banks or federal intermediate credit banks established under the Federal Farm Loan Act, as amended; debentures and consolidated debentures issued by the Central Bank for Cooperatives and banks for cooperatives established under the Farm Credit Act of 1933, as amended; bonds, or debentures of the Federal Home Loan Bank Board established under the Federal Home Loan Bank Act; and stock, bonds, debentures and other obligations of the Federal National Mortgage Association established under the National Housing Act as amended and bonds of any Federal Home Loan Mortgage Corporation.

(f) Commercial paper of "prime" quality as defined by a nationally recognized organization which rates such securities. Eligible paper is further limited to issuing corporations: (1) organized and operating within the United States; (2) having total assets in excess of five hundred million dollars (\$500,000,000); and (3) approved by the Pooled Money Investment Board of the State of California. Purchases of eligible commercial paper may not exceed 180 days' maturity, nor represent more than 10 percent of the outstanding paper of an issuing corporation.

(g) Bills of exchange or time drafts on and accepted by a commercial bank, otherwise known as bankers acceptances, which are eligible for purchase by the Federal Reserve System.

(h) Certificates of deposits issued by a nationally or state-chartered bank or savings and loan association.

(i) The portion of bank loans and obligations guaranteed by the United States Small Business Administration or the United States Farmers Home Administration.

(j) Student loan notes insured under the Guaranteed Student Loan Program established pursuant to the Higher Education Act of 1965, as amended (20 U.S.C. 1001, et seq.) and eligible for resale to the Student Loan Marketing Association established pursuant to Section 133 of the Education Amendments of 1972, as amended (20 U.S.C. 1087-2).

(k) Obligations issued, assumed or guaranteed by International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, or the Government Development Bank of Puerto Rico.

(l) Bonds, debentures and notes issued by corporations organized and operating within the United States. Such securities eligible for substitution shall be within the top three ratings of a nationally recognized rating service.

2. The securities shall be deposited with City or with any commercial bank as escrow agent, who shall arrange for transfer of such securities to the Contractor upon satisfactory completion of the contract. Any interest accrued or paid on such securities shall belong to the Contractor and shall be paid upon satisfactory completion of the contract.

The market value of the securities deposited shall at all times be maintained in an amount at least equal, in the sole judgment of City, to the moneys to be withheld pursuant to the Contract Documents to ensure performance of the Contract. In order to comply with this condition, Contractor shall deposit additional securities as necessary upon request by City or the escrow agent.

3. Upon acceptance of any Proposal that includes substituting securities for amounts withheld to ensure performance, a separate escrow agreement satisfactory in form and substance to City shall be prepared and executed by City, the Contractor and the escrow agent, which may be City. The escrow agreement shall specify, among other matters, value of securities to be deposited; procedures for valuing the securities and for adding or withdrawing securities to maintain the market value of the deposited securities at least equal to the amount of moneys which would otherwise be withheld; the terms and conditions of conversion to cash in case of the default by the Contractor; and terms, conditions and procedure for termination of the escrow. City shall have no obligation to enter any such Agreement that does not provide the City with the unilateral right to convert securities to cash and to gain immediate possession of the cash.

10-04. Acceptance. The work must be accepted by vote of the City Council of the City of Ukiah when the whole shall have been completed satisfactorily. The Contractor shall notify the Engineer, in writing, of the completion of the work, whereupon the Engineer shall promptly, by personal inspection, satisfy himself as to the actual completion of the work in accordance with the terms of the contract and shall thereupon recommend acceptance by the City Council.

10-05. Final Estimate and Payment. The Engineer shall, as soon as practicable after the final acceptance of the work done under this contract, make a final estimate of the amount of work done thereunder and the value thereof.

Such final estimate shall be signed by the Engineer, and after approval, the City shall pay or cause to be paid to the Contractor, in the manner provided by law, the entire sum so found to be due hereunder, after deducting therefrom all previous payments and such other lawful amounts as the terms of this contract prescribe.

In no case will final payment be made in less than thirty-five (35) days after the filing of the notice of completion with the County Recorder.

10-06. Delay Payments. Should any payment due the Contractor or any estimate be delayed, through fault of the City beyond the time stipulated, such delay shall not constitute a breach of contract or be the basis for a claim for damages, but the City shall pay the Contractor interest on the amount of the payment at the rate of 6 percent per annum for the period of such delay. The terms for which interest will be paid shall be reckoned, in the case of any monthly or progress payment, from the twentieth day of the month next succeeding the month in which the work was performed to the date of payment of the estimate; and in the case of the final estimate, from the forty-fifth day after acceptance to the date of payment of the final estimate.

The date of payment of any estimate shall be considered the day on which the payment is offered or mailed as evidenced by the records of the Treasurer of the City. If interest shall become due on any delayed payment, the amount thereof, as determined by the City, shall be added to a succeeding payment. If the interest shall become due on the final payment, it shall be paid on a supplementary voucher to interest or any sum or sums which, by the terms of this contract, the City is authorized to reserve or retain.

10-07. Extra Work and Work Omitted. Whenever corrections, alterations, or modifications of the work under this contract ordered by the Engineer and approved by the City increase the amount of work to be done, such added work shall be known as "extra work"; and when such corrections, alterations, or modifications decrease the amount of work to be done, such subtracted work shall be known as "work omitted".

When the Contractor considers that any changes ordered involve extra work, he or she shall immediately notify the Engineer in writing and subsequently keep him or her informed as to when and where extra work is to be performed and shall make claim for compensation therefor each month not later than the first day of the month following that in which the work claimed to be extra work was performed and he or she shall submit a daily complete statement of materials and labor used and expenses incurred on account of extra work performed, showing allocation of all materials, labor and expenses.

All such claims shall state the date of the Engineer's written order and the date of approval by the City authorizing the work on account of which claim is made. Unless such notification is made in writing within the time specified and unless complete statements of materials used and expenses incurred on account of such extra work are furnished as above required, the Contractor shall not be entitled to payment on account of extra work and Contractor shall be deemed to have waived the right to make any future claims for compensation for such extra work.

When changes decrease the amount of work to be done, they shall not constitute a claim for damages on account of anticipated profits on the work that may be omitted.

10-08. Compensation for Extra Work or Work Omitted. Whenever corrections, additions, or modifications in the work under this contract change the amount of work to be done or the amount of compensation due the Contractor, excepting increases or decreases in contract items having unit contract prices for each measurable quantity installed in place, and such changes have been ordered in writing by the Engineer and approved by the City prior to the Contractor performing the extra work, then a price may be agreed upon. Failing such an agreement in price, the Contractor shall be compensated for performing extra work pursuant to the provisions of Section 4-1.03 D, "Extra Work", and Section 9-1.03, "Force Account Payment" of the Standard Specifications.

This method of determining the price of work shall not apply to the performance of any work which is required or reasonably implied to be performed or furnished under this contract.

10-09. Compensation to the City for Extension of Time. In case the work called for under this contract is not completed within the time limit stipulated herein, the City shall have the right as provided hereinabove, to extend the time of completion thereof. If the time limit be so extended, the City shall have the right to charge to the Contractor and to deduct from the final payment for the work the actual cost to the City of engineering, inspection, superintendence and other overhead expenses which are directly chargeable to the contract and which accrue during the period of such extension, except that the cost of final unavoidable delays shall not be included in such charges.

10-10. Liquidated Damages for Delay. It is agreed by the parties to the contract that time is of the essence and that, in case all the work is not completed before or upon the expiration of the time limit as set forth, damage, other than those cost items identified in section 10-09, will be sustained by the City and that it is and will be impracticable

to determine the actual amount of damage by reason of such delay; and it is therefore agreed that the Contractor will pay to the City the sum of five hundred dollars (\$500.00) per day for each and every calendar day's delay beyond the time prescribed.

In compliance with the provisions of California Public Contract Code § 7102, the Contractor will be compensated for damages incurred due to delays in completing the work due solely to the fault of the City, where such delay is unreasonable under the circumstances and not contemplated by the parties. The Contractor and City agree that determining actual damages is impracticable and extremely difficult. As such, the Contractor shall be entitled to the appropriate time extension and to payment of liquidated damages in the sum of \$250 per day of delay in excess of the time specified for the completion of the work. Such amount shall constitute the only payment allowed and shall necessarily include all overhead (direct or indirect), all profit, all administrative costs, all bond costs, all labor, materials, equipment and rental costs, and any other costs, expenses and fees incurred or sustained as a result of such delay. The Contractor expressly agrees to be limited solely to the liquidated damages for all such delays as defined in this subsection.

SECTION 11. MISCELLANEOUS

11-01. Notice. Whenever any provision of the contract documents requires the giving of written notice, it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice. If mailed, the notice shall be deemed received on the date of delivery stated in the return receipt.

11-02. Computation of Time. When any period of time is referred to in the Contract Documents by days, it shall be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day shall be omitted from the computation.

11-03. Claims Procedure

Contractor shall timely comply with all notices and requests for changes to the contract time or contract price, as a prerequisite to filing any claim governed by this Article. The failure to timely submit a notice of delay or notice of change, or to timely request a change to the contract time or contract price, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the claim under the contract or at law.

A. **Intent.** Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Article is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Article shall be construed to be consistent with said statutes.

B. **Claims.** For purposes of this Article, "Claim" means a separate demand by the Contractor, for (A) a time extension, (B) payment of money or damages arising from work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the District. Claims governed by this Article may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order. Claims governed by this Article must be filed no later than the date of final payment. The claim shall be submitted in writing to the District and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing herein is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra work, disputed work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

C. **Supporting Documentation.** The Contractor shall submit all claims in the following format:

Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made
List of documents relating to claim:
Specifications
Drawings
Clarifications (Requests for Information)
Schedules
Other
Chronology of events and correspondence
Analysis of claim merit
Analysis of claim cost
Time impact analysis in CPM format

If Contractor's claim is based in whole or in part on an allegation of errors or omissions in the Drawings or Specifications for the project, Contractor shall provide a summary of the percentage of the claim subject to design errors or omissions and shall obtain a certificate of merit in support of the claim of design errors and omissions.

D. City's Response. Upon receipt of a claim pursuant to this Article, City shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 days after the City issues its written statement.

If the City needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the City's governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the City shall have up to three days following the next duly publicly noticed meeting of the City's governing body after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

Within 30 days of receipt of a claim, the City may request in writing additional documentation supporting the claim or relating to defenses or claims the District may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of City and the Contractor. The City's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days (if the claim is less than \$15,000, within 15 days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

E. Meet and Confer. If the Contractor disputes the City's written response, or the City fails to respond within the time prescribed, the Contractor may so notify the City, in writing, either within 15 days of receipt of the City's response or within 15 days of the City's failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, the City shall schedule a meet and confer conference within 30 days for settlement of the dispute.

F. Mediation. Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the City issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in

dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

Unless otherwise agreed to by the City and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has been commenced.

The mediation shall be held no earlier than the date the Contractor completes the work or the date that the Contractor last performs work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.

G. Procedures After Mediation. If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code prior to initiating litigation. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference.

H. Civil Actions. The following procedures are established for all civil actions filed to resolve claims of \$375,000 or less:

Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this Contract. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

I. Government Code Claims. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, construction claims and/or changed conditions, the Contractor must comply with the claim procedures set forth in Government Code Sections 900, et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, construction claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if the prerequisite contractual requirements are not satisfied, no action against the City may be filed. **A Government Code claim must be filed no earlier than the date the work is completed or the date the Contractor last performs work on the project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.**

J. Non-Waiver. The City's failure to respond to a claim from the Contractor within the time periods described in this Article or to otherwise meet the time requirements of this Article shall result in the claim being deemed rejected in its entirety.

11-04. Litigation and Forum Selection. Contractor and City stipulate and agree that any litigation relating to the enforcement or interpretation of this contract, arising out of Contractor's performance or relating in any way to the work shall be brought in Mendocino County and that venue will lie in Mendocino County.

Except as otherwise expressly provided by law, the parties waive any objections they might otherwise have to the propriety of jurisdiction or venue in the state courts in Mendocino County and agree that California law shall govern any such litigation.

The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto and, in particular but without limitation, the warranties, guaranties and obligations imposed upon the Contractor and all of the rights and remedies available to the City thereunder, shall be in addition to and shall not be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by law or contract, by special warranty or guaranty, or by other provisions of the contract documents and the provisions of this paragraph shall be as effective as if repeated specifically in the contract documents in connection with each particular duty, obligation, right and remedy to which they apply. All warranties and guaranties made in the contract document shall survive final payment and termination or completion of this contract. The City disclaims an express or implied warranty that the plans and specifications identify all site conditions that could affect the time or cost to complete the Work.

11-05. Waiver. The Contractor shall strictly comply with all notices and other contract requirements. Waiver by the City of any failure of the Contractor to comply with any term of the contract, including the notice provisions, shall not be deemed a waiver of a subsequent breach.

TECHNICAL SPECIFICATIONS

SECTION 12. GENERAL INFORMATION

12-01. Location and Scope of Work. All of the work to be performed is within the City of Ukiah and consists of a tenant improvement of an existing 15,800 square foot unconditioned warehouse building of type V-A construction. Situated along highway 101 in Ukiah surrounded by nearby pear orchards, the building was originally constructed in 1999 as an agricultural storage warehouse. The facility (The Electric Service Center) is to house and centralize the Ukiah Electric Utility Department's electrical operations and administrative offices for Engineering, Construction and Technical Services. In addition, the Department intends to use the Electric Service Center for training, material warehousing and construction preparation.

On August 5, 2020, the City Council adopted the plans and specifications for the grading, fencing, roofing and electric equipment relocation. This work was completed on March 2, 2023. On the morning of March 8, 2023, a fire broke out at the core of the building in the existing bathroom beneath the main stair to the second level. The source of the fire was the electrical failure of a bathroom ceiling fan. The automated sprinkler went off throughout the building and The Ukiah Valley Fire Authority responded to the incident and was successful in extinguishing the fire. However, significant smoke and water damage occurred, as well as structural damage to the building's main floor core and second level, including some exterior walls and roofing. On April 7, 2023, all Fire remediation work as a part of a separate contract with West Coast Fire and Water remediation specialists was completed.

In addition to the repair of some exterior siding, replacing windows and roofing at the second level, the exterior of the building will receive a new front entry awning, updated exterior lighting fixtures and the existing metal roll up doors will be replaced with new glazed storefront doors and windows at the new administrative office and showroom portion of the building.

The interior of the building will be repaired where required due to smoke and water damage and renovated to accommodate a new showroom, conference room, individual & shared offices, break room with kitchenette, restrooms, mezzanines, warehouses, a workshop area and storage rooms on the main level and repair of the main stair and entire second level. The interior renovation includes a new building HVAC system, new lighting, electrical outlets, and plumbing throughout. Three existing mezzanine structures will be demolished and replaced with two new mezzanines. Two existing warehouse bays will remain as storage areas for equipment.

Scope of Work Summary by CSI Division:

Div 02 - Existing Conditions: Deconstruct Mezzanines and store onsite, demolish existing flooring & walls where indicated on plans, demo existing doors & windows where indicated on plans and any other existing components (structural or not) uncovered during construction and deemed non salvageable due to fire, smoke or water damage. Patch and repair all bottoms of walls removed due to water damage, as noted on plans.

Div 03 - Concrete: Backfill & back pour ± 260 sq. ft. concrete where indicated on plans.

Div 05 - Metals: Structural steel where indicated on plans, wire mesh panel guards and screening at mezzanines and above offices.

Div 06 - Wood, Plastics & Composites: New wood beams, joists, structural framing, mezzanines, interior wall partition framing, countertops & millwork where indicated on plans.

Div 07 - Thermal & Moisture Protection: Insulation at interior & exterior walls. Waterproofing at all altered exterior walls around doors & windows.

Div 08 - Openings: New aluminum windows where indicated on plans. New interior & exterior aluminum storefront doors & office partitions where indicated on plans. Infill existing roll-up doors and patch infill wall areas with siding to match existing. New roller shades at all new windows.

Div 09 - Finishes: Ceilings, wall finishes, resilient base, flooring, painting and interior and exterior finish patching where indicated on plans.

Div 10 - Specialties: Restroom accessories where indicated on plans.

Div 21 - Fire Suppression: The existing building is sprinklered but will need to have sprinkler heads added where required for new office areas. Fire sprinkler alterations and permit will be performed under purview of general contractor.

Div 22 - Plumbing: Renovate three existing restrooms and construct four new restrooms. New plumbing fixtures & fittings where indicated on plans.

Div 23 - HVAC: New forced air HVAC system throughout building. See mechanical plans.

Div 26 - Electrical: New lighting throughout. Replace existing exterior light fixtures. New switching, receptacles and data outlets where indicated on plans. Relocate one existing electrical panel to accommodate new office partition where indicated on plans.

Div 28 - Electronic Safety & Security: new burglar alarm integration with existing system at new building entry points.

The Contractor should familiarize himself with the local conditions of the project site. Failure to do so will in no way relieve him of the responsibility for performing any of the work or operations required as a part of this contract. Further information regarding the work or these specifications can be obtained from Mary Horger at (707) 463-6233.

12-02. Arrangement of Technical Specifications. The Technical Specifications are arranged in sections covering the various phases of work as follows:

Section No.	Title
SECTION 01 10 00	SUMMARY OF WORK AND REQUIREMENTS
SECTION 01 20 13	REQUESTS FOR INTERPRETATION
SECTION 01 31 00	PROJECT COORDINATION
SECTION 01 31 20	PROGRESS MEETINGS
SECTION 01 32 16	PROJECT SCHEDULES
SECTION 01 33 00	SUBMITTALS
SECTION 01 40 00	QUALITY REQUIREMENTS
SECTION 01 41 00	REGULATORY REQUIREMENTS
SECTION 01 51 00	TEMPORARY UTILITIES, FACILITIES AND CONTROLS
SECTION 01 56 10	SITE AND AREA CLEANUP
SECTION 01 57 23	STORMWATER POLLUTION CONTROL SECTION
SECTION 01 73 29	CUTTING AND PATCHING REQUIREMENTS
SECTION 02 41 16	DEMOLITION AND DISPOSAL
SECTION 02 41 19	SELECTIVE INTERIOR DEMOLITION
SECTION 03 20 00	REINFORCING STEEL
SECTION 03 30 00	CAST IN PLACE CONCRETE
SECTION 06 10 00	CARPENTRY
SECTION 06 41 13	ARCHITECTURAL WOOD CASEWORK
SECTION 07 25 00	BUILDING ENVELOPE UNDERLAYMENT
SECTION 07 42 13	SIDING AND ROOFING PANELS (METAL)
SECTION 07 62 00	SHEET METAL FLASHING AND TRIM
SECTION 07 92 00	JOINT SEALANTS
SECTION 08 16 00	COMPOSITE INTERIOR DOORS
SECTION 08 41 13	ALUMINUM STOREFRONTS
SECTION 08 51 13	ALUMINUM WINDOWS
SECTION 08 71 00	DOOR HARDWARE
SECTION 08 80 00	GLAZING

SECTION 09 21 16 - GYPSUM BOARD ASSEMBLIES
SECTION 09 65 19 - RESILIENT TILE FLOORING
SECTION 09 68 13 - CARPET TILE FLOORING
SECTION 09 90 00 - PAINTING AND COATING
SECTION 10 28 13 - TOILET ACCESSORIES
SECTION 10 40 00 - SIGNAGE
SECTION 12 24 13 - ROLLER SHADES
SECTION 21 10 00 - FIRE SUPPRESSION AND ALARM SYSTEMS
SECTION 22 30 00 - PLUMBING EQUIPMENT
SECTION 23 05 00 - HVAC
SECTION 26 00 01 - ELECTRICAL GENERAL PROVISIONS
SECTION 26 00 02 - ELECTRICAL BASIC MATERIALS AND METHODS
SECTION 26 50 00 - LIGHTING SYSTEM
SECTION 32 31 13 - POLYMER COATED CHAIN LINK FENCING AND GATES

12-03. Arrangement of Plans. General locations and linear quantities of the work are shown in Attachment "A".

12-04. Business Licenses. The Contractor and any subcontractors shall each secure and maintain a valid City of Ukiah Business License prior to the start of any portion of the work.

12-05. Permits. The Contractor shall provide, procure, and pay for all permits required to complete this work.

12-06. Standard Specifications and Standard Plans. The Standard Specifications and Standard Plans of the California State Department of Transportation, 2018, are hereby made a part of these Special Provisions and are hereinafter referred to as "California Standard Specifications" and "California Standard Plans."

Whenever in the California Standard Specifications and the California Standard Plans the following terms are used, they shall be understood to mean and refer to the following:

Department of Transportation - The City Council.

Director of Public Works - The City of Ukiah Director of Public Works.

Engineer - The Engineer, designated by the City Council, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

Laboratory - The designated laboratory authorized by the City of Ukiah to test materials and work involved in the contract.

State - The City of Ukiah

Other terms appearing in the California Standard Specifications and the California Standard Plans shall have the intent and meaning specified in Section I, Definition of Terms of the California Standard Specifications.

In case of discrepancy between the contract documents, the order of precedence from the highest to lowest is as follows:

1. (City) Special Provisions
2. (City) Project Plans
3. City Standard Plans and Details
4. California Standard Plans
5. California Standard Specifications

12-07. Temporary Facilities. All temporary facilities are the responsibility of the Contractor. The removal of said facilities shall be the responsibility of the Contractor. The Contractor shall be responsible for any and all damages to existing facilities which are a result of the work.

12-08. Public Convenience and Safety. The Contractor shall conduct operations so as to cause the least possible obstruction and inconvenience to public traffic. The Contractor shall, at his or her expense, furnish such flag persons and furnish, erect, construct and maintain such fences, barriers, lights, signs, detours, pedestrian walkways, driveway ramps and bridging as may be necessary to give adequate warning to the public that work is in progress and that dangerous conditions exist, to provide access to abutting properties and to permit the flow of pedestrian and vehicular traffic to safely and expeditiously pass the work.

12-09. Maintaining Traffic. Attention is directed to Section 7-1.08, "Public Convenience," 7-1.09, "Public Safety," 7-1.092, "Lane Closure," and 7-1.095, "Flagging Costs," of the California Standard Specifications.

Streets shall be open to through vehicular traffic during non-working hours. All public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible.

Full costs for "Maintaining Traffic", including "Flagging Costs", shall be considered as included in the various items of work and no additional compensation will be made.

12-10. Stream Pollution. The Contractor shall exercise every reasonable precaution to prevent muddying or silting of live streams, and the Contractor's attention is called to the fact that the terms of this contract do not relieve him or her of responsibility for compliance with Sections 5650 and 12015 of the Fish and Game Code or other applicable statutes relating to pollution prevention or abatement.

12-11. Warranties. Unless otherwise indicated, the Contractor shall warrant all materials provided and work performed under this contract for a period of one year from the date of final acceptance. He shall replace promptly and at his own expense any materials and/or workmanship which fail during this warranty period.

12-12. Utilities. No water, sewer or electrical services will be provided by the owner. It is the Contractor's sole responsibility to arrange such services as necessary.

12-13. Preconstruction Conference. A preconstruction conference will be held before any work will be allowed to commence. This meeting will cover inspection, schedule for work, and among other items, the responsibilities and procedures of each of the interested parties to assure that the project will be completed in accordance with the contract documents.

12-14. Safety Requirements. The Contractor shall comply with all pertinent provisions of the Department of Labor "Safety and Health Regulations for Construction (29 FCS Part 1518, 36 CFR 7340)", with additions or modifications thereto, in effect during construction of this project.

12-15. Hazardous Materials. Pursuant to Section 25914.2 of the California Health and Safety Code, in the event the Contractor encounters on the site materials he or she reasonably believes to be asbestos or a hazardous substance, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed safe and shall immediately cease work on the area affected and report the condition to the City in writing. If the City determines that asbestos or hazardous substances which were not disclosed in the bid are present on the site, all work regarding the removal of those substances will be performed pursuant to a separate contract.

SECTION 13 - CONSTRUCTION DETAILS

13-01. Technical Specifications. See Appendix A.

13-02. Contract Drawings. See Attachment A, a separately bound set entitled "100 % Construction Plans Electrical Service Center Tenant Improvement and Fire Damage Repair" dated December 19, 2023.

13-03. Supporting Product Data and Cut Sheets. See Attachment B, a supporting document with products, finishes and cut sheets that are pertinent to the project.

SECTION 14. EXCLUSIONS FROM GENERAL CONDITIONS

14-01. Provisions to be Excluded from General Conditions. The following designated provisions of the General Conditions are hereby determined to be inapplicable to the proposed work and, therefore, are hereby excluded from the terms of the Notice to Bidders, Proposal, Agreement and other contract documents as though entirely omitted from said General Conditions:

- (1) Section 6-02. Office at the Site
- (2) Section 7-03. Surveys

No other exclusions.

SECTION 15. AMENDMENTS TO GENERAL CONDITIONS

15-01. Sections of General Conditions to be Amended.

The following designated sections of the Special Provisions are hereby amended to read as follows:

No amendments.

BID SUBMITTAL CHECKLIST

The following is a checklist to assist you in your submission of your bid documents. Please make sure you include the following when submitting your bid documents to reduce the risk of having your bid rejected:

Did you include?...

- **Proposal** (Page 32)
 - Unit prices filled out clearly.
 - Extended prices filled out clearly and calculated correctly
 - Total bid amount filled out clearly and calculated correctly
 - Sign the proposal, and provide complete information
 - CLSB No. and expiration date
 - Department of Industrial Relations Public Works Contractor Registration Number
- **Fair Employment Practices Certification** (Page 37)
 - Filled out completely per instruction
- **Worker's Compensation Certificate** (Page 38)
 - Filled out completely per instruction
- **Certification of Non-Discrimination in Employment** (Page 39)
 - Filled out completely per instruction
- **List of Proposed Subcontractors** (Page 40)
 - Filled out completely per instruction
- **Statement of Experience** (Page 41)
- **Signature of Bidder** (Page 42)
 - Filled out completely per instruction
 - Authorized signature provided
- **Bidder's Bond** (Page 43)
 - Filled out completely per instruction
- **Non-Collusion Affidavit** (Page 44)
 - Filled out completely per instruction
 - Notarized
- **Addenda Issued**
 - Check the City website for any addenda issued: www.cityofukiah.com/purchasing.

**CITY OF UKIAH
MENDOCINO COUNTY, CALIFORNIA**

PROPOSAL

**FOR
CITY OF UKIAH ELECTRIC SERVICE CENTER
TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR**

Specification No. 24-01

The undersigned, as bidder,
declares that he or she has examined thoroughly all of the contract documents herein contained, that this proposal is made without collusion with any other person, firm or corporation and that all laws and ordinances relating to the interest of public officers in this contract have been complied with in every respect.

AND he or she proposes and agrees, if this proposal is accepted,

- 1) that he or she will contract with the City of Ukiah, Mendocino County, California, in the form of the copy of the agreement herein contained
 - a) to provide all necessary machinery, tools, apparatus and other means of construction;
 - b) to furnish all materials;
 - c) to provide all superintendence, overhead expenses and all labor and expenses of whatever nature necessary to complete the job in conformity with the specifications and drawings and other contract provisions herein or reasonably implied hereby or as necessary to complete the work in the manner and within the time named herein and according to the requirements and to the reasonable satisfaction of the City Engineer;
 - d) to pay all charges of freight transportation and hauling;
- 2) that he or she indemnifies the City against any loss or damage arising from any act of the undersigned as Contractor; and
- 3) that he or she will accept as full payment therefor the following sums:

BIDDING SCHEDULE

In the case of any discrepancy between the unit price and the total set forth for the item, the unit price shall prevail; provided, however, that if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any reason, or is omitted, or in the case of lump sum items, is not the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

1. As to lump sum items, the amount set forth in the "Total" column shall be the unit price;
2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price.

The Total Base Bid shall be the sum of the items in the "Total" column. In case of discrepancy between the sum of the items in the "Total" column and the amount entered as Total Base Bid, the sum of the "Total" column items shall prevail. The bid comparison will be based on the sum of the items in the "total" column for each bidder.

The Unit prices for the various Construction Items below include all costs associated with the General Conditions, Special Provisions, Requirements of the Construction Contract, and represent the total, complete, in-place cost for each specific Construction Item in accordance with the Construction Documents, including all elements, work components, accessories, and connections, shown in applicable details or required to yield a complete, sound and functional component or system appropriate for its intended function, whether or not such is specifically described or listed in any description of measurement or payment. The total amount of the Construction items below shall represent the total and complete cost of the fully functional Project. All work not specifically listed below be required to complete the work of the various construction items and the cost of such shall be considered as included throughout the various unit prices indicated.

Lowest bid will be based on the lowest Base Bid.

NAME OF BIDDER:

SPEC #:

PROJECT NAME:

24-01

CITY OF UKIAH ELECTRIC SERVICE CENTER
TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR

BASE BID

ITEM #	DESCRIPTION	UNIT OF MEASURE	QUANTITY	TOTAL
1	CSI DIVISION 01 – GENERAL REQUIREMENTS	LS	1	\$ _____
2	CSI DIVISION 02 – EXISTING CONDITIONS	LS	1	\$ _____
3	CSI DIVISION 03 - CONCRETE	LS	1	\$ _____
4	CSI DIVISION 04 – MASONRY	LS	1	\$ _____
5	CSI DIVISION 05 – METALS	LS	1	\$ _____
6	CSI DIVISION 06 – WOOD, PLASTICS & COMPOSITES	LS	1	\$ _____
7	CSI DIVISION 07 – THERMAL & MOISTURE PROTECTION	LS	1	\$ _____
8	CSI DIVISION 08 - OPENINGS	LS	1	\$ _____
9	CSI DIVISION 09 - FINISHES	LS	1	\$ _____
10	CSI DIVISION 10 – SPECIALTIES	LS	1	\$ _____
11	CSI DIVISION 12 - FURNISHINGS	LS	1	\$ _____
12	CSI DIVISION 13 – SPECIAL CONSTRUCTION	LS	1	\$ _____
13	CSI DIVISION 14 – CONVEYING EQUIPMENT	LS	1	\$ _____
14	CSI DIVISION 21 – FIRE SUPPRESSION	LS	1	\$ _____
15	CSI DIVISION 22 - PLUMBING	LS	1	\$ _____

16	CSI DIVISION 23 - HVAC	LS	1	\$ _____
17	CSI DIVISION 25 – INTEGRATED AUTOMATION	LS	1	\$ _____
18	CSI DIVISION 26 – ELECTRICAL	LS	1	\$ _____
19	CSI DIVISION 27 – COMMUNICATIONS	LS	1	\$ _____
20	CSI DIVISION 28 – ELECTRONIC SAFETY & SECURITY	LS	1	\$ _____
21	CSI DIVISION 31 – EARTHWORK	LS	1	\$ _____
22	CSI DIVISION 32 – EXTERIOR IMPROVEMENTS	LS	1	\$ _____
23	CSI DIVISION 33 - UTILITIES	LS	1	\$ _____
TOTAL BID ==>>				\$ _____

We, the undersigned, acknowledge that the City Council has reserved the right to reject any or all bids and to determine which proposal is, in its opinion, the lowest responsive bid from a responsible bidder and that which it deems in the best interest of the City to accept. We, the undersigned, further agree, if this proposal shall be accepted, to sign the agreement and to furnish the required bonds with satisfactory surety, or sureties, within fifteen (15) calendar days after written notice that the contract is ready for signature; and, if the undersigned shall fail to contract, as aforesaid, it shall be understood that he or she has abandoned the contract and that, therefore, this proposal shall be null and void and the proposal guaranty accompanying this proposal, or the amount of said guaranty, shall be forfeited to and become the property of the City. Otherwise, the proposal guaranty accompanying this proposal shall be returned to the undersigned.

Witness our hands this day of _____, 20____.

Licensed in accordance with an act providing for the registration of California Contractors License No. _____, expiration date _____.

THE CONTRACTOR'S LICENSE NUMBER AND EXPIRATION DATE STATED HEREIN ARE MADE UNDER PENALTY OF PERJURY.

Department of Industrial Relations Public Works Contractor Registration Number: _____

Signature of bidder or bidders, with business name, address, phone number and fax number:

Notice: In the case of a corporation, give below the addresses of the principal office thereof and names and addresses of the President, Secretary, Treasurer.

FAIR EMPLOYMENT PRACTICES CERTIFICATION

TO: _____

The undersigned, in submitting a bid for performing the following work by Contract, hereby certifies that he or she has or will meet the standards of affirmative compliance with the Fair Employment Practices requirements of the Special Provisions contained herein.

CITY OF UKIAH ELECTRIC SERVICE CENTER
TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR

(Signature of Bidder)

Business Mailing Address:

Business Location:

(The bidder shall execute the certification of this page prior to submitting his or her proposal.)

WORKER'S COMPENSATION CERTIFICATE

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Worker's Compensation or undertake self-insurance in accordance with the provisions of that code and I will comply with such provisions before commencing the performance of the work of this contract.

Witness my hand this _____ day of _____, 20____

Signature of Bidder, with Business Address:

CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT

The bidder represents that he or she has/has not, participated in a previous contract or subcontract subject to either the equal opportunity clause herein or the clause contained in Section 301 of Executive Order 10925; that he or she has/has not, filed all required compliance reports; and that representations indicating submission of required compliance prior to subcontract awards.

Signature and address of Bidder:

_____ Date _____

(This certification shall be executed by the bidder in accordance with Section 60-1.6 of the Regulations of the President's Committee on Equal Employment Opportunity for implementing Executive Orders 10925 and 11114.)

LIST OF PROPOSED SUBCONTRACTORS

In compliance with the provisions of Sections 4100-4108 of the California Public Contract Code and any amendments thereof, each bidder shall set forth (a) the name and location of the place of business of each subcontractor who will perform work or labor or render service in or about the construction site or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of 1 percent of the total bid and (b) the California Contractor License Number for each subcontractor, and (c) the portion of the work to be done by each subcontractor. (See General Conditions Section 1-09.) Include with the name of each sub-contractor their Department of Industrial Relations Public Works Contractor Registration Number.

SUBCONTRACTOR NAME	SUBCONTRACTOR LICENSE NUMBER	SUBCONTRACTOR DIR REGISTRATION NUMBER	SUBCONTRACTOR BUSINESS ADDRESS	DESCRIPTION OF WORK

The bidder is required to state below what work of similar magnitude or character he or she has done and to give references that will enable the City Council to judge of his or her experience, skill and business standing and his or her ability to conduct work as completely and rapidly as required under the terms of the contract.

[illegible]

SIGNATURE(S) OF BIDDER

Accompanying this proposal is _____
(insert the words "cash (\$)", "cashier's check" or "bidder's bond", as the case may be) in an amount equal to at least 10 percent of the bid.

The names of all persons interested in the foregoing proposal as principals are as follows:

IMPORTANT NOTICE: If bidder or other interested person is a corporation, provide the legal name of corporation and also the names of the president, secretary, treasurer and manager thereof. If a co-partnership, provide the true name of firm and also the names of all individual co-partners composing the firm. If bidder or other interested person is an individual, provide the first and last names in full.

Licensed in accordance with an act providing for the registration of Contractors:

License No. _____, License Expiration Date _____.

Signature(s) of Bidder: _____

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation; if bidder is a co-partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts in behalf of the co-partnership; and if bidder is an individual, his or her signature shall be placed above. If a member of a partnership, a Power of Attorney must be on file with the Department prior to opening bids or submitted with the bid; otherwise, the bid will be disregarded as irregular and unauthorized.

Business address: _____

Place of residence: _____

Dated: _____

CITY OF UKIAH
Mendocino County, California

BIDDER'S BOND

KNOW ALL MEN BY THESE PRESENTS,

That we, _____

_____, as PRINCIPAL and

_____, as SURETY,

are held and firmly bound unto the City of Ukiah in the penal sum of 10 PERCENT OF THE TOTAL AMOUNT OF THE BID of the Principal above named, submitted by said Principal to the City of Ukiah, as the case may be, for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, to the City Clerk to which said bid was submitted, we bind ourselves, our heirs, executors, administrators and successors jointly and severally, firmly by these presents. In no case shall the liability of the surety hereunder exceed the sum of \$ _____

THE CONDITION OF THIS OBLIGATION IS SUCH,

That whereas the Principal has submitted the above mentioned bid to the City of Ukiah, as aforesaid, for certain construction specifically described as follows, for which bids are to be opened at the Office of the City Clerk, Ukiah Civic Center, Ukiah, California, on FEBRUARY 22, 2023 for CITY OF UKIAH ELECTRIC SERVICE CENTER TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR.

NOW, THEREFORE, If the aforesaid Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him or her for signatures, enters into a written contract, in the prescribed form, in accordance with the bid and files two bonds with the City of Ukiah, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by law, then this obligation shall be null and void; otherwise, it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this _____ day of _____, A.D. 20_____.

_____(Seal)

_____(Seal)

_____(Seal)

Principal

_____(Seal)

_____(Seal)

_____(Seal)

Surety

Address: _____

NON-COLLUSION AFFIDAVIT

Note: Bidder shall execute the affidavit on this page prior to submitting his or her bid.

To City Council, City of Ukiah:

The undersigned in submitting a bid for performing CITY OF UKIAH ELECTRIC SERVICE CENTER TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR by contract, being duly sworn, deposes and says:

that he or she has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract.

Signature(s) of Bidder

Business Address: _____

Place of Residence: _____

NOTARIZATION

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public in and for the County of _____, State of California.

My Commission Expires _____, 20 ____.

CITY OF UKIAH
Mendocino County, California

AGREEMENT

FOR

**CITY OF UKIAH ELECTRIC SERVICE CENTER
TENANT IMPROVEMENTS AND FIRE DAMAGE REPAIR**

Specification No. 24-01

THIS AGREEMENT, made this _____ day of _____, 20____, by and between the City of Ukiah, Mendocino County, California, hereinafter called the City and _____ hereinafter called the Contractor,

WITNESSETH:

WHEREAS, the City has caused to be prepared in accordance with law, specifications, drawings and other contract documents for the work herein described and shown and has approved and adopted these contract documents, specifications and drawings and has caused to be published in the manner and for the time required by law a notice to bidders inviting sealed proposals for doing the work in accordance with the terms of this contract and

WHEREAS, the Contractor, in response to the notice to bidders, has submitted to the City a sealed proposal accompanied by a proposal guaranty in an amount of not less than 10 percent of the bid price for the construction of the proposed work in accordance with the terms of this contract and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined and canvassed the proposals submitted and as a result has determined and declared the Contractor to be the lowest and best regular responsible bidder for the work and for the sums named in the proposal,

NOW, THEREFORE, THIS AGREEMENT WITNESSETH:

Article 1. Work to be Done and Contract Days Allowed.

That the Contractor shall provide all necessary machinery, tools, apparatus and other means of construction; shall furnish all materials, superintendence, overhead, expenses, all labor and expenses of whatever nature necessary for completion of the work in conformity with the Special Provisions and other contract documents hereto attached and according to such instructions as may be given by the Engineer. The Contractor shall complete the work within ONE HUNDRED EIGHTY (180) calendar days. Contract days shall be counted starting with the 10th day following receipt of notice that the contract has been executed by the City. Contractor, at his or her option, may begin work prior to start of counting contract days, however, in no event shall the Contractor start work without giving notification to the Engineer at least 72 hours prior to the start of work, without obtaining an encroachment permit from the City, or without having submitted certificates of insurance that have been accepted and approved by the Engineer.

Article II. Contract Prices.

That the City shall pay the Contractor the prices stated in the proposal submitted by the Contractor, for complete performance of the contract by the Contractor. The Contractor hereby agrees to accept the prices as full compensation for all material and appliances necessary to the work, for all labor and use of tools and other implements necessary to execute the work contemplated in this contract; for all loss or damage arising out of the nature of the work or from the action of the elements, or from any unforeseen obstructions or difficulties which may be encountered in the prosecution of the work; for all risks of every description connected therewith; for all expenses of the work, as herein specified; for all liability and other insurance, for all overhead and other expenses incident to the work; all according to the Contract Drawings, the Special Provisions, the Details, the instructions and the requirements of the City.

Article III. Labor Discrimination.

Attention is directed to Section 1735 of the Labor Code, which reads as follows:

"No discrimination shall be made in the employment of persons upon public works because of the race, color, national origin or ancestry, or religion of such persons and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter."

In connection with the performance of work under this contract, the Contractor agrees as follows:

- (a) The Contractor will not willfully discriminate against any employee or an applicant for employment because of race, color, religion, ancestry, or national origin. The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, ancestry, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the awarding authority setting forth the provisions of this Fair Employment Practice section.
- (b) The Contractor will send to each labor union or representative of workers with which he or she has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the awarding authority, advising the said labor union or worker's representative of the Contractor's commitments under this section, to employees and applicants for employment.
- (c) The Contractor will permit access to his or her records of employment, employment advertisements, application forms and other pertinent data and records by the Fair Employment Practices Commission, City of Ukiah or any other appropriate agency of the State of California designated by the awarding authority, for the purposes of investigation to ascertain compliance with the Fair Employment Practices section of this contract.
- (d) A finding of willful violation of the Fair Employment Practices section of this Contract or of the Fair Employment Practices Act shall be regarded by the awarding authority as a basis for determining the Contractor to be not a "responsible bidder" as to future contracts for which such Contractor may submit bids, for revoking the Contractor's pre-qualification rating, if any and for refusing to establish, reestablish or renew a pre-qualification rating for the Contractor.

The City of Ukiah shall deem a finding of willful receipt of written notice from the Fair Employment Practices Act to have occurred upon that it has investigated and determined that the Contractor has

violated the Fair Employment Practices Act and has issued an order under Labor Code Section 1426 or obtained an injunction under Labor Code Section 1429.

Upon receipt of such written notice from the Fair Employment Practices Commission, the City shall notify the Contractor that unless he or she demonstrates to the satisfaction of the awarding authority within a stated period that the violation has been corrected, his or her pre-qualification rating will be revoked at the expiration of such period.

- (e) The Contractor agrees that should the City determine that the Contractor has not complied with the Fair Employment Practices section of this Contract, then pursuant to Labor Code Section 1735 and 1775 the Contractor shall, as a penalty to the City, forfeit for each calendar day or portion thereof, for each person who was denied employment as a result of such non-compliance, the penalties provided in the Labor Code for violation of prevailing wage rates. Such monies may be recovered from the Contractor. The City may deduct any such damages from any monies due the Contractor.
- (f) Nothing contained in this Fair Employment Practices section shall be construed in any manner of fashion so as to prevent the City or the State of California from pursuing any other remedies that may be available at law.
- (g) Prior to awarding the Contract, the Contractor shall certify to the awarding authority that he or she has or will meet the following standards for affirmative compliance, which shall be evaluated in each case by the awarding authority:
 - (1) The Contractor shall provide evidence, as required by the City that he or she has notified all supervisors, foremen and other personnel officers in writing of the content of the anti-discrimination clause and their responsibilities under it.
 - (2) The Contractor shall provide evidence, as required by the City, that he or she has notified all sources of employees' referrals (including unions, employment agencies, advertisements, Department of Employment) of the content of the anti-discrimination clause.
 - (3) The Contractor shall file a basic compliance report, as required by the City. Willfully false statements made in such reports shall be punishable as provided by law. The compliance report shall also spell out the sources of the work force and who has the responsibility for determining whom to hire, or whether or not to hire.
 - (4) Personally, or through his or her representatives, the Contractor shall, through negotiations with the unions with whom he or she has agreements, attempt to develop an agreement which will:
 - a. Spell out responsibilities for nondiscrimination in hiring, referral, upgrading and training.
 - b. Otherwise implement an affirmative anti-discrimination program in terms of the unions' specific areas of skill and geography to the end that qualified minority workers will be available and given and equal opportunity for employment.
 - (5) The Contractor shall notify the City of opposition to the anti-discrimination clause by individuals, firms or organizations during the period of its pre-qualification.
- (h) The Contractor will include the provisions of the foregoing paragraphs 1 through 5 in every first tier subcontract so that such provisions will be binding upon each such subcontractor.

- (i) The "Fair Employment Practices Certification" must be completed and signed prior to the time of submitting the bid.

Article IV. Parts of the Contract.

That the complete contract consists of the following documents, all of which shall be considered a part of this agreement.

1. Notice to Bidders
2. Wage Rates
3. General Conditions
4. Technical Specifications
5. Proposal
6. Fair Employment Practices Certification
7. Agreement
8. Addenda
9. Contract Bonds
10. Contract Drawings and Construction Details
11. Standard Drawings
12. Indemnification Agreement

IN WITNESS WHEREOF, this contract being executed in duplicate and the parties having caused their names to be signed by authority of their duly authorized office this _____ day of _____, 20____.

CITY OF UKIAH, MENDOCINO COUNTY, CALIFORNIA

By: _____
CITY MANAGER, CITY OF UKIAH

Attest: _____
CITY CLERK, CITY OF UKIAH

By: _____
CONTRACTOR

Attest: _____

Title: _____

The foregoing contract is approved as to form and legality this _____ day of _____, 20____.

CITY ATTORNEY, CITY OF UKIAH

INDEMNIFICATION AGREEMENT

This Indemnification Agreement is made and entered in Ukiah, California, on _____, 20____,
by and between the City of Ukiah (Ukiah) and _____ (Contractor).

Contractor is

_____ for Ukiah.

As a condition of issuing the work order, attached hereto, Ukiah requires assurance that Contractor will protect Ukiah from damage or damage claims which arise from its performance of the work.

Accordingly, Contractor agrees as follows:

1. **Indemnification.** Contractor shall indemnify and hold harmless Ukiah and its officers, agents, and employees from and against any claim, loss, or damage, including the legal and other costs of defending against any claim of damage or loss which arises out of the Contractor's negligent or wrongful performance under the work order attached hereto, except for claims, losses, or damages resulting from the sole and exclusive negligence or other wrongful conduct of Ukiah or its officers, agents and employees.

CONTRACTOR

BY: _____

TITLE: _____

CITY OF UKIAH
Mendocino County, California

PERFORMANCE BOND

BOND No. _____

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Ukiah, organized and operating under the laws of the State of California, (hereinafter referred to as the "City") has awarded to _____, (hereinafter referred to as the "Contractor") an agreement for Contract No. _____ (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract for the Project dated _____, (hereinafter referred to, together with all attachments and exhibits thereto, as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by the Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____, as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held firmly bound until the City in the sum of _____ (\$ _____), for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations; and shall indemnify and save harmless the City, its officials, officers, employees, and authorized volunteers, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorneys' fees, incurred by the City in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by the City, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the City from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the City's rights or the Contractor or Surety's obligations under the Contract Documents, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the City to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the City's option:

- i. Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- ii. Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder, the Surety and the City, and make available as work

progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

iii. Permit the City to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs by the City pursuant to the Contract Documents.

Surety expressly agrees that the City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the City, when declaring the Contractor in default, notifies Surety of the City's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this ____ day of _____, 2022.

(Corporate Seal)

Contractor/Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

(Attach Attorney-in Fact Certificate)

Title _____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges is \$_____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM.

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or

Representative for service of process in

California, if different from above)

(Telephone number of Surety and Agent
or Representative for service of process in California)

CITY OF UKIAH
Mendocino County, California

PAYMENT BOND

BOND No. _____

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the City of Ukiah ("City") has awarded to _____ ("Contractor/Principal") a contract (City Agreement No. _____, dated _____, _____, referred to as the "Agreement") for the work described as _____. The Agreement is incorporated by this reference into this Payment Bond ("Bond"); and

WHEREAS, Contractor/Principal is required to furnish a bond in connection with the Agreement and pursuant to California Civil Code section 9550;

NOW, THEREFORE, we _____, the undersigned Contractor/Principal, and _____ ("Surety"), a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held firmly bound until the City, and to any and all persons, companies, or corporations entitled by law to file stop payment notices under California Civil Code Section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of \$_____, for which payment will and truly be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Contractor/Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code section 9100; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code Section 13020 with respect to work and labor thereon of any kind, then Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code Section 9550, et seq.

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, or specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described; or pertaining or relating to the furnishing of labor, materials, or equipment therefor; nor by any change or modification of any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described; nor by any rescissions or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is give; and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Owner and Contractor/Principal or on the part of any oblige named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code section 9100, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned, including but not limited to the provisions of section 2819 and 2845 of the California Civil Code.

Any notice to Surety may be given in the manner specified in the Agreement and delivered or transmitted to Surety as follows:

Attn: _____

Address: _____

City/State/Zip: _____

Phone: _____

Fax: _____

Email: _____

IN WITNESS WHEREOF, two identical counterparts of this Bond, each of which shall for all purposes be deemed an original thereof, have been duly executed by Contractor/Principal and Surety above named, on the ____ day of _____, 202__.

Contractor/Principal (SEAL)

By _____
Contractor's Representative

Contractor/Principal's Address

City, State, Zip

Surety (SEAL)

By _____
Surety's Representative

Surety's Address

City, State, Zip

Telephone Number

NOTE: Signatures of those executing for Surety must be properly acknowledged, The bond must be accompanied by a properly acknowledged Power of Attorney from the Surety authorizing its agent to bind it to this bond. A copy of such Power of Attorney must be in file with the City.

DIRECTIONS FOR PREPARATION OF PERFORMANCE AND MATERIAL AND LABOR BOND

1. Individual sureties, partnerships, or corporations not in the surety business will not be acceptable.
2. The name of the Principal shall be shown exactly as it appears in the Contract.
3. The penal sum shall not be less than required by the Specifications.
4. If the Principals are partners or joint venturers, each member shall execute the bond as an individual and state his place of residence.
5. If the Principal is a corporation, the bond shall be executed under its corporate seal.
If the corporation has no corporate seal, it shall so state and affix a scroll or adhesive seal following the corporate name.
6. The official character and authority of the person(s) executing the bond for the Principal, if a corporation, shall be certified by the Secretary or Assistant Secretary thereof under the corporate seal, or copies attached to such records of the corporation as will evidence the official character and authority of the officer signing, duly certified by the Secretary or Assistant Secretary, under the corporate seal, to be true copies.
7. The current power-of-attorney of the person signing for the surety company must be attached to the bond.
8. The date of the bond must not be prior to the date of the Contract.
9. The following information must be placed on the bond by the surety company:
 - a. The rate of premium in dollars per thousand; and
 - b. The total dollar amount of premium charged.
10. The signature of a witness shall appear in the appropriate place attending to the signature of each party of the bond.
11. Type or print the name underneath each signature appearing on the bond.
12. An executed copy of the bond must be attached to each copy of the Contract (original counterpart) intended for signing.

CITY OF UKIAH
Mendocino County, California

DEFECTIVE MATERIAL AND WORKMANSHIP (MAINTENANCE) BOND

KNOW ALL MEN BY THESE PRESENTS,

That we, _____,
_____, as **PRINCIPAL**

and _____,
_____, as **SURETY,**

are held and firmly bound unto the **City of Ukiah** as Obligee, in the penal sum of

_____, (\$ _____),
(5 PERCENT OF THE FINAL CONTRACT AMOUNT)

to which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators successors and assigns jointly and severally, firmly by these presents.

WHEREAS, the said Principal entered into a Contract with the City of Ukiah

dated _____

for _____

WHEREAS, said Contract has been completed, and was approved on the _____ day of _____,
_____.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall guarantee that the work will be free of any defective materials or workmanship which become apparent during the period of one (1) year following completion of the Contract, then this obligation shall be void, otherwise to remain in full force and effect, provided however, any additional warranty or guarantee whether expressed or implied is extended by the Principal or Manufacturer only, and the surety assumes no liability for such a guarantee.

Signed, sealed, and dated this _____ day of _____, 20____.

_____(Seal)

BY: _____(Seal)

_____(Seal)

Principal

_____(Seal)

BY: _____(Seal)

_____(Seal)

Surety



September 9th, 2024

Mary Horger
Financial Services Manager
City of Ukiah
Phone: (707) 463-6233
Email: mhorger@cityofukiah.com

RE: Change Order – Concealed Fire Damage
City of Ukiah's Electrical Service Building at 1350 Hastings Rd

Ms. Horger,

Please find our costs and justifications for providing additional structural repair design for the second story and construction assistance for the City of Ukiah's Electrical Service Building.

Whitchurch Engineering provided a cost estimate to assess damages caused by the fire and prepare plans to correct damages and potential causes of the damages. The contract included an assumption (Assumption #3), that significant fire/water damage was not concealed by sheetrock during the March 28th, 2023 Site Visit. During demolition, by Kirby Construction, fire damage was discovered, which impacted the collecting girder truss at the building corner. Damage was such that repair or replacement was necessary. Whitchurch Engineering, as requested by Cindy Sauers, prepared a structural design to repair the existing truss, in order to avoid further construction delays. An issued for construction design was transmitted to the City and Contractor on July 19th, 2024.

In addition to the out-of-scope work identified above, Whitchurch Engineering notified City of Ukiah on August 30th, 2024 that the scope of the construction services contract was complete, per the assumptions agreed upon in the contract dated September 20th, 2022. Starting September 3rd, 2024, Whitchurch Engineering proposes to continue supporting the project on a Time and Materials basis, up to the estimate provided in this letter. An estimate has been included, given the number of RFI's transmitted since August 30th, 2024, the duration of the remaining construction schedule, and an estimated number of RFI's still to be sent.

The additional cost requested is \$11,884.25. A full description of services and breakdown of hours is provided on the attached page.

Should you have any questions regarding the changes and additional fees, please don't hesitate to contact our office.

Sincerely,

Jeffrey Laikam, PE
Engineering Manager, Contracts Negotiations

A handwritten signature in blue ink, appearing to read "Jeffrey Laikam", is written over the typed name and title.

Description of Changes and Cost Breakdown

A. Truss Repair Scope of Services:

1. Site Visit and Inspection - \$595.50

- a. Onsite evaluation of fire damage to Girder Truss.
 - i. Terry O'Reilly (Senior Civil Engineer) 3.25 hours @ \$150/hr
 - a. Note: Engineer was in Fort Bragg on other business, only additional travel time was billed.
 - ii. Mileage: 120 miles @ \$0.90 / mile

2. Structural Calculations & Design - \$5,590

- a. Review of original truss calculations and modeling of tension forces in member.
 - i. Terry O'Reilly (Senior Civil Engineer) – 3 hours @ \$150/hr
 - ii. Ruben Ochoa (Associate Civil Engineer) – 24 hours @ \$110/hr
 - iii. Brett Whitchurch (Senior Civil Engineer) – 4 hours @ \$160/hr
- b. Prepare Sketch/Detail for Construction.
 - i. Ruben Ochoa (Associate Civil Engineer) – 8 hours @ \$110/hr
 - ii. Brett Whitchurch (Senior Civil Engineer) – 2.5 hours @ \$160/hr
- c. Project Management – Review pictures and information, consult client and contractor, schedule and task design team, review and transmit deliverables.
 - i. Derek Long (Project Manager) – 4 hours @ \$145/hr

B. Additional RFI Support:

1. Mechanical RFI's - \$825

- a. Contractor RFIs 43 & 44, and client request to terminate Duct Run
 - i. Eric Allen (MEP Design Engineer) – 6 hours @ 137.50/hr

2. Structural RFI's - \$640

- a. Contractor RFI 48 Architect Clarification on Ledger/Framing
 - i. Brett Whitchurch (Senior Civil Engineer) – 2 hours @ \$160/hr

C. Ongoing Construction Assistance Fees:

1. Job Meetings - \$423.75

- a. Assume 3 Additional Meetings, ending on October 15th, 2024
 - i. Eric Allen (MEP Design Engineer) – 1.5 hours @ 137.50/hr
 - ii. Derek Long (Project Manager) – 1.5 hours @ \$145/hr

2. Projected RFI's (1 per week for 5 weeks) - \$1,600

- i. Brett Whitchurch (Senior Civil Engineer) – 2 hours each @ \$160/hr

3. Final Drawing Revisions/Issuance - \$2,210

- a. MEP/Structural Drawings Revisions
 - i. Drafter – 12 hours @ \$90/hr
 - ii. Eric Allen (MEP Design Engineer) – 4 hours @ 137.50/hr
 - iii. Derek Long (Project Manager) – 4 hours @ \$145/hr



AGENDA SUMMARY REPORT

SUBJECT: Determination of Notification of Intent to Adjust Curbside Collection and Transfer Station Service Rates.

DEPARTMENT: Finance

PREPARED BY: Dan Buffalo, Finance Director, Sage Sangiacomo, City Manager

PRESENTER: Sage Sangiacomo, City Manager; Daniel Buffalo, Finance Director

ATTACHMENTS:

1. UWS Adjustment 2025
2. SWS Adjustment 2025
3. UWS, Curbside Contract
4. SWS, Transfer Station Contract

Summary: The City Council is asked to receive and review a determination from the City Manager of proposed rates, as intended to be adjusted by Ukiah Waste Solutions, Inc. and Solid Waste Systems, Inc. for curbside and Ukiah Transfer Station services, respectively. The proposed rate adjustments are, by contract, allowed annually to address cost adjustments borne by the City's franchise solid waste contractor. Those operating costs are limited and specifically identified by contract as pass-through or affected by inflation, measured by the consumer price index (CPI-u).

Background: Pursuant to contracts between the City of Ukiah and Ukiah Waste Solutions, Inc., and the City of Ukiah and Solid Waste Systems, Inc. (collectively referred to herein as "Company"), notices of intent were submitted to the City by Company on August 15, 2024, regarding adjustments to collection rates for residential and commercial curbside service and rates for Ukiah Transfer Station services, effective January 1, 2025. These notices are allowed annually by contract and are in accordance with Section 6.2 of the Waste Collection Agreement and corresponding provisions of the Transfer Station Agreement.

Procedure for Annual Adjustments:

1. **Notice of Intent:** Not later than August 15th each year, the Company is required to file with the City Manager a written notice of intent to adjust the current rates, effective January 1st of the following year.
2. **City Review:** Within 60 days of receiving the notice, the City Manager must review the proposed rate adjustments. The City Manager can either confirm that the proposed rates comply with the contract provisions or work with the Company to establish necessary changes.
3. **City Council Review:** By October 20th, the City Manager reports the determination to the City Council. The City Council has until November 20th to either confirm that the proposed rates are within the contractual limits or agree on necessary changes.

4. **Implementation:** Once the proposed rates are confirmed, they take effect on January 1st of the following year. Customers must be notified of the rate adjustments no later than December 1st.

The rate adjustments reflect changes in various elements, including the Consumer Price Index (CPI), fuel index, recycling processing costs, and pass-through costs such as landfill disposal fees and franchise fees.

Corresponding notices are further detailed in the discussion section and included as attachments to this report.

Discussion: As is required by contract, the City Manager reviewed the notices of intent. The Finance Department was tasked to review the methodology used by Company to arrive at the proposed rate adjustments to evaluate its conformity with the respective contracts. The elements of the proposed rate adjustment are limited to pass-through costs, including changes to the consumer price index (CPI-u) for the San Francisco-Oakland-San Jose area. Specifically, the elements under review consist of the changes in cost to the following:

Curbside collection costs:

- fuel
- abatement activities
- landfill disposal fees for garbage
- landfill disposal fees for mixed organic waste
- recycling processing costs
- operating costs affected by inflation (CPI-u)

Transfer Station costs:

- fuel
- disposal and processing costs of garbage and recycling
- property tax based on tonnage
- operating costs affected by inflation (CPI-u)

The determination by the Finance Department and subsequent report to the City Manager, after review and testing of the information provided by the Company, is that the calculations and supporting documentation used by the Company in the notices appear correct, reasonable, and are in compliance with the contracts between Company and the City.

Based on the notices, the Company calculated curbside collection service cost increases and pass-throughs of \$506,637.35 (Attachment 1), which equates to an average of 8.39 percent increase to all residential and commercial accounts. For transfer station services, cost increases and pass-throughs calculated by the Company equate to \$267,258.04 (Attachment 2), resulting in an increase in revenue requirements of 7.22 percent.

At this time, Council is asked to receive and review the intent of the Company, as per the provisions of its respective contracts (curbside contract - Attachment 3 and transfer station contract - Attachment 4). Accordingly, by November 20, 2024, the City Council must complete its review of the Company's notices of intent and either confirm that the intention to adjust rates conforms to the provisions of the contracts for curbside services and transfer station services or establish by mutual agreement with the Company any necessary changes to the proposed rates so that it can make such confirmation. The City must provide customers notice of proposed rate adjustments for curbside collection and transfer station services by December 1, 2024.

As this is a regular matter and a contractual requirement, the recommendation is for Council to receive, review, and confirm the determination of the City Manager that the proposed rate adjustment comply with the agreed upon terms of the contracts. The next available regular City Council meeting before the November 20th

confirmation deadline is scheduled for November 6, 2024. Staff can bring this item back to Council with this for further consideration, if deemed necessary.

Recommended Action: Review and confirm the determination of the City Manager of compliance with the provisions of the agreements between the City of Ukiah and Ukiah Waste Solutions, Inc. and Solid Waste Systems, Inc. regarding the company's notice of intent to adjust curbside collection and transfer station rates.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH:

DIVERSITY-EQUITY INITIATIVES (DEI): N/A

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): N/A

Approved: 
Sage Sangiacomo, City Manager 

**Ukiah Waste Solutions Curbside Rate
Annual Adjustment Calculations
Effective Date January 1, 2025**

<u>Comparison Year Costs July 2023-June 2024</u>	<u>Index</u>	<u>Increase / Decrease Allowed</u>	
TOTAL COSTS	\$6,218,517		
Less: Fuel Cost	\$153,446	Fuel	\$100,555.59
Less: Disposal Fees - Garbage	\$1,337,059	SWS TS Gate	\$96,401.94
Less: Disposal Fees - Mixed Organic Waste	\$188,949	Negotiated	\$6,424.28
Less: Processing - Recycling	\$128,330	Contract	(\$30,003.70)
Less: City Landfill Closure Costs	\$60,000	Set by City	\$0.00
Less: City Commercial Oversight fee	\$10,000	Set by City	\$0.00
Collection Costs	\$4,340,732		
Franchise Fee & Billing Costs			\$129,579.57
Collection COSTS Subject to CPI adj.	\$4,340,732	CPI BA	\$140,639.73
Per Adjustment Summary			\$443,597.41
			TOTAL

<u>Revenue base July 2023 - June 2024</u>	<u>Residential</u>	<u>Commercial</u>	<u>Roll Off</u>	<u>Total Revenue</u>
	32.66%	59.05%	8.29%	100.00%
	\$1,972,571.08	\$3,566,458.38	\$500,692.91	\$6,039,722.37
	\$1,972,571.08	\$3,566,458.38	\$500,692.91	\$6,039,722.37
Fuel Cost	\$32,841.42	\$59,378.11	\$8,336.06	\$100,555.59
Disposal Fees - MOW	\$2,098.17	\$3,793.54	\$532.57	\$6,424.28
Abatement	\$20,588.83	\$37,225.12	\$5,226.01	\$63,039.96
	\$0.00	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00	\$0.00
Processing - Recycle	(\$9,799.20)	(\$17,717.20)	(\$2,487.31)	(\$30,003.71)
Landfill closure cost	\$0.00	\$0.00	\$0.00	\$0.00
Commercial Oversight fee	\$0.00	\$0.00	\$0.00	\$0.00
Other Regulatory & Governmental Costs	\$0.00	\$0.00	\$0.00	\$0.00
Disposal Fees - Garbage	\$31,484.84	\$56,925.38	\$7,991.72	\$96,401.94
CPI adjustment	\$45,932.88	\$83,047.81	\$11,659.03	\$140,639.72
Total before franchise and billing fees	\$2,095,718.02	\$3,789,111.14	\$531,950.99	\$6,416,780.15
Franchise & Billing Fees	\$42,320.64	\$76,516.78	\$10,742.14	\$129,579.57
Adjusted revenue	\$2,138,038.66	\$3,865,627.92	\$542,693.14	\$6,546,359.72
Revenue Adjustment	\$165,467.58	\$299,169.54	\$42,000.23	\$506,637.35

Rate adjustment as a percent	8.39%
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**Ukiah Waste Solutions Curbside Rate
Annual Adjustment Calculations
Effective Date January 1, 2025**

Fuel - June to June (EIA Petroleum & Other Liquids)

See Fuel Cost Adjustment Worksheet

CPI Bay Area - June to June (Index)

Jun-23	Jun-24		Index Increase (Decrease)
340.056	351.064		11.008
CPI % Change			3.24%

Transfer Station Fee (Disposal Fees - Garbage) Jan to Jan

Jan-24	Jan-25		Increase (Decrease)
\$133.85	\$143.50		\$9.65
Transfer Station Fee % Change			7.21%

Mixed Organic Waste Disposal Fee (Disposal - Green Waste) June to June

Jun-23	Jun-24		Increase (Decrease)
\$65.00	\$67.21	\$ 2.21	3.40%
Disposal Fee - Green Waste % Change			3.40%

Landfill Closure Costs Jan to Jan

January 2024	January 2025		Increase (Decrease)
\$60,000	\$60,000		\$0.00
Landfill Closure Costs % Change			0.00%

Commercial Oversight Fee Jan to Jan

January 2024	January 2025		Increase (Decrease)
\$10,000	\$10,000		\$0.00
Commercial Oversight Fee % Change			0.00%

Recycle Tip Fee June to June

Jun-23	Jun-24		Increase (Decrease)
\$158,334.05	\$128,330.35		(\$30,003.70)

City Franchise Fee	15%	City Billing Fee - Residential Customers	3%
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Ukiah Waste Solutions, Inc.
JANUARY 1, 2025 RATE ADJUSTMENT

SUMMARY OF RATE ADJUSTMENT FOR STANDARD SERVICES

Service Level	Current 2024 Rate	New 2025 Rate	Total Monthly Adjustment
<u>Curbside Service</u>			
No Service Minimum Charge	\$ 12.48	\$ 13.53	\$ 1.05
10 gallon can rate	\$ 23.32	\$ 25.28	\$ 1.96
20 gallon can rate	\$ 26.07	\$ 28.26	\$ 2.19
32 gallon can rate	\$ 29.38	\$ 31.84	\$ 2.46
68 gallon can rate	\$ 67.05	\$ 72.68	\$ 5.63
95 gallon can rate	\$ 94.47	\$ 102.40	\$ 7.93
Other combinations - rate per gallon	\$ 1.11	\$ 1.21	\$ 0.09
1 yard bin rate	\$ 208.90	\$ 226.43	\$ 17.53
1.5 yard bin rate	\$ 261.14	\$ 283.04	\$ 21.91
2 yard bin rate	\$ 339.47	\$ 367.95	\$ 28.48
3 yard bin rate	\$ 496.15	\$ 537.78	\$ 41.63
4 yard bin rate	\$ 652.83	\$ 707.60	\$ 54.77
6 yard bin rate	\$ 948.89	\$ 1,028.50	\$ 79.61

<u>Packout Service</u>			
20 gallon can rate	\$ 32.74	\$ 35.49	\$ 2.75
32 gallon can rate	\$ 38.46	\$ 41.69	\$ 3.23
68 gallon can rate	\$ 87.30	\$ 94.63	\$ 7.32
95 gallon can rate	\$ 126.09	\$ 136.67	\$ 10.58
Other combinations - rate per gallon	\$ 1.35	\$ 1.46	\$ 0.11

Remote Area Service

Add to the Packout Service rate.	\$ 12.39	\$ 13.43	\$ 1.04
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In areas with limited access, an additional fee is charged to fund the costs of special equipment and special handling necessary to provide garbage pickup services. This fee is in addition to the "Packout Service" fee listed in this schedule.

<u>Commercial / Multi-Family Service</u>			
20 gallon can rate	\$ 27.06	\$ 29.34	\$ 2.27
32 gallon can rate	\$ 32.60	\$ 35.33	\$ 2.73
68 gallon can rate	\$ 74.45	\$ 80.69	\$ 6.25
95 gallon can rate	\$ 104.91	\$ 113.71	\$ 8.80
1 yard bin rate	\$ 208.90	\$ 226.43	\$ 17.53
1.5 yard bin rate	\$ 261.14	\$ 283.04	\$ 21.91
2 yard bin rate	\$ 339.47	\$ 367.95	\$ 28.48
3 yard bin rate	\$ 496.15	\$ 537.78	\$ 41.63
4 yard bin rate	\$ 652.83	\$ 707.60	\$ 54.77
6 yard bin rate	\$ 948.89	\$ 1,028.50	\$ 79.61

Greenwaste & Recycling Tip Fee

July 2023 - June 2024

	Green Yard Waste		Recycling	
	SWS	PRS	Disposal Cost	Tip Fee/Ton
2023-07	2,698	7,370	12,586	\$ 55.00
2023-08	3,351	9,762	12,316	\$ 55.00
2023-09	1,813	9,372	9,521	\$ 45.00
2023-10	4,698	10,670	10,836	\$ 45.00
2023-11	7,172	15,345	13,144	\$ 55.00
2023-12	8,640	12,832	13,789	\$ 55.00
2024-01	3,985	11,459	12,169	\$ 45.00
2024-02	3,287	11,178	10,252	\$ 45.00
2024-03	1,342	11,786	10,821	\$ 45.00
2024-04	3,009	16,353	9,778	\$ 45.00
2024-05	3,585	15,947	8,058	\$ 35.00
2024-06	1,939	11,355	5,061	\$ 25.00
	\$ 45,521	\$ 143,429	\$ 128,330	

Calculation to adjust fuel costs

Effective Date January 1, 2025

Fuel Revenue Adjustment Worksheet, based on Fuel Index change, June to June**UWS****Base Year Fuel Index and Cost****3.216****\$162,843.06****June 2020 after 5 yr Review - Jan 2021**Index Change - New
vs. Base Year**Annual adjustment based on Fuel Index change, year to year (using example fuel index changes)**

2	Fuel index adjustment at Dec 2023	5.202	61.75%	\$100,555.59	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2025 rate revision	→	\$100,555.59	\$0.00	Less: Prior Fuel Cost applied to rate
				\$263,398.65	Fuel Cost Allowed Year 1 - 2025
3	Estimated Fuel index adjustment at June 2024	4.913	52.77%	\$85,932.28	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2026 rate revision	→	(\$14,623.31)	\$100,555.59	Less: Prior Fuel Cost applied to rate
				\$248,775.34	Fuel Cost Allowed Year 2 - 2026
4	Estimated Fuel index adjustment at June 2025	4.913	52.77%	\$85,932.28	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2027 rate revision	→	\$0.00	\$85,932.28	Less: Prior Fuel Cost applied to rate
				\$248,775.34	Fuel Cost Allowed Year 3 - 2027
5	Estimated Fuel index adjustment at June 2026	4.913	52.77%	\$85,932.28	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2028 rate revision	→	\$0.00	\$85,932.28	Less: Prior Fuel Cost applied to rate
				\$248,775.34	Fuel Cost Allowed Year 4 - 2028
6	Estimated Fuel index adjustment at June 2027	4.913	52.77%	\$85,932.28	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2029 rate revision	→	\$0.00	\$85,932.28	Less: Prior Fuel Cost applied to rate
				\$248,775.34	Fuel Cost Allowed Year 5 - 2029

Weekly Retail Gasoline and Diesel Prices

https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMD_EPD2DXL0_PTE_SCA_DPG&f=W

Year-Month	Week 1		Week 2		Week 3		Week 4		Week 5	
	End Date	Value	End Date	Value	End Date	Value	End Date	Value	End Date	Value
2023-Feb	02/06	5.482	02/13	5.445	02/20	5.407	02/27	5.357		
2023-Mar	03/06	5.316	03/13	5.312	03/20	5.260	03/27	5.165		
2023-Apr	04/03	5.047	04/10	4.989	04/17	4.963	04/24	4.960		
2023-May	05/01	4.903	05/08	4.847	05/15	4.825	05/22	4.825	05/29	4.810
2023-Jun	06/05	4.765	06/12	4.750	06/19	4.773	06/26	4.751		
2023-Jul	07/03	4.762	07/10	4.821	07/17	4.848	07/24	4.944	07/31	5.158
2023-Aug	08/07	5.339	08/14	5.518	08/21	5.535	08/28	5.678		
2023-Sep	09/04	5.801	09/11	5.970	09/18	6.192	09/25	6.208		
2023-Oct	10/02	6.269	10/09	6.178	10/16	6.119	10/23	6.016	10/30	5.890
2023-Nov	11/06	5.816	11/13	5.699	11/20	5.640	11/27	5.579		
2023-Dec	12/04	5.480	12/11	5.367	12/18	5.231	12/25	5.202		
2024-Jan	01/01	5.184	01/08	5.152	01/15	5.142	01/22	5.092	01/29	5.078
2024-Feb	02/05	5.121	02/12	5.250	02/19	5.258	02/26	5.225		
2024-Mar	03/04	5.228	03/11	5.207	03/18	5.203	03/25	5.224		
2024-Apr	04/01	5.221	04/08	5.259	04/15	5.256	04/22	5.244	04/29	5.216
2024-May	05/06	5.155	05/13	5.123	05/20	5.049	05/27	4.985		
2024-Jun	06/03	4.968	06/10	4.911	06/17	4.915	06/24	4.913		
2024-Jul	07/01	4.915	07/08	4.955	07/15	4.932	07/22	4.874	07/29	4.831
2024-Aug	08/05	4.821								

Table 1. Consumer Price Index for All Urban Consumers (CPI-U): Indexes and percent changes for selected periods

San Francisco-Oakland-Hayward, CA (1982-84=100 unless otherwise noted)

Item and Group	Indexes				
	Historical data	Apr. 2024	May 2024	Jun. 2024	Jul. 2024
Expenditure category					
All items		351.247	-	351.064	
All items (1967=100)		1,079.830	-	1,079.270	
Food and beverages		369.070	-	369.320	
Food		371.953	-	372.216	
Food at home		334.687	332.927	331.134	
Cereals and bakery products		338.361	335.492	335.839	
Meats, poultry, fish, and eggs		352.382	355.059	354.032	
Dairy and related products		342.013	331.060	328.616	
Fruits and vegetables		428.608	431.203	419.859	
Nonalcoholic beverages and beverage materials(1)		253.426	240.853	237.036	
Other food at home		292.229	294.640	297.951	
Food away from home		418.167	-	424.458	
Alcoholic beverages		335.512	-	335.583	
Housing		406.337	-	406.145	
Shelter		451.395	451.048	451.424	
Rent of primary residence(2)		504.927	505.686	504.841	
Owners' equiv. rent of residences(2)(3)		477.504	476.694	476.496	
Owners' equiv. rent of primary residence(1)(2)		477.504	476.694	476.496	

Ukiah Waste Solutions Curbside Agreement

Effective Date January 1, 2018

		Cost/Rev	Adjustment Period	Adjustment Method	Index Used	Cost Group
1,2	Fuel		Annual	100% of index change	eia Ca #2 Diesel Retail all sellers	Base Rate as Adjusted
	Disposal - Solid Waste		Time to Time	Per TS (SWS) Agreement	N/A	Pass Through
1,2	Operations (all other costs)		Annual	100% of index change	CPI - US Cities CPI-U	Base Rate as Adjusted
3	Recycle Reduction		Annual	Per Recycle Agreement	Rec Market Value Grid - \$5 base	Operating Cost Reduction
1,2	Green Waste Disposal	\$30 / Ton	Annual	Up to CPI (Contractor Choice)	CPI - US Cities CPI-U	Base Rate as Adjusted
1,2,8	Food Waste Disposal (Comm)	Up to \$40 / ton	Annual	Up to CPI (Contractor Choice)	CPI - US Cities CPI-U	Base Rate as Adjusted
4	City Franchise Fee	15%	Time to Time	City Action	N/A	Pass Through
4	City Bill Fee	3%	Time to Time	City Action	N/A	Pass Through
4	City Oversight Fee	\$10,000.00	Time to Time	City Action	N/A	Pass Through
4	City Landfill Closure Fee	\$60,000.00	Time to Time	City Action	N/A	Pass Through
6,9	TOTAL NET COST					

Notes

- 1 Agreement should state mutually agreed upon Index if Index becomes unavailable
- 2 June to June change
- 3 Recycle Agreement with PRS renewable every 5 years with Base Market Value per mixed ton to provide for Rev sharing with City (reduction of operating costs).
- 4 Agreement should state initial rate, subject to change by City action
- 5 Exhibit of calculation to be made part of agreement
- 6 UWS requests new rate by Aug 15, City approves by Oct 15, Pub Notice given by Nov 1, Adjusted Rate goes into effect following January 1.
- 7 Agreement must provide for City Flow Control with language that directs flow to contractor facilities when available.
- 8 FOOD WASTE - UWS will implement a pilot and or full commercial food waste program in place by June 2013 provided proper permits can be obtained
Details still to be worked out.
- 9 Rate change is calcd as follows: % annual adjustment X actual prior year (July to June) actual component cost = new funds needed / collection revenue
= % adjustment per rate. New cost adj dollars (fuel, disposal, city fees etc..) need to be adjusted for city fees - CPI adj does not.

RE-OPENER - the contract should have a mutual re-opener for other new items

**Solid Wastes Systems Transfer Station
Annual Adjustment Calculations
Effective Date January, 2025
Using 2023-2024 Data (July to June)**

<u>COSTS Subject to adjustment</u>	Cost	Index		Adjustment Allowed
Operating Costs subject to CPI	\$3,417,733.07	CPI		\$ 101,506.67
Fuel	\$331,218.07	Fuel		\$124,278.71
Disposal - Garbage	\$1,118,631.20	Contract rate	Pass Through	\$ 52,087.07
Disposal - Processing GW	\$282,172.94	Negotiated	Pass Through	\$ 9,593.88
Disposal - Processing Recycling	\$66,786.75		Pass Through	-\$22,957.35
			Pass Through	\$ -
Maint / Prop Tax \$2.36/ton	\$92,561.10	CPI	Pass Through	\$ 2,749.06
City Rent \$10/ton	\$392,208.08	Lease rate	Pass Through	\$ -
City Landfill Fee \$14/ton	\$549,091.30	Set by City	Pass Through	\$ -
MSWMA Fee \$9.50/ton	\$255,044.82	Set by City	Pass Through	\$ -
Total COSTS Subject to adjustment	\$6,505,447.34			\$ 267,258.04
Adjusted Costs				\$6,772,705.38
Adjustments:	\$0.00			\$ -
Total Adjustments	\$0.00			\$ -
Adjusted Cost	\$6,505,447.34			\$ 267,258.04
<u>Revenue base</u>				
Comparison Year Revenue	\$4,115,428.09			
Fuel	\$124,278.71			
Disposal - garbage	\$52,087.07			
Disposal - processing	\$9,593.88			
CPI adjustment	\$101,506.67			
City Landfill Fee \$14/ton	\$0.00			
Maint / Prop Tax \$2.36/ton	\$2,749.06			
Disposal Processing - Recycling	-\$22,957.35			
	\$0.00			
Revenue change - Contractor	\$267,258.04	Less: City & MSWMA Fee Adjustments		
Adjusted revenue	\$4,382,686.13			
Adjusted Revenue Difference	\$267,258.04			
		Current	Adjustment	New
Contractor Rate increase as a percent	6.49%	\$102.88	\$6.68	\$109.56
MSWMA Rate increase as a percent	46.15%	\$6.50	\$3.00	\$9.50
City Rate increase as a percent	0.00%	\$24.45	\$0.00	\$24.45
		\$133.85	Total Rate	\$143.51
EFFECTIVE RATE ADJUSTMENT PERCENT				7.22%

**Solid Wastes Systems Transfer Station
Annual Adjustment Calculations
Effective Date January, 2025
Using 2023-2024 Data (July to June)**

**Worksheet for computing the change in various indexes and factors which comprise the components on
which rates are adjusted**

Fuel - June to June (EIA Petroleum & Other Liquids)

See Fuel cost adjustment worksheet

CPI US City Average- Jun-23 to Jun-24 (normal year is June to June)

Jun-23	Jun-24	Index Increase (Decrease)
305.109	314.175	9.066
CPI % Change		2.97%

Landfill Fee Jan 2024 to Jan 2025

January 2024	January 2025	Increase (Decrease)
\$ 32.13	\$ 33.63	\$ 1.50
Disposal - Garbage Cost % Change		4.66%

Disposal Processing Fee Jan 2023 to Jan 2024

January 2023	January 2024	<u>CPI Jun to Jun</u>	Increase (Decrease)
\$ 65.00	\$ 67.21	Nov-21 N/A	Jun-22 N/A
Disposal - Green Waste Cost % Change			3.40%

Transfer Station MSW Tonnage at gate, Year to Year

12 months ended June 2023	12 months ended June 2024	Increase (Decrease)
38,508.05	39,220.81	712.75
Tonnage % Change		1.85%

City Landfill Fee June to June

June 2023	June 2024	Increase (Decrease)
\$ 14.00	\$ 14.00	\$ 0.00
City Landfill Fee % Change		0.00%

MSWMA Fee June to June

June 2023	June 2024	Increase (Decrease)
\$ 6.50	\$ 9.50	\$ 3.00
MSWMA Fee % Change		46.15%

Recycle Tip Fee June to June

12 months ended June 2023	12 months ended June 2024	Increase (Decrease)
\$89,744.10	\$66,786.75	-\$22,957.35

Calculation to adjust fuel costs					
Effective Date January 1, 2025					
Fuel Revenue Adjustment Worksheet, based on Fuel Index change, June to June					UWS
Base Year Fuel Index and Cost		3.216	\$201,261.07	June 2020 after 5 yr Review - Jan 2021	
Index Change - New vs. Base Year					
Annual adjustment based on Fuel Index change, year to year (using example fuel index changes)					
2	Fuel index adjustment at Dec 2023	5.202	61.75%	\$124,278.71	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2025 rate revision			\$0.00	Less: Prior Fuel Cost applied to rate
				\$325,539.78	Fuel Cost Allowed Year 1 - 2025
3	Estimated Fuel index adjustment at June 2024	4.913	52.77%	\$106,205.47	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2026 rate revision			\$124,278.71	Less: Prior Fuel Cost applied to rate
				\$307,466.54	Fuel Cost Allowed Year 2 - 2026
4	Estimated Fuel index adjustment at June 2025	4.913	52.77%	\$106,205.47	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2027 rate revision			\$0.00	Less: Prior Fuel Cost applied to rate
				\$307,466.54	Fuel Cost Allowed Year 3 - 2027
5	Estimated Fuel index adjustment at June 2026	4.913	52.77%	\$106,205.47	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2028 rate revision			\$0.00	Less: Prior Fuel Cost applied to rate
				\$307,466.54	Fuel Cost Allowed Year 4 - 2028
6	Estimated Fuel index adjustment at June 2027	4.913	52.77%	\$106,205.47	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2029 rate revision			\$0.00	Less: Prior Fuel Cost applied to rate

Solid Wastes Systems, Inc.
Transfer Station Rate Schedule
Effective Date January 2025

Item		2024	Calculated 2025	NEW 2025
		Rate	FA Rate	Rate Rounded *
MSW - Ton		\$133.85	\$143.51	\$143.50
MSW - Yard		\$30.35	\$32.48	\$32.50
Minimum Gate Fee - MSW	Up to 3 cans	\$15.15	\$16.24	\$16.25
Per Can Rate - 32 gallon	After 3 cans	\$5.05	\$5.41	\$5.40
Green Waste - Ton		\$67.05	\$67.07	\$67.05
Green Waste - Yard		\$9.45	\$9.45	\$9.45
Minimum Gate Fee - Green Waste		\$9.20	\$9.20	\$9.20
Mixed Load - Additional Charge		\$30.30	\$32.27	\$32.25
Appliances		\$16.50	\$17.57	\$17.55
Oil Filters - Small		\$0.60	\$0.64	\$0.65
Oil Filters - Medium		\$1.05	\$1.12	\$1.10
Oil Filters - Large		\$1.40	\$1.49	\$1.50
Concrete - Ton		\$106.20	\$113.09	\$113.10
Dirt - Ton		\$106.20	\$113.09	\$113.10
Sheetrock - Clean		\$67.70	\$72.09	\$72.10
Sheetrock - Dirty		\$106.20	\$113.09	\$113.10
Tires - Bicycle		\$1.90	\$2.02	\$2.00
Tires - Motorcycle		\$3.70	\$3.94	\$3.95
Tires - Passenger Car		\$5.55	\$5.91	\$5.90
Tires - Passenger Car with Rim		\$8.65	\$9.21	\$9.20
Tires - Truck		\$11.80	\$12.57	\$12.55
Tires - Truck with Rim		\$15.95	\$16.99	\$17.00
Tires - Tractor		66.70 - 504.55	66.71 - 504.55	66.70 - 504.55
E-Waste - Computers		No Charge	No Charge	No Charge
E-Waste - Monitors		No Charge	No Charge	No Charge
Scrap Metal		No Charge	No Charge	No Charge

This rate adjusted by 9.89% (effective rate)

This rate = 24.05% of per ton contractor gate fee PLUS per ton City & MSWMA fees divided by 5.54 (yards / ton)

This rate = MSW Yard fee / 2

This rate = Min Gate fee / 3

This rate - changing to \$65/ton on 1/1/2023

Increased in proportion to per Ton GW increase.

Increased in proportion to per Ton GW increase.

These rates adjusted by 17.35% (contractor rate)

* Rates are rounded to the nearest five cents

Solid Wastes Systems, Inc.
Transfer Station Rate Schedule
Effective Date January 2025

		NEW 2025 Rate
<u>Item</u>		<u>Rounded *</u>
MSW - Ton		\$143.50
MSW - Yard		\$32.50
Minimum Gate Fee - MSW	Up to 3 cans	\$16.25
Per Can Rate - 32 gallon	After 3 cans	\$5.40
Green Waste - Ton		\$67.05
Green Waste - Yard		\$9.75
Minimum Gate Fee - Green Waste		\$9.50
Mixed Load - Additional Charge		\$32.25
Appliances		\$17.55
Oil Filters - Small		\$0.65
Oil Filters - Medium		\$1.10
Oil Filters - Large		\$1.50
Concrete - Ton		\$113.10
Dirt - Ton		\$113.10
Sheetrock - Clean		\$72.10
Sheetrock - Dirty		\$113.10
Tires - Bicycle		\$2.00
Tires - Motorcycle		\$3.95
Tires - Passenger Car		\$5.90
Tires - Passenger Car with Rim		\$9.20
Tires - Truck		\$12.55
Tires - Truck with Rim		\$17.00
Tires - Tractor		66.70 - 504.55
E-Waste - Computers		No Charge
E-Waste - Monitors		No Charge
Scrap Metal		No Charge

* Rates are rounded to the nearest five cents

SWS Transfer Station Agreement

		Cost/Rev	Adjustment Period	Adjustment Method	Index Used	Cost Group
1,2,4	Construction / Lease	\$2.36 / MSW ton	Annual	100% of index change	CPI - US Cities CPI-U	Base Rate as Adjusted
3	Construction / Lease	\$10.00 / MSW ton	Time to Time	Per City	N/A	Pass Through
1,2	Fuel		Annual	100% of index change	eia CA #2 Diesel Retail all sellers	Base Rate as Adjusted
	Disposal - Landfill		Time to Time	Per Landfill Agreement	N/A	Pass Through
9	Disposal - Processing		Time to Time	Per Processor Agreements	N/A	Pass Through
1,2	Operating Costs		Annual	100% of index change	CPI - US Cities CPI-U	Base Rate as Adjusted
	Per Ton Contractor Gate					
4	City Franchise Fee	\$2.00	Time to Time	Per City	N/A	Pass Through
4	MSWMA Fee	\$5.00	Time to Time	Per MSWMA	N/A	Pass Through
6,7,8	TOTAL GATE FEE					

Notes

- 1 Agreement should state mutually agreed upon Index if Index becomes unavailable
- 2 June to June change
- 3 Lease rate replaces construction rate January 1, 2017 - \$10.00 per ton MSW
- 4 Part of Construction rate left in gate rate to cover triple net lease costs (adjusts by CPI) starting January 1, 2017. i.e.. Prop tax, Insurance & R&M.
- 4 Agreement should state initial rate, subject to change by City / MSWMA action
- 5 Exhibit of calculation to be made part of agreement
- 6 SWS requests new rate by Aug 15, City approves by Oct 15, Pub Notice given by Nov 1, Adjusted Rate goes into effect following January 1.
- 7 Per Yard Gate Fee shall be equal to 24.05% of per ton contractor gate fee PLUS per ton City & MSWMA fees divided by 5.54 (MSWMA yards / ton)
- 8 Rate change is calculated as follows: % annual adjustment X actual prior year (July to June) component cost = new funds needed / total gate revenue
= % adjustment to gate rate.
- 9 Processing contract mutually agreed to with city - i.e. PRS grinding yard rate charged SWS for greenwaste.

City can direct SWS to implement other programs, provided the costs of such programs are covered through increased rates.

Solid Waste Systems
Disposal Breakdown by Stream & Facility

	Potrero - MSW \$	PRS - GYW \$	PRS - Recycling \$	SWS MSW Inbound Tons	SWS Compost Inbound \$\$
2023-07	99,627	21,718	7,978	3,204	13,564
2023-08	93,929	22,691	8,848	3,247	14,316
2023-09	93,665	21,916	5,194	3,389	10,707
2023-10	87,785	23,921	5,693	3,782	12,995
2023-11	86,753	33,744	7,165	4,010	15,621
2023-12	82,622	27,789	6,173	3,837	12,051
2024-01	88,531	19,838	5,375	3,590	13,338
2024-02	86,056	23,466	4,119	3,669	15,554
2024-03	89,299	22,090	4,477	3,381	12,139
2024-04	102,243	20,174	4,244	3,388	14,953
2024-05	104,815	25,809	4,259	3,325	21,023
2024-06	103,306	19,015	3,261	3,016	18,871
Total	\$ 1,118,631	\$ 282,173	\$ 66,787	41,838	\$ 147,253

	Rent	Franchise Fees	MSWMA
2023-07	\$ 33,278	\$ 46,590	\$ 21,631
2023-08	\$ 37,367	\$ 52,314	\$ 24,288
2023-09	\$ 34,350	\$ 48,090	\$ 21,159
2023-10	\$ 34,896	\$ 48,854	\$ 22,682
2023-11	\$ 32,366	\$ 45,313	\$ 21,038
2023-12	\$ 29,886	\$ 41,841	\$ 19,426
2024-01	\$ 29,459	\$ 41,243	\$ 19,166
2024-02	\$ 24,580	\$ 34,412	\$ 15,977
2024-03	\$ 30,757	\$ 43,060	\$ 19,992
2024-04	\$ 34,267	\$ 47,973	\$ 22,273
2024-05	\$ 36,506	\$ 51,109	\$ 24,314
2024-06	\$ 34,496	\$ 48,294	\$ 23,098
Total	\$ 392,208.08	\$ 549,091.30	\$ 255,044.82

39,220.81 Total Tons

4. Compensation to Company.

(A) **Basic Disposal Prices.** The basic per Ton prices paid by Customer to Company for Acceptable Waste and Special Waste delivered to the Disposal Site hereunder (the "Basic Disposal Prices") shall be as set forth on Exhibit A, which is attached hereto and made a part hereof. The parties may amend Exhibit A from time to time upon mutual written agreement for the purpose of adding additional types of Acceptable Waste and the corresponding Basic Disposal Prices for such additional types of Acceptable Waste. The Basic Disposal Prices include current Fees and Taxes imposed on acceptance of Acceptable Waste at the Disposal Site in effect as of the Effective Date, but does not include sales or use taxes, if applicable, for which Customer shall be solely responsible.

(B) **CPI Adjustment.** Commencing on January 1, 2018, and on each January 1st thereafter, each of the Basic Disposal Prices for Acceptable Waste and Special Waste shall automatically increase as follows:

(i) Ninety percent (90%) of the actual percentage change in the Consumer Price Index for the Prior Rolling Twelve-Month Period (as defined below). The Consumer Price Index or "CPI-U" means the All Items Consumer Price Index for All Urban Consumers in the San Francisco I Oakland I San Jose Metropolitan Area, standard reference base period 1982 - 1984 = 100 as prepared by the United States Department of Labor Bureau of Labor Statistics ("BLS") or its successor. If BLS designates an index with a new title or code number or table number as being the continuation of the index cited above, the new index will be used. Otherwise, the parties shall agree upon a new index. The "Prior Rolling Twelve Month Period" shall be calculated by establishing the CPI-U on each August 1st as compared to the immediately preceding August 1 during every year of the Term.

(C) **Change of Law.** The parties acknowledge that solid waste disposal is a highly regulated and highly taxed enterprise. From time to time, state, federal and local governments impose new taxes or increase existing Fees and Taxes. In addition, changes in laws and regulations require additional investment of capital and cause Company's costs of operations to increase. These tax and cost requirements are unavoidable by Company. If new or increased Fees and Taxes or increased regulatory compliance costs are at any time imposed, assessed, levied or charged on Company's waste management and disposal activities, or if increased operational costs result from changes in regulations, permit conditions or regulatory interpretation (together the "Allowable Costs"), the Basic Disposal Price shall be equitably adjusted to allow Allowable Costs to be passed through to Customer by a Basic Disposal Price adjustment; provided, however, such Allowable Costs must be ratably shared across all applicable customers of Company utilizing the Disposal Site. Notwithstanding anything contained herein to the contrary, a determination by any governmental entity (including, without limitation, the State of California, or Solano County) that Diversion Materials utilized by Company hereunder as alternative daily cover shall no longer qualify for AB 939 diversion credits shall constitute the imposition of new taxes and allow for adjustment to the Basic Disposal Price for Waste Used as ADC in accordance with the terms of this Section 4(C). Company shall notify Customer of its calculation of the new Basic Disposal Price per ton (the "New Rate"), including with such notice the methodology used to calculate the New Rate and Customer shall have thirty (30) days from the date of such notice to dispute the New Rate or the manner in which it was calculated.

(D) **Special Waste.** The Basic Disposal Price for Special Waste shall be as set forth in Exhibit A, which may be amended and updated from time to time by the mutual agreement of the parties to add additional agreed upon Special Waste Streams.

(E) **Cumulative Compensation.** Every adjustment to Company's compensation pursuant hereto will be cumulative and in addition to every other adjustment pursuant hereto.

RE: Change of Law



Natalie Hicks

To: Antonio Barnett

Cc: Jeff Stevens

Retention Policy: WCNX - Temp. Unlimited - Inbox (Never)

Start your reply all with:

Thank you!

Ok, thanks.

Thanks. That helps.

Feedback

Antonio,

Yes, we have two new government fees related to Phase II filling.

One fee to the County is .15/ton and one to the Conservation District of .41/ton.

As for the PI, I would guess around 3% based on the table below.

2015	2.53%
2016	3.02%
2017	3.44%
2018	3.56%
2019	3.53%
2020	2.91%
2021	1.57%
2022	5.19%
2023	5.30%
2024	2.37%

Thanks,

Natalie Hicks
 Potrero Hills Landfill - Waste Connections
 3675 Potrero Hills Lane Suisun, CA 94585
 P.O. Box 68 Fairfield, CA 94533
 Office: 707.432.4637 ext. 54637 | Mobile: 530.209.1120 | Fax: 707.432.4630

0.15 County

0.41 Conservation District

0.56 Total

\$32.13

1.74% % of Current Rate

Year-Month	Week 1		Week 2		Week 3		Week 4		Week 5	
	End Date	Value	End Date	Value	End Date	Value	End Date	Value	End Date	Value
2023-Feb	02/06	5.482	02/13	5.445	02/20	5.407	02/27	5.357		
2023-Mar	03/06	5.316	03/13	5.312	03/20	5.260	03/27	5.165		
2023-Apr	04/03	5.047	04/10	4.989	04/17	4.963	04/24	4.960		
2023-May	05/01	4.903	05/08	4.847	05/15	4.825	05/22	4.825	05/29	4.810
2023-Jun	06/05	4.765	06/12	4.750	06/19	4.773	06/26	4.751		
2023-Jul	07/03	4.762	07/10	4.821	07/17	4.848	07/24	4.944	07/31	5.158
2023-Aug	08/07	5.339	08/14	5.518	08/21	5.535	08/28	5.678		
2023-Sep	09/04	5.801	09/11	5.970	09/18	6.192	09/25	6.208		
2023-Oct	10/02	6.269	10/09	6.178	10/16	6.119	10/23	6.016	10/30	5.890
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2023-Dec	12/04	5.480	12/11	5.367	12/18	5.231	12/25	5.202		
2024-Jan	01/01	5.184	01/08	5.152	01/15	5.142	01/22	5.092	01/29	5.078
2024-Feb	02/05	5.121	02/12	5.250	02/19	5.258	02/26	5.225		
2024-Mar	03/04	5.228	03/11	5.207	03/18	5.203	03/25	5.224		
2024-Apr	04/01	5.221	04/08	5.259	04/15	5.256	04/22	5.244	04/29	5.216
2024-May	05/06	5.155	05/13	5.123	05/20	5.049	05/27	4.985		
2024-Jun	06/03	4.968	06/10	4.911	06/17	4.915	06/24	4.913		
2024-Jul	07/01	4.915	07/08	4.955	07/15	4.932	07/22	4.874	07/29	4.831
2024-Aug	08/05	4.821								

FIRST AMENDED AND RESTATED WASTE COLLECTION AGREEMENT

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FIRST AMENDED AND RESTATED WASTE COLLECTION AGREEMENT

This First Amended and Restated Waste Collection Agreement (the "Agreement") is made as of October 7, 2015 by and between the City of Ukiah, a municipal corporation (hereinafter "City"), and Ukiah Waste Solutions, Inc., a California corporation (hereinafter "Company"), with reference to the following:

WHEREAS, Company currently collects and disposes of Solid Waste generated in City pursuant to that certain Waste Collection Agreement dated December 12, 2011 (the "Prior Agreement"); and

WHEREAS, Company has invested its own funds to acquire land and facilities that increase diversion of Solid Waste from landfills, reduce greenhouse gasses, and create new jobs; and

WHEREAS, City has approved a Mixed Organic Waste Curbside Recycling Program (the "New Program"); and

WHEREAS, the parties wish to amend and restate the Prior Agreement on the terms herein in order to accommodate the New Program;

NOW, THEREFORE, in and for the mutual covenants herein and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. Franchise Grant.

1.1 City hereby grants to Company, and Company hereby accepts from City, the exclusive franchise right and privilege, subject only to Section 1.3 below, to Collect, remove, transport, Recycle, Process, compost and Dispose of all Solid Waste generated in City in accordance with the provisions of City's laws and regulations pertaining to the accumulation, collection and removal thereof and any other applicable law, including applicable State and Federal statutes or administrative rules.

1.2 All Solid Waste Collected by Company pursuant to this Agreement shall become the property of Company upon its possession thereof, provided that nothing in this section shall be deemed a waiver by City of its rights and duties under this Agreement.

1.3 The franchise granted to Company hereunder shall in all respects be exclusive, except as otherwise provided by applicable law and as follows:

(a) Recyclables generated at any Residential, Commercial or Institutional Property that are Source Separated may be (i) transported personally by the Generating person for sale or donation to a Processing facility that has been duly approved and authorized as such by a governmental or other appropriate authority, including beverage containers Recycled at authorized facilities under the California Beverage Container Recycling Litter Reduction Act, (ii) may be sold or donated by the Generating person to any Charitable Entity, or (iii) sold by the

Generating person to any licensed Recycler (provided the Generating person is not charged any amount by such Recycler, directly or indirectly);

(b) Solid Waste Generated at any Residential, Commercial or Institutional Property may be personally transported by the person Generating same to any licensed landfill, transfer station or materials recovery facility;

(c) Green Waste removed from a Residential, Commercial or Institutional Property by a gardening, landscaping or tree trimming contractor as an incidental part of a comprehensive service offered by such contractor, rather than as a hauling service, may be disposed of by such contractor at any licensed transfer station or materials recovery facility, provided that such contractor does not store the box, bin or container used for such purpose at the location where the service is provided or remove such box, bin or container from such contractor's truck;

(d) Construction Debris and Demolition Debris removed from a Residential, Commercial or Institutional Property by a licensed construction or demolition contractor using its own employees and equipment as an incidental part of a comprehensive service offered by such contractor, rather than as a hauling service, may be disposed of by such contractor at any licensed transfer station or materials recovery facility, provided that such contractor does not store the box, bin or container used for such purpose at the location where the service is provided or remove such box, bin or container from such contractor's truck; and

(e) Hazardous Waste and Household Hazardous Waste may be disposed of in any lawful manner.

1.4 To the extent permitted by applicable law, City agrees to take such steps as may be reasonably necessary to protect (a) Company's ownership of Solid Waste, including Recyclables, Green Waste and/or Mixed Organic Waste, placed at the curbside or designated collection location for Collection by Company under the terms of this Agreement, and (b) Company's exclusive rights to collect all Solid Waste, including Recyclables, Green Waste and Mixed Organic Waste, in accordance with the terms hereof. City's obligation under this Section 1.4 is subject to Company's agreement, upon request of City, to reimburse City's reasonable expenses, including attorneys' fees and litigation expenses, incurred in taking steps as agreed upon herein; provided, however, that nothing herein shall prevent Company from taking any lawful action to protect its rights hereunder.

1.5 Except as expressly provided herein, this Agreement shall supersede the Prior Agreement as of the Effective Date set forth in Section 3 below, when the Prior Agreement shall cease to have any effect (except for periods prior to such Effective Date).

2. Definitions.

2.1 "Authorized Facility" means a Disposal or Processing facility that has received and is maintaining in good standing all regulatory or other approvals required by law to perform the task for which Company is using the facility and which has been approved by the City pursuant to Section 5.11 below.

2.2 "Billing Fees" means the billing fees payable to City pursuant to Section 6.6

below, including any fees or charges adopted to replace or supplement such billing fees.

2.3 "CCC" means Cold Creek Compost, Inc.

2.4 "Change in Law" means the enactment, adoption, promulgation, issuance, modification, or written adoption or change in administrative or judicial interpretation on or after the Effective Date of, any law, regulation, rule, order, judgment, decree, permit, approval or other requirement of any governmental agency (including City) having jurisdiction over this Agreement or Company's performance hereunder.

2.5 "Charitable Entity" means any not-for-profit organization or entity maintained for community service, education or the public good, including service clubs, scouting organizations, religious and educational organizations and recognized charities.

2.6 "Collect" or "Collection" means the collection, transportation and removal of Solid Waste within and from City.

2.7 "Commercial Property" means property upon which business activity is conducted, including but not limited to retail sales, services, wholesale operations, manufacturing and industrial operations, but excluding businesses conducted upon Residential Property that are permitted under applicable zoning regulations and are not the primary use of the property.

2.8 "Construction Debris" means used or discarded construction materials generated during the construction or renovation of a building, structure or other man-made improvement on a Residential, Commercial or Institutional Property.

2.9 "Containers" means any and all types of Solid Waste receptacles supplied by Company, including but not limited to rectangular bins, cylindrical containers, and any and all other kinds of receptacles or bags, irrespective of size or shape.

2.10 "Customer" means the owner or occupant of Residential, Commercial or Institutional Property.

2.11 "Demolition Debris" means used construction materials generated during the razing or renovation of a building, structure or other man-made improvement on a Residential, Commercial or Institutional Property.

2.12 "Disposal" means the permanent placing of Solid Waste in a facility legally permitted to receive it.

2.13 "Disposal Costs" means Company's costs to deposit Solid Waste collected under this Agreement at the Transfer Station (as defined in Section 5.11 below) or any other Authorized Facility.

2.14 "Food Waste" means food scraps, including animal and vegetable foods, paper tissues, paper napkins and towels, coffee grounds and filters, pizza boxes, food soiled paper plates and cups, and miscellaneous paper not suitable for recycling that is discarded (as from a Commercial or Residential Property kitchen).

2.15 "Franchise Fees" means the franchise fees payable to City pursuant to Section 4 below, including any fees or charges adopted to replace or supplement such franchise fees.

2.16 "Generate" means to create or render. A Customer is not considered to be the Generator of Solid Waste if the material has merely been transported or moved to the Customer's site.

2.17 "Green Waste" means tree trimmings, grass cuttings, plants, leaves, branches and trees (not more than six (6) inches in diameter or more than four (4) feet in length) and similar materials generated at a Residential, Commercial or Institutional Property.

2.18 "Hazardous Waste" means all substances defined as Hazardous Waste, acutely Hazardous Waste or extremely Hazardous Waste by the State of California, or identified as Hazardous Waste by the U.S. Environmental Protection Agency, under applicable laws or regulations.

2.19 "Household Hazardous Waste" means Hazardous Waste that is generated at Residential Properties.

2.20 "Institutional Property" means the premises or site of any governmental entity, including city, county, state and/or federal buildings, public schools, colleges, and public recreational sites.

2.21 "Mixed Organic Waste" means Green Waste and Food Waste.

2.22 "Multi-Family Residential Property" means any building or structure, connected structure or series of structures used for residential purposes, and consisting of three (3) or more distinct dwelling units, irrespective of whether the dwelling units are rental units or are owner-occupied.

2.23 "Pass-Through Costs" means Disposal Costs, Processing Costs and Regulatory Costs.

2.24 "Processing" means the act of salvaging, reprocessing, marketing and selling or reusing Recyclables (including Green Waste and Mixed Organic Waste) for the purpose of Recycling, whether directly or through one or more third parties (including, in the case of Green Waste and Mixed Organic Waste, composting or anaerobic digestion), and shall include other means of diverting Solid Waste from landfills.

2.25 "Processing Costs" means fees, if any, paid by Company to a Processing Facility for Processing Recyclables, Food Waste, Green Waste, Mixed Organic Waste, Wood Waste and Solid Waste collected by Company. The amount paid by Company to PRS for Food Waste, Mixed Organic Waste, Green Waste or Wood Waste delivered to the PRS Facility shall be as determined under that certain First Amended and Restated Agreement for Receipt of Wood Waste, Green Waste and Mixed Organic Waste among PRS, UWS and SWS of even date herewith and attached as Exhibit D hereto (the "PRS Agreement").

2.26 "Recyclables" means Solid Waste which may be reused or processed into a form suitable for reuse through reprocessing or remanufacture consistent with the requirements of the California Integrated Waste Management Act of 1989, as amended ("AB 939"), including, without limitation, paper, newsprint, printed matter, pasteboard, paper containers, cardboard, glass, aluminum, PET, HDPE, and other plastics, beverage containers, compostable materials (including Green Waste and Food Waste), and wood, brick and stone in reusable size and condition. Recyclables shall include those items of Construction Debris and Demolition Debris which are described in this Sections 2.8 and 2.11. Company shall report changes in Recyclables collected at the curbside to the City Manager who must approve those changes.

2.27 "Recycle" means the process of reusing or processing Solid Waste into a form suitable for reuse consistent with the requirements of AB 939.

2.28 "Regulatory Costs" means all regulatory and governmental fees and charges incurred by Company in connection with providing services under this Agreement, including, without limitation, Franchise Fees, Billing Fees, commercial oversight fees and landfill closure costs payable to City.

2.29 "Residential Property" means Single Family Residential Property and Multi-Family Residential Property.

2.30 "Single Family Residential Property" means any building or structure, connected structure or series of structures used for residential purposes, and consisting of less than three (3) distinct dwelling units, irrespective of whether the dwelling units are rental units or are owner-occupied.

2.31 "Solid Waste" means all putrescible and nonputrescible residential refuse, commercial solid waste, institutional solid waste, garbage, Green Waste, Food Waste, Mixed Organic Waste and rubbish as defined in Public Resources Code Section 40191, including, without limitation, for the purposes of this Agreement Construction Debris, Demolition Debris, Recyclables, but excluding Hazardous Waste and Household Hazardous Waste.

2.32 "Source Separated" means Recyclables that are separated at the Residential, Commercial or Institutional Property where they are generated from Solid Waste and other Recyclables that are Collected separately, and which are saleable or acceptable for Processing without further sorting, including, but not limited to, Recyclables consisting of glass, paper, plastic, cardboard, tin cans and aluminum cans which are separated from all other Recyclables and Solid Waste, Green Waste which is separated from all other Recyclables and Solid Waste,

and Mixed Organic Waste which is separated from all other Recyclables and Solid Waste.

3. Term. Subject to earlier termination in accordance with the terms of this Agreement, the term of this Agreement shall commence on October 1, 2015 (the "Effective Date") and continue for a period of eleven (11) years and three (3) months through December 31, 2026, provided that Company shall have one (1) option to extend this Agreement and the franchise granted hereunder on the terms and conditions herein for a period of five (5) years commencing January 1, 2027 and ending December 31, 2031. Notice of Company's exercise of such option must be given at least six (6) months prior to December 31, 2026. The option to extend hereunder may not be exercised unless Company is in material compliance with the terms of this Agreement at the time of exercise and on December 31, 2026. It is the parties' intention that, subject to prior termination hereunder or thereunder, the term of this Agreement be coextensive with the term of the Transfer Station Agreement between City and Solid Wastes Systems, Inc. ("SWS") of even date herewith (the "Transfer Station Agreement").

4. Franchise Fee; Other Fees. Company shall be liable to City for a franchise fee equal to fifteen percent (15%) of the gross revenues collected by Company from Customers within the City limits during the term of this Agreement or such other percentage of such gross revenues as the City Council may establish from time to time. Within thirty (30) days after the end of each calendar month, Company shall send City a statement detailing gross revenue received by Company from Commercial and Institutional Customers, and from the Multi-Family Residential Customers that Company bills, for the prior calendar month, and City shall send Company a statement showing how City calculated the amounts withheld in accordance with this Section 4 and Section 6.6 below from its payment to Company for the prior calendar month. As soon as City's billing system permits it to generate the following statement, City will provide Company within thirty (30) days after the end of each calendar month with a statement detailing the amounts billed by City to the Residential Customers billed by City, the amounts collected by City from such Customers, the amounts paid to Company and all amounts withheld from such payments in accordance with this Section 4 and Section 6.6 below for the prior calendar month. In addition, each party shall maintain copies of all its billing and collection records for three (3) years following the date of billing for inspection and verification by the other party. Company shall also owe City a Billing Fee pursuant to Section 6.6 below, a commercial oversight fee of \$10,000 per calendar year and a landfill closure cost of \$60,000 per calendar year. The Franchise Fee, the Billing Fee, the oversight fee and the landfill closure fee shall all be paid by means of City's withholding such amounts from the payments City makes to Company in respect of the revenues City bills to Residential Customers in accordance with Section 6.6 below. The annual oversight and landfill closure fees will each be withheld at the rate of one-twelfth per month.

5. Services.

5.1 Solid Waste. Company shall Collect and Dispose of all Solid Waste (other than Source Separated Recyclables, which are subject to Section 5.2 below, and Source Separated Green Waste and Mixed Organic Waste, which are subject to Section 5.3 below) generated at every Single Family Residential Property within City once each week on a regularly scheduled day, and at every Multi-Family Residential, Commercial and Institutional Property within City

upon a schedule established between Company and each Generating person (or the owner, landlord or property manager, in the case of Multi-Family Residential Properties), but at least once each week on a regularly scheduled day, in accordance with this Agreement. Solid Waste shall not be put out for Collection with Hazardous Waste or Household Hazardous Waste in the same Container. Company will not collect Solid Waste, including Recyclables, on New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day or Christmas Day, and will make appropriate adjustments to its collection schedule in order to avoid an excessive accumulation of Solid Waste on such days.

5.2 Recyclables. On the same day as specified by Company under Section 5.1, Company shall collect all Source Separated Recyclables (other than Green Waste and Mixed Organic Waste) Generated at every Residential Property within City once each week on a regularly scheduled day in accordance with this Agreement. Company shall collect all Source Separated Recyclables (other than Green Waste and Mixed Organic Waste) Generated at every Commercial and Institutional Property within City upon a schedule established between Company and each Generating person (or the owner, landlord or property manager, in the case of Multi-Family Residential Properties), but not less frequently than weekly.

5.3 Green Waste and/or Mixed Organic Waste. On the same day as specified by Company under Section 5.1, Company shall collect all Source Separated Green Waste and/or Mixed Organic Waste Generated at every Residential Property within City once each week on a regularly scheduled day in accordance with this Agreement. Company shall collect all Source Separated Green Waste and/or Mixed Organic Waste Generated at each electing Commercial and Institutional Property within City upon a schedule and at rates established between Company and each Generating person, but not less frequently than weekly.

5.4 Food Waste. Subject to any revisions to the Food Waste Collection Program adopted pursuant to Section 5.17, Food Waste shall be collected only in the Green Waste containers approved by the City Manager pursuant to Sections 5.7 and 5.8 below as a component of Mixed Organic Waste deposited in said containers by Customers on Residential, Commercial or Institutional Properties pursuant to the New Program.

5.5 Contaminated Materials. Company may refuse to collect Solid Waste, Recyclables, Green Waste and/or Mixed Organic Waste Generated by, and shall not be obligated to continue to provide any Solid Waste, Recyclables or Green Waste and/or Mixed Organic Waste Container to, any person who after reasonable warning, fails to sort Solid Waste, Recyclables, Green Waste and/or Mixed Organic Waste properly, or fails or refuses to allow Company to Collect, on an exclusive basis, said person's Solid Waste, Recyclables, Green Waste and/or Mixed Organic Waste. Company shall make available to City any warning notices issued by Company for this purpose, and City shall investigate same to determine whether the person receiving the notice has violated the applicable ordinance. Company may alternatively assess a contamination charge in accordance with Exhibit E in such instances.

5.6 Changes; Missed Pick-Ups. Company shall not alter or adjust Collection services without providing prior notice to all service addresses, and any schedule modifications shall not

result in reduced service frequency to any Customer. Company shall collect and remove Solid Waste and Recyclables from any premises "missed" or "skipped" during the regularly scheduled time, within one (1) working day after demand for collection is made by the Customer or City.

5.7 Containers-Single Family Residential. Company shall collect Solid Waste, Recyclables, Green Waste and Mixed Organic Waste from Single Family Residential Properties in City in the following types of Containers: Solid Waste – 10, 20, 32, 64 or 96 gallons, Recyclables – 32 (Billy Goat Run) or 96 gallons, and Green Waste and/or Mixed Organic Waste – 32 (Billy Goat Run) or 96 gallons. Company has provided and distributed one set of Solid Waste, Recyclables and Green Waste Containers, at no cost in addition to the monthly rates, to each Single Family Residential Property in City where collection can be accomplished using Company's standard curbside collection equipment, and will provide such a set to each new Single Family Residential Property in City after the Effective Date, and will provide a new Green Waste Container or modify an existing Green Waste Container of the approved size to each such Single Family Residential Property upon commencement of the New Program. Nothing in this section shall be deemed to preclude the use of bins or other Containers of a size and shape, which are compatible with approved rates, acceptable to and supplied by Company and, in the event City and Company shall institute new programs hereunder which require bins or other Containers of a particular size and shape, Customers on single unit Residential Properties shall use bins or other Containers supplied by Company meeting such requirements.

5.8 Containers- Multi-Family Residential, Commercial and Institutional. Company shall collect Solid Waste, Recyclables, Green Waste and/or Mixed Organic Waste from Multi-Family Residential Properties, Commercial Properties and Institutional Properties in City in a size and shape suitable for each such location from the following capacities: 10, 20, 32, 64 or 96 gallon carts, two-yard, three-yard, four-yard and six-yard bins, and 15-yard, 20-yard and 30-yard boxes, provided that Green Waste and/or Mixed Organic Waste shall be collected only in 64 gallon carts or two-yard bins and only commingled in the same container.

5.9 Replacement or Addition of Containers. Company shall replace, at no charge to a Single Family Residential Generator but not more than once a calendar year, a Solid Waste, Recyclables or Green Waste Container that is stolen from the curb. If from time to time a Single Family Residential Generator may wish to have additional Containers, Company shall make additional Containers available for free and adjust the Generator's service rate. A replacement Container will be provided free to any Single Family Residential Generator returning the original Container for a Container of a different size, but not more than twice a calendar year. Company will maintain and repair Containers at its cost, and shall repair or replace damaged Containers, at Company's option, upon request of a Customer or City. The ownership of all Containers purchased by Company under this Agreement shall be and remain with Company.

5.10 Personnel and Equipment. Company shall furnish sufficient personnel, labor and equipment required for the Collection, removal, handling, Processing and Disposal of all Solid Waste Generated within the corporate limits of the City in compliance with this Agreement and the City's applicable law or City policy.

5.11 Disposal and Processing Facilities.

(a) Solid Waste. Company shall transport all Solid Waste collected by it in City to the transfer station operated by SWS and located at 3151 Taylor Drive, Ukiah, California (the "Transfer Station"). All of such Solid Waste that is not Recycled shall be hauled to a licensed disposal facility in accordance with the terms of the Transfer Station Agreement. The gate fee paid by Company to SWS for Solid Waste delivered to the Transfer Station shall be as determined under the Transfer Station Agreement.

(b) Recyclables. Company shall transport all Source Separated Recyclables (other than Green Waste and Mixed Organic Waste) Collected by it curbside from Residential Customers in City to the materials recovery and green waste facility operated by Pacific Recycling Solutions, Inc. ("PRS") and located at 4260 North State Street and 3501 Taylor Drive and 3515 Taylor Drive, Ukiah, California (the "PRS Facility") for Processing. Company shall transport all other Recyclables collected in City to the Transfer Station. Any residue from such Recyclables that cannot be Recycled shall be Disposed of in accordance with the Transfer Station Agreement if delivered to the Transfer Station, or at any Authorized Facility selected by PRS, if delivered to the PRS Facility. PRS shall pay Company the amounts determined under that certain Recyclable Materials Agreement between PRS and Company of even date with this Agreement attached hereto as Exhibit B for Recyclables delivered to PRS by Company (the "Recycling Agreement"). The amount, if any, paid by Company to SWS for Recyclables delivered to the Transfer Station shall be as determined under the Transfer Station Agreement.

(c) Green Waste and Mixed Organic Waste. Company shall transport all Source Separated Green Waste collected by it in City to any or all of the following facilities: the Transfer Station, the PRS Facility, the CCC composting facility (the "CCC Facility"), or the Scotia biomass conversion facility (the "Scotia Facility"), or other biomass conversion facility approved by the City Manager for Processing; provided, however, that, notwithstanding any other provision in this Agreement and subject to the receipt by PRS of all government approvals and permits necessary for PRS to receive, commingle, store and handle Mixed Organic Waste, Company shall deliver all Mixed Organic Waste generated in City from curbside collection from Residential, Multi-Family Residential, Commercial and Institutional Properties to the PRS Facility for transport from the PRS Facility to the CCC Facility during the term of and in accordance with the Agreement for Mixed Organic Waste Services between PRS and CCC dated September 15, 2015, which is attached as Exhibit 1 to Exhibit D to this Agreement (the "CCC Agreement"); provided, however, that the exercise of any option to extend that agreement by PRS must be approved by City. Any residue from the Green Waste or Mixed Organic Waste generated in City that cannot be Processed shall be disposed of in accordance with the Transfer Station Agreement if delivered to the Transfer Station, or at any Authorized Facility selected by PRS, if delivered to the PRS Facility. The amount paid by Company to SWS for Green Waste delivered to the Transfer Station shall be as determined under the Transfer Station Agreement, and the amount paid by Company to PRS for Green Waste and/or Mixed Organic Waste delivered to the PRS Facility shall be as determined under the PRS Agreement.

(d) Alternate, Successor and Other Authorized Facilities. Company shall provide City with written notice as soon as Company knows that it will use a Processing Facility instead of or in addition to the PRS Facility, the Scotia Facility, or other biomass conversion facility approved by the City Manager for Processing, or the CCC Facility; provided, however, that Company and PRS shall only be entitled to propose an alternate Processing Facility (or

Disposal Facility, if available) to receive Mixed Organic Waste from PRS if CCC shall refuse, due to no fault of Company, SWS or PRS, to accept Mixed Organic Waste that is not a Contaminated Load (as defined in the CCC Agreement) or if the CCC Facility shall shut down or cease operating. The notice shall provide the name and location of the proposed Facility, the anticipated gate fee and other charges for Processing at that Facility, and a copy of the proposed contract between Company and such Facility. Company shall also provide City with the increased or decreased transportation costs, if any, associated with using the proposed Facility (in the case of Mixed Organic Waste) and with any additional information about the proposed Facility reasonably requested by City. Company's use of the proposed Processing Facility shall be subject to approval by the City Council, which shall not be unreasonably withheld. In acting on a request for approval, the City shall consider, among other things, whether the use of that Facility is available at a reasonable cost to the ratepayers considering the environmental benefits and the available alternatives, and otherwise qualifies as an Authorized Facility. The City Council may consider any other factor reasonably related to a legitimate City interest in its management of waste collection and disposal, including, but not limited to, alternative technologies and facilities, the impact on rates, past performance and regulatory compliance history of the Processing Facilities under consideration, factors affecting the facilities' future performance, and the public interest. City and Company acknowledge that, as of the date of this Agreement, very few Processing Facilities will accept Mixed Organic Waste and, if not Processed, such Waste cannot be stockpiled and may not be permitted to be Disposed of in a landfill. Accordingly, and notwithstanding any other provision in this Agreement, in the case of a written request by Company to use a Processing Facility (or Disposal Facility, if available) other than CCC for Mixed Organic Waste: (i) City will, in its sole discretion and within sixty (60) days after its receipt of such request, approve the use of the proposed Facility or select an alternate Processing Facility or Disposal Facility, if available, to Process or Dispose of the Mixed Organic Waste, and (ii) Company's service rates will be adjusted to cover any increase or decrease in its costs for Processing or Disposal, and/or transportation resulting from City's decision, effective as of the date of such request; and, provided, further, that if City does not accept the proposed Facility or select an alternate Facility in accordance with this sentence, Company shall direct PRS to deliver the Mixed Organic Waste for Processing to any licensed facility, with the costs to PRS of using the new facility being deemed to consist of the tonnage of Mixed Organic Waste delivered by PRS to the new facility multiplied by the then effective per ton or per yard Rate for MSW charged at the Transfer Station, and with the excess of such costs to PRS over the costs to PRS of using the CCC Facility being passed through to Company and treated as a Pass-Through adjustment to the Rates on the next Rate Adjustment Date pursuant to Section 6.3 below. In the event that the Transfer Station, the PRS Facility, the CCC Facility, the Scotia Facility or any other Authorized Facility described above cannot accept Solid Waste, Recyclables, Green Waste, or Mixed Organic Waste Generated in City on a temporary basis due to no fault of Company, or due to events beyond the control of Company, such as acts of God, public emergency, strike or lockout by employees of another entity unrelated to Company, Company shall locate and use an alternate licensed facility for the duration of such circumstance; provided, however, that City approval in accordance with this Section 5.11(d) shall be required if the Authorized Facility cannot accept Solid Waste for a period of time exceeding three (3) months. In addition, in adjusting the MOW Processing Rate (as defined in the PRS Agreement) at the PRS Facility during the five year review of rates conducted in 2016 under Section 4c, of

that Agreement, the adjustment shall include in the per ton rate all costs incurred by PRS to accommodate the Processing of MOW, including, but not limited to, the capital costs of improvements to the PRS Facility, operational costs, transportation costs, and other costs required to accommodate the New Program and shall allow for a reasonable profit to Company.

5.12 Local Office. Company shall maintain an office in or in close proximity to the City, as approved by the City Manager, where service may be applied for and complaints made. The address and telephone number of such office shall regularly be included in Customer billings and service information distributed to the public. Company's office shall have a responsible individual available daily between the hours of seven-thirty o'clock a.m. and four o'clock p.m., excepting Saturday, Sunday and holidays. Calls for missed collections shall be received 24 hours per day, by answering machine after four o'clock p.m. and on Saturdays, Sundays and holidays.

5.13 Pick-Ups at City Facilities. Company shall provide Containers and remove, without charge, all Solid Waste, Source Separated Recyclables and Source Separated Green and Food Waste Generated at all City facilities, including from City street cans, (of the nature and in the amounts currently collected) at least once per week, but Company may charge all other public agencies for services rendered at the same rates and on the same basis as Commercial Customers are charged for similar services. Company shall also remove, without charge, all grit and screenings from City's wastewater plant as scheduled by Company and City

5.14 Outreach and Public Education. Company shall execute a public awareness campaign for recycling by Residential and Commercial Customers, which campaign will include an up to date Web Site that includes educational information, a business waste reduction program, a school Recycling program and a flyer in Company's billing statements (or posted on Company's website) not less than every six months. City shall provide Company with free space at all City-sponsored events to promote the campaign. Additional activities shall be available at additional cost by mutual agreement of the parties. Company shall also provide each new Customer with a packet of information regarding the curbside Recycling and Green Waste programs, and, if in effect, a Food Waste program, as well as information cards to be used in the event that a Customer places materials out for Recyclables, Green Waste or Food Waste collection that are not acceptable as set forth in this Agreement. Such card shall be left with the Customer's container or bin and shall inform the Customer why the materials were not picked up.

5.15 Fall Leaf Collection. Company shall provide all Customers with reasonable leaf collection without charge during the week after Thanksgiving each year in Containers and/or bags approved or provided by Company. City shall prepare and pay for an insert in all Customer billing advertising this service.

5.16 Spring Clean-up Week. Company shall provide all Customers with reasonable Green Waste collection without charge during the third week of April each year, including the collection of tree branches not to exceed six (6) inches in diameter or four (4) feet in length.

5.17 Additional or Modified Services. Company shall provide additional or modified services upon request of City, or upon the proposal of Company as approved by City pursuant to Section 5.19 below, subject, if the costs incurred by Company to provide such services increase or decrease, to the establishment by mutual written agreement of a reasonable service Rate, or service Rate adjustment, therefor.

5.18 Permits and Licenses. Company shall obtain and maintain throughout the term of this Agreement all permits, licenses and approvals necessary or required for Company to perform the work and services described herein. City shall reasonably cooperate with Company in connection with obtaining or renewing such permits, licenses and approvals.

5.19 Diversion Requirements. In an effort to assure City's continuing compliance with the current and any future diversion requirements set forth in the California Integrated Waste Management Act of 1989, as amended ("AB 939"), Company shall propose and City may require Company to adopt and implement various recycling, Solid Waste reduction, public education and reporting programs for City and its residents, subject to City taking all actions necessary to implement such programs and approving reasonable service rate increases needed, if any, in connection therewith.

6. Rates.

6.1 Establishment of Rates. The service rates specified in Exhibit E to this Agreement (the "Rates") shall take effect on the Effective Date, subject to approval by the City Council and compliance with the notice and hearing requirements in Article XIII.D of the California Constitution and Government Code Sections 53750 et seq. (collectively, "Proposition 218"). Such Rates shall be adjusted pursuant to Sections 6.2, 6.3, 6.4 and 6.5 below, subject to compliance with the notice and public hearing requirements of Proposition 218 as provided in such Sections. The parties' agreement to subject the Rates and certain adjustments thereto to the notice and public hearing requirements of Proposition 218 is precautionary only and shall not be deemed an admission that Proposition 218 applies to the Rates or such adjustments. Company shall not charge any amount in excess of the approved Rates for services required by or permitted under this Agreement.

6.2 Modification Based on Consumer Price Index, Fuel Index, Recycling Reduction and Certain Pass-Through Costs.

(a) Adjustment Calculation. Each Rate shall be adjusted January 1st every year, beginning January 1, 2013 ("Rate Adjustment Date") to reflect changes in the CPI, the Fuel Index, the amount paid to Company by PRS for Recyclables and certain Pass-Through Costs by a percentage determined in accordance with the Curbside Rate Calculation attached hereto as Exhibit C (the "Calculation").

(b) Definitions. For purposes of Rate adjustments pursuant to this Section 6.2 and the Calculation, the following terms shall have the following meanings.

(i) "Base Fuel Costs" means Company's actual costs for diesel and other fuels used in performing services under this Agreement for the year ended December 31, 2010 or \$200,641.15.

- (ii) "Base Revenue" means Company's total revenue received from Customers during the Comparison Year.
 - (iii) "Base Year" means the year ended June 30th one year prior to June 30th of the Comparison Year.
 - (iv) "Comparison Year" means the year ended June 30th immediately prior to the relevant Rate Adjustment Date.
 - (v) "Commercial Oversight Fees" means the total amount of commercial oversight fees, including any fees or charges adopted to replace or supplement such fees, paid by Company to City in accordance with Section 4 and 6.6 during the Comparison Year.
 - (vi) "CPI" means the Consumer Price Index, All Urban Consumers, U.S. City Average, All Items (1982-1984=100), published by the United States Department of Labor, Bureau of Labor Statistics.
 - (vii) "Disposal Fees – Garbage" means the actual Disposal Costs paid by Company to SWS for Solid Waste delivered by Company to the Transfer Station during the Comparison Year.
 - (viii) "Disposal Fees – Green Waste" means the actual Processing Costs paid by Company to PRS or any other Authorized Facility for Green Waste and/or Mixed Organic Waste delivered by Company to the PRS Facility or such Authorized Facility (including pursuant to Section 5.11(d) above), respectively, during the Comparison Year.
 - (ix) "Fuel Costs" means Company's actual costs for diesel and other fuels used in performing services under this Agreement during the Comparison Year.
 - (x) "Fuel Index" means the California No.2 Diesel Retail Sales by all Sellers (Dollars Per Gallon) published by the U. S. Energy Information Administration.
 - (xi) "Landfill Closure Costs" means the total amount of landfill closure fees, including any fees or charges adopted to replace or supplement such fees, paid by Company to City in accordance with Section 4 and 6.6 during the Comparison Year.
 - (xii) "Recycle Credit" means the product of (A) the average monthly weighted average price (AMWAP) per ton PRS is required to pay to Company under the Recycling Agreement for Source Separated Recyclables collected by Company curbside from Residential Customers during the Comparison Year, but not less than \$5.00, times (B) the total tons of such Recyclables so delivered by Company to PRS and accepted by PRS during the Comparison Year; provided, however, that if the amount of Recyclables rejected by PRS under Section 2 of the Recycling Agreement averages over any consecutive six month period more than 5% of the total Recyclables delivered to PRS ("the Acceptable Rejection Rate"), the credit shall include AMWAP, but not less than \$5.00, times the tons of Recyclables rejected by PRS for that same six month period in excess of the Acceptable Rejection Rate .
 - (xiii) "Total Costs" means all of Company's costs to provide Collection services under this Agreement, including, without limitation, labor costs, vehicle and vehicle-related costs, maintenance, insurance, and transportation costs, Fuel Costs and Pass-Through Costs.
- (c) Rules. For purposes of Rate adjustments pursuant to this Section 6.2 and the Calculation, the following rules shall apply.
- (i) "CPI Change" shall be calculated as one hundred percent (100%) of the percentage increase or decrease, if any, in the CPI during the Comparison Year, using the CPI published for June of such Year as compared with the CPI published for June of the Base

Year.

(ii) "Fuel Index Change" shall be calculated as one hundred percent (100%) of the percentage increase or decrease, if any, in the Fuel Index from June of the Base Year through June of the Comparison Year; provided, however, that, notwithstanding Section 6.2(b)(iii) above, "Base Year" for purposes of the Fuel Index Change shall mean the year ended June 30, 2010; and, provided, further, that the Fuel Index Change adjustment (i.e., Fuel Index Change multiplied by Base Fuel Cost) for any Rate Adjustment Date shall be calculated after removal of such adjustment for the prior Rate Adjustment Date.

(iii) Each adjustment element in the first part of the Calculation will be grossed up for the corresponding increase or decrease in Franchise Fees and Billing Fees (where applicable) resulting from such adjustment, other than the CPI adjustment.

(iv) Rate adjustments for changes in Commercial Oversight Fees or Landfill Closure Costs that take effect on a date other than January 1st, as well as changes in other Pass-Through Costs, will be determined under Section 6.3 below and not under this Section 6.2.

(d) Procedure. The procedure for Rate adjustments under this Section 6.2 shall be as follows:

(i) Not later than August 15th of each year, Company shall file with the City Manager a written notice of intention to adjust each of the then current Rates effective as of January 1st of the next year in accordance with Section 6.2(a) through (c) above.

(ii) Within sixty (60) days of the filing of the notice of intention, the City Manager shall review the notice and either confirm that the proposed Rates are within the limit of Section 6.2(a) through (c) above or establish by mutual agreement with Company any necessary changes to the proposed Rates to make such confirmation.

(iii) Not later than October 20th, the City Manager shall inform the City Council in writing of his or her determination regarding the proposed new Rates and the City Council shall be entitled to review and confirm that the proposed Rates are within the limit of Section 6.2 above or establish by mutual agreement with Company any necessary changes to the proposed Rates to make such confirmation, not later than November 20th. Any new Rates shall become effective on the following January 1st, provided that the Company and the City shall give the respective Customers that each bills written notice of the new Rates not later than December 1st.

(iv) In the event that the CPI or the Fuel Index described in Section 6.2(b) above shall be discontinued or materially modified during the term of this Agreement, the parties shall together select a replacement index and/or otherwise change Section 6.2(b) above so as to replicate, as nearly as possible, the mutual intention of the parties to rely on the results of the relevant index described in Section 6.2(b) as in effect on the date hereof.

6.3 Modification Based on Changes in Pass-Through Costs. In addition to adjustments under Section 6.2 above, each Rate shall be adjusted to reflect changes in Pass-Through Costs that are not the subject of Rate adjustments pursuant to Section 6.2 above, as follows. Using the section of the Calculation entitled "Revenue Base," each Rate shall be increased by an amount equal to the increase in applicable Pass-Through Costs, and decreased by an amount equal to the decrease in applicable Pass-Through Costs, in each case so as to cause all the Rates to compensate for such change in Pass-Through Costs as of the date such change

becomes effective and either payable by or a benefit to Company, and taking into account the increase or decrease in Franchise Fees and/or Billing Fees payable in respect of such change.

6.4 Five Year Review. Once every five (5) years (beginning no later than April 2, 2016 for purposes of adjusting the Rates effective January 1, 2017), City shall conduct a review for the purpose of determining whether or not the automatic adjustments provided in Sections 6.2 and 6.5 have adequately adjusted the rates to cover the actual increase or decrease in the Company's reasonable operating costs or have exceeded those costs and whether the Rates remain fair to the ratepayer and the Company. Depending on the results of that review the City may increase or decrease the rates. City shall complete each such review and adjustment, if any, at least three months (3) prior to the beginning of such year (by September 30, 2016 in the case of the first such review), and Company shall cooperate with such review. In conducting each such review, City shall consider the following information: financial records of Company (including operating expenses and revenues and Disposal, Processing, Regulatory and other costs of Company, and Company revenues), the factors described in Section 6.5 below, and rates charged for comparable services in similar communities. Increases or decreases in the Rates pursuant to this Section 6.4 shall be subject to the notice and public hearing requirements of Proposition 218. The City may conduct such investigation as it deems necessary to perform this review and Company shall cooperate with such investigation, which may include the City's inspection and copying of Company records and Review and/or Audit of Company's financial records by a City retained CPA, the costs of which shall be reimbursed to City from Base Revenue but treated as a pass-through cost for rate setting purposes.

6.5 Modification Based on Extraordinary Items. In addition to adjustments under Sections 6.2, 6.3 and 6.4 above, Company may request an increase in the Rates if Company's costs increase or its revenues decrease solely as the result of extraordinary circumstances beyond its control that could not have been reasonably anticipated by Company (such as a Change in Law) and if the increase in costs or decrease in revenues unavoidably adversely affects Company's opportunity to operate at a reasonable profit. Company shall have the burden of producing evidence satisfactory to City demonstrating its need for a rate increase prior to the regular Five Year Review pursuant to Section 6.4 above, including, but not limited to, reviewed or audited financial statements of Company, if requested by City. The City Council shall consider the request in good faith. Any such increase shall only be approved through the notice and hearing requirements in Proposition 218.

6.6 Billing. Company shall bill directly for all Solid Waste, Recyclables, Green Waste and Mixed Organic Waste Collection services provided herein to all Commercial and Institutional Customers, and to those Multi-Family Residential Customers assigned by City to Company for billing. Company and City shall regularly exchange billing lists to avoid double billing and to insure that Company is following the City's direction regarding its direct billing of Multi-Family Residential Customers. City shall bill all Residential Customers (except those currently billed by Company as approved by City) for all Solid Waste, Recyclables, Green Waste and Mixed Organic Waste Collection services hereunder. Each Commercial or Institutional Customer will be billed for one (1) month of service in advance upon commencement of service, and thereafter for one (1) month of service in arrears. Interest of one percent (1%) per month or

the highest rate permitted under applicable law, whichever is less, shall be applied to any past due amounts from all Customers until paid in full. Amounts shall be past due if not paid within thirty (30) days of billing. Company shall have the right to refuse service to any Customer that is more than sixty (60) days delinquent on his, her or its account; provided, however, that if the City is forced to take enforcement action against a Customer who has been refused service, Company shall pay the City's costs to take such enforcement action as is necessary to protect public health and safety. Company shall pay City three percent (3%) of the amount billed by City to Residential Customers as a billing fee. City shall pay to Company all amounts billed to Residential Customers, less Billing Fees, Franchise Fees, commercial oversight fees and landfill closure costs (in accordance with Section 4 above), and a delinquency allowance equal to one-half percent (0.5%) of such billings, monthly within thirty (30) days of the end of the calendar month for which the Residential Customers are billed. When permitted by the City's accounting software, the City will reconcile the amount held by City as a delinquency allowance at the end of each calendar quarter and shall pay Company, within thirty (30) days after the end of such quarter, the portion of such amount that exceeds the actual delinquent billings for such quarter.

6.7 Proposition 218. Notwithstanding any other provision in this Agreement, in the event that the Rates or any modifications thereof are invalidated by a final non-appealable judgment in a court action challenging them as in violation of Proposition 218, and Company's operating costs exceed its revenue for a continuous period of six months since the date of the last Rate adjustment, Company shall have the right, exercisable by written notice to City within ninety (90) days after the entry of such judgment, to terminate this Agreement effective One Hundred Twenty (120) days after City's receipt of such notice.

7. Provisions Applicable to Equipment and Personnel.

7.1 Company shall use in connection with transportation of Solid Waste modern motor dump trucks with water tight bodies, sufficient in number and capacity to efficiently perform the work required by this Agreement and to comply with all applicable legal requirements. Company shall keep the outside of the truck bodies free from dirt and filth, and shall clean the inside of the trucks in a sanitary manner on a regular basis. Suitable measures shall be taken to prevent refuse from falling into public streets or places. Company shall keep all trucks freshly painted in a uniform manner, and the firm name or logo, telephone number, and truck number of each truck shall appear in a conspicuous manner. Company shall keep all trucks in good maintenance and repair, regularly inspect same, keep accurate records of all vehicle maintenance, and replace as needed.

7.2 Company shall not litter premises in the process of making collections nor allow refuse to blow or fall from any vehicle used for collections. Company shall clean up any and all spills, including oil and debris on the streets, resulting from its operations. Should Company fail to promptly clean up such spills resulting from its operations after notice from City, Company shall be liable to City for all reasonable costs incurred by City in doing so.

7.3 Company shall provide suitable operational and safety training for all of its employees who utilize or operate vehicles or equipment for Collection of Solid Waste or who are otherwise directly involved in such Collection. Company shall use its best efforts to assure that

all employees present a neat appearance, conduct themselves in a courteous manner, and perform the work as quietly as possible. Company shall also designate one or more qualified employees as supervisors of field operations, who will devote a substantial portion of their time in field checking Collection operations, including responding to complaints.

7.4 City officials shall at all times have access on 24 hours' prior written notice to inspect Company's work during operations and Company's facilities for purposes of ascertaining full knowledge respecting the conduct of Company's operations.

8. Records and Reports.

8.1 Company shall keep and maintain accurate books and records in accordance with the most recently adopted Accounting Standards Codification of generally accepted accounting principles by the Financial Accounting Standards Board clearly showing its revenues and expenses in connection with the operations provided for in this Agreement. Company shall maintain records accounting by category for the tonnage of Solid Waste, Green Waste, Mixed Organic Waste and Source Separated Recyclables Collected pursuant to this Agreement on a monthly, quarterly and annual basis.

8.2 Every three (3) months after the Effective Date through the date which applies for purposes of measuring compliance with the diversion requirements of AB 939, Company shall supply City with a written report setting forth Company's best estimate of the diversion rate as of the end of the most recent month. Company shall also supply City with such related information as City may reasonably request and as Company possesses or is required by this Agreement to possess concerning such estimate.

8.3 Every three (3) months after the Effective Date, Company shall provide City with a written financial report on the amounts billed by Company to each Multi-Family Residential, Commercial and Institutional Customer and the amounts paid by such Customer.

8.4 Not later than March 31 each year, or when otherwise requested by City, Company shall provide City with a complete customer list for all Customers with the service type, billing rate, and name and address of each Customer.

9. Hold Harmless and Insurance.

9.1 Company shall indemnify and hold harmless City, its City Council, boards, commissions, officers, agents, representatives and employees from any and all actions, claims or damages brought for or on account of injuries to or death of any person or damage to property of all kinds resulting from or arising out of the operations of Company, its officers, agents, employees or servants pursuant to this Agreement. The duty of Company to indemnify and hold harmless shall include the duty to defend as set forth in California Civil Code Section 2778.

9.2 Company shall have in effect during the term of this Agreement, workers' compensation and employer liability insurance providing full statutory coverage.

9.3 Company shall take out and maintain during the term of this Agreement liability insurance for the following types and minimum amounts:

(a) General liability, including comprehensive form, premises operations, products/completed operations, hazard, contractual insurance, broad form property damage, independent contractors and personal liability, with limits for bodily and property damage combined of \$500,000 each occurrence and \$500,000 aggregate.

(b) Automobile liability, including comprehensive form, owned, hired and non-owned, with a limit of \$1,000,000 for bodily injury and property damage combined.

(c) Excess liability, umbrella form with the same scope of coverage and exclusions as the underlying policies, with a limit for bodily injury and property damage combined of \$5,000,000 each occurrence and \$5,000,000 aggregate.

(d) Pollution and remediation liability with limits in an amount of not less than one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) annual aggregate insuring against loss, the cost of remediation and legal defense as a result of pollution conditions arising out of the collision, upset or overturn of Company vehicles in conjunction with this Agreement.

Insurance certificates and policy endorsements evidencing the required coverage shall be filed with City and shall be subject to approval by the City Attorney. City, its City Council, boards, commissions, officers, agents and employees shall be named as additional insureds on any such policies of insurance which shall also contain a provision that the insurance afforded thereby shall be primary. No such policy shall be cancelled or modified except upon thirty (30) days' prior written notice to City. Insurance is to be placed with admitted California insurers with an A.M. Best's rating of no less than A- for financial strength, AA for long-term credit rating and AMB-1 for short-term credit rating.

9.4 Company shall post a \$300,000 performance bond or financial instrument reasonably acceptable to the City Manager as security for Company's faithful performance of each and every term, covenant and condition of this Agreement to be performed by Company, provided that the cost of such bond or other instrument shall be included in Company's Collection Costs for rate making purposes.

10. Remedies upon Default.

10.1 Company shall be deemed in default in the event Company defaults in the performance of any of the duties to be performed by it under the terms of this Agreement and fails to cure the default as further provided in this Section 10.1. City shall give Company written notice, either by mail or by personal service, setting forth the default. Company shall correct such default within thirty (30) days after receipt of such notice (within seven (7) days if City determines that the public health or safety is at risk) unless the default cannot, by its nature, be cured within said period, in which case the cure period shall be extended for such additional time as is reasonably necessary to effect a cure, provided that Company shall commence efforts to effect a cure as soon as practicable and shall diligently pursue the cure to completion.

10.2 In the event Company's default described in Section 10.1 is of a material provision of this Agreement and is not cured as set forth in Section 10.1 or if Company has

committed Multiple Breaches (defined to mean three or more defaults of material provisions of this Agreement within an eighteen (18) month period, whether cured or not) ("Material Default") City shall have the following remedies:

10.2.1 Liquidated Damages. The parties acknowledge that City will incur damages as a result of a Material Default, and that such Material Default may not warrant termination of this Agreement. The parties agree that as of the time of the execution of this Agreement, it is impractical, if not impossible, to reasonably ascertain the extent of damages which shall be incurred by City as a result of a Material Default. The factors relating to the impracticability of ascertaining damages include, but are not limited to, the fact that: (i) substantial damage results to members of the public who are denied services or denied quality or reliable service; (ii) such breaches cause inconvenience, anxiety, frustration, and deprivation of the benefits of the Agreement to individual members of the general public for whose benefit this Agreement exists, in subjective ways and in varying degrees of intensity which are incapable of measurement in precise monetary terms; (iii) that exclusive services might be available at substantially lower costs than alternative services and the monetary loss resulting from denial of services or denial of quality or reliable services is impossible to calculate in precise monetary terms; and (iv) the termination of this Agreement for such breaches, and other remedies are, at best, a means of future correction and not remedies which make the public whole for past breaches. Liquidated damages shall be the City's exclusive damages remedy for any individual Material Default which does not result in termination of this Agreement by City. The amount of liquidated damages is \$1,000 for each day the Material Default continues after Company fails to cure until it is either cured or the City terminates this Agreement.

10.2.2 Franchise Termination. Without further notice and without suit or other proceedings, City may cancel and annul the rights and privileges of this Agreement upon a Material Default. In the event of termination of this Agreement for Material Default, City shall have the right forthwith to grant a franchise to another scavenger service or to take possession of trucks and other equipment of Company used to perform work under this Agreement. City shall have the right to retain possession of the trucks and equipment until other suitable trucks and equipment can be purchased or otherwise acquired by City for the purpose and City shall pay Company the reasonable rental value of such trucks and equipment, and keep them in good maintenance and repair, during the time the same are used by City. City shall also have access to Company's records for the purpose of billing service accounts during the period City is providing the services described in this Agreement, and shall retain all fees collected for such services.

10.2.3 Other Remedies. Upon termination of this Agreement based on a Material Default, City shall have all other remedies in law or equity for such Material Default.

10.3 If a dispute arises between City and Company regarding fees or any other term or provision of this Agreement, the parties agree to meet and confer in good faith to resolve the dispute. Either party may request to meet and confer by written notice to the other party. Alternatively, the parties may agree to participate in non-binding mediation. If the dispute is not resolved within thirty (30) days after the written request to meet and confer has been given or after the parties have agreed to non-binding mediation, the matter, other than an action seeking

specific performance or other equitable relief, damages of Twenty Five Thousand Dollars (\$25,000) or less, or indemnification or insurance coverage pursuant to Section 9, shall be submitted to non-binding arbitration in accordance with Title 9 of the California Code of Civil Procedure, commencing with Section 1280, before a single neutral arbitrator ("Arbitrator") in Mendocino County. The Arbitrator shall be an attorney with at least ten (10) years' experience or a retired judge (or a person having comparable qualifications) and shall be mutually agreed upon by the parties. If the parties are unable to agree on an Arbitrator, the Arbitrator shall be appointed by the superior court in accordance with Cal. Code Civ. Proc. §1281.6. The fees and expenses of the Arbitrator shall be borne equally by the parties.

In the event such non-binding arbitration does not resolve the matter and in any other dispute that results in any court action, the parties waive any right to a jury trial and agree that any such action shall be filed in the federal or state courts in or for Mendocino County, each party hereby consents to the jurisdiction of and venue in such courts, the matter shall be governed by the internal laws of the State of California (irrespective of choice of law principles), and the prevailing party shall be entitled to recover its reasonable attorneys' fees, costs and disbursements incurred in such action from the non-prevailing party.

10.4 If Company shall at any time during the term of this Agreement or any extension thereof, become insolvent, or if proceedings in bankruptcy shall be instituted by or against Company, or if Company shall be adjudged bankrupt or insolvent by any Court, or if a receiver or trustee in bankruptcy or a receiver of any property by Company shall be appointed in any suit or proceeding brought by or against Company, or if Company shall make an assignment for the benefit of creditors, then and in each and every such case, and provided that such proceedings, adjudication, appointment or assignment, as the case may be, continue in effect for ninety (90) days without being vacated, removed or withdrawn, this Agreement shall immediately cease and come to an end, and the rights and privileges granted shall immediately be cancelled and annulled without notice or action required on behalf of City.

10.5 Notwithstanding any other provision herein, no default, delay or failure to perform on the part of either party shall be considered a breach hereunder if such default, delay or failure to perform is due to causes beyond such party's control, including, but not limited to, riots, civil disturbances, actions or inactions of governmental authorities, epidemic, war, embargoes, severe weather, fire, earthquake, acts of God, defaults by the other party or defaults by carriers. In the event of any such default, delay or failure to perform, any dates or times by which the affected party otherwise is scheduled to perform shall be extended for a period of time equal in duration to the additional time required because of the excused default, delay or failure to perform.

11. Assignment.

11.1 Company shall not directly or indirectly, voluntarily or involuntarily assign, mortgage, pledge or encumber any interest in all or a part of this Agreement without the prior written consent of City. The City Council shall have the right to determine in its sole discretion whether to approve, conditionally approve or deny any request by Company for approval under this Section. Any action requiring City Council approval under this Section that occurs without

such approval shall give City the right to terminate this Agreement without prior notice to Company or its successors or assigns. For purposes of this Section, any transaction involving the transfer, sale or exchange of stock which results in a change in majority control of Company from its owners as of the date hereof (excluding transfers between such owners and transfers by any such owners to revocable living trusts for the benefit of their families) shall be an assignment subject to City review and approval.

11.2 Any written agreement between Company and an Authorized Facility for the disposal of Solid Waste generated in City entered into after the date of this Agreement shall provide that: (a) City is a third party beneficiary with the same right as a party to enforce such agreement; (b) any assignment of such agreement shall require City approval; (c) in the event such agreement is terminated during its term or any extended term by Company or by the Authorized Facility operator based on an uncured default by Company under such agreement, such agreement may be assumed by City without change, including as to disposal rates and terms; and (d) if terminated based on an uncured default by Company, any payments due but unpaid under such agreement on the date of termination shall continue to be an obligation of Company and the obligation to make any such payments shall not be assumed by City upon its assumption of such agreement.

12. Waiver. The waiver by either party of any breach or violation of any term or condition of this Agreement or of any provision of law by the other party must be in writing signed by the party to be charged, and shall not be deemed to be a waiver of the term, condition or provision of law, or of any subsequent breach or violation of the same or any other term, condition or provision of law. The acceptance by City of any franchise fee or other fee or other monies which may become due hereunder to City shall not be deemed to be a waiver of any preceding breach or violation by Company.

13. Administration. The administration and enforcement of this Agreement shall be the responsibility of the City Manager or a designated representative of that office. This section is not intended to indicate or suggest the City Manager has the authority to grant, amend, or revoke the franchise referenced herein. Nothing contained in this Agreement shall prohibit the City Manager from seeking approval from the City Council for any decision the City Manager is authorized to make under the terms of this Agreement.

14. Independent Contractor. Company, its employees and agents, are independent contractors and not employees or agents of City.

15. Notices. Whenever a notice or document is required or permitted to be served or given hereunder, it shall be deemed given or served when received if delivered by fax or email (with acknowledgment of receipt), certified U.S. Mail, overnight courier (such as UPS or Federal Express), or 48 hours after deposit in the U.S. Mail with first class postage affixed. Any such document or notice shall be addressed as follows:

City: City Manager
Ukiah Civic Center
300 Seminary Avenue

Ukiah, California 95482

FAX:

Email:

Company:

Ukiah Waste Solutions, Inc.

Attn: David M. Carroll, President

P. O. Box 60

Ukiah, California 95482

FAX:

Email:

or to such other person or address as may be specified from time to time in writing by either party in accordance with this Section.

16. Amendments. This Agreement may be amended from time to time only by written agreement between the parties signed by an authorized representative of each party. Either party may at any time request that the service or other provisions in this Agreement be modified by delivering written notice of its requested modifications to the other party. Within thirty (30) days after receipt of any such request, the parties shall meet and negotiate in good faith on adopting such requested modifications, including, without limitation, any change to the Rates necessitated by such modifications, provided that nothing herein shall obligate either party to agree on any such requested modifications.

17. Successors and Assigns. This Agreement shall be binding upon, and shall inure to the benefit of, the permitted successors and assigns of the parties.

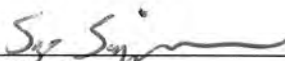
18. Integration; Severability. This Agreement, including the Exhibits hereto, constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements between the parties, whether written or oral, relating to such subject matter, including the Prior Agreement. If a court finds any provision of this Agreement invalid or unenforceable as applied to any circumstance, the remainder of this Agreement and the application of such provision to other persons or circumstances shall remain in effect. The parties further agree to replace such void or unenforceable provision with a valid and enforceable provision which will achieve, to the extent possible, the economic, business and other purposes of the void or unenforceable provision.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

Ukiah Waste Solutions, Inc.

By: 
President

City of Ukiah

By: 
City Manager

ATTEST:


City Clerk

APPROVED AS TO FORM:

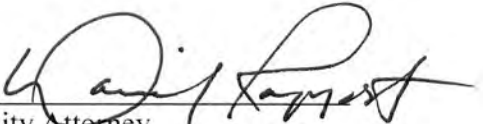

City Attorney

EXHIBIT A
RESERVED

EXHIBIT B
RECYCLABLE MATERIALS AGREEMENT

EXHIBIT B

RECYCLABLE MATERIALS AGREEMENT

THIS RECYCLABLE MATERIALS AGREEMENT (the "Agreement") is entered into as of _____, 2011 by and between Pacific Recycling Solutions, Inc. ("Buyer") and Ukiah Waste Solutions, Inc. ("Seller"). Seller and Buyer shall collectively be referred to herein as the "Parties."

WHEREAS, Seller is in the business of collecting and transporting solid waste and recyclable materials; and

WHEREAS, Buyer wishes to purchase and Seller wishes to sell recyclable materials collected by Seller.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, Seller and Buyer hereby agree as follows:

1. Recyclable Materials. During the term of this Agreement, Buyer agrees to purchase and Seller agrees to sell all of the type(s) of recyclable materials identified in Exhibit A attached hereto and incorporated herein collected by Seller curbside from single-family residences within the California City of Ukiah ("Recyclable Materials"). The Recyclable Materials shall meet the standards and specifications set forth in Exhibit A or such other standards and specifications as shall be agreed upon in writing by Seller and Buyer.

2. Delivery. Delivery of the Recyclable Materials shall be made from Seller to Buyer's facility located at 4260 North State Street, Ukiah, California and/or 3501 Taylor Drive, Ukiah, California, commonly known as the Materials Recycling Facility (the "MRF"), in accordance with a schedule as agreed upon in advance by Buyer and Seller.

3. Pricing; Payment. Buyer shall pay Seller the price per ton, as calculated each year, determined in Exhibit B attached hereto and incorporated herein, but not less than \$5.00, for each ton of Recyclable Materials that is received by Buyer in accordance with Section 2. The Recyclable Materials shall be weighed at Seller's or Buyer's facility, as agreed by the parties, and proof of weight shall be provided to Seller. Seller shall, on a monthly basis, transmit an invoice to Buyer showing the types and number of tons of Recyclable Materials received by Buyer hereunder during the preceding month and the total amount due therefor. Buyer shall remit to Seller the full amount due no later than the fifteenth (15th) day of the month following the month in which Recyclable Materials were received by Buyer. Within thirty (30) days after the end of each year of the term of this Agreement, the Parties shall conduct a true-up of the amounts paid and the amounts owed hereunder, with UWS returning any overpayment to PRS and PRS paying any underpayment to UWS. Each late payment shall be subject to a late fee of one and one-half percent (1-1/2%) and shall bear interest at the higher of 10% per annum or the highest rate permitted by applicable law until paid in full.

4. Term; Default; Termination.

4.1 Subject to Section 9 below, the term of this Agreement shall be for a period commencing on January 1, 2012 (the "Effective Date") and ending upon the expiration or termination of Seller's Waste Collection Agreement with the City of Ukiah of even date herewith, including extensions, subject to earlier termination on the terms herein.

4.2 If at any time either Party determines or becomes aware that the other Party is in default under or has breached any of the terms of this Agreement, the non-defaulting Party shall provide

written notice to the other Party as to the nature of such default. If the defaulting Party fails to make any payment due hereunder within five (5) days, and/or fails to cure any default in the performance of any other obligation under this Agreement within thirty (30) days, after receipt of such written notice, the non-defaulting Party shall have the right to terminate this Agreement upon giving written notice; provided, however, that, other than for failure to make any payment hereunder, in the event the defaulting party shows cause why it should be entitled to reasonable additional time to cure a default, the non-defaulting Party shall allow such reasonable additional time to cure.

5. Representations and Warranties. In performing this Agreement, each of the Parties shall fully comply with all applicable federal, state and local laws, ordinances, decisions, orders, rules or regulations. Each of the Parties shall, and shall cause any carrier with which it contracts to, handle and transport the Recyclable Materials in a safe and workmanlike manner and all of the Parties' driver personnel and any carrier with which the Parties contract are, and shall at all times relevant to the performance of this Agreement remain, properly licensed and otherwise fully qualified to perform the services required hereunder. By the commencement date of this Agreement and throughout the term of this Agreement and any extension thereof, each Party shall be duly licensed, permitted and authorized pursuant to all applicable federal, state and local laws to handle and transport the Recyclable Materials and each Party's facility or facilities will have been issued all licenses, permits and authorizations required by all applicable federal, state and local laws to handle Recyclable Materials.

6. Indemnification. Each Party hereto (the "Indemnitor") hereby agrees to indemnify, hold harmless and defend the other Party, and its owners, officers, directors, employees and agents (collectively, the "Indemnitees"), from and against any and all liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, judgments and costs and expenses incidental thereto, including reasonable attorneys' fees (collectively, "Damages"), which any or all of the Indemnitees may hereafter suffer, incur, be responsible for or pay out as a result of personal injuries, property damage, or contamination of or adverse effects on the environment, to the extent directly or indirectly caused by, or arising from or in connection with the breach of any representations and warranties set forth in this Agreement of, the Indemnitor, or any negligent or intentional actions or omissions or willful misconduct of the Indemnitor, its employees, officers, owners, directors or agents in the performance of this Agreement or the transportation, handling or disposition of the Recyclable Materials by the Indemnitor, its employees or subcontractors. Such indemnity shall be limited to exclude Damages to the extent they arise as a result of any negligent or intentional actions or omissions or willful misconduct of the Indemnitees or their employees, officers, owners, directors or agents. If any claims indemnified against under this paragraph have the potential for coverage under any insurance, then the indemnities set forth in this Agreement shall apply only to the extent the amount of any indemnified claim exceeds all amounts collected under any insurance covering such claim. Before pursuing recovery under this indemnity, the Indemnitees shall exhaust all recovery available for such claim from insurance.

7. Insurance. Each of the Parties shall obtain and maintain during the term of this Agreement commercial general liability insurance which conforms to the industry standard for the services being performed by each hereunder and workers' compensation insurance that complies with applicable state statutory requirements.

8. Assignment. This Agreement shall be binding upon the successors and assigns of the Parties hereto; provided, that no assignment of this Agreement shall be binding upon the other Party without the other Party's consent, which consent shall not be unreasonably withheld or delayed; and provided further, that no assignment shall be valid and binding which endeavors to relieve the assigning Party of any obligations to make payments hereunder which accrued prior to the date of assignment or in which the assignee does not affirmatively agree, in writing, to assume all obligations of the assignor under this Agreement. No assignment can be made without the prior written approval of the City of Ukiah.

exercising its rights in accordance with Section 11 of the Waste Collection Agreement between UWS and the City of Ukiah.

9. Force Majeure. Except for the obligation to pay for Recyclable Materials received by Buyer, the performance of this Agreement may be suspended to the extent that and for so long as either Party's obligations hereunder are delayed or hindered by a cause or causes beyond the reasonable control of such Party. Such causes shall include, but not be limited to, acts of God, landslides, lightning, forest fires, storms, floods, freezing, earthquakes, civil disturbances, strikes, lockouts or other industrial disturbances, acts of the public enemy, wars, blockades, public riots, breakage, explosions, or other similar causes.

10. General Provisions.

(a) No waiver by either Party of any one or more defaults or breaches by the other in the performance of this Agreement shall operate or be construed as a waiver of any future defaults or breaches, whether of a like or different character. If any provision of this Agreement is declared invalid or unenforceable, then such portion shall be deemed to be severable from this Agreement and shall not affect the remainder hereof.

(b) This Agreement and all Exhibits hereto represent the entire understanding between the Parties and no representations, statements or agreements, unless agreed to by the parties in writing, shall modify, change, amend or otherwise affect the obligations undertaken in this Agreement. This Agreement supersedes, as of the Effective Date, the prior Recyclable Materials Agreement between the Parties and Solid Wastes Systems, Inc. dated November 1, 2007, and may only be amended by a written agreement executed by Seller and Buyer.

(c) All notices under this Agreement shall be in writing and shall be effective if delivered personally or sent by certified mail, postage prepaid, or by overnight carrier or confirmed facsimile to the addresses set forth on the signature page hereto or to such other address as either Party shall specify by written notice so given. Any notice sent by mail shall be deemed given and received three (3) business days after the date deposited in the mail. Any notice given by personal delivery or sent by overnight carrier or confirmed facsimile shall be deemed given upon receipt.

(d) The validity, interpretation and performance of this Agreement shall be governed and construed in accordance with the internal laws of the state of California, irrespective of choice of law principles, and applicable federal laws and regulations.

(e) The City of Ukiah shall be considered a third party beneficiary of this Agreement with all of the rights of a party to enforce the provisions of this Agreement.

EXECUTED and effective as of the Effective Date.

Pacific Recycling Solutions, Inc.

Ukiah Waste Solutions, Inc.

By: _____

By: _____

Attachment 3

Its: _____

Address for receipt of notices:

Its: _____

Address for receipt of notices:

EXHIBIT A

TYPES, STANDARDS & SPECIFICATIONS OF RECYCLABLE MATERIALS

Material Specifications

During the course of operations, any changes to the material specifications for any inbound commodity will be agreed to by both Parties prior to introduction of the new commodity.

Residential Materials

Materials collected through curbside recycling include: glass bottles and jars, tin and aluminum cans, aluminum foil, plastic food and beverage containers (#1-#7) and milk and juice cartons, newspaper, OCC, magazines, junk mail, chipboard, white and office paper, and telephone books. Inbound materials may not contain more than 5% reject material.

Commercial Materials

Clean Corrugated Containers

Consists of baled or loose corrugated containers having liners of either test liner, jute or kraft.

Prohibitive materials.....1%

Total Outthrows may not exceed5%

Mixed Office Paper

Consists of office fiber waste including envelopes, files, file folders, white ledger, color ledger, CPO, copy paper (coated or uncoated), brochures, forms and associated staples, clips, bindings and bands.

- Prohibitives include glass, food, shredded paper, restroom waste and hospital waste.
- Total outthrows may not exceed 5%.

EXHIBIT B
Pricing Schedule

(a) **Annual Calculation of Tonnage Payment.** The price per ton of Recyclables delivered by Seller to Buyer during any calendar year shall be calculated in accordance with Table 1 below.

Table 1

Tier	CMV*	Tier CMV Cap	Base Fee and % of Tier Differences
Tier 1	\$167.69 and below	\$ 167.69	\$5.00
Tier 2	Above \$167.69 to \$200	\$ 200	Plus of CMV above \$167.69 up to \$200 5.00%
Tier 3	Above \$200 to \$280	\$ 280	Plus of CMV above \$200 up to \$280 10.00%
Tier 4	Above \$280		Plus of CMV above \$280 15.00%

*CMV means weighted average "Composite Market Value" computed according to (b) below.

By way of example, using the tiers forth in Table 1, Buyer shall pay for each ton of Recyclables delivered as follows:

If the CMV is \$167.69 or below, Buyer shall pay \$5.00 per ton delivered;

If the CMV is above \$167.69 but not above \$200, Buyer shall pay \$5.00 plus 5% of the excess of the CMV over \$167.69 per ton delivered;

If the CMV is above \$200 but not above \$280, Buyer shall pay \$5.00 plus \$1.62 (\$200 minus \$167.69 times .05) plus 10% of the excess of the CMV over \$200 per ton delivered; and

If the CMV is greater than \$280, Buyer shall pay \$5.00 plus \$1.62 (\$200 minus \$167.69 times .05) plus \$8.00 (\$280 minus \$200 times .1), plus 15% of the excess of the CMV over \$280 per ton delivered.

1.1 (b) **Annual Commodity Material Value (CMV).**

The CMV for each calendar year during the term of the Agreement (commencing with 2012) shall equal the CMV calculated by the following per ton weighted profile, with each category of Commodity being multiplied by the monthly annual average actual market price, using June to June values preceding that year, for such Commodity, including any California Redemption Value, for such year, FOB at the PRS Facility. The Composition percentages and/or the commodity categories in the first two columns below shall be reviewed every five (5) years after the Effective Date (beginning January 1, 2017) and may be revised by the mutual agreement of the parties to reflect actual curbside collections.

**Per Ton Weighted Profile
Composite Market Value Grid**

Composition	Commodity	Scrap Value/Ton	CRV/Ton	Weighted Value/Ton
16.75%	OCC #11	\$140.50		\$23.53
23.07%	ONP #7	\$155.00		\$35.76
21.01%	Mixed Paper	\$155.00		\$32.57
0.53%	HDPE Color	\$477.50	\$120.00	\$3.17
0.51%	HDPE Natural	\$587.50	\$120.00	\$3.61
1.94%	PET	\$626.50	\$1,160.00	\$34.66
1.25%	#3 - #7 MRP	\$11.50		\$0.14
1.82%	Tin	\$150.00		\$2.73
24.41%	Glass 3 Mix	(\$40.00)	\$72.00	\$7.81
0.71%	Alum Cans	\$1,479.50	\$2,700.00	\$29.67
8.00%	Residuals	(\$74.50)		(\$5.96)
	Total Composite Market Value Per Ton			\$167.69

1.2

EXHIBIT C
CURBSIDE RATE CALCULATION

Ukiah Waste Solutions Curbside Rate Components
Annual Adjustment Calculations
Effective Date January, 2012

		Index	Increase / Decrease Allowed	
TOTAL COSTS	<u>\$2,819,380.47</u>			
Less: Fuel Cost	\$200,641.15	Fuel	\$ 71,869.66	
Less Disposal Fees - Garbage	\$693,250.45	SWS TS Gate	\$ 39,099.33	
Less Disposal Fees - Green Waste	\$72,000.00	Negotiated	\$ -	
Less City Landfill Closure Costs	\$60,000.00	Set by City	\$ -	
Less City Commercial Oversight fee	\$9,999.96	Set by City	\$ -	
Collection Costs before Recycle Credit	<u>\$1,783,488.91</u>			
Recycle Credit	-\$16,056.55			
Collection COSTS Subject to CPI adj.	<u>\$1,767,432.36</u>	CPI	\$ 62,920.59	
			<u>\$ 173,889.58</u>	TOTAL

<u>Revenue base</u>	<u>Residential</u>	<u>Commercial</u>	<u>Roll Off</u>	<u>Total Revenue</u>
	<u>29.44%</u>	<u>67.79%</u>	<u>2.77%</u>	<u>100.00%</u>
2010 Revenue	<u>\$806,433.60</u>	<u>\$1,856,695.20</u>	<u>\$75,811.40</u>	<u>\$2,738,940.20</u>
Fuel Cost	\$21,160.78	\$48,719.59	\$1,989.29	\$71,869.66
Disposal Fees - Greenwaste	\$0.00	\$0.00	\$0.00	\$0.00
Landfill closure cost	\$0.00	\$0.00	\$0.00	\$0.00
Commercial Oversight fee	\$0.00	\$0.00	\$0.00	\$0.00
Other Regulatory & Governmental Costs	\$0.00	\$0.00	\$0.00	\$0.00
Disposal Fees - Garbage	\$11,512.12	\$26,504.97	\$1,082.23	\$39,099.32
CPI adjustment	\$18,525.88	\$42,653.12	\$1,741.59	\$62,920.59
Total before franchise and billing fees	\$857,632.38	\$1,974,572.88	\$80,624.51	\$2,912,829.77
Franchise Fee	\$5,976.75	\$13,274.92	\$542.03	\$19,793.70
Billing Fee	\$1,195.35	\$0.00	\$0.00	\$1,195.35
Adjusted revenue	<u>\$864,804.48</u>	<u>\$1,987,847.80</u>	<u>\$81,166.54</u>	<u>\$2,933,818.82</u>
Revenue Increase	<u>\$58,370.88</u>	<u>\$131,152.60</u>	<u>\$5,355.14</u>	<u>\$194,878.62</u>

Rate increase as a percent	7.12%
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Ukiah Waste Solutions Curbside Rate Components
Annual Adjustment Calculations
Effective Date January, 2012

Fuel - June to June (Fuel Index)

June 2010	June 2011	Index Increase (Decrease)
\$3.102	\$4.213	\$1.111
Fuel % Change		35.82%

CPI - June to June (Index)

June 2010	June 2011	Index Increase (Decrease)
217.965	225.722	7.757
CPI % Change		3.56%

Transfer Station Fee (Disposal Fees - Garbage) Jan to Jan

January 2011	January 2012	Increase (Decrease)
\$74.50	\$78.70	4.200
Transfer Station Fee % Change		5.64%

Green Waste Disposal Fee (Disposal - Green Waste) Jan to Jan

January 2011	January 2012	Increase (Decrease)
\$30.00	\$30.00	\$ -
Disposal Fee - Green Waste % Change		0.00%

Landfill Closure Costs Jan to Jan

January 2011	January 2012	Increase (Decrease)
\$60,000.00	\$60,000.00	\$ -
Landfill Closure Costs % Change		0.00%

Commercial Oversight Fee Jan to Jan

January 2011	January 2012	Increase (Decrease)
\$10,000.00	\$10,000.00	\$ -
Commercial Oversight Fee % Change		0.00%

Recycle Credit June to June

	Tons	Value/Ton	Credit
June 2011	3,211.31	\$5.00	\$ 16,056.55
Recycle Credit			\$ 16,056.55

City Franchise Fee	15%	City Billing Fee - Residential Customers	3%
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Calculation to adjust fuel costs					Fuel Exhibit #1
Fuel Revenue Adjustment Worksheet, based on Fuel Index change, June to June					
Base Year Fuel Index and Cost		3.102	\$200,641.15	2010 Actual	
Index Change - New vs. Base Year					
1	Estimated Fuel index adjustment at June 2011	4.213	35.82%	\$71,869.66	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2012 rate revision	→	\$71,869.66	\$0.00	Less: Prior Fuel Cost applied to rate
				\$272,510.81	Fuel Cost Allowed Year 1
Annual adjustment based on Fuel Index change, year to year (using example fuel index changes)					
2	Estimated Fuel index adjustment at June 2012	4.630	49.26%	\$98,835.83	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2013 rate revision	→	\$26,966.17	\$71,869.66	Less: Prior Fuel Cost applied to rate
				\$299,476.98	Fuel Cost Allowed Year 2
3	Estimated Fuel index adjustment at June 2013	3.940	27.01%	\$54,193.17	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2014 rate revision	→	(\$44,642.66)	\$98,835.83	Less: Prior Fuel Cost applied to rate
				\$254,834.32	Fuel Cost Allowed Year 3
4	Estimated Fuel index adjustment at June 2014	4.330	39.59%	\$79,433.83	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2015 rate revision	→	\$25,240.66	\$54,193.17	Less: Prior Fuel Cost applied to rate
				\$280,074.98	Fuel Cost Allowed Year 4
5	Estimated Fuel index adjustment at June 2015	5.410	74.40%	\$149,277.02	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2016 rate revision	→	\$69,843.19	\$79,433.83	Less: Prior Fuel Cost applied to rate
				\$349,918.17	May be RESET during rate review process
6	Estimated Fuel index adjustment at June 20	4.870	57.00%	\$114,365.46	Plus: Base Year Cost X Index Change
	Revenue adjustment for January 2017 rate revision	→	(\$34,911.56)	\$149,277.02	Less: Prior Fuel Cost applied to rate
				\$315,006.61	Fuel Cost Allowed Year 6

Ukiah Waste Solutions Curbside Agreement

		Cost/Rev	Adjustment Period	Adjustment Method	Index Used	Cost Group
1,2	Fuel		Annual	100% of index change	eia Ca #2 Diesel Retail all sellers	Base Rate as Adjusted
	Disposal - Solid Waste		Time to Time	Per TS (SWS) Agreement	N/A	Pass Through
1,2	Operations (all other costs)		Annual	100% of index change	CPI - US Cities CPI-U	Base Rate as Adjusted
3	Recycle Reduction		Annual	Per Recycle Agreement	Rec Market Value Grid - \$5 base	Operating Cost Reduction
1,2	Green Waste Disposal	\$30 / Ton	Annual	Up to CPI (Contractor Choice)	CPI - US Cities CPI-U	Base Rate as Adjusted
1,2,8	Food Waste Disposal (Comm)	Up to \$40 / ton	Annual	Up to CPI (Contractor Choice)	CPI - US Cities CPI-U	Base Rate as Adjusted
4	City Franchise Fee	15%	Time to Time	City Action	N/A	Pass Through
4	City Bill Fee	3%	Time to Time	City Action	N/A	Pass Through
4	City Oversight Fee	\$10,000.00	Time to Time	City Action	N/A	Pass Through
4	City Landfill Closure Fee	\$60,000.00	Time to Time	City Action	N/A	Pass Through
6,9	TOTAL NET COST					

Notes

- 1 Agreement should state mutually agreed upon Index if Index becomes unavailable
- 2 June to June change
- 3 Recycle Agreement with PRS renewable every 5 years with Base Market Value per mixed ton to provide for Rev sharing with City (reduction of operating costs).
- 4 Agreement should state initial rate, subject to change by City action
- 5 Exhibit of calculation to be made part of agreement
- 6 UWS requests new rate by Aug 15, City approves by Oct 15, Pub Notice given by Nov 1, Adjusted Rate goes into effect following January 1.
- 7 Agreement must provide for City Flow Control with language that directs flow to contractor facilities when available.
- 8 FOOD WASTE - UWS will implement a pilot and or full commercial food waste program in place by June 2013 provided proper permits can be obtained
Details still to be worked out.
- 9 Rate change is calcd as follows: % annual adjustment X actual prior year (July to June) actual component cost = new funds needed / collection revenue
= % adjustment per rate. New cost adj dollars (fuel, disposal, city fees etc..) need to be adjusted for city fees - CPI adj does not.

RE-OPENER - the contract should have a mutual re-opener for other new items

EXHIBIT D
FIRST AMENDED AND RESTATED AGREEMENT FOR RECEIPT OF WOOD WASTE,
GREEN WASTE AND MIXED ORGANIC WASTE

EXHIBIT D

**FIRST AMENDED AND RESTATED AGREEMENT FOR RECEIPT OF
WOOD WASTE, GREEN WASTE AND MIXED ORGANIC WASTE**

THIS FIRST AMENDED AND RESTATED AGREEMENT FOR RECEIPT OF WOOD WASTE, GREEN WASTE AND MIXED ORGANIC WASTE (the "Agreement") is entered into as of October __, 2015 ("Effective Date") by and between Pacific Recycling Solutions, Inc., a California corporation ("PRS"), Ukiah Waste Solutions, Inc., a California corporation ("UWS"), and Solid Wastes Systems, Inc., a California corporation ("SWS"), with reference to the following:

A. PRS owns and operates a green waste and wood waste processing facility located at 4260 North State Street and 3501 Taylor Drive and 3515 Taylor Drive, Ukiah, California (the "Facility").

B. The Facility is permitted to receive Green Waste and Wood Waste and currently accepts and processes such materials received from SWS and UWS in accordance with that certain Agreement for Receipt of Wood and Green Waste dated December 12, 2011 (the "Prior Agreement") which provides for disposal of approximately 10,000 tons, but without limit subject to the Facility's permitted capacity, annually of Materials (as defined below) at the Facility.

C. SWS is party with the City of Ukiah (the "City") to that certain First Amended and Restated Transfer Station Agreement of even date herewith for the operation of the Ukiah Valley Transfer Station for the receipt, collection, transportation and disposal of municipal, commercial and industrial solid waste (the "TS Agreement"), and UWS is party with the City to that certain First Amended and Restated Waste Collection Agreement of even date herewith for the collection and disposal of solid waste (the "Collection Agreement"), which agreements have been amended and restated to allow for the recycling of Food Waste and Mixed Organic Waste.

D. Prior to receiving Food Waste or Mixed Organic Waste, the Facility must be fully permitted to receive, commingle, store and handle Food Waste and Mixed Organic Waste.

E. The parties wish to amend and restate the Prior Agreement on the terms herein effective as of the Effective Date, so that this Agreement shall supersede the Prior Agreement as of the Effective Date, when the Prior Agreement shall cease to have any effect (except for periods prior to the Effective Date).

In consideration of the aforementioned recitals and upon the terms and conditions herein set forth, the parties hereto agree as follows:

1. Definitions: The following terms shall have the respective meanings set forth below:

"Green Waste" shall mean green trimmings, grass, weeds, leaves, prunings, branches, dead plants, brush, tree trimmings, dead trees, small wood pieces and other types of organic yard waste, provided that dead trees and branches may not exceed six (6) inches in diameter or four (4) feet in length.

"Food Waste" shall mean food scraps, paper tissues, paper napkins and towels, coffee grounds and filters, pizza boxes, food soiled paper plates and cups, and miscellaneous paper not suitable for recycling that is discarded (as from a Commercial or Residential Property kitchen).

"Mixed Organic Waste" shall mean Green Waste and Food Waste.

“Wood Waste” shall mean unpainted and untreated lumber and boards.

“Materials” shall mean Green Waste, Wood Waste, Food Waste and Mixed Organic Waste.

“Process” shall mean handle, grind or chip and recycle (including by composting or anaerobic digestion) Materials.

“CCC Agreement” shall mean the Agreement for Mixed Organic Waste Services between PRS and Cold Creek Compost, Inc. (“CCC”) dated September 15, 2015, a true and correct copy of which is attached hereto as Exhibit 1.

2. Agreement to Accept Materials: PRS agrees to accept and Process all Materials received at SWS’s transfer station or collected by UWS, as provided for under the TS Agreement, the Collection Agreement, and the CCC Agreement and delivered by SWS or UWS to the Facility, on the terms herein; provided, however, that PRS shall not accept Food Waste or Mixed Organic Waste until it has been fully permitted to receive, commingle, store and handle such Materials. PRS shall receive and process all such Materials in strict compliance with its permits.

3. Processing Rates: As consideration for the receipt and proper Processing by PRS of the Materials delivered by SWS and UWS, SWS and UWS shall each pay PRS the following fees: (a) Thirty Dollars (\$30.00) per ton for Green Waste and/or Wood Waste received by PRS at the Facility from SWS and UWS, respectively (the “GW Processing Rate”); and (b) Thirty Dollars (\$30.00) per ton for Food Waste and/or Mixed Organic Waste received by PRS at the Facility from SWS and UWS, respectively (the “MOW Processing Rate”). The GW Processing Rate and the MOW Processing Rate shall each be adjusted pursuant to Paragraph 4 herein. Fees shall be paid by SWS and UWS within thirty (30) days of receipt from PRS of a written invoice detailing the amount of Materials received by PRS for each month.

4. Adjustment of Processing Rates:

a. **Adjustment based on CPI:** PRS shall have the right, commencing on January 1, 2016 and annually thereafter, to increase or decrease the GW Processing Rate and/or the MOW Processing Rate by a percentage equal to the applicable percentage increase or decrease, if any, in the Consumer Price Index, All Urban Consumers, U.S. City Average, All Items (1982-1984=100), published by the United States Department of Labor, Bureau of Labor Statistics (“Index”), for the preceding year, using the Index published for the month nearest the beginning and the month nearest the end of such year. The “applicable percentage” shall be 100% for the GW Processing Rate, and 90% for the MOW Processing Rate. If PRS forgoes the application of a CPI adjustment in any year, that adjustment will be treated as a zero increase (decrease) in subsequent years, and shall not be retroactively recouped.

b. **Adjustment for Government Taxes:** Notwithstanding any other provision herein, to the extent any government having jurisdiction over the Facility should impose any fee or tax (“Government Tax”) on the Facility associated with the Processing of Materials, the GW Processing Rate and/or the MOW Processing Rate, as the case may be, shall be increased by the amount of such Government Tax, either at the per ton rate of such Tax or if such Tax is not assessed on a per ton basis, in the proportion that the total tonnage of relevant Materials PRS reasonably projects to accept from SWS and UWS during the period for which the Government Tax will pertain compared with other users of the Facility. On each adjustment of the GW Processing Rate and/or the MOW Processing Rate, PRS shall deliver to SWS and UWS written notice stating the adjusted GW Processing Rate and/or MOW Processing Rate.

c. **Five year review:** During calendar year 2016 only, the parties and the City shall review the per ton MOW Processing Rate to determine what increase to that rate is warranted, effective as

of January 1, 2017, to cover the costs incurred by PRS to accommodate the processing of MOW (the "New Program"), including, but not limited to, the capital costs of improvements to the PRS Facility, operational costs, transportation costs, and other costs (not included under Section 4.d) required to accommodate the New Program and shall allow for a reasonable profit to PRS. During calendar year 2016 and every five years thereafter, the parties and the City shall review the GW Processing Rate to determine to what extent, if any, changes in 1) the market value for Green Waste and Wood Waste, 2) attendant costs including, but not limited to, changes in processing, transfer and transportation costs, and 3) the gate fee charged by CCC, pursuant to the CCC Agreement, or any successor processing site agreement, warrant an adjustment in the GW Processing Rate to account for changes in such costs, and the income produced from processed green waste and wood waste. If receiving, transfer and processing costs have become substantially more or less and/or the income produced from processed material has substantially increased or decreased during the five year period since the Effective Date or during the five year period since the last rate review, the GW Processing Rate shall be adjusted to account for these changes starting on January 1, 2017, and every five (5) years thereafter based upon such five year review process, provided that no such adjustment shall reduce the GW Processing rate to less than Thirty Dollars (\$30.00) per ton.

d. **CCC Agreement Adjustments:** In addition to adjustments under subparagraphs a., b. and c. above, any change in the gate fee charged by CCC pursuant to the CCC Agreement for Local Annual Tonnage (as defined in the CCC Agreement), or by any City-approved successor processing site for similar Materials under its agreement with PRS, that are not in either case the subject of adjustments pursuant to subparagraphs a., b. or c. above, shall be treated as an immediate pass through adjustment to the MOW Processing Rate effective as of the date of such change. For example, effective January 1, 2017 and in addition to any adjustments under subparagraphs a., b. and c. above for the period from the Effective Date through January 1, 2017, the MOW Processing Rate will be increased by Ten Dollars (\$10.00) per ton by virtue of the Ten Dollar (\$10.00) per ton increase in the gate fee charged PRS by CCC for Local Annual Tonnage under the CCC Agreement effective on such date.

5. Term of Agreement: This Agreement shall expire as to each of SWS and UWS on the expiration of the TS Agreement or the Collection Agreement, respectively, including extensions, subject to earlier termination, as follows. PRS, on the one hand, and either of SWS or UWS, on the other, shall be entitled to terminate this Agreement in the event of the other party's material breach hereof unless such breach is cured within thirty (30) days after written notice thereof. This Agreement shall terminate automatically as to any party in the event of such party's insolvency, bankruptcy, assignment for the benefit of creditors or other debt reorganization unless, in the case of bankruptcy, the petition is removed or withdrawn within thirty (30) days.

6. Type of Waste: PRS shall only accept, and SWS and UWS shall only be entitled to provide, Materials not containing any prohibited substances or hazardous waste. PRS shall be entitled to inspect the Materials and reject and/or return to SWS or UWS any Materials that are not in conformance with the standards set forth herein. Notice of rejection of non-conforming Materials shall be given in writing prior to the close of business on the day PRS receives such non-conforming Materials at the Facility. Failure to provide written notice in accordance with the terms of the preceding sentence shall forfeit PRS's right to reject such non-conforming Materials. SWS or UWS, as the case may be, shall bear all costs associated with inspecting, testing and rejecting any non-conforming Materials. Each party agrees to comply with all laws applicable to such party in the performance of its duties hereunder.

7. Amount of Waste to be Delivered: SWS and UWS shall deliver an aggregate minimum of 30 tons per day and an aggregate maximum of 75 tons per day of Materials to the Facility.

8. Time of Delivery: SWS and UWS shall be entitled to deliver Materials to the Facility six (6) days a week, Monday thru Saturday during normal operating hours.

9. Attorney's Fees: If any litigation is commenced between PRS and SWS or PRS and UWS to collect any sums due under this Agreement, or concerning any provisions of this Agreement, the

prevailing party in such litigation shall be entitled, in addition to such other relief deemed appropriate by the court, to reasonable attorney's fees and expenses incurred in connection with such litigation.

10. Binding Effect: This Agreement shall be binding upon and inure to the benefit of the successors and assigns of SWS, UWS and PRS.

11. Confidentiality: No party shall disclose the GW Processing Rate or the MOW Processing Rate to any person except with the express written permission of the other parties, which permission shall not be unreasonably withheld. Without limiting the generality of the foregoing, PRS shall agree to allow SWS or UWS to disclose such Processing Rates as may be reasonably requested or required by the City under the TS Agreement or the Collection Agreement.

12. Counterparts: This Agreement may be executed in counterparts, and shall be effective when fully executed by all of the parties. The parties agree to accept signatures transmitted by facsimile.

13. Third Party Beneficiaries: The City of Ukiah shall be deemed a third party beneficiary of this Agreement with all of the rights of a party to enforce the terms of this Agreement.

14. Assignment: No assignment of this Agreement can be made without the prior written approval of the City and may be assumable by the City, exercising its rights under Section 11 of each of the Waste Collection Agreement or the TS Agreement.

IN WITNESS WHEREOF, this Agreement is entered into as of the date first set forth above.

PACIFIC RECYCLING SOLUTIONS, INC.

By: 

SOLID WASTES SYSTEMS, INC.

By: 

UKIAH WASTE SOLUTIONS, INC.

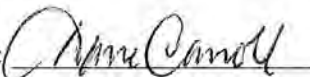
By: 

EXHIBIT 1

CCC AGREEMENT

EXHIBIT 1
AGREEMENT FOR MIXED ORGANIC WASTE SERVICES

This Agreement is made and entered into as of the latest date of execution between Pacific Recycling Solutions, Inc. (hereinafter, "PRS"), a California corporation whose main office is located in Ukiah, CA. and Cold Creek Compost, Inc. (hereinafter, "Cold Creek"), a California corporation, who shall collectively be referred to as the "Parties."

RECITALS

WHEREAS, PRS operates facilities at 4260 North State Street, Ukiah, California and/or 3515 Taylor Drive, Ukiah, California (the "PRS Facilities") where it processes organic materials collected by its Affiliates (as defined below); and

WHEREAS, Cold Creek operates a fully-permitted industrial compost facility at 6000 East Side Potter Valley Road, Ukiah, California (the "Site") which has capacity sufficient to perform its obligations hereunder and is subject to a valid ground lease on the Site which expires December 31, 2022; and

WHEREAS, PRS and Cold Creek wish to enter into this Agreement on the terms and conditions herein; and

NOW, THEREFORE, the Parties agree to the terms and conditions set forth herein.

1. DEFINITIONS

1.1 "Mixed Organic Waste" shall mean Green Material, Food Material, paper tissues, paper napkins and towels, coffee grounds and filters, pizza boxes, food soiled paper plates and cups, and miscellaneous paper not suitable for recycling collected at the curb from residential and commercial customers by the City Franchisee.

1.2 "Additional Mixed Organic Waste" shall mean the following:

1.2.1 Agricultural Materials including, but not limited to, manure and animal bedding, poultry mortalities, grape pomace, diatomaceous earth and culled fruit;

1.2.2 Green Material including, but not limited to, yard trimmings, brush, branches, and stumps;

1.2.3 Wood Waste including, but not limited to, sawmill waste, source separated construction and demolition material including sheetrock (which material may contain nails, doorknobs, joist hangers);

1.2.4 Food Materials including, but not limited to, meat, fish, and dairy, soiled paper and waxed cardboard, fishery waste, grease trap waste, liquid wastes, including, but not limited to, wine lees, olive sludge, brewery waste and pond sludge.

1.3 "**Agricultural Materials**" has the meaning provided in Title 14 of the California Code of Regulations ((“CCR”) Section 17852(5).

1.4 "**Green Material**" has the meaning provided in 14 CCR §17852(21).

1.5 "**Wood Waste**" has the meaning provided in 14 CCR §17852(42).

1.6 "**Residual Waste**" shall mean any material that is not included in the definitions of Sections 1.1 through 1.5 above, and that cannot be used by Cold Creek in the ordinary course of business.

1.7 "**Contaminated Load**" shall mean the inclusion of material or liquids in a load in such quantities that one of the following occurs:

1.7.1 The load is spoiled to the extent that the entire load is unusable by Cold Creek in the ordinary course of business as determined solely by Cold Creek.

1.7.2 The cost of removing the contaminants exceeds the value of the organic material, as determined solely by Cold Creek.

1.7.3 The Residual Waste exceeds the CalRecycle standard of more than 1.0 percent by weight or by such standard as is the current standard for contamination established by California Integrated Waste Management Board (CIWMB) or successor agency.

1.8 "**Compensation**" shall mean those fees described in Section 6 below due Cold Creek by PRS for Cold Creek's acceptance and processing of material described in Sections 1.1 through 1.5 above.

1.9 "**Local Annual Tonnage**" shall mean the aggregate of all material described in Section 1.1 above that is generated within the city limits of the City of Ukiah (the “City”), collected at the curb from residential and commercial customers by the City Franchisee and delivered by PRS or its Affiliates to the Site in any calendar year.

1.10 "Other Annual Tonnage" shall mean any material described in Sections 1.1 through 1.5 above that is generated outside of the city limits of the City, and any material described in Sections 1.2 through 1.5 above that is generated within the city limits of the City, and in each case delivered to the Site by PRS or its Affiliates in any calendar year, but excluding Sonoma Organic Material (as defined below).

1.11 "City Franchisee" shall mean Ukiah Waste Solutions, Inc., a California corporation and an Affiliate of PRS.

1.12 "Affiliate" shall mean any entity at least 50% of the voting power of which is owned by the stockholders of PRS.

1.13 "City" shall mean the City of Ukiah, California.

1.14 "Sonoma Organic Material" shall mean any material described in Sections 1.1 through 1.5 above that is generated in Sonoma County and delivered to the Site by PRS or its Affiliates in any calendar year.

1.15 "Change in Law" means the enactment, adoption, promulgation, issuance, modification, or written adoption or change in administrative or judicial interpretation on or after the Effective Date of any law, regulation, rule, order, judgment, decree, permit, approval or other requirement of any governmental agency having jurisdiction over this Agreement or a Party's performance hereunder.

2. TERM

2.1 The Term of this Agreement shall commence on November 1, 2015, subject to the receipt by PRS of all government approvals and permits necessary for PRS to receive, commingle, store and handle any or all of the materials described in Sections 1.1 through 1.5 above at the PRS Facilities and approval of a Mixed Organic Waste Recycling Program by the City Council of the City of Ukiah (the "Effective Date"), and continue through December 31, 2022, unless extended pursuant to Section 2.2 below, terminated early pursuant to Section 9.1.2 or 9.1.3 below, or amended by mutual agreement in writing by the Parties.

2.2 Cold Creek grants to PRS options to extend this Agreement under the same terms and conditions for up to nine (9) individual consecutive one (1) year periods, each consecutive option period at PRS's sole discretion. Such Agreement extension options are contingent upon a reasonable determination by

PRS and the City that Cold Creek has obtained an extension or replacement of the Lease for such periods, or control of a substitute fully-permitted site of equal functionality for such periods and under such terms and conditions that permit Cold Creek to perform its obligations under this Agreement. Upon the exercise by PRS of any option to extend this Agreement, the initial Term described in 2.1 above, plus any extension under this paragraph together shall become the Term.

2.3 Nothing in this Agreement limits PRS's right to pursue any disposal alternatives at the end of the Term subject to City approval.

3. SERVICES PROVIDED BY COLD CREEK

3.1 Cold Creek warrants that the Site is fully permitted and has capacity sufficient to perform its obligations hereunder, and that Cold Creek controls the Site through a valid ground lease.

3.2 Cold Creek shall process all Mixed Organic Waste, Additional Mixed Organic Waste, Agricultural Materials, Wood Waste and Green Material received from PRS or its Affiliates in a way that promotes maximum landfill diversion and shall comply with all applicable laws pertaining to the operation of the Site, including, but not limited to, closure and post closure obligations and any financial assurances. Upon request, Cold Creek agrees to provide PRS with copies of any regulatory inspection reports on its operation within a reasonable amount of time.

3.3 Cold Creek shall maintain all-weather access to the Site for tractor-trailer configured vehicles during regular business hours as provided in Section 3.4 below.

3.4 The Site shall be open for deliveries Monday through Friday, 7 a.m. to 3:30 p.m., and Saturday from 7 a.m. to 1 p.m., excluding the following holidays: Christmas, New Year's Day, Labor Day, Memorial Day, July 4th, and Thanksgiving Day, except that the Site will open on Labor Day, Memorial Day, and July 4th if requested by PRS where notice is given not less than seven (7) days in advance to receive PRS delivery. Such notice may be in the form of an email, phone call or other informal means; however notice shall not be deemed effective until PRS receives an acknowledgement of receipt by Cold Creek by any of the above mentioned forms.

3.5 Cold Creek will provide an adequate, unencumbered tipping area at the Site to assure timely offloading of materials from PRS and its Affiliates' vehicles.

4. SERVICES PROVIDED BY PRS

- 4.1** City Franchisee will provide a public education program educating its customers on the specific requirements of its Mixed Organic Waste program, and use its best efforts in the monitoring, inspection and enforcement procedures to minimize contamination of the Mixed Organic Waste collection.
- 4.2** Commencing on the first day of the Term, PRS will deliver all Local Annual Tonnage to the Site, subject only to PRS's receiving approval from the City for such flow direction to Cold Creek.
- 4.3** Commencing on the first day of the Term, PRS and/or its Affiliates may deliver, in their sole discretion, any or all Other Annual Tonnage and any or all Sonoma Organic Material to the Site, subject to PRS's having received approval where needed for such flow direction to Cold Creek from the jurisdiction holding such authority.
- 4.4** PRS, at its sole discretion, may either combine Mixed Organic Waste materials with Additional Mixed Organic Waste materials and deliver them together to the Site, or deliver Mixed Organic Waste, Additional Organic Waste, Agricultural Materials, Food Materials, Wood Waste or Green Material separately.
- 4.5** All materials delivered to the Site described in Sections 4.2 and 4.3 will be billed under payment terms as set forth in Section 6 below.
- 4.6** PRS's deliveries of Mixed Organic Waste, Additional Mixed Organic Waste, Agricultural Materials, Food Materials, Wood Waste and Green Material to the Site shall be weighed at the Site's truck scale to determine net weight delivered. PRS agrees to deliver all material in trucks with capabilities to discharge its own load. Cold Creek may inspect each load prior to and immediately after unloading and at its discretion may reject any load pursuant to Section 5 below.

5. CONTAMINATED LOADS

- 5.1** If a load is determined by Cold Creek pursuant to Section 4.6 above to be a Contaminated Load, but only as defined in Section 1.7 above, Cold Creek at its sole discretion may reject the load ("Rejected Load").
- 5.2** Upon the rejection of a load by Cold Creek, Cold Creek will immediately notify PRS and hold PRS's truck and driver, if instructed to do so by PRS, to allow PRS's management to inspect such load. PRS will have the right to either remove the contamination from the load at Cold Creek's site or dispose of the Rejected Load by backhaul at PRS's sole expense.

5.3 The cost of disposing of Residual Waste contained in a non-Contaminated Load shall be borne solely by Cold Creek.

5.4 In no circumstances shall the materials described in Sections 1.1 through 1.5 above that are not a Contaminated Load be considered unacceptable material.

6. FEES

6.1 PRS shall pay Cold Creek for Local Annual Tonnage delivered to the Site by PRS and its Affiliates, as follows:

6.1.1 \$16.00 per ton commencing on the Effective Date and continuing through December 31, 2016.

6.1.2 \$26.00 per ton commencing January 1, 2017 and continuing through December 31, 2018.

6.1.3 The per-ton fee for Local Annual Tonnage will be adjusted up or down on January 1 of each year, starting January 1, 2019, by a percentage factor equal to 0.9 (90%) of the change in the value in the twelve months before the most recent November 1 of the All Urban Consumers Consumer Price Index (CPI-U), all items, for the San Francisco-Oakland-San Jose, CA, Base Period 1982 — 1984 = 100, not seasonally adjusted, compiled and published by the U.S. Department of Labor, Bureau of Labor Statistics or its successor index.

6.2 PRS shall pay Cold Creek \$26.00 per ton for Other Annual Tonnage delivered to the Site by PRS and its Affiliates commencing on the Effective Date and continuing through December 31, 2018. The per-ton fee for Other Annual Tonnage will be adjusted up or down on January 1 of each year, starting January 1, 2019, by a percentage factor equal to 0.9 (90%) of the change in the value in the twelve months before the most recent November 1 of the All Urban Consumers Consumer Price Index (CPI-U), all items, for the San Francisco-Oakland-San Jose, CA, Base Period 1982 — 1984 = 100, not seasonally adjusted, compiled and published by the U.S. Department of Labor, Bureau of Labor Statistics or its successor index.

6.3 PRS shall pay Cold Creek \$32.00 per ton for Sonoma Organic Materials delivered to the Site by PRS and its Affiliates commencing on the Effective Date and continuing through December 31, 2018. The per-ton fee for Sonoma Organic Materials will be adjusted up or down on January 1 of each year, starting January 1, 2019, by a percentage factor equal to 0.9 (90%) of the change in the value in the twelve months before the most recent November 1 of the All Urban Consumers Consumer Price Index

(CPI-U), all items, for the San Francisco-Oakland-San Jose, CA, Base Period 1982 — 1984 = 100, not seasonally adjusted, compiled and published by the U.S. Department of Labor, Bureau of Labor Statistics or its successor index.

6.4 Cold Creek will invoice PRS monthly with payments due in 30 days. Any payments due from PRS and not made within 30 days of receipt of the invoice shall incur additionally a 1.5% per month late charge, or the maximum rate allowed by law, whichever is less.

6.5 Fees due to Cold Creek from PRS described in this Section for services herein shall constitute the total of all Compensation due to Cold Creek by PRS under this Agreement.

7. COLD CREEK LEASE

7.1 The Site is the subject to a valid ground lease (the Lease) between Cold Creek and Lessors, the term of which is currently set to expire on December 31, 2022. A copy of the Lease is attached hereto as Exhibit A.

7.2 During the Term of this Agreement, Cold Creek shall notify PRS in writing, with a copy to the City Manager of the City, of any material change in the terms of the Lease within seven (7) days of Cold Creek becoming aware of such material change. A copy of a modified Lease (redacted to remove economic terms) or a memorandum of lease signed by Cold Creek and the landlord and setting forth the major non-economic terms of the modified lease, will accompany that notice, and will be added to Exhibit A of the Agreement by the Parties. Notice and delivery of a modified Lease under this Section shall be made by either USPS certified mail or by any national delivery service that provides proof of delivery.

8. INSURANCE AND INDEMNIFICATION

8.1. Comprehensive General Liability-Cold Creek. Cold Creek shall obtain and maintain in full force and effect throughout the entire term of this Agreement a Broad Form Comprehensive General Liability (occurrence) policy with a minimum limit of TWO MILLION DOLLARS (\$2,000,000.00) aggregate and ONE MILLION DOLLARS (\$1,000,000.00) per occurrence for bodily injury and property damage, with any self-insured retention not exceeding TWO HUNDRED THOUSAND (\$200,000.00) per occurrence. Cold Creek shall also obtain and maintain in full force and effect throughout the entire term of this Agreement a pollution legal liability policy with a minimum limit of TWO MILLION DOLLARS (\$2,000,000.00) aggregate and ONE MILLION DOLLARS (\$1,000,000.00) per occurrence for bodily

injury and property damage, with any self-insured retention not exceeding TWO HUNDRED THOUSAND (\$200,000.00) per occurrence, and with tail coverage extending for at least five (5) years after the expiration or termination of the term of this Agreement. Said insurance shall protect PRS and its Affiliates, and the City from any claim for damages for bodily injury, including accidental death, as well as from any claim for property damage, including claims for injury, damage and remediation of alleged environmental contamination which may arise from operations performed pursuant to this Agreement, whether such operations are by Cold Creek itself, or by its agents, employees or subcontractors. Copies of the policies or endorsements evidencing the above-required insurance coverage shall be filed with PRS. Endorsements are required to be made a part of all of the following insurance policies required by this Section:

8.1.1 "PRS and its Affiliates, the City, and its and their employees, agents, and officers, acting within the scope of their employment related to the services provided under this Agreement, are hereby added as insured's as respects liability arising out of activities performed by or on behalf of Cold Creek."

8.1.2 "Thirty (30) days prior written notice by certified mail, return receipt requested, shall be given to PRS and the City in the event of suspension, cancellation, reduction in coverage or in limits or non-renewal of this policy for whatever reason. Such notice shall be sent to PRS and the City."

8.2 Cold Creek, and its successors and assigns, agree to indemnify, hold harmless and defend PRS and its Affiliates, the City, and its and their officers, agents and employees from and against any and all losses, damages, costs, charges, expenses, suits, actions, claims for injury, damage, judgments, liabilities, and attorney fees directly or indirectly, resulting from the delivery and processing of all Mixed Organic Waste, Additional Mixed Organic Waste, Agricultural Materials, Food Materials, Wood Waste and Green Material delivered to the Site by PRS or its Affiliates, arising out of/or related to Cold Creek's leasehold, operation, remediation, closure or post closure of the Site.

8.3 Comprehensive General Liability-PRS. PRS shall name Cold Creek as an additional insured under its General Liability and Pollution insurance policy, which PRS will keep in force during the Term of the Agreement, to the extent of coverage and limits as described in Section 8.1 above.

8.4 PRS, and its successors and assigns, agree to indemnify, hold harmless and defend Cold Creek, and its officers, agents and employees from and against any and all losses, damages, costs, charges, expenses,

suits, actions, claims for injury, damage, judgments, liabilities, and attorney fees directly or indirectly, resulting from all Mixed Organic Waste, Additional Mixed Organic Waste, Agricultural Materials, Food Materials, Wood Waste and Green Material delivered to the Site by PRS or its Affiliates.

9. DEFAULT

9.1 Each of the following shall constitute an event of default ("Event of Default") hereunder:

9.1.1 A party to this Agreement has: (1) failed to comply with one or more of the terms or conditions of this Agreement, or future amendment(s) to this Agreement, or (2) failed to comply with any material federal, state or local laws, ordinances, rules or regulations pertaining to the activity, or (3) when the Site's activity has been determined to be a nuisance or detrimental to the public health, safety or welfare by a body of competent authority.

9.1.2 If Cold Creek does not perform the services for a period in excess of seven (7) days, this Agreement may be terminated by PRS. Cold Creek shall not be in default of this Agreement if Cold Creek commences such action required to cure the particular breach within seven (7) calendar days after such notice, and it continues such performance diligently until completed.

9.1.3 If PRS does not perform the services for a period in excess of seven (7) days, this Agreement may be terminated by Cold Creek. PRS shall not be in default of this Agreement if PRS commences such action required to cure the particular breach within seven (7) calendar days after such notice, and it continues such performance diligently until completed.

9.1.4 If Cold Creek files a voluntary petition for debt relief under any applicable bankruptcy, insolvency, debtor relief, or other similar law now or hereafter in effect, or shall consent to the appointment of or taking of possession by a receiver, liquidator, assignee (other than as a part of a transfer of equipment no longer useful to Cold Creek or necessary for this Agreement), trustee (other than as security for an obligation under a deed of trust), custodian, sequestrator (or similar official) of Cold Creek for any part of Cold Creek's operating assets or any substantial part of Cold Creek's property, or shall make any general assignment for the benefit of Cold Creek's creditors, or shall fail generally to pay Cold Creek's debts as they become due or shall take any action in furtherance of any of the foregoing:

9.1.5 A court having jurisdiction shall enter a decree or order for relief in respect of Cold Creek, in any involuntary case brought under any bankruptcy, insolvency, debtor relief, or similar law now or hereafter in effect, or Cold Creek shall consent to or shall fail to oppose any such proceeding, or any such court shall enter a decree or order appointing a receiver, liquidator,

assignee, custodian, trustee, sequestrator (or similar official) of Cold Creek or for any part of Cold Creek's operating equipment or assets, or orders the winding up or liquidation of the affairs of Cold Creek;

9.1.6 If PRS files a voluntary petition for debt relief under any applicable bankruptcy, insolvency, debtor relief, or other similar law now or hereafter in effect, or shall consent to the appointment of or taking of possession by a receiver, liquidator, assignee, trustee (other than as security for an obligation under a deed of trust), custodian, sequestrator (or similar official) of PRS for any part of PRS's operating assets or any substantial part of PRS's property, or shall make any general assignment for the benefit of PRS's creditors, or shall fail generally to pay PRS's debts as they become due or shall take any action in furtherance of any of the foregoing;

9.1.7 A court having jurisdiction shall enter a decree or order for relief in respect of PRS, in any involuntary case brought under any bankruptcy, insolvency, debtor relief, or similar law now or hereafter in effect, or PRS shall consent to or shall fail to oppose any such proceeding, or any such court shall enter a decree or order appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator (or similar official) of PRS or for any part of PRS's operating equipment or assets, or orders the winding up or liquidation of the affairs of PRS;

9.1.8 A seizure or attachment (other than a prejudgment attachment) of, or levy affecting possession on the operating equipment of a party to this Agreement, including without limitation, vehicles, maintenance facilities, office facilities, or any part thereof of such proportion as to substantially impair the party's ability to perform under this Agreement and which cannot be released, bonded, or otherwise lifted within 48 hours excluding weekends and holidays.

9.2 Upon an "Event of Default" by either party, the non-defaulting party may suspend, amend, or terminate this Agreement.

10. THIRD PARTY BENEFICIARIES

10.1 The Parties acknowledge and declare that the City is and will be a Third Party beneficiary of this Agreement, included without limitation, with the same rights as the Parties to enforce the terms of this Agreement.

10.2 The Parties agree that PRS's rights under this Agreement can be assigned or assumed by the City, at the City's sole option, without per ton fee adjustments to the City or its assignee, upon an Event of Default by PRS. Upon such an Event of Default, any payments then due to Cold Creek by PRS shall

continue to be the obligation of PRS and such payment obligation shall not be transferred to the City upon the assumption or assignment of such rights.

11. ASSIGNMENT

11.1 Except as provided in Sections 10.2 and 11.2, neither Party shall sell, assign or otherwise transfer, by operation of law or otherwise, its rights or obligations under this Agreement, in whole or in part, without the prior written consent of the other, which shall not be unreasonably withheld or delayed.

11.2 Consent is not required for an assignment of this Agreement in connection with a sale or other disposition of substantially all the assets of the assigning Party's business.

11.3 This Agreement shall be binding on and inure to the benefit of the successors and permitted assigns of each of the Parties hereto.

12. INDEPENDENT CONTRACTOR

Each Party is and shall perform this Agreement as an independent contractor and, as such, shall have and maintain complete control over all of its employees, agents and their conduct of operations. Neither Party, nor anyone employed by it shall be, represent, act, purport to act or be deemed to be the agent, representative or employee of the other Party.

13. MUTUAL RELEASE

13.1 Each Party, on behalf of itself and its affiliates (including, in the case of PRS, its Affiliates), officers, directors, insurers, attorneys, employees, agents, predecessors, successors and assigns, hereby releases and agrees to hold harmless the other Party and the other Party's affiliates (including, in the case of PRS, its Affiliates), officers, directors, insurers, attorneys, employees, agents, predecessors, successors and assigns from and against any and all claims, damages, actions, causes of action, costs and expenses (including attorney's fees), at law or in equity, known or unknown, of every type whatsoever existing as of, or hereafter arising out of or in connection with events through the Effective Date, whether resulting from the delivery by PRS and its Affiliates of materials to the Site under the conditions stated in such Affiliates' agreements with the City or otherwise, excluding any claim for breach of the release in this Section 13.

13.2 Each Party acknowledges Section 1542 of the California Civil Code, which provides as follows:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."

and hereby waives any rights or benefits such Party may have under such Section or any other similar provision of law to the maximum extent permitted by law.

13.3 Each Party hereby represents and warrants that such Party is the sole owner of, and has not assigned to any other person or entity all or any part of, any of the claims released by such Party pursuant to the release in this Section 13. Each Party further agrees never to bring any action or proceeding on any claim that such Party has released hereunder.

14. ENTIRE AGREEMENT

This Agreement represents the entire understanding and agreement between the Parties hereto relating to the processing and disposal of the materials described herein and supersedes any and all prior agreements, whether written or oral, that may exist between the Parties regarding same and supersedes any and all terms and conditions which may exist in any form with any party regarding PRS's disposal of such materials at the Site.

15. SEVERABILITY

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Agreement or any part thereof is, for any reason, held to be illegal, such decision shall not affect the validity of the remaining portions of this Agreement or any part thereof, except as specifically set forth herein.

16. NOTICES

All Notices by the Parties will be given at the address listed below after the signature line. Such addresses may be changed by advising the other Party in writing, using either USPS Certified Mail, or any national delivery service that provides proof of service.

17. GENERAL PROVISIONS

Either Party shall be relieved of its obligations hereunder for the duration of a Force Majeure or a Change in Law, if, as a result of a Force Majeure or a Change in Law, such party is unable to perform. A

Force Majeure shall include only events outside of the Party's control and which are either Acts of God or the unforeseeable.

No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of both Parties to this Agreement.

The Parties stipulate and agree that any litigation relating to the enforcement or interpretation of this Agreement, arising out of either Parties' performance or relating in any way to the work, shall be brought in Superior Court in Mendocino County.

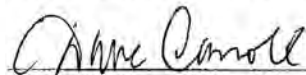
In the event legal action is instituted by either Party to enforce this Agreement, the prevailing party shall be entitled to reasonable attorney fees and actual costs in connection with such action.

This Agreement and amendments and supplemental agreements hereto may be executed in counterparts.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives, have affixed their hands on the day and year indicated:

PACIFIC RECYCLING SOLUTIONS, INC.

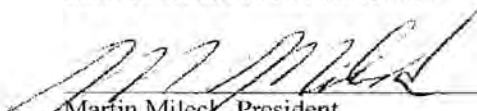
Date: 9/15/15



David M. Carroll, President
Pacific Recycling Solutions, Inc.
3515 Taylor Drive
Ukiah, California 95482

COLD CREEK COMPOST, INC.

Date: 9/14/15



Martin Mileck, President
Cold Creek Compost, Inc.
6000 Potter Valley Road
Ukiah, California 95482

EXHIBIT E
INITIAL SERVICE RATES

The current rate chart is attached. Commercial Green Waste and/or Mixed Organic Waste collection is charged at the same rates as Commercial Solid Waste. The chart will need to be expanded to clarify that for Single Family Residences, the Solid Waste rate includes Recyclables, Green Waste and/or Mixed Organic Waste, and that for Multi-Family Residences and Commercial Solid Waste. Recyclables and Green Waste and/or Mixed Organic Waste collection are all billed at the cart rates listed.

Rates to collect and dispose of sludge will be competitive with current rates,

Insert replacement/additional cart/container fees.

Insert all Special Charges.

Ukiah Waste Solutions, Inc.
NEW 2012 GARBAGE COLLECTION RATE ADJUSTMENTS

SUMMARY OF RATE ADJUSTMENT FOR STANDARD SERVICES

Service Level	YEAR 2012		Effective Percentage Adjustment	Total Monthly Adjustment	Rate Per Gallon / Yard
	Current	Adjusted 2012			
<u>Curbside Service</u>					
No Service	\$ 4.41	\$ 4.72	7.03%	\$ 0.31	\$ 0.472
10 gallon can rate	\$ 4.41	\$ 4.72	7.03%	\$ 0.31	\$ 0.472
20 gallon can rate	\$ 9.26	\$ 9.92	7.13%	\$ 0.66	\$ 0.496
32 gallon can rate	\$ 16.64	\$ 17.82	7.09%	\$ 1.18	\$ 0.557
68 gallon can rate	\$ 39.30	\$ 42.10	7.12%	\$ 2.80	\$ 0.619
95 gallon can rate	\$ 55.39	\$ 59.33	7.11%	\$ 3.94	\$ 0.625
Other combinations - rate per gallon	\$ 0.64	\$ 0.69	7.14%	\$ 0.05	\$ 0.690
Overstuffed can charge/Extra Stop	\$ 5.91	\$ 6.33	7.12%	\$ 0.42	n/a
1 yard bin rate	\$ 110.07	\$ 117.91	7.12%	\$ 7.84	\$ 117.91
1.5 yard bin rate	\$ 130.08	\$ 139.34	7.12%	\$ 9.26	\$ 92.89
2 yard bin rate	\$ 173.44	\$ 185.79	7.12%	\$ 12.35	\$ 92.90
3 yard bin	\$ 260.16	\$ 278.68	7.12%	\$ 18.52	\$ 92.89
4 yard bin	\$ 346.88	\$ 371.58	7.12%	\$ 24.70	\$ 92.90
6 yard bin	\$ 520.32	\$ 557.37	7.12%	\$ 37.05	\$ 92.90

<u>Packout Service</u>					
No Service	\$ 6.80	\$ 7.28	7.06%	\$ 0.48	\$ 0.728
10 gallon can rate	\$ 6.80	\$ 7.28	7.06%	\$ 0.48	\$ 0.728
20 gallon can rate	\$ 11.62	\$ 12.45	7.14%	\$ 0.83	\$ 0.623
32 gallon can rate	\$ 20.38	\$ 21.83	7.11%	\$ 1.45	\$ 0.682
68 gallon can rate	\$ 47.87	\$ 51.28	7.12%	\$ 3.41	\$ 0.754
95 gallon can rate	\$ 69.16	\$ 74.08	7.11%	\$ 4.92	\$ 0.780
Other combinations - rate per gallon	\$ 0.73	\$ 0.78	7.14%	\$ 0.05	\$ 0.780
Overstuffed can charge/Extra Stop	\$ 6.80	\$ 7.28	7.06%	\$ 0.48	n/a

Pack out service is limited to the elderly and disabled who apply directly through Ukiah Waste Solutions at 707-234-6400

<u>Remote Area Service</u>					
Add to the Packout Service rate.	\$ 6.80	\$ 7.28	7.06%	\$ 0.48	N/A
In areas with limited access, an additional fee is charged to fund the costs of special equipment and special handling necessary to provide garbage pickup services. This fee is in addition to the "Packout Service" fee listed in this schedule.					

**Ukiah Waste Solutions, Inc.
2012 Rate Schedule**

<u>RESIDENTIAL / COMMERCIAL</u>								
<u>Residential Carts</u>		No Service	1 - 10	11 - 20	21 - 32	33 - 68	69 - 95	Gallons
2012 Rates		Fee	1x/WK	1x/WK	1x/WK	1x/WK	1x/WK	
Roadside		4.72	4.72	9.92	17.82	42.10	59.33	
Pack Out*		7.28	7.28	12.45	21.83	51.28	74.08	
Remote**		14.56	14.56	19.73	29.11	58.56	81.36	
* Pack Out service is limited to the elderly and disabled who apply directly through Ukiah Waste Solutions @ 707-234-6400.								
** The additional charges of Remote service may be required for certain areas with difficult access.								
<u>Commercial Carts</u>			1 - 10	11 - 20	21 - 32	33 - 68	69 - 95	Gallon
2012 Rates								
1 Can - 1x/WK			4.91	10.28	18.50	43.72	61.62	
1 Can - 2x/WK					41.12	97.33	136.96	
1 Can - 3x/WK					68.70	149.24	208.48	
2 Cans - 1x/WK					41.12	97.33	136.96	
<u>Commercial / Residential Bins</u>								
Yards	Number of pick-ups per week						Extra	
2012 Rates	1x/WK	2x/WK	3x/WK	4x/WK	5x/WK	6x/WK	Pick-up	
1.0	117.91	n/a	n/a	n/a	n/a	n/a	n/a	27.23
1.5	139.34	278.68	418.02	557.36	696.70	836.04	836.04	32.18
2.0	185.79	371.58	557.37	743.16	928.95	1,114.74	1,114.74	42.91
3.0	278.68	557.36	836.04	1,114.72	1,393.40	1,672.08	1,672.08	64.36
4.0	371.58	743.16	1,114.74	1,486.32	1,857.90	2,229.48	2,229.48	85.82
6.0	557.37	1,114.74	1,672.11	2,229.48	2,786.85	3,344.22	3,344.22	128.72
Extra p/u calculated at 1/wk divided by 4.33								

Clean-Up Bins and Boxes		New Rate 2012	
3.0 Yd	3 day rental	96.41	includes tip fee
15.0 Yd	7 day rental	218.46	Plus \$78.70 per ton tip fee
20.0 Yd	7 day rental	218.46	Plus \$78.70 per ton tip fee
30.0 Yd	7 day rental	218.46	Plus \$78.70 per ton tip fee
Compactors		218.46	Plus \$78.70 per ton tip fee

Misc Charges	New Rate 2012	
Bulky Items (appliances, Lg Tires, Furniture etc..)	24.25	Plus tip fee
Tires - each - (Automotive or motorcycle)	5.11	
Damage Cart Replacement	66.00	
Additional Green Waste or R/C Cart	6.50	
Extra Residential Pick-up	6.33	Plus Materials
Extra Commercial Pick-up	11.82	
Compactor Cleaning	284.46	
Container Cleaning	102.41	
Locking bin, one-time setup fee	32.43	
Replacement Key	11.38	
Contamination Fee	32.48	
Returned Check Fee	35.00	
Roll Off or Bin Extra Day Charge	11.82	
Exchange Cart Size	24.36	

Rate to collect and dispose of sludge will be equal to or less than the current rate.

Customers billed by Ukiah Waste Solutions are billed as commercial customers.

Customers billed by the City of Ukiah are billed as residential customers.

SECOND AMENDED AND RESTATED TRANSFER STATION AGREEMENT

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SECOND AMENDED AND RESTATED TRANSFER STATION AGREEMENT

This Second Amended and Restated Transfer Station Agreement (the “Agreement”) is made as of October __, 2015 by and between the City of Ukiah, a municipal corporation (hereinafter “City”), Solid Wastes Systems, Inc., a California corporation (hereinafter “Contractor”), and Yulupa Investments, LLC, a California limited liability company (hereinafter “Owner”), with reference to the following:

WHEREAS, Owner currently owns and Contractor currently operates the Ukiah Valley Transfer Station located in Mendocino County pursuant to that certain Amended and Restated Transfer Station Agreement dated December 12, 2011 (the “Prior Agreement”); and

WHEREAS, Ukiah Waste Solutions, Inc. (“UWS”), a California corporation and an affiliate of Contractor, collects all Solid Waste generated in City pursuant to that certain Amended and Restated Waste Collection Agreement with City of even date herewith (the “Collection Agreement”); and

WHEREAS, Contractor has invested substantial funds to acquire land and construct improvements to increase diversion of Solid Waste from landfills, reduce greenhouse gasses, convert waste into energy, and create new jobs; and

WHEREAS, City has approved a Mixed Organic Waste Curbside Recycling Program (the “New Program”) pursuant to the Collection Agreement; and

WHEREAS, the parties wish to amend and restate the Prior Agreement on the terms herein consistent with the New Program and to make certain other changes;

NOW, THEREFORE, in and for the mutual covenants herein and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. Operating Rights.

1.1 Contractor shall have the exclusive right to operate, and shall operate, the Transfer Station (as defined in Section 2 below) in accordance with the terms of this Agreement and all applicable federal, state and local statutes, regulations, ordinances and other laws and enforceable policies. Subject to any limits imposed by applicable law, all Solid Waste generated in City shall be delivered to the Transfer Station and Contractor shall be entitled to accept at the Transfer Station Solid Waste generated anywhere within Mendocino County. Contractor shall also have the right to accept at the Transfer Station Solid Waste generated outside of Mendocino County with City’s prior written consent (which consent shall not be unreasonably withheld and may be granted by City’s City Manager), provided that Contractor shall identify and keep records satisfactory to both California Department of Resources Recycling and Recover (“CalRecycle”) and City, including the quantity and the jurisdiction of origin of such Solid Waste. Receipt and disposal of such solid waste shall be subject to all of the applicable provisions of this Agreement, including Contractor’s obligation to indemnify and hold City harmless in any action related to the acceptance of out of County Solid Waste, and the payment, if levied, of Surcharges. During the term of this Agreement, City shall not own, operate or authorize any facility that would compete with the Transfer Station or Contractor’s operation thereof, nor shall City issue any request for proposal for the operation of the Transfer Station by any person other than Contractor except for any period after the expiration or termination of this Agreement in accordance with its terms. Correspondingly, and except as specifically permitted under this Agreement or the Collection Agreement, Owner, Contractor and any Related Entity (as defined below) shall not accept at any facility owned or operated by them Solid Waste originating from any source generated in the areas of Mendocino County described at Exhibit G, which

represents the Solid Waste, as of November 1, 2011, that is received at the Transfer Station, unless such Solid Waste has first passed through and paid Gate fees at the Transfer Station. "Related Entity" means an entity in which Contractor or Owner, any of its shareholders, partners or members, or their spouses, are owners, members, partners, or over which Owner, Contractor, their shareholders, members or partners, or their spouses, otherwise exercise any ownership or control.

1.2 To the extent permitted by applicable law, City shall take such steps as may be reasonably necessary to protect Contractor's rights under this Agreement; provided, however, that City's obligation under this Section 1.2 is subject to Contractor's agreement, upon request of City, to reimburse City's reasonable expenses, including attorneys' fees and litigation expenses, incurred in taking steps as agreed upon herein; and, provided, further, that nothing herein shall prevent Contractor from taking any lawful action to protect its rights hereunder.

1.3 Except as expressly provided herein, this Agreement shall supersede the Prior Agreement as of the Effective Date set forth in Section 3 below, when the Prior Agreement shall cease to have any effect (except for periods prior to such Effective Date).

2. Definitions.

2.1 "Acceptable Waste" means all Solid Waste, except (a) Recyclables, (b) Segregated Food Waste, Mixed Organic Waste, Green Waste or Wood Waste, and (c) Hazardous Waste, Household Hazardous Waste and Unacceptable Waste.

2.2 "Change in Law" means the enactment, adoption, promulgation, issuance, modification, or written adoption or change in administrative or judicial interpretation on or after the Effective Date of, any law, regulation, rule, order, judgment, decree, permit, approval or other requirement of any governmental agency (including City) having jurisdiction over this Agreement or Contractor's performance hereunder.

2.3 "Construction Debris" means used or discarded construction materials generated during the construction or renovation of a building, structure or other man-made improvement.

2.4 "Demolition Debris" means used construction materials generated during the razing or renovation of a building, structure or other man-made improvement.

2.5 "Disposal" means the permanent placing of Solid Waste in a facility legally permitted to receive it.

2.6 "Disposal Costs" means Contractor's costs to Dispose of Solid Waste at a Disposal Facility, including all tipping fees and service fees paid by Contractor to any Disposal Facility for such Disposal.

2.7 "Disposal Facility" means any fully-permitted Subtitle D approved Solid Waste landfill, approved by City pursuant to Section 4.1 below, to which Contractor transports Acceptable Waste for Disposal (including, without limitation, any authorized transfer station for ultimate Disposal at such a landfill).

2.8 "Food Waste" means food scraps, paper tissues, paper napkins and towels, coffee grounds and filters, pizza boxes, food soiled paper plates and cups, and miscellaneous paper not suitable

for recycling that is discarded (as from a Commercial or Residential Property kitchen).

2.9 "Franchised Waste Hauler" means any person that possesses a franchise, permit, license or contract from a public agency authorizing such person to collect and transport Solid Waste from generators of such Solid Waste in or subject to such agency's jurisdiction.

2.10 "Green Waste" means tree trimmings, grass cuttings, plants, leaves, branches and trees (not more than six (6) inches in diameter or more than four (4) feet in length) and similar materials.

2.11 "Hazardous Waste" means all substances defined as hazardous waste, acutely hazardous waste or extremely hazardous waste by the State of California, or identified as hazardous waste by the U.S. Environmental Protection Agency, under applicable laws or regulations.

2.12 "Household Hazardous Waste" means Hazardous Waste that is generated at Residential Properties.

2.13 "Mixed Organic Waste" means Green Waste and Food Waste.

2.14 "Pass-Through Costs" means Disposal Costs, Processing Costs and Regulatory Costs, as well as any increase above \$10.00 per ton in the lease rate payable under the lease between City and Contractor for the Transfer Station Site and the Improvements attached hereto as Exhibit F.

2.15 "Processing" means the act of salvaging, reprocessing, marketing and selling or reusing Recyclables, Food Waste, Green Waste, Mixed Organic Waste and Wood Waste for the purpose of Recycling, whether directly or through one or more third parties (including, in the case of Food Waste, Green Waste and Mixed Organic Waste, composting or anaerobic digestion), and shall include other means of diverting Solid Waste from landfills.

2.16 "Processing Costs" means fees, if any, paid by Contractor to a Processing Facility for Processing Recyclables, Food Waste, Green Waste, Mixed Organic Waste, Wood Waste and Solid Waste received at the Transfer Station. The amount paid by Contractor to PRS for Food Waste, Mixed Organic Waste, Green Waste or Wood Waste delivered to the PRS Facility shall be as determined under that certain First Amended and Restated Agreement for Receipt of Wood Waste, Green Waste and Mixed Organic Waste among PRS, UWS and SWS of even date herewith and attached hereto as Exhibit A (the "PRS Agreement").

2.17 "Processing Facility" means, with respect to Recyclables, the PRS Facility and/or any other authorized facility selected and approved pursuant to Section 4.1 below, with respect to Green Waste and Wood Waste and subject to Section 4.5 below, the PRS Facility, the Scotia Facility (as defined in Section 4.5 below), or other licensed biomass conversion facility approved by the City Manager for Processing, the CCC Facility (as defined in Section 4.5 below), and/or any other authorized facility selected and approved pursuant to Section 4.1.2 and 4.5 below, and with respect to Food Waste and Mixed Organic Waste and subject to Section 4.6 below, the PRS Facility, the CCC Facility, and/or any other authorized facility selected and approved pursuant to Section 4.1.2 and/or 4.6 below.

2.18 "PRS" means Pacific Recycling Solutions, Inc.

2.19 "PRS Facility" means the materials recovery and green waste facility operated by PRS, currently located at 4260 North State Street, Ukiah, California and/or 3501 Taylor Drive and 3515 Taylor

Drive, Ukiah, California.

2.20 "Recyclables" means Solid Waste which may be Recycled, including, without limitation, paper, newsprint, printed matter, pasteboard, paper containers, cardboard, glass, aluminum, PET, HDPE, and other plastics, beverage containers, compostable materials (including Segregated Food Waste, Mixed Organic Waste, Green Waste and/or Wood Waste), electronic waste, wood, brick and stone in reusable size and condition, those items of Construction Debris and Demolition Debris which are described in Sections 2.4 and 2.5, appliances and automobile and light truck tires. Contractor shall report changes in Recyclables accepted at the Transfer Station to the City Manager who must approve those changes.

2.21 "Recycle" means the process of reusing or processing Solid Waste into a form suitable for reuse consistent with the requirements of the California Integrated Waste Management Act of 1989, as amended ("AB 939").

2.22 "Regulatory Costs" means all regulatory and governmental fees and charges incurred by Contractor in connection with providing services under this Agreement, including, without limitation, Surcharges which may be adopted from time to time, such as but not limited to, the City Landfill Fee and MSWMA fee, as shown on Exhibit E, payable to City, MSWMA or such other jurisdiction whose fee is acceptable to and approved by the City, and remains in force, pursuant to Section 1.1 above.

2.23 "Segregated" means:

2.23.1 As to Recyclables other than Food Waste, Mixed Organic Waste, Green Waste and Wood Waste, Recyclables that have been separated from Solid Waste that is not Recyclables and from Food Waste, Mixed Organic Waste, Green Waste and Wood Waste prior to delivery to the Transfer Station, and that are saleable or acceptable for Processing without further sorting. (For example, cardboard and glass that have been separated by a Self-Hauler from wet garbage is Segregated.)

2.23.2 As to any of Food Waste, Mixed Organic Waste, Green Waste or Wood Waste, each of those types of waste that has been separated from Solid Waste that is not Recyclables and from each of Food Waste, Mixed Organic Waste, Green Waste and Wood Waste, as applicable, prior to delivery to the Transfer Station, and that in each case are saleable or acceptable for Processing without further sorting. (For example, Food Waste that has been separated from all Solid Waste by whatever means, and Recyclables, including Green Waste and Wood Waste, is Segregated.)

2.24 "Self-Haulers" means persons delivering Acceptable Waste or Recyclables to the Transfer Station who are not Franchised Waste Haulers.

2.25 "Solid Waste" means all putrescible and nonputrescible residential refuse, commercial solid waste, institutional solid waste, garbage, Food Waste, Green Waste, Wood Waste and rubbish as defined in Public Resources Code Section 40191, including, without limitation, for the purposes of this Agreement Construction Debris, Demolition Debris and Recyclables, but excluding Hazardous Waste and Household Hazardous Waste.

2.26 [Reserved]

2.27 "Surcharge" means any per ton, or other, fee imposed by City on MSW (as defined below) received at the Transfer Station, such as, but not limited to, the Landfill Fee payable to City

pursuant to Section 5 below, and the MSWMA Fee payable to the Mendocino Solid Waste Management Authority (“MSWMA”) (currently \$5.00 per ton), and that remains in force, pursuant to Section 1.1 above, or any similar fee of any other jurisdiction that is acceptable to and approved by City, including, in each case, any fees or charges adopted to replace or supplement any such Surcharge or fee.

2.28 “Transfer Station” means the facility located on the Transfer Station Site.

2.29 “Transfer Station Site” means the real property commonly known as 3151 Taylor Drive, Ukiah, California, Mendocino County Assessor’s Parcel No. 14-140-13, and which is depicted and described on Exhibit C attached hereto and hereby incorporated herein.

2.30 “Unacceptable Waste” means the types of Solid Waste that may not be received at the Transfer Station unless authorized by the permits issued for the operation of the Transfer Station.

2.31 “Wood Waste” means unpainted and untreated lumber and boards separated from Solid Waste, including other Recyclables.

3. Term. Subject to earlier termination in accordance with the terms of this Agreement, the term of this Agreement shall commence on October 1, 2015 (the “Effective Date”) and continue for a period of eleven (11) years and three (3) months through December 31, 2026, provided that Contractor shall have one (1) option to extend this Agreement and the rights granted hereunder on the terms and conditions herein for a period of five (5) years commencing January 1, 2027 and ending December 31, 2031. Notice of Contractor’s exercise of such option must be given at least six (6) months prior to December 31, 2026. The option to extend hereunder may not be exercised unless Contractor is in material compliance with the terms of this Agreement at the time of exercise and on December 31, 2026. It is the parties’ intention that, subject to prior termination hereunder or thereunder, the term of this Agreement be coextensive with the term of the Collection Agreement.

4. Operations. Contractor shall provide the following operations at the Transfer Station:

4.1 Receipt, Transfer and Disposal of Solid Waste. Contractor shall accept, for the per ton or per yard Rate for Municipal Solid Waste (“MSW”), set forth in Exhibit D attached hereto as adjusted under Section 6 below, Acceptable Waste delivered to the Transfer Station by Franchised Waste Haulers and Self-Haulers, and shall transfer or transport such Acceptable Waste to a Disposal Facility or a Processing Facility, in accordance with the terms of this Agreement. The initial Disposal Facility shall be the Eastlake landfill, the initial Recyclables Processing Facility shall be the PRS Facility, the initial Green Waste and Wood Waste Processing Facility is described in Section 4.5 below, and the initial Food Waste and Mixed Organic Waste Processing Facility is described in Section 4.6 below. Any alternate or successor Disposal or Processing Facility to the initial Facilities approved or described in this Agreement shall be subject to City’s approval as provided hereafter.

4.1.1 At least one year and three months before the expiration of the term of the disposal contract between Contractor and the existing Disposal Facility, Contractor shall begin the process of selecting a successor Disposal Facility (which may be the existing Disposal Facility), and at least seven months before such expiration, Contractor shall give City written notice identifying the proposed Disposal Facility, including its name and location, and the particulars of the disposal costs it recommends for the period of the new disposal agreement. Such notice shall include: (1) the anticipated tipping fee and other charges for Disposal at that Facility (2) a comparison of the disposal costs of the expiring disposal agreement to the new recommended disposal costs; (3) any impact the new recommended disposal costs will have on the Gate Fee (4) a justification statement, if the recommended

disposal costs will increase by more than an annual CPI adjustment; (5) a list of Contractor explored disposal options not recommended, and (6) why the Contractor believes the recommended Disposal Option is best. Before giving such notice to City, Contractor has a duty under this Agreement to have vigorously explored all Disposal options reasonably available. The notice shall be accompanied by a copy of the proposed contract between Contractor and such Facility. Contractor shall also provide City with any additional information about such Disposal Facility reasonably requested by City. Contractor's use of the proposed Facility shall be subject to the City Council's approval, which shall not be unreasonably withheld. In acting on a request for approval, the City shall consider, among other things, whether the use of that Facility available at a reasonable cost to the ratepayers considering the environmental benefits and the available alternatives; provided, however, that if the City Council determines that another Disposal Facility reasonably available to Contractor will provide the same service at a lower cost, Contractor shall use that Facility.

4.1.2 Contractor shall provide City with written notice as soon as Contractor knows that it will use a Processing Facility instead of or in addition to the PRS Facility, the Scotia Facility, any licensed biomass conversion facility approved by the City Manager, or the CCC Facility. The notice shall provide the name and location of the proposed Facility, the anticipated gate fee and other charges for Processing at that Facility, and a copy of the proposed contract between Contractor and such Facility. Contractor shall also provide City with any additional information about such Processing Facility reasonably requested by City. Contractor's use of the proposed Processing Facility shall be subject to the City Council's approval, which shall not be unreasonably withheld. In acting on a request for approval, the City shall consider, among other things, whether the use of that Facility is available at a reasonable cost to the ratepayers considering the environmental benefits and the available alternatives, and otherwise qualifies as an Authorized Facility. The City Council may consider any other factor reasonably related to a legitimate City interest in its management of waste collection and disposal, including, but not limited to, alternative technologies and facilities, the impact on rates, past performance and regulatory history of the processing facilities under consideration, factors affecting the facilities' future performance, and the public interest.

4.1.3 In the event that any Facility described above cannot accept Solid Waste, Recyclables, Green Waste, Wood Waste, Food Waste or Mixed Organic Waste Generated in City on a temporary basis due to no fault of Contractor, or due to events beyond the control of Contractor, such as acts of God, public emergency, strike or lockout by employees of another entity unrelated to Contractor, Contractor shall locate and use an alternate Facility for the duration of such circumstance; provided, however, that City approval in accordance with this Section 4.1 shall be required if the Facility cannot accept the applicable materials for a period of time exceeding three (3) months.

4.2 Buy-Back Recycling. Contractor shall operate a certified Beverage Container Recycling Center at the Transfer Station that will provide redemption buy-back from the public in accordance with the rules of CalRecycle, and which is open to the public during regular business hours at least six days per week.

4.3 Drop-Off Recycling. Contractor shall accept at a designated area of the Transfer Station, at no charge, Segregated Recyclables (other than Food Waste, Mixed Organic Waste, Green Waste, Wood Waste and the types of Recyclables listed on Exhibit D as bearing a charge), from Self-Haulers, and shall transfer or transport such Recyclables for Processing to a Processing Facility, in accordance with the terms of this Agreement. Contractor shall accept at a designated area of the Transfer Station, at the designated Recycling Rate set forth on Exhibit D as adjusted under Section 6 below, Segregated Recyclables of the types listed on Exhibit D as bearing a charge, from Self-Haulers, and shall transfer or

transport such Recyclables for Processing to a Processing Facility, in accordance with the terms of this Agreement. Contractor shall be entitled to retain all revenue it receives from the sale of such Recyclables. Any residue from the Recyclables received at the Transfer Station that cannot be processed shall be disposed of at a Disposal Facility. City may designate any entity, including MSWMA, to provide hazardous waste load-check and refrigerant removal at no cost to Contractor or the general public.

4.4 Household Hazardous Waste Recycling. Contractor shall, at the applicable Rate set forth on Exhibit D as adjusted under Section 6 below, accept from Self-Haulers who are residents of City, oil filters, used motor oil (up to five gallons per customer), antifreeze and automobile and boat batteries, and shall transfer or transport such items for Processing to a Processing Facility, in accordance with the terms of this Agreement. Contractor shall be entitled to retain all revenue it receives from the sale of such items. Any residue from such items that cannot be Processed shall be disposed in accordance with all legal requirements at a City approved facility fully licensed to accept such materials.

4.5 Green Waste and Wood Waste. Contractor shall accept at a designated area of the Transfer Station, at the applicable Green Waste Rates specified in Exhibit D as adjusted under Section 6 below, Segregated Green Waste and Segregated Wood Waste from Self-Haulers, and shall transfer or transport all such Green Waste and Wood Waste to the Scotia biomass conversion facility (the "Scotia Facility"), any licensed biomass conversion facility approved by the City Manager, the Cold Creek Compost, Inc. composting facility (the "CCC Facility"), or the PRS Facility for Processing, in accordance with the terms of this Agreement. Any residue from the Green Waste or Wood Waste received at the Transfer Station that cannot be Processed shall be disposed of at the Disposal Facility or at any licensed landfill selected by PRS.

4.6 Food Waste and Mixed Organic Waste. Notwithstanding any other provision in this Agreement, Contractor shall not be required to accept or Process any Segregated Food Waste or Segregated Mixed Organic Waste delivered to the Transfer Station until January 1, 2017 and subject to the receipt by PRS of all government approvals and permits necessary for PRS to receive, commingle, store and handle such Food Waste and Mixed Organic Waste. Once such approvals and permits have been received by PRS and such date has occurred, Contractor shall, if (1) PRS permits do not allow self-haulers to deliver Food Waste or Mixed Organic Waste to the PRS Facility (and PRS does not intend to seek such allowance), and (2) requested in writing by the City Manager: (a) accept at a designated area of the Transfer Station Segregated Food Waste and Segregated Mixed Organic Waste from City and County Self-Haulers at the applicable Mixed Organic Waste Rates specified in Exhibit D as adjusted under Section 6 below, and transfer or transport all such Food Waste and Mixed Organic Waste for Processing to the PRS Facility, in accordance with the terms of this Agreement; and (b) due to space constraints and subject to Section 5.11(d) of the Collection Agreement, direct City and County Franchised Haulers to deliver all Segregated Food Waste and/or Segregated Mixed Organic Waste for Processing to another facility; provided, however, that if the CCC Facility shall refuse, due to no fault of Contractor, UWS or PRS, to accept Mixed Organic Waste that is not a Contaminated Load (as defined in the Agreement for Mixed Organic Waste Services between PRS and CCC dated September 15, 2015, which is attached as Exhibit 1 to Exhibit A to this Agreement (the "CCC Agreement")) or if the CCC Facility shall shut down or cease operating, Contractor shall deliver the Mixed Organic Waste received at the Transfer Station for Processing or to the licensed facility that is least expensive (taking into account costs of Processing and transportation), with any increase in the costs to Contractor of using the new facility instead of the PRS Facility and the CCC Facility being passed through to Contractor and treated as a Pass-Through adjustment to the Rates on the next Rate Adjustment Date pursuant to Section 6.3 below.

4.7 Reuse Facility. Contractor shall provide a reuse area at the Transfer Station where Contractor shall make available for give-away or sale salvageable items such as doors, windows, furniture, appliances, toys and tools brought to the Transfer Station by Self-Haulers. Contractor shall be entitled to retain all revenues from the sale of such items.

4.8 Unacceptable Waste Prohibited. Contractor shall not knowingly accept Unacceptable Waste at the Transfer Station, except for those recyclable Household Hazardous Wastes described in Section 4.4 above. Contractor shall continuously inspect customer vehicles and the tipping floor for Unacceptable Waste. Unacceptable Waste shall be refused and returned to the customer, unless the Unacceptable Waste is already dumped on the tipping floor and the vehicle of origin is unknown. Contractor shall accept title to any Unacceptable Waste received at the Transfer Station and not so returned, and shall safely segregate, contain, store and dispose of it in accordance with applicable law.

4.9 Refusal of Waste. When Contractor refuses Unacceptable Waste that is brought to the Transfer Station by a customer, Contractor will inform the customer of the most convenient and economical legal option available for disposal of that Waste. Written information on such disposal options will be kept available at all times in the scale house, and a log shall be maintained to detail such refusal of Waste acceptance.

4.10 Title to Waste. Contractor shall accept ownership and title to all Acceptable Waste, Recyclables, Food Waste, Mixed Organic Waste, Green Waste and Wood Waste at the time of unloading of such materials at the Transfer Station.

4.11 Hours of Operation. Contractor will receive Acceptable Waste, Recyclables, Food Waste, Mixed Organic Waste, Green Waste and Wood Waste at the Transfer Station only between the hours 7 a.m. and 4 p.m. Monday through Friday for Franchised Waste Haulers and from 7:30 a.m. to 4 p.m. Monday through Saturday for Self-Haulers throughout the year, except for the following holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day; provided, however, that if New Year's Day, July 4th or Christmas Day falls on a Sunday, Contractor may with the consent of City's City Manager's observe the holiday on the Saturday before the holiday; and, provided, further, that Franchised Waste Haulers may deliver to the Transfer Station between 6 a.m. and 4 p.m. on the day after any such holiday. Within this schedule, Contractor may specify different hours for Franchised Waste Haulers and Self-Haulers. Any such changes shall be reported to the City no later than thirty (30) days before the effective date of the change and shall be revised at the direction of the City Council. Such hours are subject to change in accordance with changes to Contractor's permits for the Transfer Station.

4.12 Additional Services. Contractor shall provide additional services upon request of City or upon the proposal of Contractor as approved by City subject, if the costs incurred by Contractor to provide such services increase, to the establishment by mutual written agreement of a reasonable service fee therefor.

4.13. Permits and Licenses. Contractor shall obtain and maintain throughout the term of this Agreement all permits, licenses and approvals required for Contractor to perform the services described herein, including, without limitation, an operating permit from the County of Mendocino. City shall cooperate with Contractor in connection with such permits, licenses and approvals, and shall renew all such permits, licenses and approvals issued by City, provided that Contractor is not in material breach of this Agreement and provided Contractor shall have fulfilled all requirements for the renewal of such

permits, licenses and approvals. Contractor shall provide City's City Manager or his or her designee with copies of all permits or amendments or renewals thereof which are not issued by City.

4.14 Applicable Law. Contractor shall perform all its obligations under this Agreement in accordance with all applicable laws, including, without limitation, the permits, licenses and approvals described in Section 4.12 above, and shall be solely liable for all fines and penalties that may be imposed on Contractor for violations thereof.

5. Landfill Fee and Other Surcharges. Within forty-five (45) days after the end of each calendar month during the term of this Agreement, Contractor shall remit to City as a landfill fee a sum of money equal to Two Dollars (\$2.00) per ton (or the equivalent amount for a cubic yard), or such other amount approved by City, of Acceptable Waste received by Contractor at the Transfer Station, and any other Surcharge, approved by and acceptable to the City still in force shall be remitted to City or another entity, as directed by the City, within ninety (90) days after the end of each calendar month. If these fees are not paid on or before such due date, a late payment fee in an amount equal to eighty-three one-hundredths of a percent (0.83%) of the amount owing per month will be charged for each thirty (30) day period, or portion thereof, that the fee remains unpaid. Each monthly remittance to City shall be accompanied by a statement detailing the Acceptable Waste received at the Transfer Station for the period covered.

6. Gate Rate and Other Service Fees.

6.1 Establishment. Exhibit D sets forth the gate rate and other service fees for services provided by Contractor under this Agreement (collectively, the "Rates") effective as of the Effective Date. Contractor shall not charge lower Rates to any Franchised Waste Hauler or Self Hauler serving or from areas outside the City. Such Rates shall be subject to review and revision as set forth in Sections 6.2, 6.3, 6.4 and 6.5 below. Contractor shall not charge any amount in excess of the approved Rates for services required by or permitted under this Agreement.

6.2 Modification Based on Consumer Price Index, Fuel Index and Certain Pass-Through Costs.

(a) Per Ton MSW Rate. The per ton Municipal Solid Waste ("MSW") Rate shall be adjusted January 1st every year, beginning January 1, 2013 ("Rate Adjustment Date") to reflect changes in the CPI, the Fuel Index and certain Pass-Through Costs by an amount determined in accordance with the Transfer Station Rate Calculation attached hereto as Exhibit E (the "Calculation").

(b) Definitions. For purposes of Rate adjustments pursuant to this Section 6.2 and the Calculation, the following terms shall have the following meanings.

(i) "Base Fuel Cost" means Contractor's actual costs for diesel and other fuels used in performing services under this Agreement for the year ended December 31, 2010 or \$152,533.47.

(ii) "Base Revenue" means Contractor's total revenue received from Franchised Haulers and Self-Haulers during the Comparison Year, excluding revenue from the sale of scrap metal, Recyclables purchased under the buy-back program, and compost.

(iii) "Base Year" means the year ended June 30th one year prior to June 30th of the Comparison Year.

(iv) "Comparison Year" means the year ended June 30th immediately prior to the relevant Rate Adjustment Date.

(v) "Contractor Rate" means the per ton MSW Rate minus the per ton Franchise Fees.

(vi) "CPI" means the Consumer Price Index, All Urban Consumers, U.S. City

Average, All Items (1982-1984=100), published by the United States Department of Labor, Bureau of Labor Statistics.

(vii) “Disposal Fees – Garbage” means the actual Disposal Costs paid by Contractor for Solid Waste delivered by Contractor to the Disposal Facility during the Comparison Year.

(viii) “Disposal Fees – Processing” means the actual Processing Costs paid by Contractor to PRS or any other Authorized Facility for Recyclables, Green Waste, Mixed Organic Waste and Food Waste delivered by Contractor to the PRS Facility or such Authorized Facility, respectively, during the Comparison Year.

(ix) “Fuel Costs” means Contractor’s actual costs for diesel and other fuels used in performing services under this Agreement during the Comparison Year.

(x) “Fuel Index” means the California No.2 Diesel Retail Sales by all Sellers (Dollars Per Gallon) published by the U. S. Energy Information Administration.

(xi) “Operating Costs” means all of Contractor’s costs to operate the Transfer Station under this Agreement, including, without limitation, labor costs, vehicle and vehicle-related costs, maintenance, insurance and transportation costs, but excluding Fuel Costs, Pass-Through Costs and the costs of purchasing scrap metal, Recyclables purchased under the buy-back program, and compost (including sales taxes).

(c) Rules. For purposes of Rate adjustments pursuant to this Section 6.2 and the Calculation, the following rules shall apply.

(i) “CPI Change” shall be calculated as one hundred percent (100%) of the percentage increase or decrease, if any, in the CPI during the Comparison Year, using the CPI published for June of such Year as compared with the CPI published for June of the Base Year.

(ii) “Fuel Index Change” shall be calculated as one hundred percent (100%) of the percentage increase or decrease, if any, in the Fuel Index from June of the Base Year through June of the Comparison Year; provided, however, that, notwithstanding Section 6.2(b)(iii) above, “Base Year” for purposes of the Fuel Index Change shall mean the year ended June 30, 2010; and, provided, further, that the Fuel Index Change adjustment (i.e., Fuel Index Change multiplied by Base Fuel Cost) for any Rate Adjustment Date shall be calculated after removal of such adjustment for the prior Rate Adjustment Date.

(iii) The Adjustments for destination charges and Disposal Fees with respect to the use of the Eastlake landfill that appear in the Calculation are not recurring.

(iv) Rate adjustments for changes in Franchise Fees that take effect on a date other than January 1st, as well as changes in other Pass-Through Costs, will be determined under Section 6.3 below and not under this Section 6.2.

(v) If City elects to purchase the Transfer Station Site and the Improvements on December 31, 2016 pursuant to Section 12 below, the cost entitled “Construction/Lease \$2.36/ton” in the Calculation will be increased annually commencing January 1, 2018 by one hundred percent (100%) of the percentage increase or decrease, if any, in the CPI during the Comparison Year, using the CPI published for June of such Year as compared with the CPI published for June of the Base Year.

(vii) As set forth in the Calculation, each adjustment in the per ton MSW Rate pursuant to this Section 6.2 shall equal the percentage adjustment in the Contractor Rate plus the per ton Franchise Fees.

(d) Per Yard MSW and Minimum MSW Rates. Each of the per yard MSW Rate, minimum MSW Rate and per can MSW Rate shall be adjusted January 1st every year (beginning January 1, 2013), as follows: the per yard MSW Rate shall equal 24.05% of the Contractor Rate, plus the per ton Franchise Fees divided by 5.54; the minimum MSW Rate shall equal the per yard MSW Rate divided by two (2); and the per can MSW Rate shall equal the minimum MSW Rate divided by three (3). All rates in this Section 6.2(d) shall be rounded to the nearest five cents.

(e) All Other Rates. Each of the Rates set forth on Exhibit D other than the MSW

Rates shall be adjusted January 1st every year (beginning January 1, 2013) by an amount equal to the percentage increase or decrease, if any, in the Contractor Rate (i.e., determined before adjusting for Franchise Fees) . All rates in this Section 6.2(e) shall be rounded to the nearest five cents.

(f) Procedure. The procedure for Rate adjustments under this Section 6.2 shall be as follows:

(i) Not later than August 15th of each year, Contractor shall file with the City Manager a written notice of intention to adjust each of the then current Rates effective as of January 1st of the next year in accordance with Section 6.2(a) through (e) above.

(ii) Within sixty (60) days of the filing of the notice of intention, the City Manager shall review the notice and either confirm that the proposed Rates are within the limit of Section 6.2 above or establish by mutual agreement with Contractor any necessary changes to the proposed Rates to make such confirmation.

(iii) Not later than October 20th, the City Manager shall inform the City Council in writing of his or her determination regarding the proposed new Rates and the City Council shall be entitled to review and confirm that the proposed Rates are within the limit of Section 6.2 above or establish by mutual agreement with Contractor any necessary changes to the proposed Rates to make such confirmation, not later than November 20th. Any Rates shall become effective on the following January 1st, provided that Contractor shall post notice of the revised Rates at the Transfer Station not later than December 1st.

(iv) In the event that the CPI or the Fuel Index described in Section 6.2 above shall be discontinued or materially modified during the term of this Agreement, the parties shall together select a replacement index and/or otherwise change Section 6.2 above so as to replicate, as nearly as possible, the mutual intention of the parties to rely on the results of either index described in Section 6.2 as in effect on the date hereof.

6.3 Modification Based on Changes in Pass-Through Costs. In addition to adjustments under Section 6.2 above, each Rate shall be adjusted to reflect changes in Pass-Through Costs that are not the subject of Rate adjustments pursuant to Section 6.2 above, as follows. Using the section of the Calculation entitled "Revenue Base," each Rate shall be increased by an amount equal to the increase in applicable Pass-Through Costs, and decreased by an amount equal to the decrease in applicable Pass-Through Costs, in each case so as to cause such Rate to compensate for such change in Pass-Through Costs as of the date such change becomes effective and either payable by or a benefit to Contractor, and taking into account the increase or decrease in Franchise Fees payable in respect of such change. Changes in Pass-Through Costs resulting from a change in Disposal Facilities or Processing Facilities shall cause an increase in Rates as provided herein only if Contractor has complied with Sections 4.1.1 and 4.1.2 and City has approved the successor or alternate Facilities in accordance with such Sections, subject to Section 4.6.

6.4 Five Year Review. Once every five (5) years (beginning no later than April 2, 2016 for purposes of adjusting the Rates effective January 1, 2017), City shall conduct a review for the purpose of determining whether or not the automatic adjustments provided in Sections 6.2, 6.3 and 6.5 have adequately adjusted the Rates to cover the actual increase or decrease in the Contractor's reasonable operating costs or have exceeded those costs and whether the Rates remains fair to the ratepayer and the Contractor. Depending on the results of that review the City may approve an increase or decrease in the Rates. City shall complete each such review and adjustment, if any, at least three months (3) prior to the beginning of such year (by September 30, 2016 in the case of the first such review), and Contractor shall cooperate with such review. In conducting each such review, City shall consider the following information: financial records of Contractor (including operating expenses and revenues and Disposal, Processing, Regulatory and other costs of Contractor, and Contractor revenues), the factors described in

Section 6.5 below, and rates charged for comparable services at similar facilities. Increases or decreases in the Rates pursuant to this Section 6.4 shall be subject to the notice and public hearing requirements in the Ukiah City Code, Division 4, Chapter 6, Article 1, commencing with Section 3950. The City may conduct such investigation as it deems necessary to perform this review and Contractor shall cooperate with such investigation, which may include the City's inspection and copying of Contractor records and review and/or audit of Contractor's financial records by a City retained CPA, the costs of which shall be reimbursed to City from Base Revenue but treated as a Pass-Through Cost for rate setting purposes.

6.5 Modification Based on Extraordinary Items. In addition to adjustments under Sections 6.2, 6.3, and 6.4 above, Contractor may request an increase in the Rates if Contractor's costs increase or its revenues decrease solely as the result of extraordinary circumstances beyond its control that could not have been reasonably anticipated by Contractor (such as a Change in Law) and if the increase in costs or decrease in revenues unavoidably adversely affects Contractor's opportunity to operate at a reasonable profit. Contractor shall have the burden of producing evidence satisfactory to City demonstrating its need for a rate increase prior to the regular Five Year Review pursuant to Section 6.4 above, including, but not limited to, Reviewed or Audited financial statements of Contractor, if requested by City. The City Council shall consider the request pursuant to the notice and public hearing procedures in Ukiah City Code, Division 4, Chapter 6, Article 1, commencing with Section 3950.

6.6 Billing. Contractor shall charge and collect from all customers at the Transfer Station upon receipt of materials, or bill such customers, for all services hereunder. Interest of one percent (1%) per month or the highest rate permitted under applicable law, whichever is less, shall be applied to any past due amounts until paid in full. Amounts shall be past due if not paid within thirty (30) days of billing. Contractor shall have the right to refuse service to any customer that is more than sixty (60) days delinquent on his, her or its account.

7. Provisions Applicable to Equipment and Personnel.

7.1 Equipment. Contractor shall provide all equipment necessary to perform the services described in the Agreement, sufficient in number and capacity to efficiently perform the work required by this Agreement. All equipment used at the Transfer Station shall be maintained in good working condition and be suitable for use at the facility without causing unreasonable wear and tear or damage to the improvements constructed on the Site. The equipment shall comply with all applicable legal requirements. Contractor shall keep the outside of the truck bodies free from dirt and filth, and shall clean the inside of the trucks in a sanitary manner on a regular basis. Suitable measures shall be taken to prevent refuse from falling into public streets or places. Contractor shall keep all trucks freshly painted in a uniform manner, and the firm name or logo, telephone number, and truck number of each truck shall appear in a conspicuous manner. Contractor shall keep all equipment in good maintenance and repair, regularly inspect same, and keep accurate records of all maintenance.

7.2 Facility Maintenance. Contractor shall maintain the Site and the tipping floor in an orderly condition with proper signage to direct users to the appropriate locations on the Site to conduct their business. All refuse deposited on the tipping floor shall be removed within 24 hours of its deposit. Contractor shall employ reasonable measures to control noise, odors, litter and other nuisance conditions. Contractor will be responsible for all repair, maintenance and replacement of the Transfer Station in order to keep it in sound working order, including, without limitation, the tipping floor surface, driveways, gates, fences, electrical distribution systems, ventilation and heating, fire sprinklers, floor drains, walls, doors, roof, restrooms, fixed equipment and landscaping. Contractor will keep the tipping floor free of major cracks, holes and breaks, and will keep any tractor not equipped with rubber tires or tracks from

coming in contact with the tipping floor or driveways. All repairs made by Contractor will be with an identical article or material or an equal approved by City.

7.3 Transport of Materials. Contractor shall not allow Solid Waste, Recyclables, Green Waste, Food Waste, Mixed Organic Waste or Wood Waste to blow or fall from any vehicle used for transportation. Contractor shall clean up any and all spills, including oil and debris on the streets, resulting from its operations. Should Contractor fail to promptly clean up such spills resulting from its operations after notice from City, Contractor shall be liable to City for all reasonable costs incurred by City in doing so.

7.4 Staffing. Contractor shall employ sufficient staff to provide service in a safe manner at the Transfer Station, and to meet its obligations under this Agreement, including, without limitation, a Transfer Station Manager. All personnel shall be qualified to perform their assigned tasks and will possess the required licenses, permits or training for the tasks they perform. Contractor shall provide suitable operational and safety training for all of its employees who utilize or operate vehicles or equipment at or in connection with the operation of the Transfer Station. Contractor shall use its best efforts to assure that all employees present a neat appearance, conduct themselves in a courteous manner, and perform the work as quietly as possible.

7.5 Subcontractors. Contractor shall not subcontract any of the services under this Agreement without the prior written consent of City.

8. Records and Reports.

8.1 Contractor shall keep and maintain accurate books and records clearly showing its revenues and expenses in connection with the operations provided for in this Agreement. Contractor will also keep and preserve records of all loads of Acceptable Waste, Recyclables, Food Waste, Mixed Organic Waste, Green Waste, Wood Waste and Household Hazardous Waste received at the Transfer Station, and will report to City every three (3) months during the term hereof the total quantities and payments received. Contractor shall provide written notice to City of the location of its records and any change in the location.

8.2 City's designated representative shall be allowed access to the Transfer Station Site at all times when the Transfer Station is open, and upon prior written notice to Contractor shall be allowed to inspect and copy any and all records of Contractor containing information about the operation of the Transfer Station for purposes of audit or to verify the recordkeeping procedures of Contractor. City's designated representative shall also be allowed access to the Site during non-operating hours upon prior written notice to the Transfer Station Manager. Contractor shall fully cooperate with City in reviewing or investigating information in Contractor's records or pertaining to Transfer Station operations.

9. Hold Harmless and Insurance.

9.1 Contractor shall indemnify and hold harmless City, its City Council, boards, commissions, officers, agents, representatives and employees from any and all actions, claims or damages brought for or on account of injuries to or death of any person or damage to property of all kinds resulting from or arising out of the operations of Contractor, its officers, agents, employees or servants pursuant to this Agreement. The duty of Contractor to indemnify and hold harmless shall include the duty to defend as set forth in California Civil Code Section 2778.

9.2 Contractor shall have in effect during the term of this Agreement, workers' compensation and employer liability insurance providing full statutory coverage.

9.3 Contractor shall take out and maintain during the term of this Agreement, liability insurance for the following types and minimum amounts:

(a) General liability, including comprehensive form, premises operations, products/completed operations, hazard, contractual insurance, broad form property damage, independent contractors and personal liability, with limits for bodily and property damage combined of \$500,000 each occurrence and \$500,000 aggregate.

(b) Automobile liability, including comprehensive form, owned, hired and non-owned, with a limit of \$1,000,000 for bodily injury and property damage combined.

(c) Excess liability, umbrella form, with a limit for bodily injury and property damage combined of \$5,000,000 each occurrence and \$5,000,000 aggregate.

(d) Pollution and remediation liability with limits in an amount of not less than one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) annual aggregate insuring against loss, the cost of remediation and legal defense as a result of pollution conditions arising out of the collision, upset or overturn of Contractor vehicles in conjunction with this Agreement.

(e) Broad form fire insurance approved by City, jointly in the names of Contractor and City, covering not less than the full replacement cost of all improvements on the Transfer Station Site. In the event of damage to any portion of the Transfer Station, Contractor shall rebuild, repair or otherwise reinstate the damaged improvements in good and substantial manner, with such reconstruction to commence within ninety (90) days after the damage occurs.

Insurance is to be placed with admitted California insurers with an A.M. Best's rating of no less than A- for financial strength, AA for long-term credit rating and AMB-1 for short-term credit rating. Insurance certificates evidencing the required coverage shall be filed with City and shall be subject to approval by the City Attorney. City, its City Council, boards, commissions, officers, agents and employees shall be named as additional insureds on any such policies of insurance which shall also contain a provision that the insurance afforded thereby shall be primary. No such policy shall be cancelled or modified except upon thirty (30) days' prior written notice to City.

9.4 Contractor shall post a \$250,000 performance bond or financial instrument reasonably acceptable to the City Manager as security for Contractor's faithful performance of each and every term, covenant and condition of this Agreement to be performed by Contractor, provided that the cost of such bond or other instrument shall be included in the Operating Cost Component.

10. Remedies upon Default.

10.1 Contractor shall be deemed in default of this Agreement in the event Contractor defaults in the performance of any of the duties to be performed by it under the terms of this Agreement and fails to cure the breach as further provided in this Section 10.1. City shall give Contractor written notice, either by mail or by personal service, setting forth the default. Contractor shall correct such default within thirty (30) days after service of such notice (within seven (7) days if City determines that the public health or safety is at risk) unless the default cannot, by its nature, be cured within said period, in which case the cure period shall be extended for such additional time as is reasonably necessary to effect a cure, provided that Contractor shall commence efforts to effect a cure as soon as practicable and shall diligently pursue the cure. . If Contractor commits three or more breaches of material provisions of this Agreement within an eighteen (18) month period, whether cured or not, the Contractor shall be deemed to

have committed "Multiple Breaches."

10.2 In the event Contractor's default described in Section 10.1 is of a material provision of this Agreement and is not cured as set forth in Section 10.1, or if Contractor has committed Multiple Breaches (defined to mean three or more defaults of material provisions of this Agreement within an eighteen (18) month period, whether cured or not) ("Material Default"), City shall have the following remedies:

10.2.1 Liquidated Damages. The parties acknowledge that City will incur damages as a result of a Material Default, and that such Material Default may not warrant termination of this Agreement. The parties agree that as of the time of the execution of this Agreement, it is impractical, if not impossible, to reasonably ascertain the extent of damages which shall be incurred by City as a result of a Material Default. The factors relating to the impracticability of ascertaining damages include, but are not limited to, the fact that: (i) substantial damage results to members of the public who are denied services or denied quality or reliable service; (ii) such breaches cause inconvenience, anxiety, frustration, and deprivation of the benefits of the Agreement to individual members of the general public for whose benefit this Agreement exists, in subjective ways and in varying degrees of intensity which are incapable of measurement in precise monetary terms; (iii) that exclusive services might be available at substantially lower costs than alternative services and the monetary loss resulting from denial of services or denial of quality or reliable services is impossible to calculate in precise monetary terms; and (iv) the termination of this Agreement for such breaches, and other remedies are, at best, a means of future correction and not remedies which make the public whole for past breaches. Liquidated damages shall be City's exclusive damages remedy for any individual Material Default which does not result in termination of this Agreement by City. The amount of liquidated damages is \$1,000 for each day the Material Default continues after Contractor fails to cure until it is either cured or City terminates this Agreement.

10.2.2 Franchise Termination. Without further notice and without suit or other proceedings, City may cancel and annul the rights and privileges of this Agreement upon a Material Default. Nothing in this Section shall prohibit the parties from meeting to discuss ways to resolve the issue. In the event of termination of this Agreement for Material Default, City shall have the right forthwith to grant a franchise to another person or to take possession of the trucks and other equipment of Contractor used to perform work under this Agreement. City shall have the right to retain possession of the trucks and other equipment for up to one (1) years after such termination and City shall pay Contractor the reasonable rental value of such trucks and other equipment, and keep them in good maintenance and repair, during the time the same are used by City. City shall also have access to Contractor's records for the purpose of billing customers during the period City is providing the services described in this Agreement, and shall retain all fees collected for such services.

Upon termination of this Agreement for any reason, Contractor shall have the obligation to sell to City and City shall have the option to purchase the equipment used by Contractor to perform its obligations under this Agreement in operating the Transfer Station and transporting Solid Waste to Disposal and Processing Facilities and other markets (the "equipment"). Such option shall be exercised by written notice to Contractor at least six (6) months prior to the termination date, unless the Agreement is terminated based on a Material Breach, in which event notice of the election must be given within sixty (60) days after the termination date.

The purchase price that City shall pay Contractor for the equipment shall be its cost less depreciation to the date of purchase calculated on a straight-line basis over its estimated useful life as shown on the books of Contractor.

10.2.3 Other Remedies. Upon termination of this Agreement based on a Material Default, City shall have all other remedies in law or equity for such Material Default.

10.3 If a dispute arises between City and Contractor regarding fees or any other term or provision of this Agreement, the parties agree to meet and confer in good faith to resolve the dispute. Either party may request to meet and confer by written notice to the other party. Alternatively, the parties may agree to participate in non-binding mediation. If the dispute is not resolved within thirty (30) days after the written request to meet and confer has been given or after the parties have agreed to non-binding mediation, the matter, other than an action seeking specific performance or other equitable relief, damages of Twenty Five Thousand Dollars (\$25,000) or less, or indemnification or insurance coverage pursuant to Section 9, shall be submitted to non-binding arbitration in accordance with Title 9 of the California Code of Civil Procedure, commencing with Section 1280, before a single neutral arbitrator ("Arbitrator") in the Mendocino County. The Arbitrator shall be an attorney with at least ten (10) years' experience or a retired judge (or a person having comparable qualifications) and shall be mutually agreed upon by the parties. If the parties are unable to agree on an Arbitrator, the Arbitrator shall be appointed by the superior court in accordance with Cal. Code Civ. Proc. §1281.6. The fees and expenses of the Arbitrator shall be borne equally by the parties.

In the event such non-binding arbitration does not resolve the matter and in any other dispute that results in any court action, the parties waive any right to a jury trial and agree that any such action shall be filed in the federal or state courts in and for Mendocino County, each party hereby consenting to the jurisdiction of and venue in such courts, the matter shall be governed by the internal laws of the State of California (irrespective of choice of law principles), and the prevailing party shall be entitled to recover its reasonable attorneys' fees, costs and disbursements incurred in such action from the non-prevailing party.

10.4 If Contractor shall at any time during the term of this Agreement or any extension thereof, become insolvent, or if proceedings in bankruptcy shall be instituted by or against Contractor, or if Contractor shall be adjudged bankrupt or insolvent by any Court, or if a receiver or trustee in bankruptcy or a receiver of any property by Contractor shall be appointed in any suit or proceeding brought by or against Contractor, or if Contractor shall make an assignment for the benefit of creditors, then and in each and every such case, and provided that such proceedings, adjudication, appointment or assignment, as the case may be, continue in effect for ninety (90) days without being vacated, removed or withdrawn, this Agreement shall immediately cease and come to an end, and the rights and privileges granted shall immediately be cancelled and annulled without notice or action required on behalf of City.

10.5 Notwithstanding any other provision herein, no default, delay or failure to perform on the part of either party shall be considered a breach hereunder if such default, delay or failure to perform is due to causes beyond such party's control, including, but not limited to, riots, civil disturbances, actions or inactions of governmental authorities, epidemic, war, embargoes, severe weather, fire, earthquake, acts of God, defaults by the other party or defaults by carriers. In the event of any such default, delay or failure to perform, any dates or times by which the affected party otherwise is scheduled to perform shall be extended for a period of time equal in duration to the additional time required because of the excused default, delay or failure to perform.

11. Assignment.

11.1 Contractor shall not directly or indirectly, voluntarily or involuntarily assign, mortgage,

pledge or encumber any interest in all or a part of this Agreement without the prior written consent of City. The City Council shall have the right to determine in its sole discretion whether to approve, conditionally approve or deny any request by Contractor for approval under this Section. Any action requiring City Council approval under this Section that occurs without such approval shall give City the right to terminate this Agreement without prior notice to Contractor or its successors or assigns. For purposes of this Section, any transaction involving the transfer, sale or exchange of stock which results in a change in majority control of Contractor from its owners as of the date hereof (excluding transfers between such owners and transfers by any such owners to revocable living trusts for the benefit of their families) shall be an assignment subject to City review and approval.

11.2 Any written agreement between Contractor and a Disposal Facility for the Disposal of Solid Waste received at the Transfer Station entered into after the date of this Agreement, and any written agreement between Contractor and a Processing Facility for the Processing of Recyclables received at the Transfer Station entered into after the date of this Agreement, shall provide that: (a) City is a third party beneficiary with the same right as a party to enforce such agreement; (b) any assignment of such agreement shall require City approval; (c) in the event such agreement is terminated during its term or any extended term by Contractor or by the Disposal Facility or Processing Facility operator based on an uncured default by Contractor under such agreement, such agreement may be assumed by City without change, including as to Disposal or Processing rates and terms; and (d) if terminated based on an uncured default by Contractor, any payments due but unpaid under such agreement on the date of termination shall continue to be an obligation of Contractor and the obligation to make any such payments shall not be assumed by City upon its assumption of such agreement.

12. City's Options to Purchase Site, Improvements and Equipment.

12.1 City's Options to Purchase Site and Improvements. On December 31, 2016, Owner and Contractor shall have the obligation to sell and the City shall have the option to purchase from Owner both the Transfer Station Site and all the improvements on the Transfer Station Site (the "Improvements") for an aggregate purchase price of One Dollar (\$1.00). City shall be deemed to have exercised its option to purchase the Transfer Station Site and the Improvements, unless it has given Contractor written notice prior to December 31, 2016 that it has elected not to exercise the option. Title shall transfer to City within thirty (30) days after December 31, 2016. The purchase shall be on a then "as-is" basis, and otherwise on commercially reasonable terms then applicable to the purchase and sale of real property, except that Owner shall indemnify City against any cost or liability arising from hazardous or toxic waste contamination on the Transfer Station Site which occurred before escrow closes on City's purchase of the Transfer Station Site. At closing, Owner shall convey to City clear, unencumbered fee title to the Transfer Station Site and City shall enter into a lease for the Transfer Station Site and the Improvements with Contractor in the form attached hereto as Exhibit F. Owner or Contractor's failure to co-operate in City's purchase of the Transfer Station Site and Improvements shall be a Material Default.

12.2 Prior Termination. If this Agreement is terminated before December 31, 2016 for any reason, City shall have the option to do all, but not part, of the following: (a) purchase or lease from Owner the Transfer Station Site pursuant to Sections 13.1 or 13.2, (b) purchase from Owner the Improvements pursuant to Section 13.3, and (c) purchase from Contractor all the Equipment pursuant to Section 10.2.2. City's option under this Section 12.2 shall be exercised by written notice to Owner and Contractor given within sixty (60) days before the termination date, unless the Agreement is terminated based on a Material Breach, in which event notice of the election must be given within sixty (60) days after the termination date.

13. Purchase or Lease of Site and Purchase of Improvements.

13.1 Purchase of Site. If City elects to purchase the Transfer Station Site in accordance with Section 12.2 above, Owner shall sell City the Transfer Station Site for a purchase price equal to the lesser of (a) \$487,000 increased by the percentage increase in the CPI between November 7, 2001 and the date of termination of this Agreement, or (b) the then actual fair market value of the Transfer Station Site; provided, however, that the purchase price shall be One Dollar (\$1.00) if the closing of the purchase occurs after September 30, 2016. The purchase shall be on a then “as-is” basis, and otherwise on commercially reasonable terms then applicable to the purchase and sale of real property, except that Owner shall indemnify City against any cost or liability arising from hazardous or toxic waste contamination on the Transfer Station Site which occurred before escrow closes on City’s purchase of the Transfer Station Site. At closing, Owner shall convey to City clear, unencumbered fee title to the Transfer Station Site.

13.2 Lease of Site. If City elects to lease the Transfer Station Site in accordance with Section 12.2 above, City’s lease shall commence on January 1, 2017 or thirty (30) days after the notice of exercise in the case of termination for Material Default, and expire ten (10) years thereafter. Rent under the lease shall equal the then fair market lease value of the Transfer Station Site (excluding any value attributable to the Improvements) and the lease shall otherwise be on commercially reasonable terms then applicable to the ground lease of real property. If City and Owner are unable to agree on the fair market lease value, they shall select and share the cost of an appraiser to determine such value. If they cannot agree on a single appraiser, each may obtain an appraisal of such value from a qualified appraiser of its choice. If the separate appraisals are within ten percent (10%) of each other, fair market lease value shall be the average of the two appraisals. If the appraisals differ by more than ten percent (10%), the two appraisers shall select a third appraiser to review the appraisal reports and determine which report represents the fairest appraisal. The appraisal selected by the third appraiser shall constitute the fair market lease value of the Transfer Station Site. The parties shall each bear the expense of their separately selected appraisers and share equally the cost of the third appraiser.

13.3 Purchase of Improvements. If City elects to purchase the Improvements in accordance with Section 12.2 above, the purchase price that City shall pay Owner for the Improvements shall be One Dollar (\$1.00)

14. Waiver. The waiver by any party of any breach or violation of any term or condition of this Agreement or of any provision of law by the other party must be in writing signed by the party to be charged, and shall not be deemed to be a waiver of the term, condition or provision of law, or of any subsequent breach or violation of the same or any other term, condition or provision of law. The acceptance by City of any Surcharge or other fee or other monies which may become due hereunder to City shall not be deemed to be a waiver of any preceding breach or violation by Contractor.

15. Administration. The administration and enforcement of this Agreement shall be the responsibility of the City Manager or a designated representative of that office. This section is not intended to indicate or suggest the City Manager has the authority to grant, amend, or revoke the rights referenced herein or to prevent the City Manager from seeking approval from the City Council for any decision the City Manager is required or authorized to make hereunder.

16. Independent Contractor. Contractor, its employees and agents are independent contractors and not employees or agents of City.

17. Notices. Whenever notice or a document is required or permitted to be served or given hereunder, it shall be deemed given or served, when received if delivered by fax or email (with acknowledgment of receipt), certified U.S. Mail, overnight courier, such as UPS or Federal Express, or 48 hours after deposit in the U.S. Mail with first class postage affixed. Any such document or notice shall be addressed as follows:

City:	City Manager Ukiah Civic Center 300 Seminary Avenue Ukiah, California 95482
	FAX:
	Email:
Contractor:	Solid Wastes Systems, Inc. Attn: David M. Carroll, President P. O. Box 60 Ukiah, California 95482
	FAX:
	Email:
Owner:	Yulupa Investments, LLC Attn: David M. Carroll, President P. O. Box 60 Ukiah, California 95482
	FAX:
	Email:

or to such other person or address as may be specified from time to time in writing by any party in accordance with this Section.

18. Amendments. This Agreement may be amended from time to time only by written agreement between the parties signed by an authorized representative of each party. Any party may at any time request that the service or other provisions in this Agreement be modified by delivering written notice of its requested modifications to the other parties. Within thirty (30) days after receipt of any such request, the parties shall meet and negotiate in good faith on adopting such requested modifications, including, without limitation, any change to the Rates necessitated by such modifications, provided that nothing herein shall obligate any party to agree on any such requested modifications.

19. Successors and Assigns. This Agreement shall be binding upon, and shall inure to the benefit of, the permitted successors and assigns of the parties.

20. Integration; Severability. This Agreement, including the Exhibits hereto, constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements between the parties, whether written or oral, relating to such subject matter, including the Prior Agreement. If a court finds any provision of this Agreement invalid or unenforceable as applied to any circumstance, the remainder of this Agreement and the application of such provision to

other persons or circumstances shall remain in effect. The parties further agree to replace such void or unenforceable provision with a valid and enforceable provision which will achieve, to the extent possible, the economic, business and other purposes of the void or unenforceable provision.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

Solid Wastes Systems, Inc.

By: _____
President

Yulupa Investments, LLC

By: _____
President

City of Ukiah

By: _____
City Manager

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney

EXHIBIT A

**FIRST AMENDED AND RESTATED AGREEMENT FOR RECEIPT OF WOOD WASTE,
GREEN WASTE AND MIXED ORGANIC WASTE**

EXHIBIT C

LEGAL DESCRIPTION OF TRANSFER STATION SITE

EXHIBIT D
RATE SCHEDULE

EXHIBIT E
TRANSFER STATION RATE CALCULATION

EXHIBIT F
TRANSFER STATION LEASE

EXHIBIT G

CURRENT GEOGRAPHIC AREA SERVED BY TRANSFER STATION

The areas marked as Franchise Areas 3 and 2 (Inland) on the attached map, including the incorporated City limits.



AGENDA SUMMARY REPORT

SUBJECT: Review Landfill Closure Financial Plan Update and Authorize the Filing of the Update.

DEPARTMENT: Finance

PREPARED BY: Dan Buffalo, Finance Director

PRESENTER: Consent Calendar

ATTACHMENTS:

1. 2016-03 CC Reso - Establishing Funding Closure
2. 2024 Landfill Annual Inflation Factor Form_signed

Summary: The City Council will receive an update on the Financial Plan of 2016 to finance closure, post-closure, and a corrective action plan of the Ukiah Landfill.

Background: The City Council, at its regularly scheduled meeting of January 6, 2016, considered a strategy to provide funding for the ultimate closure, post closure, and Corrective Action Plan (CAP) reserve of the Ukiah Landfill. The strategy was memorialized in the City Council Resolution No. 2016-03 (Attachment 1). The Resolution directs the Finance Director to present to Council for consideration annually the condition of the financial plan, with any recommended adjustments.

Discussion: Costs to conduct closure, post-closure, and prepare a corrective action plan have been adjusted by an inflationary index provided by CalRecycle. For 2024, the estimated cost with an assumed inflationary adjustment of 3.6 percent from 2023 is \$22,768,933. The change in cost is due to the annual inflation factor provided by CalRecycle. The Finance Department, in coordination with Public Works and the City Manager's Office, will have a financing strategy prepared to meet this obligation in full, using a combination of reserves, cash inflows from surcharges collected at the transfer station, and potential new debt financing. The plan is anticipated to be ready for consideration by the Council when the closure project has cleared all remaining regulatory/legal delays and is ready for RFP development.

Detail of the calculation and the breakdown by the various categories of closure are included in Attachment 2.

Recommended Action: Receive and file update to the Landfill Closure Financial Plan.

BUDGET AMENDMENT REQUIRED: No

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: Tim Eriksen, Public Works Director/City Engineer

DIVERSITY-EQUITY INITIATIVES (DEI):

CLIMATE INITIATIVES (CI):

GENERAL PLAN ELEMENTS (GP): GP-A5 - Environment and Sustainability Element

Approved: 
☒ Sage Sangiacomo, City Manager

RESOLUTION NO. 2016-03

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF UKIAH ESTABLISHING FINANCIAL MECHANISM FOR FUNDING CLOSURE, POST-CLOSURE MAINTENANCE, AND CORRECTIVE ACTION PLAN FOR CITY OF UKIAH SOLID WASTE DISPOSAL SITE

WHEREAS:

1. The City of Ukiah solid waste disposal site ("Landfill") located at 3100 Vichy Springs Road, Mendocino County Assessor Parcel No. 178-130-01), consisting of a landfill footprint of approximately 40 acres, ceased operations and accepting solid waste in September 2001; and
2. Since September 2001, the City has maintained the Landfill, including monitoring wells surrounding the perimeter of the property and a leachate collection system that captures and disposes of leachate through the City's sewer system; and
3. Under applicable provisions of the California Public Resources Code and in Title 27 of the California Code of Regulations ("CCR"), the City is required to adopt a plan for the closure, post-closure maintenance, and corrective actions required for the Landfill; and
4. Pursuant to 27 CCR 21180(a), the City must provide post-closure maintenance and a corrective action plan reserve ("CAP") for a thirty-year period after closure; and
5. The cash collected by the City to provide for Closure, Post-Closure Maintenance, and the CAP reserve are reflected in the City's financial statements as a net position of the disposal site proprietary fund; and
6. The City is scheduled to complete the closure of the landfill ("Closure") in accordance with its approved closure plan in 2016; and
7. Recently, new and more costly regulatory requirements relating to Closure have been imposed by the California state agencies with jurisdiction over the Closure. These additional requirements, including installation of a methane gas collection system, would have been imposed, even if the Closure had occurred prior to the imposition of these new requirements; and
8. The most recent engineer's estimates for Closure, including the gas collection system and other additional requirements, indicate that the net proprietary fund for the Landfill is not sufficient to cover all of the costs of Closure, Post-Closure Maintenance, and to establish a CAP reserve; and
9. The City must provide the funding for Closure, Post-Closure Maintenance, and the CAP reserve; and
10. On January 1, 2017, pursuant to the Amended and Restated Transfer Station Agreement ("Transfer Station Agreement") between the City of Ukiah and Solid Waste Systems, Inc. ("SWS"), dated December 12, 2011, the City is entitled to acquire legal title to the Transfer Station (Transfer Station) located at 3151 Taylor Drive, Ukiah, California, and the City and SWS are obligated to enter a lease under which SWS will continue to operate the transfer station and pay rent ("Transfer Station Rent") to the City for the use of the Transfer Station; and

10. Dedicating Transfer Station Rent to fund Closure, Post-Closure Maintenance, and the Cap Reserve as further provided herein will provide a source of revenue to fund those obligations which exceed the disposal site proprietary fund; and

11. Commencing on January 1, 2012, the City adopted a City Surcharge on the Gate Fee at the Transfer Station ("Surcharge") to provide a source of revenue in the Landfill/Solid Waste Enterprise Fund for Closure and Post-Closure Maintenance, and the CAP reserve. The Surcharge is currently \$2.00 per ton of Solid Waste received at the Transfer Station. The Surcharge is collected by SWS and remitted to the City, where it is recorded as revenue in the Landfill/Solid Waste Enterprise Fund as Closure and Post-Closure Reserve; and

12. Committing the Surcharge at its current level or any future level approved by the City Council will stabilize the Landfill/Solid Waste Enterprise Fund, provide a dedicated source of revenue to comply with the City's Closure and Post-Closure Maintenance costs, and the establishment and replenishment of the Cap Reserve; and

13. The combination of the disposal site proprietary fund, Transfer Station Rent, and the Surcharge will provide adequate funding for City's Closure and Post-Closure Maintenance costs, and the establishment and replenishment of the Cap Reserve, provided however, that an increase in the Surcharge may be necessary once the final Closure costs and the method of financing the City's obligations is determined;

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Ukiah as follows:

1. Transfer Station Rent is hereby committed to any unfunded Closure costs, Post-Closure Maintenance costs, and the establishment and replenishment of the CAP reserve.

2. There is hereby established a Transfer Station Rents Special Revenue Fund (Special Revenue Fund) for all Transfer Station Rent revenue which fund is established and dedicated to pay for any Closure costs, Post-Closure Maintenance costs, and the establishment and replenishment of the CAP reserve.

3. Revenue recorded in the Special Reserve Fund shall be given first preference over other revenue sources, other than grants, in funding Closure and Post-Closure Maintenance expenses and CAP reserve requirements that are not funded by the disposal site proprietary fund.

4. Any Closure and Post-Closure Maintenance expenses and CAP reserve requirements not funded by grants, the disposal site proprietary fund, and the Special Revenue Fund shall be funded by the Surcharge.

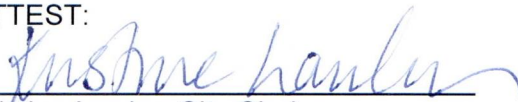
5. The City Finance Director is hereby directed to prepare for City Council the approval a Financial Plan (Plan) to extinguish in fifteen years the estimated unfunded Closure and thirty-year Post-Closure Maintenance costs, and the CAP reserve requirements, and present the Surcharge to be applied to the Transfer Station Gate Fee commencing on January 1, 2017. The revised Surcharge shall be submitted to the City Council for approval no later than October 2016. Thereafter, in September of each year, the City Finance Director shall prepare an update of the Plan to fund Closure, Post-Closure Maintenance, and CAP requirements. Any recommended increase or decrease in the Surcharge resulting from the annual update of the Plan shall be presented to the City Council for approval in October, and if approved, will be applied to the Transfer Station Gate Fee immediately following January 1st.

PASSED AND ADOPTED this 6th day of January 2016, by the following roll call vote:

AYES: Councilmember Crane, Mulheren, Doble, Brown, and Scalmanini.
NOES: None
ABSTAIN: None
ABSENT: None



Stephen G. Scalmanini, Mayor

ATTEST:


Kristine Lawler, City Clerk

California Environmental Protection Agency



Department of
Resources Recycling and Recovery

Gavin Newsom
California Governor

Yana Garcia
Secretary for Environmental Protection
Krystal Acierto
CalRecycle Acting Director

April 2, 2024

TO ALL OPERATORS/OWNERS OF SOLID WASTE LANDFILLS

Title 27, California Code of Regulations (27 CCR), Division 2, Subdivision 1, Chapter 6, Subchapter 3, Article 1, section 22236, requires you to submit a report annually to the California Department of Resources Recycling and Recovery (CalRecycle). The report calculates the inflationary increase in the closure, postclosure maintenance, and/or corrective action cost estimates for the previous calendar year.

Based on information obtained from the U.S. Department of Commerce, Bureau of Economic Analysis, Table 4, dated March 28, 2024, the inflation factor for **2023** is **1.036 (3.6%)**. Please complete the **2023 Annual Inflation Factor Report** for each landfill you own and/or operate, and send it to the **Financial Assurances Unit** at the following email address by **June 1, 2024**:

FAU@CALRECYCLE.CA.GOV

If you would prefer to mail it, please send it to:

CalRecycle, Financial Assurances Unit, MS 10A, P.O. Box 4025, Sacramento, CA 95812-4025

Previous years' Inflation Factor Reports can be found at:

<https://www.calrecycle.ca.gov/SWFacilities/Financial/Bulletins>

Following are previous years' inflation factors:

1989 - 1.041	1990 - 1.054	1991 - 1.036	1992 - 1.033
1993 - 1.026	1994 - 1.020	1995 - 1.024	1996 - 1.020
1997 - 1.020	1998 - 1.010	1999 - 1.015	2000 - 1.021
2001 - 1.022	2002 - 1.011	2003 - 1.017	2004 - 1.021
2005 - 1.028	2006 - 1.029	2007 - 1.027	2008 - 1.022
2009 - 1.012	2010 - 1.010	2011 - 1.021	2012 - 1.018
2013 - 1.015	2014 - 1.015	2015 - 1.010	2016 - 1.013
2017 - 1.018	2018 - 1.022	2019 - 1.018	2020 - 1.012
2021 - 1.041	2022 - 1.070		

If you have not made the previous years' adjustments, please do so before calculating the 2024 adjusted total cost estimates. Apply subsequent inflation factors to the previous year's total cost estimates, beginning with the inflation factor that corresponds with the year the plans were prepared. For example, if the plans were prepared in 1989, apply the 1989 inflation factor to your 1989 initial certified total closure and postclosure maintenance cost estimates and so forth, until the current inflation factor is applied.

TO ALL OPERATORS/OWNERS OF SOLID WASTE LANDFILLS

Do not disregard this notice. If you recently revised your estimates due to changes in your closure, postclosure maintenance and/or corrective action plans, and the revised estimates reflect 2024 dollars, please report your updated 2024 cost estimates.

Information regarding the total and remaining permitted capacity at your landfill(s) should be submitted under a separate mailing.

For public operators utilizing a Pledge of Revenue Agreement, the operator is required by 27 CCR section 22233(b)(4)(B) to submit the CalRecycle 114 form to demonstrate the pledged revenue continues to be available when needed and will cover the postclosure maintenance and/or corrective action cost estimate(s) identified in the updated 2023 Annual Inflation Factor Report required by 27 CCR section 22236. The operator is required to submit annual certifications of the CalRecycle 114 form with the 2023 Annual Inflation Factor Report (copies of the resolution and agreement are not required annually, unless amended).

If you have any questions regarding this report, please contact staff of the Financial Assurances Unit identified for your county through the following link:

<https://www2.calrecycle.ca.gov/SolidWaste/LEA/CalRecycleContacts/>

Thank you for your cooperation.

California Environmental Protection Agency



Department of
Resources Recycling and Recovery

Gavin Newsom
California Governor

Yana Garcia
Secretary for Environmental Protection
Krystal Acierio
CalRecycle Acting Director

ANNUAL INFLATION FACTOR REPORT 2023

FACILITY NAME: City of Ukiah

FACILITY NUMBER: SW-23-AA-0019

1.) Identify the highest approved or subsequently submitted cost estimate on record and the date of the plan:

\$ <u>8,748,697</u>	<u>March 2016</u>
Highest Closure Cost Estimate	Date of Plan
Approved or Subsequently Submitted	
\$ <u>5,258,102</u>	<u>March 2016</u>
Highest Postclosure Maintenance Cost Estimate	Date of Plan
Approved or Subsequently Submitted	
\$ <u>654,116</u>	<u>March 2016</u>
Highest Corrective Action Cost Estimate	Date of Plan
Approved or Subsequently Submitted	

2.) Multiply each cost estimate by the inflation factor to determine the new adjusted cost estimates as illustrated below:

The ABC Landfill's cost estimate for CLOSURE in 2023 was \$2,000,000. Using the 2023 inflation factor of 1.036, they recalculated their ADJUSTED CLOSURE COST for 2024 to \$2,072,000. Their POSTCLOSURE MAINTENANCE (PCM) COST with a Multiplier of 30 in 2023 was \$1,500,000. Using the 2023 inflation factor of 1.036, their ADJUSTED PCM COST for 2024 is \$1,554,000. Their cost estimate for CORRECTIVE ACTION in 2023 was \$1,000,000. Using the 2023 inflation factor of 1.036, they recalculated their ADJUSTED CORRECTIVE ACTION COST for 2024 to \$1,036,000.

NOTE: If the cost estimates identified above were prepared in 2024 dollars, do not inflate below.

ANNUAL INFLATION FACTOR REPORT 2023

\$ 12,608,858 x 1.036 =
 Closure Costs (2023 Dollars)

\$ 13,062,776
 Estimate in 2024 Dollars

\$ 8,252,932 x 1.036 =
 Annual PCM Costs x PCM Multiplier of 30
 or other approved PCM Multiplier (2023 Dollars)

\$ 8,550,038
 Estimate in 2024 Dollars

\$ 1,115,945 x 1.036 =
 Corrective Action Costs (2023 Dollars)

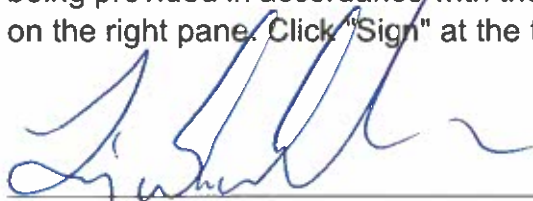
\$ 1,156,119
 Estimate in 2024 Dollars

Choose Either:

Water ☐

or Non-Water ☒

I certify under penalty of perjury under the laws of the State of California that the information in this document is true and correct to the best of my knowledge and is being provided in accordance with the regulations. To sign, click the "Fill & Sign" button on the right pane. Click "Sign" at the top and click "Add Signature".



Operator/Owner Signature

Tim Eriksen

Printed Name of Person Signing

300 Seminary Ave, Ukiah, CA 95482

Mailing Address

Director of Public Works/City
Engineer

Title of Person Signing

707-463-6280

Phone Number

teriksen@cityofukiah.com

Email

05/03/2024

Date of Report



AGENDA SUMMARY REPORT

SUBJECT: Adoption of an Ordinance Amending the Official Zoning Map and General Plan Land Use Map of the City of Ukiah by Establishing the Community Commercial (C1) Zoning District and Community Commercial (CC) Land Use Designation at 195 Low Gap Road (APN 002-080-39).

DEPARTMENT: Community Development

PREPARED BY: Jesse Davis, Chief Planning Manager

PRESENTER: Consent Calendar

ATTACHMENTS:

1. Draft Ordinance

Summary: Council will consider adoption of an ordinance to amend the general plan land use designation from Low-Density Residential (LDR) to Community Commercial (CC) and a rezone from Low-Density Residential (R-1) to Community Commercial (C-1) at 195 Low Gap Road (APN 002-080-39) to facilitate tenant improvements to an existing $\pm 2,475$ sq. ft. structure for use as a 'Professional Office'. No expansion of the existing structure is requested. Limited tenant improvements, however, would be facilitated to utilize the structure as a 'Professional Office'.

Background: Per UCC §9265(d), on August 14, 2024, the Planning Commission held a public hearing on the proposed zoning and General Plan amendment and formulated, by a unanimous 4-0 vote, a recommendation to the City Council to approve the Project with requests for the City Council and Applicant to consider the provision of bicycle parking, as well as increased landscaping and parking lot shade coverage.

On September 4, 2024, the City Council held a public hearing on the proposed zoning and General Plan amendment and formulated, by a unanimous 5-0 vote, introduction by title only an Ordinance to approve a General Plan Amendment from Low-Density Residential (LDR) to Community Commercial (CC) and a Rezone from Low-Density Residential (R1) to Community Commercial (C1), to allow for tenant improvements to an existing structure for use as a 'Professional Office' at 195 Low Gap Road (APN 002-080-39).

Discussion: This Project proposes to Rezone the existing parcel from R-1 (Low-Density Residential) to Community Commercial (C-1) to allow for tenant improvements to the existing structure for use as a 'Professional Office'. The request also requires that a General Plan Amendment be facilitated to alter the existing land use designation from Low-Density Residential (LDR) to Community Commercial (CC). This project is requested because the Applicant desires to undertake tenant improvements to the existing structure and lease it for use as a 'Professional Office', which is not allowed under the presently applied R-1 designation. As defined in Ukiah City Code a 'Professional Office' is considered the provision of professional or technical services including accounting, counseling, architecture, design, medical/dental, engineering, law, financial management, and similar professions. For this proposed use, only minor modifications and tenant improvements to the existing structure would be required, given its recent ADA improvements and past renovations.

Beyond the use of the structure as a 'Professional Office', new development would require adherence to all C-1 zoning regulations. Based on the site plan provided, the existing structures would meet the minimum setback requirements of the zoning district and comply with all other lot development standards required by

the C-1 land-use and zoning designations.

Staff recommends Council adopt the ordinance in Attachment 1, amending the general plan land use designation from Low-Density Residential (LDR) to Community Commercial (CC) and rezoning from Low-Density Residential (R-1) to Community Commercial (C-1) at 195 Low Gap Road (APN 002-080-39). If adopted, the Ordinance will go into effect in 30 days.

Recommended Action: Adopt an Ordinance amending the official zoning map and general plan land use map by establishing the Community Commercial (C1) zoning district and Community Commercial (CC) land use designation at 195 Low Gap Road (APN 002-080-39).

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: NA

FINANCING SOURCE: Cost-Recovery - Project Specific

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: Darcy Vaughn, Assistant City Attorney

DIVERSITY-EQUITY INITIATIVES (DEI): N/A

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): LU Policy 8.4 - Reuse of Underutilized Property

Approved:


Sage Sangiacomo, City Manager

ORDINANCE NO. _____**AN UNCODIFIED ORDINANCE OF THE CITY COUNCIL AMENDING THE OFFICIAL ZONING MAP AND GENERAL PLAN LAND USE MAP BY ESTABLISHING THE COMMUNITY COMMERCIAL (C1) ZONING DISTRICT AND COMMUNITY COMMERCIAL (CC) LAND USE DESIGNATION AT 195 LOW GAP ROAD (APN 002-080-39)**

The City Council of the City of Ukiah does hereby ordain as follows:

SECTION ONE - FINDINGS AND DECLARATIONS

The City Council finds and declares as follows:

1. The Planning Commission held a public hearing to provide direction on the location of the proposed Zoning Map Amendment and General Plan Amendment on August 14, 2024. The Planning Commission voted in favor of recommending that the City Council approve a proposed Zoning Map Amendment and General Plan Amendment, rezoning the subject parcel from Low Density Residential (R-1) to Community Commercial (C-1), and changing the land use designation from Low Density Residential (LDR) to Commercial (CC) ("Amendments").
2. The 0.41-acre Project site is located on the corner of North Oak Street and Low Gap Road at 195 Low Gap Road (APN 002-080-39). The Project proposes to rezone the existing parcel, currently zoned as from Low Density Residential (R-1) to Community Commercial (C-1). The Project also requires a general plan amendment to change the land use designation from Low Density Residential (LDR) to Commercial (CC). This project is requested because the Applicant desires to undertake tenant improvements to the existing structure and lease it for use as a 'Professional Office', which is not allowed under the present R-1 designation. As defined in Ukiah City Code a 'Professional Office' is considered the provision of professional or technical services including accounting, counseling, architecture, design, medical/dental, engineering, law, management, and similar professions.
3. The Zoning Map Amendment is consistent with the findings required for adoption of an ordinance to approve a Zoning Map Amendment and General Plan Amendment as required by Ukiah City Code Section 9265.
4. The Project site is surrounded by a mixture of commercial, public facility and residential uses. Other C1 zoned parcels (with corresponding Community Commercial General Plan designations) currently exist immediately east of the site. No development is proposed. However, future development of the site would require adherence to all C1 zoning regulations. The Project supports General Plan goals and policies related to land use and economic development, as it would provide an opportunity for commercial reuse of an underutilized structure. As such, the proposed Amendments would be consistent with the City's General Plan and City's zoning code.
5. The proposed use of this existing structure as a 'Professional Office' is anticipated to result in a less intensive use of the building and property. 'Religious Assembly', the previous use of the structure, typically experiences high peak usage during worship services, which are

often held multiple times throughout the week, or for holidays or specific events such as memorials, weddings or other ceremonies. Given this orientation, use of structures for religious assembly can attract large congregations, leading to increased traffic congestion and parking demand. In contrast, a 'Professional Office' operates on a more regular, daily schedule with appointments spread throughout the day, and typically features limited weekend hours. This results in a more consistent, moderate flow of traffic rather than the high peaks associated with church services.

6. Notice of the proposed Project and Amendments was provided in the following manner: provided to property owners within 300 feet of the project parcels, as well as agencies and departments with jurisdiction or interest over the project on August 23, 2024; posted on the City's webpage on August 23, 2024; published in the Ukiah Daily Journal on August 25, 2024; posted on the Project site on August 23, 2024; available to the public at the Community Development Counter on August 23, 2024, and posted at the Civic Center (glass case) 72 hours prior to the public hearing.
7. The City Council has considered the Amendments, attached hereto as Exhibits A & B, together with the recommendation of the Planning Commission to approve this Ordinance.

SECTION TWO – ADOPTION OF ORDINANCE

1. The Official Zoning Map for the City of Ukiah is amended to change the Zoning designation of 195 Low Gap Road (APN 002-080-39) from Low-Density Residential (R-1) to Community Commercial (C-1).
2. The Official General Plan land use map is amended to change the land use designation of 195 Low Gap Road (APN 002-080-39) from Low-Density Residential (LDR) to Community Commercial (CC).
3. This Ordinance incorporates the Amendments depicted in the figures attached hereto as Exhibit A and Exhibit B.

SECTION THREE

This Ordinance shall be published as required by law in a newspaper of general circulation.

SECTION FOUR

1. SEVERABILITY: If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, is for any reason held to be invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of the remaining sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases of this Ordinance, or its application to any other person or circumstance. The City Council of the City of Ukiah hereby declares that it would have adopted each section, subsection, subdivision, paragraph, sentence, clause or phrase hereof, irrespective of the fact that any one or more other sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases hereof be declared invalid or unenforceable.

2. EFFECTIVE DATE: This Ordinance shall be published as required by law in a newspaper of general circulation in the City of Ukiah and shall become effective thirty (30) days after its adoption.

Introduced by title only on September 4, 2024, by the following roll call vote:

AYES: Dueñas, Crane, Rodin, Sher, Orozco

NOES:

ABSTAIN:

ABSENT:

Adopted on _____, 2024, by the following roll call vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Josefina Dueñas, Mayor

ATTEST:

Kristine Lawler, City Clerk

EXHIBIT A: GENERAL PLAN EXHIBIT MAP, APN 002-080-39

EXHIBIT B: REZONE EXHIBIT MAP, APN 002-080-39

Exhibit A: General Plan Exhibit Map

APN 002-080-39 to
be reclassified from
LDR to CC

LDR

P

CC

MDR

MDR

Assessors Parcels

0 65 130 Feet
0 0.01 0.02 Miles



1:1,500

General Plan

CASE: File No. 24-9265
OWNER: Eversole Mortuary
APN: 002-080-39
APLCT: Eversole Mortuary
AGENT: -
ADDRESS: 195 Low Gap Rd., Ukiah

THIS MAP AND DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND.
DO NOT USE THIS MAP TO DETERMINE LEGAL PROPERTY BOUNDARIES

Exhibit B: Rezone Exhibit Map

APN 002-080-39 to
be rezoned from R1
to C1

R1

PF

C1

R2

Assessors Parcels

0 65 130 Feet
0 0.01 0.02 Miles

1:1,500



Zoning

CASE: File No. 24-9265
OWNER: Eversole Mortuary
APN: 002-080-39
APLCT: Eversole Mortuary
AGENT: -
ADDRESS: 195 Low Gap Rd., Ukiah

**THIS MAP AND DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND.
DO NOT USE THIS MAP TO DETERMINE LEGAL PROPERTY BOUNDARIES**



AGENDA SUMMARY REPORT

SUBJECT: Adoption of Ordinance Establishing Procedures for Adopting and Imposing Development Mitigation Fees on Behalf of the Ukiah Valley Fire District.

DEPARTMENT: Fire

PREPARED BY: Darcy Vaughn, Assistant City Attorney

PRESENTER: Darcy Vaughn, Assistant City Attorney; Douglas Hutchison, Fire Chief

ATTACHMENTS:

1. Fire Development Mitigation Fee Ordinance

Summary: The Council will consider adopting an ordinance establishing procedures for adopting and imposing development mitigation fees on behalf of the Ukiah Valley Fire District.

Background: To continue providing fire protection services to new development within the Ukiah Valley, the Ukiah Valley Fire District (Fire District) requested in 2008 that the County of Mendocino adopt Fire Impact Fees on its behalf. These one-time fees are charged to new developments and are intended to offset the cost of providing necessary services, such as fire protection and emergency response, in areas experiencing growth. Since their adoption, the fees have remained unchanged.

In 2017, the City of Ukiah and the Fire District entered into a Joint Powers Agreement to provide unified fire protection services across the Ukiah Valley. The Fire District's service area was expanded in 2022 to include the City of Ukiah. As part of this expansion, a **nexus study** was conducted to assess the impact of new developments on the Ukiah Valley Fire Authority's capacity to provide fire services. This study, conducted in compliance with the **California Mitigation Fee Act (Government Code Sections 66000-66008)**, recommended an increase in Fire Impact Fees to address the rising costs of fire protection services, including capital improvements and vehicle acquisitions. The nexus study ensures that the fees are proportional to the actual impact of new developments, as required by law.

The Fire District Board, pursuant to the findings of the nexus study, has drafted a resolution requesting that the City Council adopt these updated fees within the city limits. Before the City can impose these development mitigation fees, it must adopt an ordinance establishing the procedures for doing so on behalf of the Fire District ("Ordinance").

Discussion: The attached Ordinance (Attachment 1), based on similar procedures used by the County of Mendocino, outlines the necessary steps that the City of Ukiah and the Fire District must follow to impose development impact fees on building permits issued within the city. These fees are critical to ensuring that new developments contribute their fair share to the costs of providing adequate fire services, in line with the **nexus and proportionality principles** established by both California law and recent court rulings, including the 2024 U.S. Supreme Court decision on the Sheetz case. This decision emphasized that such fees must be closely tied to the actual impact of new developments and that transparent justification is essential to meet legal standards.

Under the Ordinance, the Fire District is required to adopt a resolution that makes **specific findings** demonstrating that the fees are necessary to maintain public health and safety, given the increasing demand

for fire services. These fees can only be used for capital improvements and the acquisition of equipment necessary to service new development. Additionally, the Fire District must provide an **annual report** detailing fee revenues, expenditures, and account balances to ensure transparency and compliance with the **California Mitigation Fee Act**. This requirement is crucial to meeting the standards established by the Sheetz decision, which emphasizes the need for clear documentation and public accountability in the use of impact fees.

The Fire District must also adopt a **capital improvement plan** for fire facilities and equipment, as required by Government Code Section 66002, at a noticed public hearing. This plan, updated annually, must justify the need for continued fee collection and detail the planned use of fee revenues. Should the Fire District fail to meet these reporting and procedural requirements, the City will cease collecting the fees on its behalf, ensuring ongoing accountability.

Once the City Council adopts the development mitigation fees, they will be assessed on new development projects requiring building permits, with exemptions specified in the Ordinance. The Fire District will be responsible for collecting these fees. The Ordinance also allows the City and Fire District to include administrative costs in the fee structure, ensuring compliance with applicable laws and covering the costs of managing the fee collection process.

Finally, the Ordinance outlines a clear process for suspending fee collection should the Fire District fail to adopt its required annual resolution or request that the City cease collecting the fees. This ensures that the fee program remains consistent with both legal requirements and the financial needs of the Fire District.

On September 4, 2024, the Council introduced this Ordinance, by title only, through a unanimous vote. Following significant input from the community, City Staff, and the Council, the Ordinance is now ready for final adoption. If approved, the Ordinance will take effect 30 days after adoption.

Recommended Action: Adopt the Ordinance establishing procedures for adopting and imposing development mitigation fees on behalf of the Ukiah Valley Fire District.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: Ukiah Valley Fire District Board of Directors

DIVERSITY-EQUITY INITIATIVES (DEI): N/A

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): N/A

Approved: 
Sage Sangiacomo, City Manager

ORDINANCE NO.

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UKIAH ESTABLISHING AND IMPLEMENTING A FIRE DISTRICT DEVELOPMENT MITIGATION FEE

The City Council of the City of Ukiah hereby ordains as follows:

SECTION ONE. FINDINGS

1. Adequate fire protection facilities and equipment must be available to serve new development projects.
2. New development projects require the construction or expansion of the Ukiah Valley Fire District's fire protection facilities and the acquisition of additional equipment.
3. It is necessary to expand the District's current facilities, apparatus, and equipment needed to maintain its existing level of service; no capacity exists to serve new development.
4. If the District's fire system capacity is not increased to satisfy the additional demand, the quality and responsiveness of the District's fire protection and emergency response services will deteriorate.
5. The above conditions pose a risk to the health and safety of the citizens of the City of Ukiah that are served by the District.
6. Fire impact fees are necessary to ensure that the District can adequately fund its fire protection facilities, apparatus, and equipment necessary to mitigate the impacts, in particular the population and employment growth and new structural area, caused by new development within the District's service area.
7. The District has requested the City of Ukiah to establish and administer a development mitigation fee because Fire Districts lack statutory authority to independently impose development impact mitigation fees.
8. The District has prepared all of the supporting documentation to support the findings required to establish the fee, collect the fee and comply with all necessary reporting and accounting procedures for the fee, including the documentation necessary to comply with the California Mitigation Fee Act (Government Code §§ 66000- 66025).

SECTION TWO.

Chapter 15 is hereby added to Division 1 of the Ukiah City Code and shall read as follows:

CHAPTER 15 FIRE DISTRICT DEVELOPMENT MITIGATION FEE

§ 2090 PURPOSE

The purpose of this Chapter is to establish and implement a procedure for the adoption of fire protection development mitigation fees for the Ukiah Valley Fire District and to ensure the assessment and collection of these fees in connection with the issuance of building permits. The fire protection development mitigation fees are to be allocated to the Fire District for the acquisition of capital facilities and equipment in order to ensure the provision of the capital facilities and equipment necessary to maintain current levels of fire protection services that are required as the result of new development projects.

§ 2091 DEFINITIONS

As used in this Chapter, the following definitions shall apply:

- A. "City Council" means the City Council of the City of Ukiah.
- B. "City Clerk" means the City Clerk for the City of Ukiah.
- C. "Development project" means any construction for which a building permit or other permit is needed from the City's Building Department.
- D. "Fire District" means the Ukiah Valley Fire District.
- E. "Fire District Board" means the Board of Directors of the Ukiah Valley Fire District.

§ 2092 REQUIRED ACTIONS OF THE FIRE DISTRICT

This Chapter shall be applicable to development within the boundaries of the Fire District which are within the City of Ukiah when the following events occur:

- A. The Fire District Board adopts a resolution making the following findings:
 - 1. The Fire District does not have existing fire protection facilities and equipment that could be used to provide an adequate level of services to new development projects within the district's boundaries;
 - 2. The Fire District does not have sufficient funds available to construct additional facilities and purchase equipment from fund balances, capital facility funds, property tax sources, fire suppression assessments, or any other available sources; and
 - 3. The lack of additional fire protection facilities and equipment to serve new development projects would create a situation that is dangerous to the public health and safety if fire mitigation fees are not levied within the fire district.
- B. The Fire District further resolves as follows:
 - 1. The Fire District requests that the City impose a specified fire protection development mitigation fee on the Fire District's behalf on applicants for development projects;

2. Fire protection development mitigation fees imposed under this Chapter shall only be used to expand the availability of capital facilities and equipment to provide fire services to new development projects;

3. The Fire District shall place all funds collected under this Chapter and all interest subsequently accruing on these funds in a separate budget accounting category only for those purposes of providing capital improvements and equipment to serve new development projects;

4. The Fire District shall spend funds from the "fire district development mitigation fee" budget accounting category only for those purposes of providing capital improvements and equipment to serve new development projects;

5. The Fire District shall submit a fire mitigation fee annual report no later than October 31st of each year, after the first year the City imposes the specified fire protection development mitigation fee, to the City Clerk. The report shall include, but not be limited to, the balance in the account at the end of the prior fiscal year, the mitigation fee revenue received, the amount and type of expenditures made, and the ending balance in the fund. In addition, the report shall specify the actions the Fire District plans to take to mitigate the facility and equipment needs caused by the new development projects in a capital fire facilities and equipment plan adopted at a noticed public hearing. The Fire District shall make available, upon request by the City Clerk, a copy of the annual audited report;

6. The Fire District shall make its records that justify the basis for the development mitigation fee amount available to the public upon request;

7. The Fire District shall agree to indemnify and defend the City and its officers, agents, and employees from any claim, action, or proceeding that arises from or is in any way related to the adoption of this ordinance or mitigation fees authorized by this ordinance; and

8. For the fifth fiscal year following the first deposit into the Fire District's fire district mitigation fee account and every five (5) years thereafter, the Fire District shall make all of the following findings with respect to any cash portion of the mitigation fees remaining unexpended or uncommitted in the account:

- a. Identify the purpose to which the fee is to be put,
- b. Demonstrate a reasonable relationship between the fee and the purpose for which it was charged,
- c. Identify all sources and amounts of funding anticipated to complete financing all incomplete improvements, and
- d. Designate the approximate dates on which complete funding is expected to be deposited into the account.

If the findings in subsections B.8.a through d of this Section are not made, the Fire District shall refund, on a prorated basis, to the current record owner or owners of the development projects for which the fees were paid the unexpended or uncommitted portion of the fees and any interest accrued

for which a need cannot be demonstrated.

C. The Fire District Board shall adopt a capital fire facility and equipment plan in compliance with Government Code Section 66002 at a noticed public hearing.

D. The Fire District Board shall send a certified copy of the resolution and the capital fire facilities and equipment plan to the City Clerk. The Clerk shall place the resolution and capital fire facilities and equipment plan on an agenda for a regular City Council meeting for the Council's consideration and approval at a public hearing noticed in the manner required by Government Code Section 66002. At the close of the public hearing, the City Council may approve the resolution and capital fire facilities and equipment plan if it finds that the documents meet the requirements of this Chapter and Government Code Sections 66000 *et seq.*

E. The provisions of this Chapter shall apply to any development project within the boundaries of the Fire District that are within the boundaries of the City of Ukiah not later than thirty (30) days after the City Council's approval. The Fire District shall notify the City Building Official of the effective date of its mitigation fee. Any judicial action or other proceeding to challenge the legality of the City Council's approval and adoption of mitigation fees must be commenced within one hundred twenty (120) days of the Council's action approving the mitigation fees.

F. By March 31st of each year following the year of the original adoption of a resolution and approval by the City Council of fire protection development mitigation fees under this Chapter, the Fire District shall submit a copy of a new resolution adopted by the district's governing body making the findings required by Subsection A of this Section and identifying the fire protection development mitigation fees requested by the Fire District. If the resolution proposes to increase the fire protection development mitigation fees, the resolution shall only become effective if approved by the Council in the manner set forth in Subsection D of this Section. A revision of fire protection development mitigation fees shall be effective the following July 1st.

§ 2093 FEE PAYMENT

A. Before the issuance of any building permit or other permit for a development project, the applicant shall pay to the Fire District the fees prescribed by the Fire District resolution as approved by the City Council and shall present written evidence that the provisions of this Chapter have otherwise been satisfied with respect to the development project for which permits are sought. The District may, in its resolution adopting fire protection development mitigation fees, designate those projects requiring a building permit, such as re-roofing, adding siding, installation of mechanical devices, or construction of an accessory building, that will not require payment of a fee.

B. The amount of the fees shall be determined by using the fire protection development mitigation fee in effect on the date of the payment of fees for an unexpired plan check.

C. When application is made for a new permit for a development project following the expiration of a previously issued permit for a development project for which fees were previously paid, no new fee payment shall be required.

D. If a subsequent development project occurs with respect to property for which fees have already been paid, additional fees shall be required only for additional square footage which was not included in computing the prior fee.

E. For the purpose of payment of fees to the City, the City Council delegates to the Fire District the responsibility to collect or accept payment of the fees for the District. The District may contract with the City to collect or accept payment of fees.

§ 2094 EXEMPTIONS

Permits for the following types of development projects shall be exempt from the requirements of this Chapter:

- A. Buildings or other structures constructed for governmental uses;
- B. Construction of accessory buildings or structures which will not produce additional risk of fire over and above the fire risk associated with the principal building or from the existing use of the land.
- C. Alterations of an existing building where no additional square footage is constructed, where the use is not changed, and where the risk of fire is not increased over and above the risk of fire from the existing use.
- D. Alterations of an existing building where no additional square footage is constructed, where the use is not changed, and where the risk of fire is not increased over and above the risk of fire from the existing use.
- E. The replacement of a legally constructed dwelling or other building destroyed by fire or other calamity on the same parcel, provided that:
 - 1. The application for a building permit to replace the destroyed structure is filed with the City building official within one year after destruction of the dwelling or other building,
 - 2. There is no change in occupancy, and
 - 3. The living space is not increased by more than five hundred (500) square feet compared to the destroyed structure.

§ 2095 ADMINISTRATIVE CHARGES

- A. The City may include in an adopted fire protection development mitigation fee a component that reflects the City's reasonable costs of administering the fee and complying with all laws, ordinances, and regulations related to the fee.
- B. The Fire District may include in a proposed fire protection development mitigation fee a component that reflects the District's reasonable costs of administering the fee and complying with all laws, ordinances, and regulations related to the fee, including the requirements imposed by this Chapter.

§ 2096 USE OF FEES

With the exception of the administrative cost component described in Section 2095, all fees collected under this Chapter, including any interest accrued, shall be used by the Fire District for the purpose of providing for capital facilities and equipment.

§ 2097 RECORDS AND REPORTS

The Fire District shall maintain a separate budget accounting category for any fees collected. This category shall be known as the "fire district mitigation fee" account. By October 31st of each year, the Fire District shall file a report with the City Clerk on the balance in the account at the end of the prior fiscal year, the fee revenue received, the amount and type of expenditures made, and the ending balance of the fund. In addition, the report shall specify the actions the Fire District plans to take to mitigate the facility and equipment needs caused by new development projects.

§ 2098 TERMINATION OF FEE COLLECTION

Fee collection as to the Fire District shall terminate as follows:

- A. If by March 31st of any year following the year of the original adoption of a resolution under this Chapter, which was approved by the City Council, the Fire District has not submitted a copy of a new resolution under Subsection 2092.F of this Chapter, fee collection shall terminate on July 1st of that year.
- B. If, at any time, the Fire District Board submits a copy of a resolution requesting termination of fee collection, fee collection shall terminate thirty (30) days from the date of receipt by the Clerk.
- C. The Fire District shall notify the City Building Official of the effective date of its termination of fee collection.

SECTION THREE.

1. SEVERABILITY.

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, is for any reason held to be invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of the remaining sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases of this Ordinance, or its application to any other person or circumstance. The City Council of the City of Ukiah hereby declares that it would have adopted each section, subsection, subdivision, paragraph, sentence, clause or phrase hereof, irrespective of the fact that any one or more other sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases hereof be declared invalid or unenforceable.

2. EFFECTIVE DATE.

This Ordinance shall be published as required by law in a newspaper of general circulation in the City of Ukiah, and shall become effective thirty (30) days after its adoption.

Introduced by title only on _____, 2024, by the following roll call vote:

AYES:

NOES:
ABSENT:
ABSTAIN:

Adopted on _____, 2024, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Josefina Dueñas, Mayor

ATTEST:

Kristine Lawler, CMC/City Clerk



AGENDA SUMMARY REPORT

SUBJECT: Adoption of an Ordinance Amending Chapter 11, Division 3 of the City Code to Require the Manager of a Private, Commercially-Zoned Property to Abate Nuisance Conditions on the Property.

DEPARTMENT: City Attorney

PREPARED BY: Darcy Vaughn, Assistant City Attorney

PRESENTER: Darcy Vaughn, Assistant City Attorney

ATTACHMENTS:

1. Commercial Property Manager Liability Redline
2. Commercial Property Manager Liability Clean

Summary: The City Council will consider adopting an Ordinance Amending Chapter 11, Division 3 of the City Code to Require the Manager of a Private, Commercially-Zoned Property to Abate Nuisance Conditions on the Property.

Background: Chapter 11, Division 3 of the Ukiah City Code sets forth guidelines for determining what conditions on private commercially-zoned property constitute a public health, safety, and visual blight problem; establish a method for giving notice of the conditions and an opportunity to correct them; and, finally, in the event the public health, safety, and visual blight conditions are not abated or corrected, provide a procedure for a hearing and determination of the facts and manner in which the conditions shall be corrected or removed. While the statement of purpose for this Chapter and a number of procedural provisions in the Chapter suggest that the intent of this Chapter is that any individual who has control over private commercially-zoned property should be responsible for abating nuisance conditions on that property, this is not stated explicitly. Given the recent spate of properties in which public nuisance conditions exist and the difficulty of staff in incentivizing an absent or recalcitrant owner to abate these conditions, Staff urges Council to amend Chapter 11, Division 3, to authorize the City to require individuals with management authority over blighted properties to abate public nuisance conditions at these properties.

Discussion: The Ordinance Amending Chapter 11, Division 3 of the City Code to Require the Manager of a Private, Commercially-Zoned Property to Abate Nuisance Conditions on the Property ("Ordinance"), attached here in redline as Attachment 1 and in a clean version as Attachment 2, adds a definition of "Manager" to the definitions section of that Chapter. Manager is defined as "any natural person who is a decision-maker for an Owner or occupies a prominent and influential position with the Owner and/or has extensive knowledge and control over the Owner's affairs and as a result thereof has personal responsibility to prevent or abate nuisance conditions under this Chapter." In addition, a "Manager" is added throughout Chapter 11 to the list of individuals, in addition to the Owner, having responsibility to address and abate nuisance conditions on commercially-zoned property.

Managers of nuisance properties will be notified of these conditions and given the opportunity to voluntarily abate these conditions. If they fail to do so within a reasonable abatement period, they will be notified of a public hearing to be held to determine the existence of a public nuisance; said hearing may result in an abatement order. The property Manager, like an owner, may testify at the public hearing. If the Hearing Officer issues an abatement order at the conclusion of the hearing, the Manager will be served with the order. If the Manager does not abate the nuisance conditions and the City must proceed with an abatement action, the Manager will be responsible for the costs and fees associated with abatement.

The confirmed cost of abatement of a nuisance upon any lot or parcel of land constitutes a personal joint and several obligation of the property owner and Manager of the property. Managers may also be subject to any criminal, administrative, or civil penalties for failure to abate a public nuisance.

On September 4, 2024, Council introduced this ordinance, by title only, with a unanimous vote. The current version of the Ordinance reflects a wide array of community, City Staff, and Council input. The Ordinance is now ready for consideration for adoption and will go into effect 30 days after adoption.

Recommended Action: Adopt Ordinance Amending Chapter 11, Division 3 of the City Code to Require the Manager of a Private, Commercially-Zoned Property to Abate Nuisance Conditions on the Property,

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: Code Enforcement Department

DIVERSITY-EQUITY INITIATIVES (DEI):N/A

CLIMATE INITIATIVES (CI):N/A

GENERAL PLAN ELEMENTS (GP):N/A

Approved: 
Sage Sangiacomo, City Manager

ORDINANCE NO.

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UKIAH AMENDING CHAPTER 11, DIVISION 3 OF THE CITY CODE TO REQUIRE THE MANAGER OF A PRIVATE, COMMERCIALY-ZONED PROPERTY TO ABATE NUISANCE CONDITIONS ON THE PROPERTY.

The City Council of the City of Ukiah hereby ordains as follows:

SECTION ONE.

Chapter 11 in Division 3 of the Ukiah City Code is hereby amended to read as follows (unchanged text is omitted and is shown by “* * *”):

§3401 DEFINITIONS

* * *

JUNK: Any castoff, damaged, discarded, junked, obsolete, salvaged, scrapped, unusable, worn out or wrecked object, thing or material or substance, having no substantial market value.

MANAGER: If not included in the definition of Owner, a Manager is any natural person who is a decision-maker for an Owner or occupies a prominent and influential position with the Owner and/or has extensive knowledge and control over the Owner's affairs and as a result thereof has personal responsibility to prevent or abate nuisance conditions under this Chapter.

OWNER: Any person(s) shown as the property owner on the latest equalized property tax assessment rolls, or in the case of a vehicle, any person(s) shown on the last registration of the vehicle, or if that information is not ascertainable, the owner shall be deemed to be the occupant of the property on which the vehicle is located.

* * *

§3402 PROHIBITED HEALTH, SAFETY, AND VISUAL BLIGHT NUISANCES

It shall be unlawful, and it is hereby declared to be a public nuisance, for any person owning, leasing, occupying, or having charge of any commercially zoned business or commercially zoned property within the cityCity of Ukiah, to maintain such premises in such a manner that any one or more of the conditions or activities described in the following subsections are found to exist:

* * *

F. Broken or cracked windows, windows boarded up with unpainted materials attached to the exterior of the building, or unattractive products adhered to/covering the inside of the window, unless the structure is undergoing a remodeling project. The property owner or Manager can have thirty (30) to ninety (90) days to correct the problem with the submittal and approval of a reasonable improvement strategy/plan, unless the nuisance condition creates an imminent risk of damage to persons or property.

* * *

§3404 NOTIFICATION OF DECLARED NUISANCE

Whenever the ~~city manager~~City Manager or his/her designee finds that a condition declared a public nuisance, as defined by section 3402 of this chapter, exists on any premises located within the ~~city~~City, he shall advise the property owner or Manager of the nuisance and direct the owner or Manager to abate the nuisance. The property owner or Manager shall be notified of the existence of the nuisance in writing. The notification shall describe the violations and establish a reasonable abatement period, and may also set forth suggested methods of abatement.

§3405 VOLUNTARY ABATEMENT

The owner, Manager, or tenant of any building, structure or property found to be a nuisance under the provisions of this chapter may abate the nuisance at any time within the abatement period by rehabilitation, repair, removal or demolition as appropriate. The ~~city~~City shall be advised of the abatement and shall inspect the premises to ensure that the nuisance has in fact been abated.

* * *

§3407 NOTICE OF PUBLIC HEARING – REQUIRED

A. A written notice of public hearing, substantially in the form contained in subsection B of this section, shall be served at least ten (10) days prior to the date set for the Hearing Officer public hearing.

B. Service of the notice and order may be made upon all persons entitled thereto either by personal delivery or by certified mail, addressed to the record owner and business owner or Manager at his or her or their address as it appears on the latest equalized assessment roll of Mendocino County, or as known to the City Manager. A copy of the notice and order and any amended or supplemental notice and order shall also be posted on the premises.

1. In lieu of personally serving the owner or Manager or service by certified mail, service of the notice and order and any amended or supplemental notice and order may be made as follows:

* * *

§3408 NOTICE OF PUBLIC HEARING – FORM

Notice substantially in the following form shall be given:

NOTICE OF PUBLIC HEARING TO DETERMINE EXISTENCE OF PUBLIC NUISANCE AND TO ABATE IN WHOLE OR IN PART

Notice is hereby given that on (insert date) the Hearing Officer of the City of Ukiah will hold a public hearing at (insert place) to ascertain whether certain premises situated in the City of Ukiah, State of California, known and designated as (insert address or description) to constitute a public nuisance subject to abatement by the rehabilitation of such premises or by the repair or demolition of buildings or structures situated thereon. If said premises, in whole or part, are found to constitute a public nuisance as defined by Section 3402 and if the same are not promptly abated by the owner or Manager, such nuisances may be abated by municipal authorities, in which case the cost of such abatement, including removal of the nuisance, rehabilitation, repair or demolition will be assessed upon such premises and such cost will constitute a lien upon such land until paid.

Said alleged violations consist of the following:

Said methods of abatement available are:

All persons having any objection to, or interest in, said matters are hereby notified to attend a hearing before the Hearing Officer of the City to be held on (insert date and time) when their testimony and evidence will be heard and given due consideration.

DATED (insert date)

City Manager of the City of Ukiah

* * *

§3410 HEARING – PROCEEDINGS

At the time and place stated in the notice of public hearing, the Hearing Officer shall hear and consider all relevant evidence, objections or protests, and shall receive testimony from owners, managers, witnesses, City personnel and interested persons relative to such alleged public nuisance and to proposed abatement measures. The hearing may be continued from time to time.

* * *

§3413 SERVICE OF ABATEMENT ORDER

Upon issuance of the Hearing Officer's written decision, the City Manager/designee shall post a copy thereof conspicuously on the premises involved and shall serve a copy upon the record owner or Manager by first class mail and one copy shall be mailed to each of the following if known to the department head or disclosed from official public records: the holder of any mortgage or deed of trust or other lien or encumbrance of record; the owner, Manager, or holder of any lease of record; and the holder of any other estate or legal interest of record in the premises.

§3414 ABATEMENT IN CONJUNCTION WITH ORDER

The property owner, Manager, or person having charge or control of the property, may at his own expense abate the nuisance as prescribed by the order of the Hearing Officer prior to the expiration of the abatement period set forth in the order. If the nuisance has been inspected by the City and had been abated in accordance with the order, proceedings shall be terminated.

§3416 ENFORCEMENT OF ABATEMENT ORDER

A. After any notice and order issued pursuant to this chapter shall have become final, no person to whom any such order is directed shall fail, neglect or refuse to obey any such order. Any person who fails to comply with any such order or decision after notice thereof is guilty of a misdemeanor.

B. If, after any notice and order has become final, the person(s) to whom such order has been directed shall fail, neglect or refuse to obey such order after notice thereof, the eCity Manager/designee may, without further notice:

1. Refer the person for criminal prosecution;

2. Institute an appropriate action to abate the conditions that constitute a public nuisance. The city managerCity Manager or his designee may cause the same to be abated by eCity forces or a private

contractor.

3. Whenever the ~~Ceity~~ ~~Mm~~anager or his designee determines that a public nuisance is so imminently dangerous to life or adjacent property that such condition must be immediately removed, repaired or isolated, the ~~Ceity~~ ~~Mm~~anager/designee shall notify such person, or persons, of the danger involved and require that such condition be immediately removed, repaired or isolated so as to preclude harm to any person or property.

a. Notice: The ~~Ceity~~ ~~Mm~~anager or his/her designee shall attempt to make contact through a personal interview, or by telephone, with the owner or Manager of the property or the person, if any, occupying or otherwise in real or apparent charge of the property. The ~~Ceity~~ ~~Mm~~anager/designee shall notify such person, or persons, of the danger involved and require that such condition be immediately removed, repaired or isolated so as to preclude harm to any person or property.

b. Abatement: If the ~~city-manager~~City Manager or his/her designee is unable to make contact as hereinabove noted, or if the appropriate persons after notification by the ~~city-manager~~City Manager or his designee do not take action within such time as may be specified by such official, then the ~~city-manager~~City Manager/designee may take all actions deemed necessary in order to protect the public from harm to remove, repair or isolate such dangerous condition or conditions, with the use of ~~city~~City forces or a contractor engaged pursuant to the provisions of this chapter.

§3417 RECORD OF ABATEMENT COSTS

A. If abatement action is taken by the city, all costs of the abatement will be assessed against the property and will attach as a lien until paid.

Costs of expenses for which the ~~city~~City may be reimbursed shall begin to accrue at the time the city first receives a complaint regarding a problem on the property.

The costs of abatement shall include the total ~~city~~City cost of inspections and enforcement (excluding the actual costs of abatement which shall be itemized as set forth in subsection B of this section), which shall be set by resolution of the city council. An additional fee which shall be set by resolution of the city council shall be imposed on the owner and Manager of the property at the conclusion of any matter in which a notice and order has been issued. This termination fee shall be calculated to recover the cost of closing the file, removing or placing liens, and other associated administrative costs. Costs shall be assessed at the conclusion of the abatement provided, however, in the case of the abatement by any method which takes more than six (6) months, costs may be assessed at any time after six (6) months, but in no event more than two (2) times a year.

Costs and expenses may be recovered even if the nuisance is corrected voluntarily, subsequent to the issuance of an abatement order. No fees shall be due and owing if an appeal is filed and the appeal is sustained. All fees shall be a personal obligation of the owner and Manager and a lien upon the property and are due and payable within thirty (30) days of issuance of the notice and order or closing of the file respectively; provided that if an appeal is filed, the fees shall be due and payable upon a final decision on the appeal. Any fee not paid within that time shall be payable to the ~~city~~City.

B. The ~~city-manager~~City Manager/designee shall keep an account of the costs (including incidental expenses) of abating such nuisance on each separate lot or parcel of land where the work is done and shall render an itemized billing to the property owner or Manager which shall be due and payable within

thirty (30) days. If the owner or Manager refuses or neglects to pay the bill, an itemized report in writing shall be made to the city council showing the cost of abatement and the rehabilitation, demolishing or repairing of said premises, building or structures, including any salvage value relating thereto; provided, that before said report is submitted to the city council a copy of the same shall be mailed together with a notice of the time when said report shall be heard by the city council for confirmation.

C. The city council shall set the matter for hearing to determine the correctness or reasonableness, or both, of such costs, and shall serve notice thereof.

D. Proof of said service shall be made by declaration under penalty of perjury filed with the city clerk.

* * *

§3419 NUISANCE ABATEMENT LIEN

A. If the nuisance abatement and related administrative costs are not paid within five (5) days after the city council confirms the costs of abatement, the cityCity shall notify the owner of record of the parcel of land on which the nuisance is maintained, based on the last equalized assessment roll or the supplemental roll, whichever is more current, that a nuisance abatement lien will be recorded. The notice shall specify the amount of the lien, the name of the cityCity, the date of the abatement order, the street address, the legal description and the assessor's parcel number of the parcel on which the lien is imposed, and the name and address of the owner of the parcel. The notice shall be served in the same manner as a summons in a civil action in accordance with article 3 (commencing with section 415.10) of chapter 4 of title 5 of part 2 of the Code of Civil Procedure. If the owner of record after diligent search cannot be found, the notice may be served by posting a copy thereof in a conspicuous place upon the property for a period of ten (10) days and publication thereof in a newspaper of general circulation published in Mendocino County pursuant to section 6062 of the Government Code. The notice of lien shall be in substantially the form provided in subsection 3420B of this chapter.

B. After notice is given in accordance with subsection A of this section, the notice of lien shall be recorded in the Mendocino County recorder's office and shall thereafter constitute a lien on the real property for the expense of the abatement, and the related administrative costs (assessed in accordance with subsection 3417A of this chapter) together with interest thereon.

C. In the event the lien is discharged, released or satisfied, either through payment or foreclosure, notice of the discharge containing the same information as the notice of lien shall be recorded in the Mendocino County recorder's office.

D. The city may enforce the nuisance abatement lien by an action for a money judgment.

* * *

§3421 OWNER'S OR MANAGER'S PERSONAL OBLIGATION

A. The confirmed cost of abatement of a nuisance upon any lot or parcel of land shall constitute a personal joint and several obligation of the property owner and Manager and the city-managerCity Manager/ designee is authorized to commence an action in the name of the cityCity in any court of competent jurisdiction to collect the cost of abatement from the property owner and-Manager.

B. Upon entry of a second or subsequent civil or criminal judgment within a two (2) year period finding that an owner or Manager of property is responsible for a condition that may be abated in accordance with this chapter, except for conditions abated pursuant to section 17980 of the California Health and Safety Code, the court may order the owner or Manager or both to pay triple the costs of the abatement.

§3422 ALTERNATIVE COLLECTION METHODS

A civil action to foreclose a lien, the special assessment procedure and a personal action against the owner or Manager or both shall not be mutually exclusive and the cityCity shall be free to use all methods simultaneously as long as the Ceity does not receive-recover multiple payment for the abatement costs.

* * *

§3424 VIOLATION – PENALTY

A. Criminal Violations; Civil Penalties: Any responsible party, whether owner, Manager, lessee, sublessor, sublessee or occupant of any premises who violates the provisions of this chapter shall be guilty of a misdemeanor for each day such violation continues. Without limiting the enforceability of any other statute, ordinance or regulation that may contain a different or greater penalty under those provisions, after service of notice thereof pursuant to this chapter any person violating the provisions of this chapter shall be subject to a civil action to abate or enjoin the nuisance and shall be liable for civil penalties as follows: Any violation concerning property that is located in a commercially zoned district as authorized by articles 6, 7, and 8 of this code (as amended or supplanted) of not less than one hundred fifty dollars (\$150.00) or more than two thousand five hundred dollars (\$2,500.00) for each day the violation continues. The city attorney may pursue any lawful civil remedy and civil penalties brought to enforce any provisions of this chapter.

B. Administrative Penalties: In addition to criminal sanctions, civil penalties provided in this section, and other remedies set forth in this chapter, administrative penalties may be imposed against any responsible party, whether owner, Manager, lessee, sublessor or sublessee or occupant of any premises in violation of any of the provisions of this chapter. Imposition, enforcement, collection and administrative review of administrative penalties imposed shall be conducted pursuant to this code.

C. Reasonable Period To Correct Violations: No administrative penalty shall be imposed for violations of provisions of this chapter unless the owner or Manager has been provided a reasonable period of time after service of notice thereof pursuant to this chapter to correct the violation before imposition of the penalty except in those cases in which there is an immediate danger to health or safety. The reasonable period for purposes of this chapter shall be thirty (30) days from service of a notice of violation unless otherwise directed by the city council.

D. Abatement Interference: Any person who obstructs, impedes or interferes with any representative, officer, employee, contractor or authorized representative of the city council or with any representative of a city department or with any person who owns or holds any estate or interest in a building which has been ordered to be vacated, repaired, rehabilitated or demolished pursuant to the provisions of this chapter when any of the aforementioned individuals are engaged in the work of abating any nuisance as required by the provisions of this chapter, or in performing any necessary act preliminary to or incidental to such work authorized or directed pursuant to this chapter lawfully engaged in proceedings involving the abatement of a nuisance is guilty of a misdemeanor.

§3425 NUISANCES ENDANGERING PUBLIC HEALTH

A. Whenever a nuisance endangering the public health is ascertained to exist on any premises, or in any house or other place, the ~~health officer~~Building Official shall notify, in writing, any person owning or having control of, or acting as agent for such premises, house or other place, to abate or remove such nuisance within a reasonable time, to be stated in such notice.

B. Upon the neglect or refusal of any owner, Manager, occupant, or agent, or other person having control of such house or other place, to comply with such notice, the ~~health officer~~Building Official may abate such nuisance; and the owner, Manager, agent or occupant, or other person having control of such house or place, in addition to the penalties provided by this chapter shall be liable to the cityCity for the cost of such abatement, to be recovered in a civil action in any court of competent jurisdiction. If no person can be found upon whom to serve such notice, the ~~health office~~Building Division shall proceed to abate such nuisance at the expense of the cityCity, at a cost of not to exceed ~~twenty-five~~twenty-five dollars per day.

SECTION THREE.

1. Publication: Within fifteen (15) days after its adoption, this Ordinance shall be published once in a newspaper of general circulation in the City of Ukiah. In lieu of publishing the full text of the Ordinance, the City may publish a summary of the Ordinance once 5 days prior to its adoption and again within fifteen (15) days after its adoption.

2. Effective Date: The ordinance shall become effective thirty (30) days after its adoption.

3. Severability: If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, is for any reason held to be invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of the remaining sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases of this Ordinance, or its application to any other person or circumstance. The City Council of the City of Ukiah hereby declares that it would have adopted each section, subsection, subdivision, paragraph, sentence, clause or phrase hereof, irrespective of the fact that any one or more other sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases hereof be declared invalid or unenforceable.

Introduced by title only on _____, 2024, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Adopted on _____, 2024, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Josefina Dueñas, Mayor

ATTEST:

Kristine Lawler, CMC/City Clerk

ORDINANCE NO.

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UKIAH AMENDING CHAPTER 11, DIVISION 3 OF THE CITY CODE TO REQUIRE THE MANAGER OF A PRIVATE, COMMERCIALY-ZONED PROPERTY TO ABATE NUISANCE CONDITIONS ON THE PROPERTY.

The City Council of the City of Ukiah hereby ordains as follows:

SECTION ONE.

Chapter 11 in Division 3 of the Ukiah City Code is hereby amended to read as follows (unchanged text is omitted and is shown by “* * *”):

§3401 DEFINITIONS

* * *

JUNK: Any castoff, damaged, discarded, junked, obsolete, salvaged, scrapped, unusable, worn out or wrecked object, thing or material or substance, having no substantial market value.

MANAGER: If not included in the definition of Owner, a Manager is any natural person who is a decision-maker for an Owner or occupies a prominent and influential position with the Owner and/or has extensive knowledge and control over the Owner's affairs and as a result thereof has personal responsibility to prevent or abate nuisance conditions under this Chapter.

OWNER: Any person(s) shown as the property owner on the latest equalized property tax assessment rolls, or in the case of a vehicle, any person(s) shown on the last registration of the vehicle, or if that information is not ascertainable, the owner shall be deemed to be the occupant of the property on which the vehicle is located.

* * *

§3402 PROHIBITED HEALTH, SAFETY, AND VISUAL BLIGHT NUISANCES

It shall be unlawful, and it is hereby declared to be a public nuisance, for any person owning, leasing, occupying, or having charge of any commercially zoned business or commercially zoned property within the City of Ukiah, to maintain such premises in such a manner that any one or more of the conditions or activities described in the following subsections are found to exist:

* * *

F. Broken or cracked windows, windows boarded up with unpainted materials attached to the exterior of the building, or unattractive products adhered to/covering the inside of the window, unless the structure is undergoing a remodeling project. The property owner or Manager can have thirty (30) to ninety (90) days to correct the problem with the submittal and approval of a reasonable improvement strategy/plan, unless the nuisance condition creates an imminent risk of damage to persons or property.

* * *

§3404 NOTIFICATION OF DECLARED NUISANCE

Whenever the City Manager or his/her designee finds that a condition declared a public nuisance, as defined by section 3402 of this chapter, exists on any premises located within the City, he shall advise the property owner or Manager of the nuisance and direct the owner or Manager to abate the nuisance. The property owner or Manager shall be notified of the existence of the nuisance in writing. The notification shall describe the violations and establish a reasonable abatement period, and may also set forth suggested methods of abatement.

§3405 VOLUNTARY ABATEMENT

The owner, Manager, or tenant of any building, structure or property found to be a nuisance under the provisions of this chapter may abate the nuisance at any time within the abatement period by rehabilitation, repair, removal or demolition as appropriate. The City shall be advised of the abatement and shall inspect the premises to ensure that the nuisance has in fact been abated.

* * *

§3407 NOTICE OF PUBLIC HEARING – REQUIRED

A. A written notice of public hearing, substantially in the form contained in subsection B of this section, shall be served at least ten (10) days prior to the date set for the Hearing Officer public hearing.

B. Service of the notice and order may be made upon all persons entitled thereto either by personal delivery or by certified mail, addressed to the record owner and business owner or Manager at his or her or their address as it appears on the latest equalized assessment roll of Mendocino County, or as known to the City Manager. A copy of the notice and order and any amended or supplemental notice and order shall also be posted on the premises.

1. In lieu of personally serving the owner or Manager or service by certified mail, service of the notice and order and any amended or supplemental notice and order may be made as follows:

* * *

§3408 NOTICE OF PUBLIC HEARING – FORM

Notice substantially in the following form shall be given:

NOTICE OF PUBLIC HEARING TO DETERMINE EXISTENCE OF PUBLIC NUISANCE AND
TO ABATE IN WHOLE OR IN PART

Notice is hereby given that on (insert date) the Hearing Officer of the City of Ukiah will hold a public hearing at (insert place) to ascertain whether certain premises situated in the City of Ukiah, State of California, known and designated as (insert address or description) to constitute a public nuisance subject to abatement by the rehabilitation of such premises or by the repair or demolition of buildings or structures situated thereon. If said premises, in whole or part, are found to constitute a public nuisance as defined by Section 3402 and if the same are not promptly abated by the owner or Manager, such nuisances may be abated by municipal authorities, in which case the cost of such abatement, including removal of the nuisance, rehabilitation, repair or demolition will be assessed upon such premises and such cost will constitute a lien upon such land until paid.

Said alleged violations consist of the following:

Said methods of abatement available are:

All persons having any objection to, or interest in, said matters are hereby notified to attend a hearing before the Hearing Officer of the City to be held on (insert date and time) when their testimony and evidence will be heard and given due consideration.

DATED (insert date)

City Manager of the City of Ukiah

* * *

§3410 HEARING – PROCEEDINGS

At the time and place stated in the notice of public hearing, the Hearing Officer shall hear and consider all relevant evidence, objections or protests, and shall receive testimony from owners, managers, witnesses, City personnel and interested persons relative to such alleged public nuisance and to proposed abatement measures. The hearing may be continued from time to time.

* * *

§3413 SERVICE OF ABATEMENT ORDER

Upon issuance of the Hearing Officer's written decision, the City Manager/designee shall post a copy thereof conspicuously on the premises involved and shall serve a copy upon the record owner or Manager by first class mail and one copy shall be mailed to each of the following if known to the department head or disclosed from official public records: the holder of any mortgage or deed of trust or other lien or encumbrance of record; the owner, Manager, or holder of any lease of record; and the holder of any other estate or legal interest of record in the premises.

§3414 ABATEMENT IN CONJUNCTION WITH ORDER

The property owner, Manager, or person having charge or control of the property, may at his own expense abate the nuisance as prescribed by the order of the Hearing Officer prior to the expiration of the abatement period set forth in the order. If the nuisance has been inspected by the City and had been abated in accordance with the order, proceedings shall be terminated.

§3416 ENFORCEMENT OF ABATEMENT ORDER

A. After any notice and order issued pursuant to this chapter shall have become final, no person to whom any such order is directed shall fail, neglect or refuse to obey any such order. Any person who fails to comply with any such order or decision after notice thereof is guilty of a misdemeanor.

B. If, after any notice and order has become final, the person(s) to whom such order has been directed shall fail, neglect or refuse to obey such order after notice thereof, the City Manager/designee may, without further notice:

1. Refer the person for criminal prosecution;

2. Institute an appropriate action to abate the conditions that constitute a public nuisance. The City Manager or his designee may cause the same to be abated by City forces or a private contractor.

3. Whenever the City Manager or his designee determines that a public nuisance is so imminently dangerous to life or adjacent property that such condition must be immediately removed, repaired or isolated, the City Manager/designee shall notify such person, or persons, of the danger involved and require that such condition be immediately removed, repaired or isolated so as to preclude harm to any person or property.

a. Notice: The City Manager or his/her designee shall attempt to make contact through a personal interview, or by telephone, with the owner or Manager of the property or the person, if any, occupying or otherwise in real or apparent charge of the property. The City Manager/designee shall notify such person, or persons, of the danger involved and require that such condition be immediately removed, repaired or isolated so as to preclude harm to any person or property.

b. Abatement: If the City Manager or his/her designee is unable to make contact as hereinabove noted, or if the appropriate persons after notification by the City Manager or his designee do not take action within such time as may be specified by such official, then the City Manager/designee may take all actions deemed necessary in order to protect the public from harm to remove, repair or isolate such dangerous condition or conditions, with the use of City forces or a contractor engaged pursuant to the provisions of this chapter.

§3417 RECORD OF ABATEMENT COSTS

A. If abatement action is taken by the city, all costs of the abatement will be assessed against the property and will attach as a lien until paid.

Costs of expenses for which the City may be reimbursed shall begin to accrue at the time the city first receives a complaint regarding a problem on the property.

The costs of abatement shall include the total City cost of inspections and enforcement (excluding the actual costs of abatement which shall be itemized as set forth in subsection B of this section), which shall be set by resolution of the city council. An additional fee which shall be set by resolution of the city council shall be imposed on the owner and Manager of the property at the conclusion of any matter in which a notice and order has been issued. This termination fee shall be calculated to recover the cost of closing the file, removing or placing liens, and other associated administrative costs. Costs shall be assessed at the conclusion of the abatement provided, however, in the case of the abatement by any method which takes more than six (6) months, costs may be assessed at any time after six (6) months, but in no event more than two (2) times a year.

Costs and expenses may be recovered even if the nuisance is corrected voluntarily, subsequent to the issuance of an abatement order. No fees shall be due and owing if an appeal is filed and the appeal is sustained. All fees shall be a personal obligation of the owner and Manager and a lien upon the property and are due and payable within thirty (30) days of issuance of the notice and order or closing of the file respectively; provided that if an appeal is filed, the fees shall be due and payable upon a final decision on the appeal. Any fee not paid within that time shall be payable to the City.

B. The City Manager/designee shall keep an account of the costs (including incidental expenses) of abating such nuisance on each separate lot or parcel of land where the work is done and shall render an itemized billing to the property owner or Manager which shall be due and payable within thirty (30) days. If the owner or Manager refuses or neglects to pay the bill, an itemized report in writing shall be made to the city council showing the cost of abatement and the rehabilitation, demolishing or repairing of said

premises, building or structures, including any salvage value relating thereto; provided, that before said report is submitted to the city council a copy of the same shall be mailed together with a notice of the time when said report shall be heard by the city council for confirmation.

C. The city council shall set the matter for hearing to determine the correctness or reasonableness, or both, of such costs, and shall serve notice thereof.

D. Proof of said service shall be made by declaration under penalty of perjury filed with the city clerk.

* * *

§3419 NUISANCE ABATEMENT LIEN

A. If the nuisance abatement and related administrative costs are not paid within five (5) days after the city council confirms the costs of abatement, the City shall notify the owner of record of the parcel of land on which the nuisance is maintained, based on the last equalized assessment roll or the supplemental roll, whichever is more current, that a nuisance abatement lien will be recorded. The notice shall specify the amount of the lien, the name of the City, the date of the abatement order, the street address, the legal description and the assessor's parcel number of the parcel on which the lien is imposed, and the name and address of the owner of the parcel. The notice shall be served in the same manner as a summons in a civil action in accordance with article 3 (commencing with section 415.10) of chapter 4 of title 5 of part 2 of the Code of Civil Procedure. If the owner of record after diligent search cannot be found, the notice may be served by posting a copy thereof in a conspicuous place upon the property for a period of ten (10) days and publication thereof in a newspaper of general circulation published in Mendocino County pursuant to section 6062 of the Government Code. The notice of lien shall be in substantially the form provided in subsection 3420B of this chapter.

B. After notice is given in accordance with subsection A of this section, the notice of lien shall be recorded in the Mendocino County recorder's office and shall thereafter constitute a lien on the real property for the expense of the abatement, and the related administrative costs (assessed in accordance with subsection 3417A of this chapter) together with interest thereon.

C. In the event the lien is discharged, released or satisfied, either through payment or foreclosure, notice of the discharge containing the same information as the notice of lien shall be recorded in the Mendocino County recorder's office.

D. The city may enforce the nuisance abatement lien by an action for a money judgment.

* * *

§3421 OWNER'S OR MANAGER'S PERSONAL OBLIGATION

A. The confirmed cost of abatement of a nuisance upon any lot or parcel of land shall constitute a personal joint and several obligation of the property owner and Manager and the City Manager/ designee is authorized to commence an action in the name of the City in any court of competent jurisdiction to collect the cost of abatement from the property owner and Manager.

B. Upon entry of a second or subsequent civil or criminal judgment within a two (2) year period finding that an owner or Manager of property is responsible for a condition that may be abated in accordance

with this chapter, except for conditions abated pursuant to section 17980 of the California Health and Safety Code, the court may order the owner or Manager or both to pay triple the costs of the abatement.

§3422 ALTERNATIVE COLLECTION METHODS

A civil action to foreclose a lien, the special assessment procedure and a personal action against the owner or Manager or both shall not be mutually exclusive and the City shall be free to use all methods simultaneously as long as the City does not recover multiple payment for the abatement costs.

* * *

§3424 VIOLATION – PENALTY

A. Criminal Violations; Civil Penalties: Any responsible party, whether owner, Manager, lessee, sublessor, sublessee or occupant of any premises who violates the provisions of this chapter shall be guilty of a misdemeanor for each day such violation continues. Without limiting the enforceability of any other statute, ordinance or regulation that may contain a different or greater penalty under those provisions, after service of notice thereof pursuant to this chapter any person violating the provisions of this chapter shall be subject to a civil action to abate or enjoin the nuisance and shall be liable for civil penalties as follows: Any violation concerning property that is located in a commercially zoned district as authorized by articles 6, 7, and 8 of this code (as amended or supplanted) of not less than one hundred fifty dollars (\$150.00) or more than two thousand five hundred dollars (\$2,500.00) for each day the violation continues. The city attorney may pursue any lawful civil remedy and civil penalties brought to enforce any provisions of this chapter.

B. Administrative Penalties: In addition to criminal sanctions, civil penalties provided in this section, and other remedies set forth in this chapter, administrative penalties may be imposed against any responsible party, whether owner, Manager, lessee, sublessor or sublessee or occupant of any premises in violation of any of the provisions of this chapter. Imposition, enforcement, collection and administrative review of administrative penalties imposed shall be conducted pursuant to this code.

C. Reasonable Period To Correct Violations: No administrative penalty shall be imposed for violations of provisions of this chapter unless the owner or Manager has been provided a reasonable period of time after service of notice thereof pursuant to this chapter to correct the violation before imposition of the penalty except in those cases in which there is an immediate danger to health or safety. The reasonable period for purposes of this chapter shall be thirty (30) days from service of a notice of violation unless otherwise directed by the city council.

D. Abatement Interference: Any person who obstructs, impedes or interferes with any representative, officer, employee, contractor or authorized representative of the city council or with any representative of a city department or with any person who owns or holds any estate or interest in a building which has been ordered to be vacated, repaired, rehabilitated or demolished pursuant to the provisions of this chapter when any of the aforementioned individuals are engaged in the work of abating any nuisance as required by the provisions of this chapter, or in performing any necessary act preliminary to or incidental to such work authorized or directed pursuant to this chapter lawfully engaged in proceedings involving the abatement of a nuisance is guilty of a misdemeanor.

§3425 NUISANCES ENDANGERING PUBLIC HEALTH

A. Whenever a nuisance endangering the public health is ascertained to exist on any premises, or in

any house or other place, the Building Official shall notify, in writing, any person owning or having control of, or acting as agent for such premises, house or other place, to abate or remove such nuisance within a reasonable time, to be stated in such notice.

B. Upon the neglect or refusal of any owner, Manager, occupant, or agent, or other person having control of such house or other place, to comply with such notice, the Building Official may abate such nuisance; and the owner, Manager, agent or occupant, or other person having control of such house or place, in addition to the penalties provided by this chapter shall be liable to the City for the cost of such abatement, to be recovered in a civil action in any court of competent jurisdiction. If no person can be found upon whom to serve such notice, the Building Division shall proceed to abate such nuisance at the expense of the City, at a cost of not to exceed fifty dollars per day.

SECTION THREE.

1. Publication: Within fifteen (15) days after its adoption, this Ordinance shall be published once in a newspaper of general circulation in the City of Ukiah. In lieu of publishing the full text of the Ordinance, the City may publish a summary of the Ordinance once 5 days prior to its adoption and again within fifteen (15) days after its adoption.

2. Effective Date: The ordinance shall become effective thirty (30) days after its adoption.

3. Severability: If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, is for any reason held to be invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of the remaining sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases of this Ordinance, or its application to any other person or circumstance. The City Council of the City of Ukiah hereby declares that it would have adopted each section, subsection, subdivision, paragraph, sentence, clause or phrase hereof, irrespective of the fact that any one or more other sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases hereof be declared invalid or unenforceable.

Introduced by title only on _____, 2024, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Adopted on _____, 2024, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Josefina Dueñas, Mayor

ATTEST:

Kristine Lawler, CMC/City Clerk



AGENDA SUMMARY REPORT

SUBJECT: Consider Giving Authorization of \$200,000 Interfund Loan from General Fund to Golf Enterprise Fund for Recycled Water Project Phase 4, and Approve Corresponding Budget Amendments.

DEPARTMENT: City Manager /
Admin

PREPARED BY: Maya Simerson, Project & Grant Administrator

PRESENTER: Maya Simerson, Grants and Project Manager.

ATTACHMENTS:

1. Resolution 2024-____, GF - Golf, 9-18-24
2. LAIF Daily Rate

Summary: Staff requests Council authorization for an interfund loan, not exceeding \$200,000, from the General Fund to the Golf Enterprise Fund. This loan will finance the installation of recycled water distribution equipment and a main line to service the gravity-fed portion of the Ukiah Valley Golf Course. The funds will facilitate the completion of Phase 4 of the Recycled Water Project, allowing for further water conservation and operational cost savings. The interfund loan will be repaid over a period of five years at a fixed interest rate of 4.58%, based on the City's current rate of return from the Local Agency Investment Fund (LAIF).

Background: Phase 4 of the Recycled Water Project, awarded to Ghilotti Construction, Inc. in 2023, provided for the installation of a recycled water distribution line to the main pumphouse at the Ukiah Valley Golf Course. This system currently irrigates two-thirds of the course, while the remaining one-third relies on a gravity-fed potable water system.

To maximize the use of recycled water on the property and reduce the need for potable water, Staff evaluated options to connect the remaining portion of the golf course to the recycled water system. It was determined that the existing main line can be converted into a dual-purpose line with the addition of a booster pump, allowing the recycled water to flow to the gravity-fed area. By doing this work the entirety of the property will be able to utilize recycled water, with the exception of one small area at the 6th tee, which is at a higher elevation and may not be able to be supported by recycled water at this time. Overall, the proposed conversion of the existing gravity-fed system will require some additional modifications at the pumphouse, the addition of a small structure to cover the new pump, and the installation of other connection infrastructure, and will result in significant reductions in potable water usage.

Discussion: The estimated cost of completing the connection of the gravity-fed portion of the golf course to the recycled water system is approximately \$200,000. This investment is expected to result in annual cost savings of approximately \$60,000 by reducing potable water use, leading to a return on investment in approximately three and a half years. After the loan is repaid, these ongoing savings will be utilized to pay down prior debts in the Golf Enterprise Fund.

In addition to the financial benefits, this project aligns with the City Council's Strategic Plan, the General Plan, and Climate Initiatives, promoting the use of sustainable water practices. By converting the remaining section of the golf course to recycled water, the City supports its environmental sustainability goals and reduces dependency on potable water sources.

Pursuant to the City of Ukiah Debt Management Policy, interfund borrowing is a recognized method of financing under Section 5. This policy allows for the City to borrow internally from funds with surplus cash, providing a cost-effective alternative to issuing bonds for financing needs below \$10 million. Interfund loans must be repaid with interest, ensuring that the lending fund is compensated fairly while maintaining fiscal discipline across all City funds.

This transaction is structured as an interfund loan in accordance with Governmental GAAP, ensuring that the General Fund is reimbursed with interest. Under an interfund loan arrangement, the borrowing fund (Golf Enterprise Fund) records the loan as a liability, while the lending fund (General Fund) records a receivable. This structure maintains transparency and accountability, as the loan must be repaid under agreed terms. In contrast, an interfund transfer involves a permanent movement of funds without any repayment obligation.

The loan terms, detailed in Attachment 1 (Interfund Loan Agreement Resolution), specify that the loan will be repaid over five years at a fixed interest rate of 4.58%. This interest rate is based on the City's current return from the Local Agency Investment Fund (LAIF), in line with the City's Debt Management Policy, which ensures that internal loans are repaid at a fair rate based on current investment returns (see Attachment 2 for supporting documentation of the LAIF rate). The regular payments will ensure that the General Fund is made whole, and the structured repayment schedule is consistent with the City's approach to prudent fiscal management.

Staff recommends authorizing the interfund loan, not to exceed \$200,000, from the General Fund to the Golf Enterprise Fund for the installation of recycled water distribution equipment and main line to the gravity-fed portion of the Ukiah Valley Golf Course related to the Recycled Water Project Phase 4, and approving the corresponding budget amendments.

Recommended Action: Authorize the interfund loan, not to exceed \$200,000, from the General Fund to the Golf Enterprise Fund for the installation of recycled water distribution equipment and main line to the gravity-fed portion of the Ukiah Valley Golf Course related to the Recycled Water Project Phase 4, and approve corresponding budget amendments.

BUDGET AMENDMENT REQUIRED: Not to exceed \$200,000

CURRENT BUDGET AMOUNT: 72022400.80230.18464: \$0

PROPOSED BUDGET AMOUNT: 72022400.80230.18464: \$200,000

FINANCING SOURCE: Interfund loan from the General Fund

PREVIOUS CONTRACT/PURCHASE ORDER NO.: Contract 2223-220

COORDINATED WITH: Tim Eriksen, Public Works Director, Mary Horger, Financial Services Manager & Sage Sangiacomo, City Manager

DIVERSITY-EQUITY INITIATIVES (DEI): N/A

CLIMATE INITIATIVES (CI): 7a- Expand sustainable water practices.

GENERAL PLAN ELEMENTS (GP): N/A

Approved: 
Sage Sangiacomo, City Manager

RESOLUTION NO. 2024-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF UKIAH AUTHORIZING AN INTERFUND LOAN FROM THE GENERAL FUND TO THE GOLF ENTERPRISE FUND FOR THE INSTALLATION OF RECYCLED WATER DISTRIBUTION EQUIPMENT AND MAIN LINE AS PART OF THE RECYCLED WATER PROJECT PHASE 4

WHEREAS, the City of Ukiah owns and operates the Ukiah Valley Golf Course, which currently uses potable water for a portion of its irrigation system; and

WHEREAS, the City of Ukiah has initiated Phase 4 of the Recycled Water Project to provide recycled water to the Ukiah Valley Golf Course, promoting water conservation and reducing operational costs; and

WHEREAS, the remaining portion of the golf course that is currently served by a gravity-fed potable water system can be connected to the recycled water distribution system at a cost not to exceed \$200,000; and

WHEREAS, the City's Debt Management Policy, adopted by Resolution No. 2017-16 and amended in 2021, authorizes the use of interfund borrowing as a method of financing under Section 5 (Methods of Financing), allowing internal borrowing between funds with surplus cash in lieu of issuing bonded debt; and

WHEREAS, the City's Debt Management Policy provides that the Finance Director is responsible for evaluating interfund loans on a case-by-case basis, ensuring that interfund loans are repaid with interest at a rate based on the City's investment returns, and requires Council approval for long-term borrowing between City funds with full maturity beyond the succeeding fiscal year; and

WHEREAS, the interfund loan will bear interest at a fixed rate of 4.58% per annum, which represents the City's current rate of return from the Local Agency Investment Fund (LAIF), and will be repaid over a period of five (5) years; and

WHEREAS, the terms of the loan are outlined in Exhibit A (Amortization Schedule), attached hereto and made a part of this resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF UKIAH AS FOLLOWS:

1. **Loan Authorization:** The City Council hereby authorizes an interfund loan from the General Fund to the Golf Enterprise Fund in an amount not to exceed \$200,000 for the installation of recycled water distribution equipment and the

main line for the Ukiah Valley Golf Course as part of the Recycled Water Project Phase 4.

2. **Interest Rate and Term:** The loan will be repaid over a term of five (5) years at a fixed interest rate of 4.58% per annum, based on the City's current rate of return from LAIF.
3. **Repayment Schedule:** The loan will be repaid in equal annual installments as outlined in Exhibit A (Amortization Schedule). Payments shall be made from the Golf Enterprise Fund to the General Fund, beginning one year from the date of loan disbursement.
4. **Budget Amendment:** The City Manager and Finance Director are hereby authorized and directed to amend the budget to reflect this interfund loan and to make any necessary adjustments to implement this resolution.
5. **Severability:** If any section, subsection, sentence, clause, or phrase of this resolution is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this resolution.
6. **Effective Date:** This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED this 18th day of September, 2024, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Douglas Crane, Mayor

ATTEST:

Kristine Lawler, City Clerk

EXHIBIT A: Amortization Schedule

Payment Due Date	Beginning Balance	Payment	Interest (4.58%)	Principal	Ending Balance
June 30, 2025	\$200,000	\$45,762	\$9,160	\$36,602	\$163,398
June 30, 2026	\$163,398	\$45,762	\$7,485	\$38,277	\$125,121
June 30, 2027	\$125,121	\$45,762	\$5,732	\$40,030	\$85,091
June 30, 2028	\$85,091	\$45,762	\$3,898	\$41,864	\$43,227
June 30, 2029	\$43,227	\$45,762	\$1,978	\$43,784	\$0



CALIFORNIA STATE TREASURER
FIONA MA, CPA



PMIA Daily Effective Yield

Date	Daily	Quarter to Date	Average Maturity
09/11/24	4.58	4.55	215
09/10/24	4.58	4.55	216
09/09/24	4.59	4.55	214
09/08/24	4.59	4.55	217
09/07/24	4.59	4.55	217
09/06/24	4.59	4.55	217
09/05/24	4.59	4.55	219
09/04/24	4.59	4.55	219
09/03/24	4.59	4.55	219
09/02/24	4.53	4.55	219
09/01/24	4.53	4.55	220
08/31/24	4.53	4.55	221
08/30/24	4.57	4.55	219
08/29/24	4.59	4.55	215
08/28/24	4.60	4.55	214
08/27/24	4.59	4.55	215
08/26/24	4.60	4.54	214
08/25/24	4.60	4.54	217
08/24/24	4.60	4.54	217
08/23/24	4.60	4.54	217
08/22/24	4.60	4.54	219
08/21/24	4.60	4.54	219
08/20/24	4.59	4.54	220
08/19/24	4.59	4.54	221
08/18/24	4.59	4.54	224
08/17/24	4.59	4.54	224
08/16/24	4.59	4.53	224
08/15/24	4.59	4.53	225
08/14/24	4.56	4.53	219
08/13/24	4.56	4.53	220
08/12/24	4.56	4.53	220
08/11/24	4.57	4.53	220
08/10/24	4.57	4.53	220
08/09/24	4.57	4.53	220
08/08/24	4.57	4.53	221
08/07/24	4.57	4.53	221
08/06/24	4.57	4.52	222



CALIFORNIA STATE TREASURER
FIONA MA, CPA



Attachment 2

PMIA Daily Effective Yield

Date	Daily	Quarter to Date	Average Maturity
08/05/24	4.57	4.52	222
08/04/24	4.57	4.52	224
08/03/24	4.57	4.52	224
08/02/24	4.57	4.52	224
08/01/24	4.57	4.52	224



AGENDA SUMMARY REPORT

SUBJECT: Receive Report Regarding FEMA's Response and Updated FEMA Floodplain Maps to the City of Ukiah's March 2023 Appeal; Authorize the City Manager to Develop and Submit a Second Appeal; and Take Any Other Action Deemed Necessary.

DEPARTMENT: Public Works

PREPARED BY: Seth

PRESENTER: Tim Eriksen, Director of Public Works/City Engineer

ATTACHMENTS:

1. Existing FEMA Floodplain
2. FEMA New Floodplains Proposal 2022
3. L.Huffman re FEMA_031523

Summary: Council will receive a report regarding FEMA's most recent response and updated FEMA floodplain maps to the City's 2023 appeal letter; authorize the City Manager to develop and submit a second appeal; and take any other action deemed necessary.

Background: The Federal Emergency Management Agency (FEMA) began updating the floodplain elevations, and corresponding maps, within the City of Ukiah in 2020. In 2022, FEMA presented the proposed updated floodplains to the City for comment (See Attachment 1 for existing floodplain and Attachment 2 for FEMA's newly proposed floodplain). In immediately noticing significant differences in the proposed floodplain versus what areas of the City and Ukiah Valley had actually flooded over the last 30 years, Staff requested the engineering firm GHD review the flood data provided by FEMA. GHD's review found deficiencies with FEMA's analysis and data inputs. With these noted discrepancies, Staff coordinated with GHD and Mayor Rodin to prepare and submit an appeal letter to FEMA through Congressman Jared Huffman's Office (Attachment 3).

Discussion: In response to the City's first appeal letter, FEMA has revised their initial proposed floodplain changes, reducing the expanded floodplain areas (please review the below link to access an interactive map of FEMA's most recently proposed floodplains). However, based on observed and anecdotal data about historical flooding over the last 30 years, as well as additional analysis conducted by GHD on September 12, the data and studies used by FEMA to produce the most recent floodplains appear incomplete. As a result, it is the opinion of both Staff and GHD that FEMA's proposed floodplain maps still include many new properties in the special flood hazard area that should not be included in this area. This is significant, as properties in the special flood hazard area would be required to obtain flood insurance, of which annual costs can be between \$2,000 and \$8,000. Especially concerning is that many of the affected properties within the proposed floodplain are in a census tract/block group that has among the highest concentrations of low-income residents in Ukiah, thereby increasing the risk of foreclosures and vacant homes.

July 2024 FEMA proposed floodplains

link: <https://www.arcgis.com/apps/webappviewer/index.html?id=e7a7dc3ebd7f4ad39bb8e485bb64ce44>.

The deadline for this appeal (September 23) falls before the next regularly scheduled City Council meeting. Therefore, Staff is recommending that Council authorize the City Manager to work with Staff and GHD to submit a second appeal to FEMA.

Recommended Action: 1. Receive report regarding FEMA's most recent response and updated FEMA floodplain maps to the City's 2023 appeal letter, and authorize the City Manager to develop and submit a second appeal.

2. Consider and take any other action deemed necessary.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

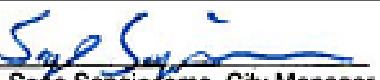
COORDINATED WITH: Jason Benson, Senior Engineer, Tim Eriksen, Director of Public Works, Jesse Davis, Chief Planning Manager and Craig Schlatter, Community Development Director

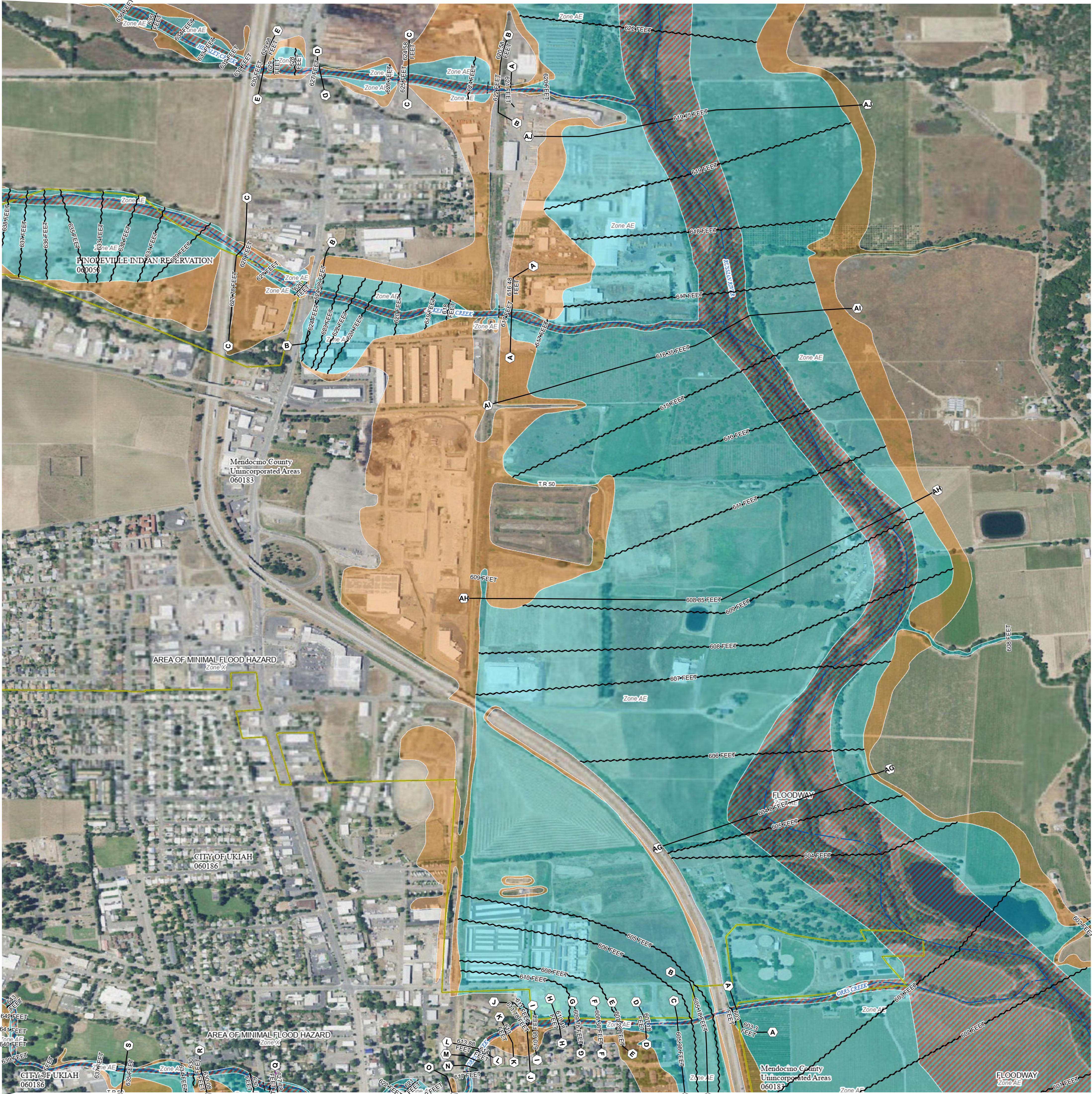
DIVERSITY-EQUITY INITIATIVES (DEI): Goal 4 – Identify and actively engage underrepresented communities in which to retain, expand, develop, and implement programs.

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): N/A

Approved:


Sage Sangiacomo, City Manager



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE)
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance
		Water Surface Elevation
		Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-6627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

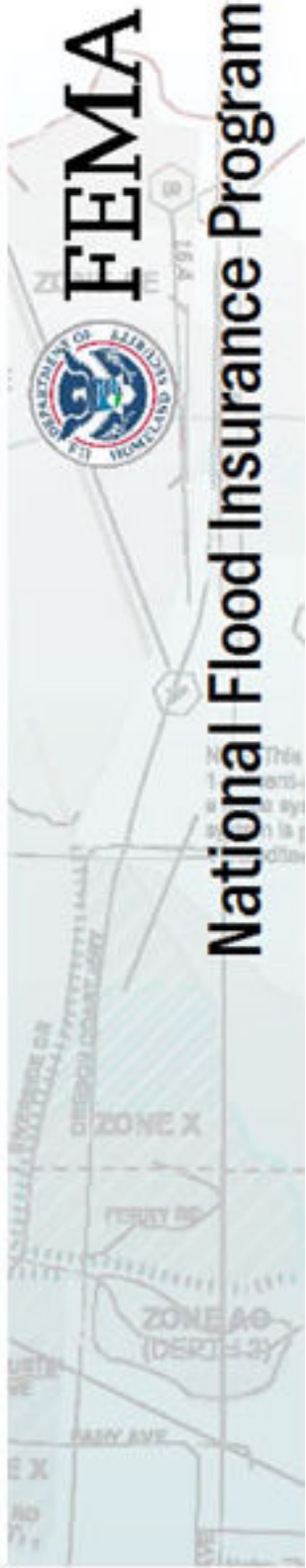
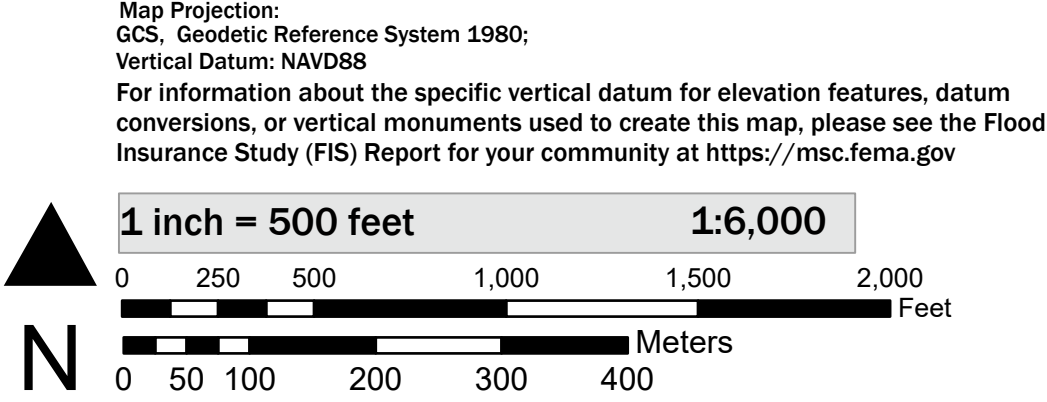
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on **9/4/2024 6:41 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

SCALE



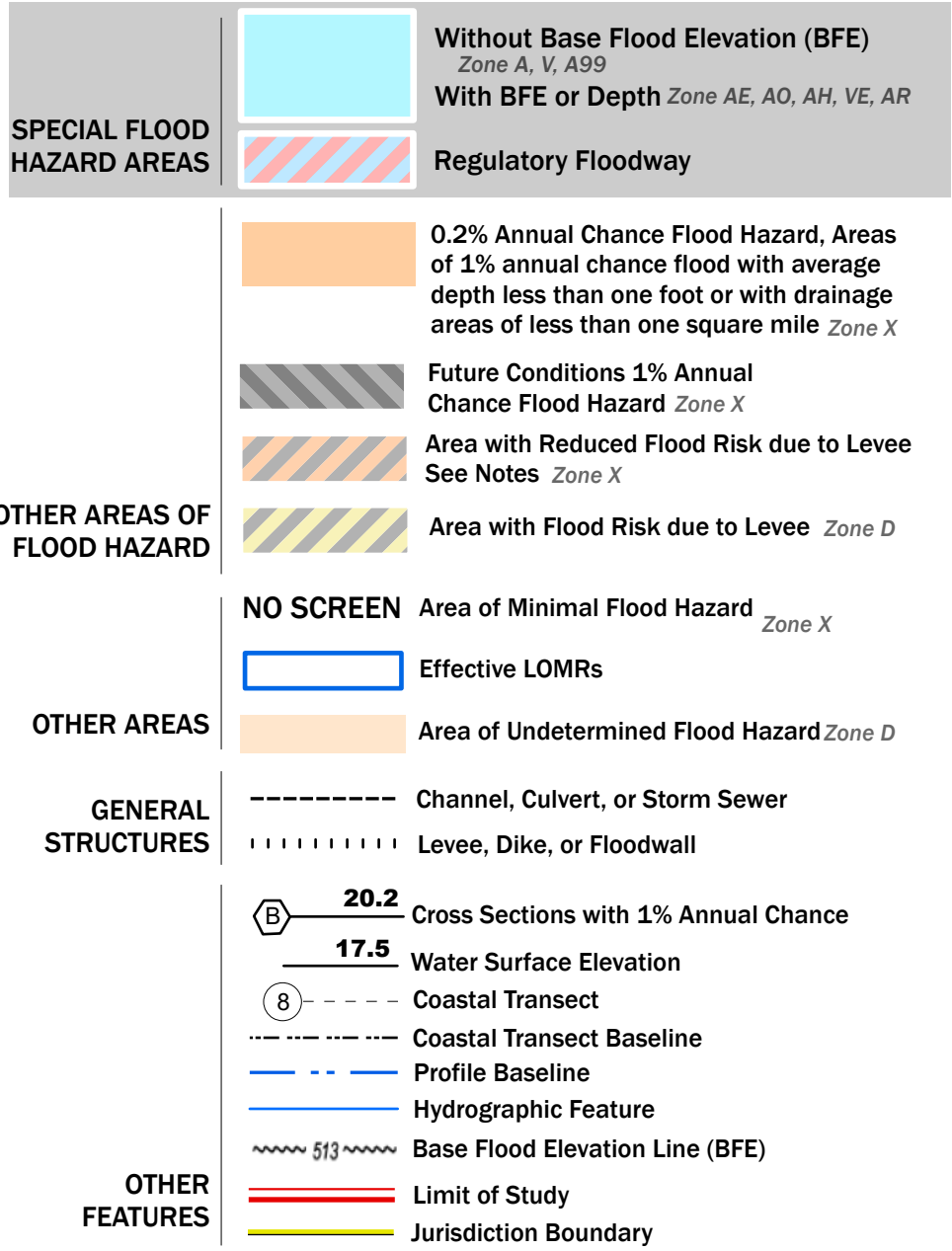
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
PANEL 1512 OF 2050

PINOYVILLE INDIAN RESERVATION	060058	1512
MENDOCINO COUNTY	NUMBER 060186	PANEL 1512
CITY OF UKIAH		



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT



NOTES TO USERS

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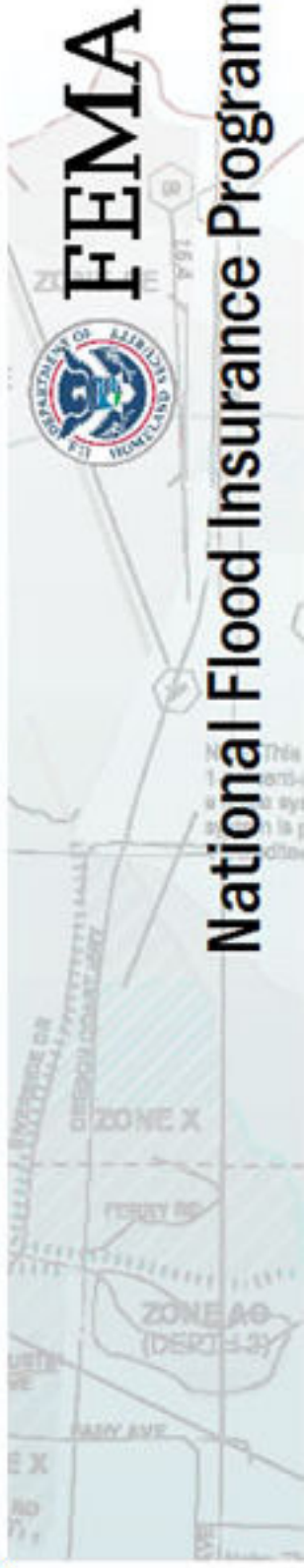
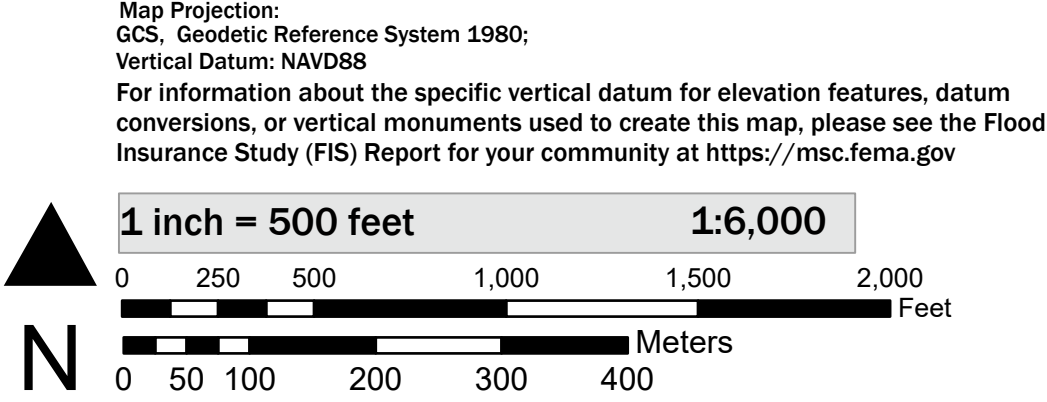
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 9/4/2024 5:09 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards. This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

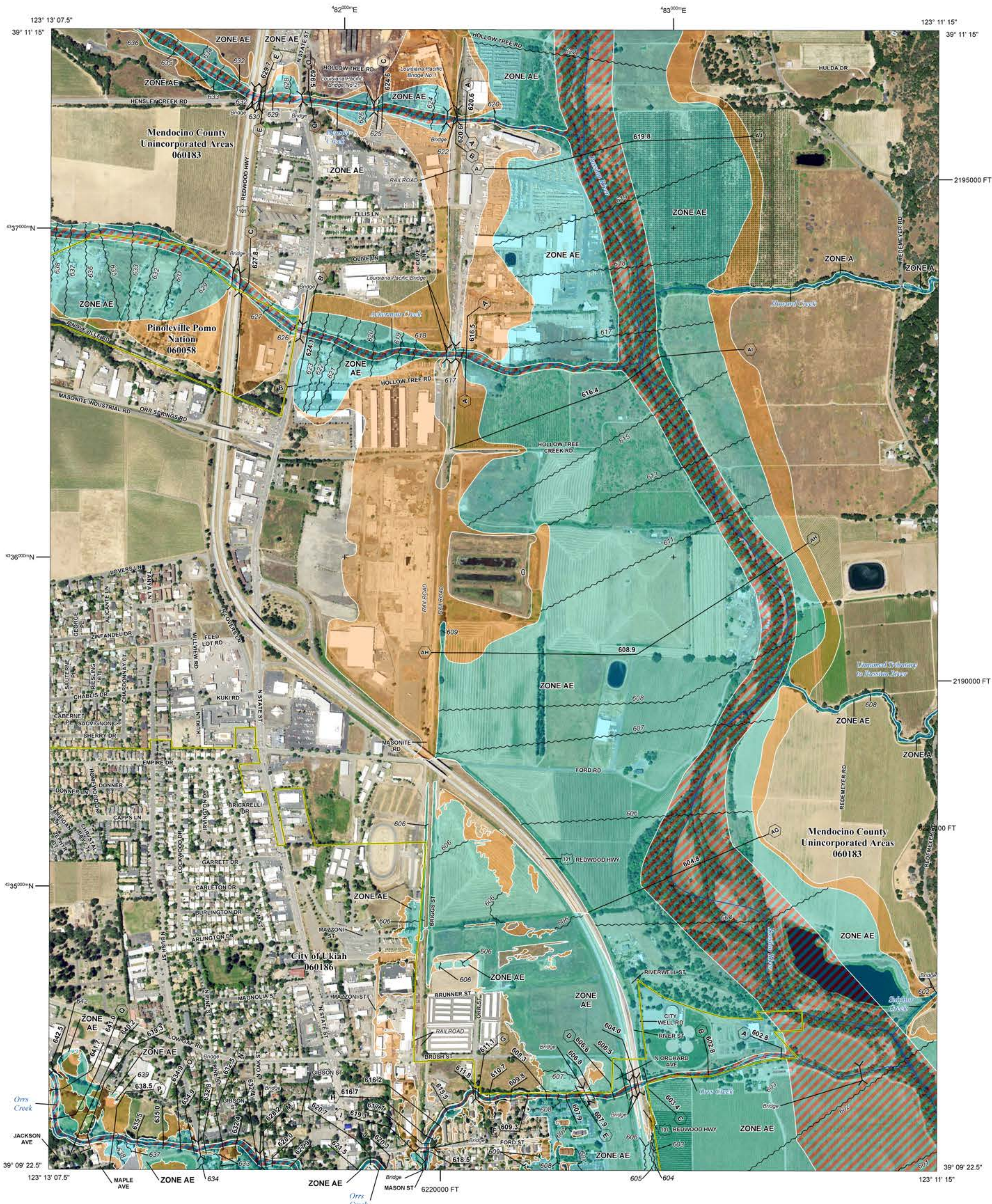
SCALE



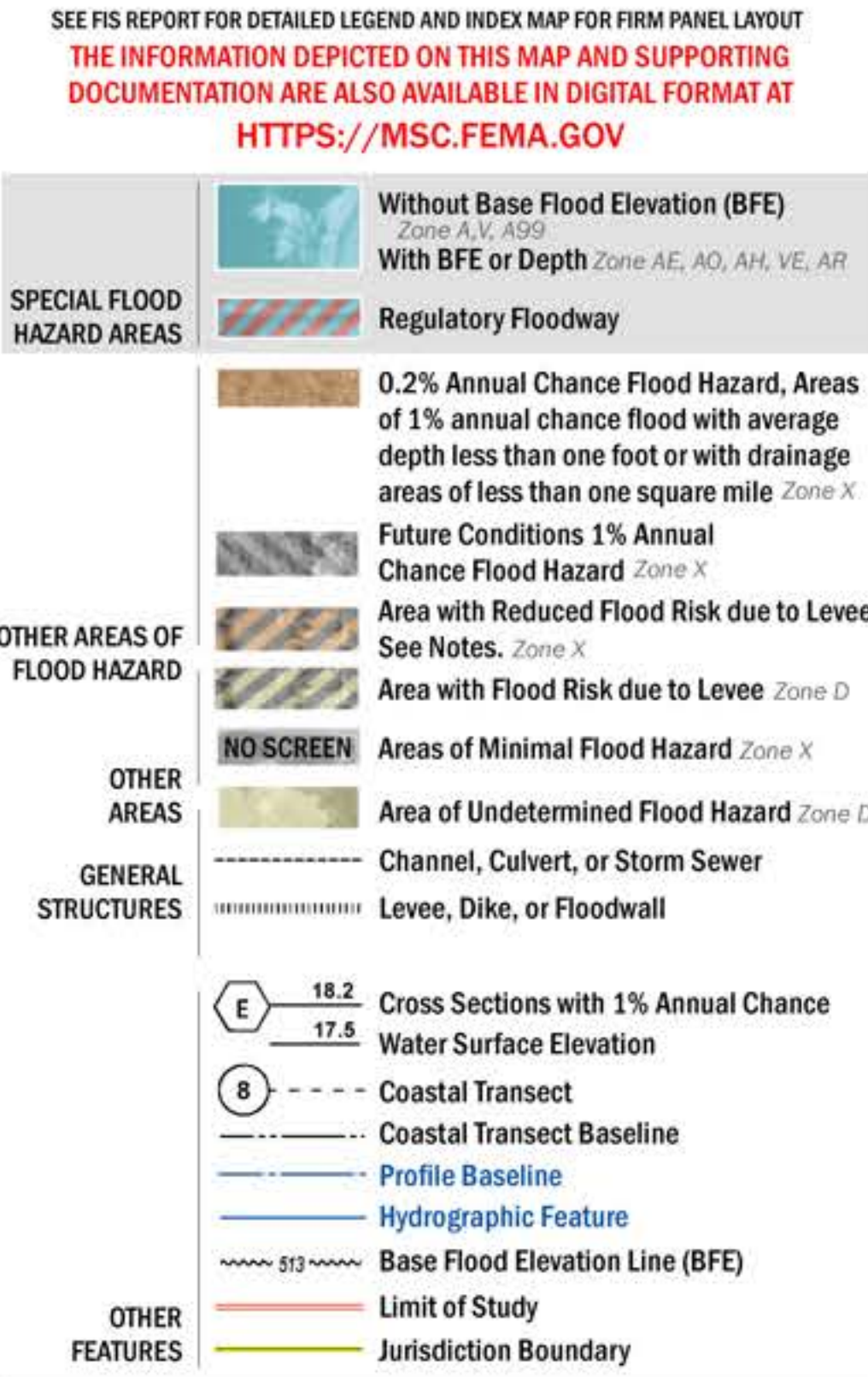
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

PANEL 1514 of 2050

Panel Contains:
COMMUNITY MENDOCINO COUNTY
CITY OF UKIAH
NUMBER 060186
PANEL 1514



FLOOD HAZARD INFORMATION



NOTES TO USERS

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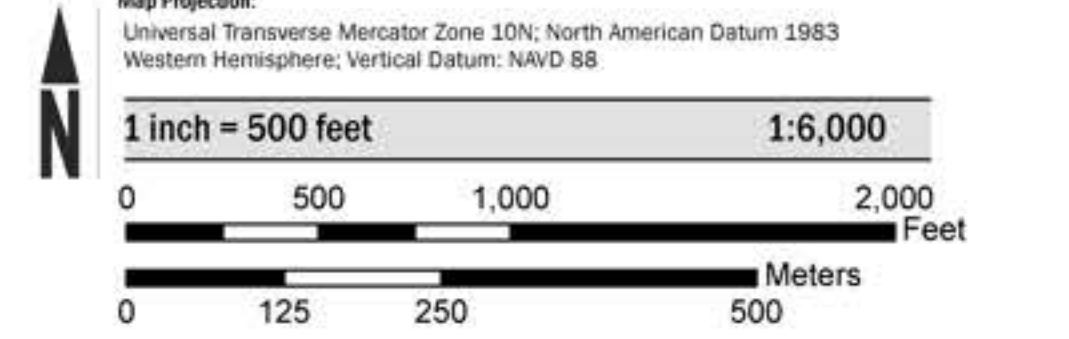
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

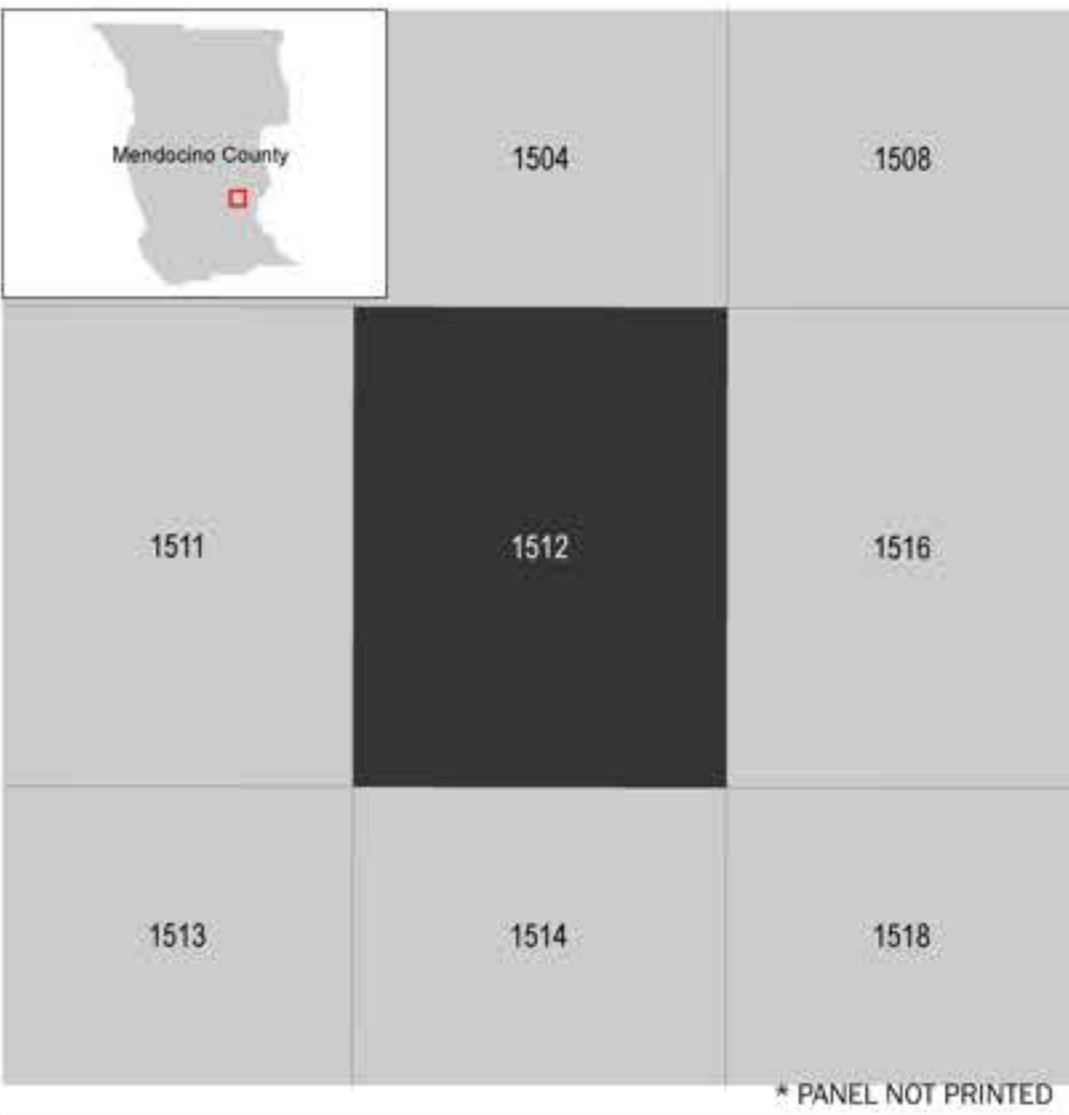
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Department of Agriculture National Resource Conservation Service (USDA-NRCS). This information was derived from digital orthophotography at a 1-meter resolution from photography dated 2016.

SCALE



PANEL LOCATOR



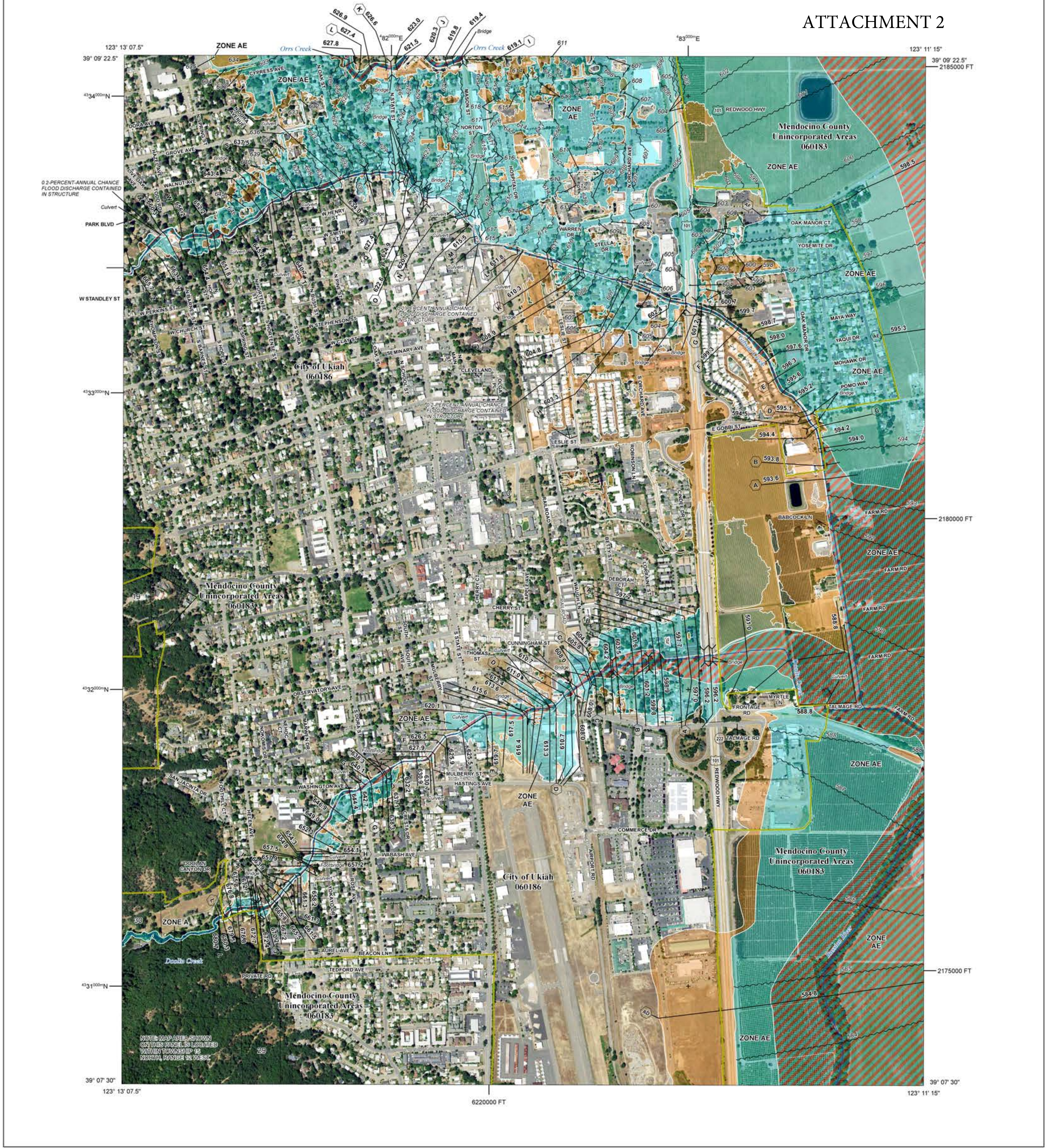
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
MENDOCINO COUNTY, CALIFORNIA
And Incorporated Areas
PANEL 1512 of 2100

Panel Contains:

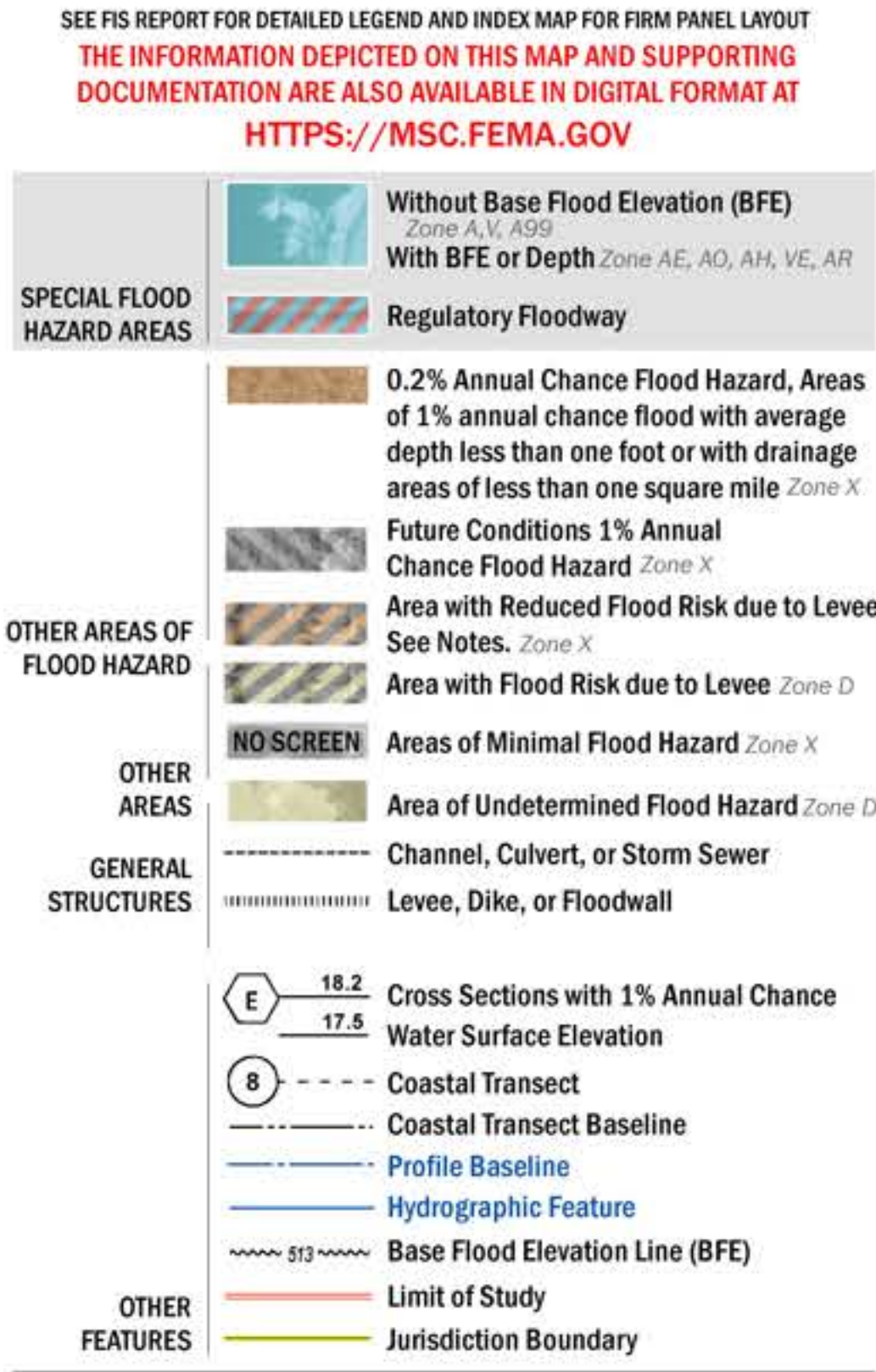
COMMUNITY	NUMBER	PANEL	SUFFIX
MENDOCINO COUNTY	060183	1512	G
PINOLEVILLE POMO NATION	060058	1512	G
UKIAH, CITY OF	060186	1512	G

REVISED PRELIMINARY 7/10/2024

VERSION NUMBER 2.6.4.6
MAP NUMBER 06045C1512G
MAP REVISED



FLOOD HAZARD INFORMATION



NOTES TO USERS

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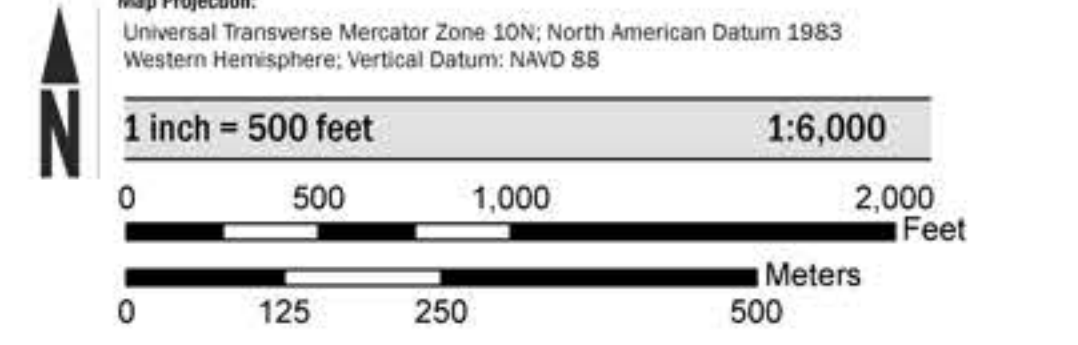
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

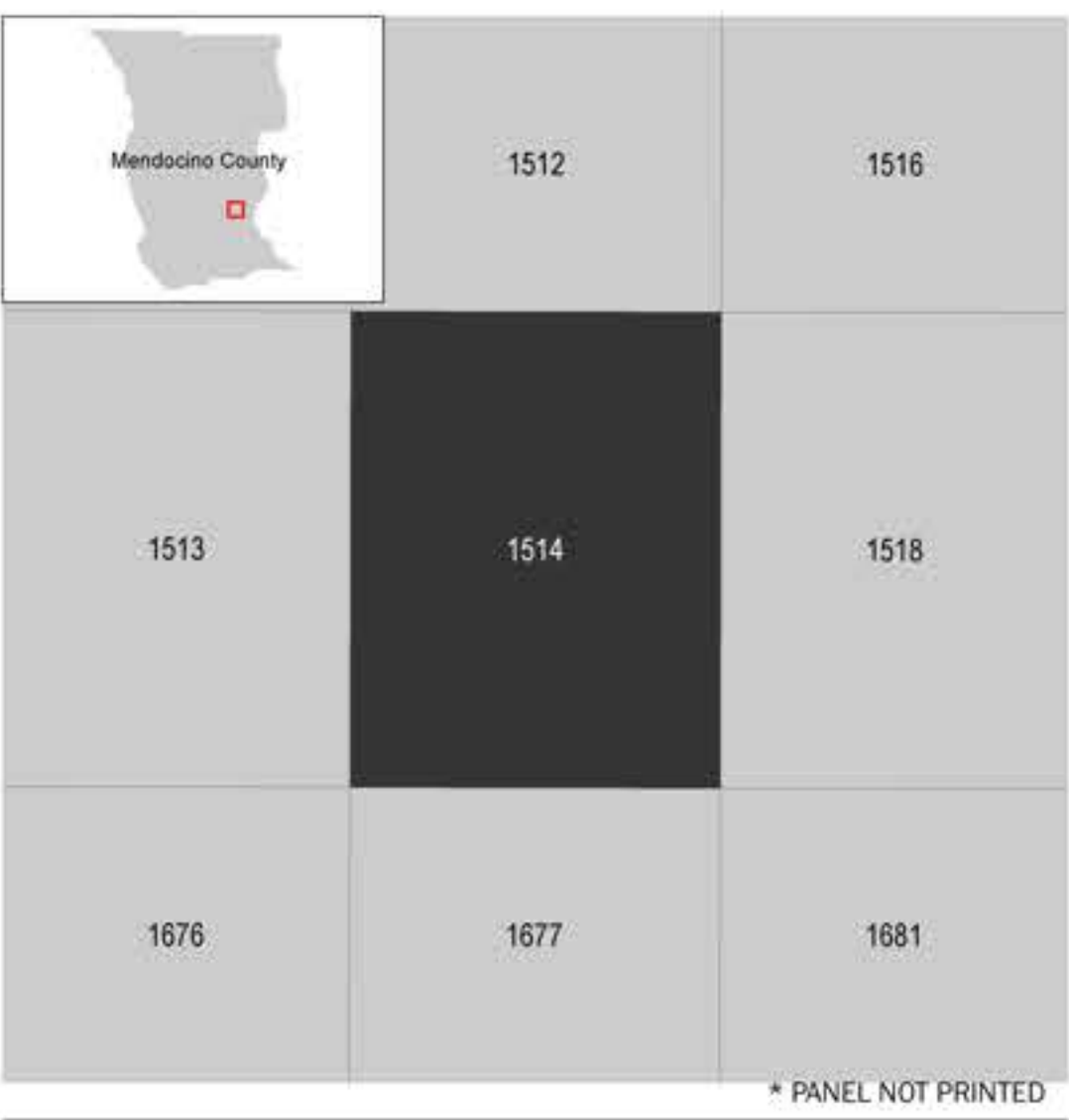
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Department of Agriculture National Resource Conservation Service (USDA-NRCS). This information was derived from digital orthophotography at a 1-meter resolution from photography dated 2016.

SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
MENDOCINO COUNTY, CALIFORNIA
And Incorporated Areas
PANEL 1514 of 2100

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
MENDOCINO COUNTY	060183	1514	G
UKIAH, CITY OF	060186	1514	G

REVISED PRELIMINARY
7/10/2024

VERSION NUMBER
2.6.4.6
MAP NUMBER
06045C1514G
MAP REVISED

Wednesday, March 15, 2023

The Honorable Jared Huffman
200 South School Street
Ukiah, CA 95482

Dear Congressman Huffman,

As you are likely aware, the Federal Emergency Management Agency (FEMA) has proposed updated flood maps for Mendocino County and the City of Ukiah. These maps revise flood hazard designations along Orrs Creek, Gibson Creek, Doolin Creek and other tributaries across the Ukiah Valley. As conveyed, these updates greatly and curiously expand the existing floodplain hazards, thereby increasing residential and commercial insurance requirements, as well as the financial burdens for residents and businesses. Even though it has been some time since the last update to the City's flood maps, no significant new developments in or near existing flood zones have been facilitated, nor have changes to flood protection systems (e.g., levees) developed. While drought continues, no other significant environmental changes have occurred that would substantiate such a considerable change in known flood hazards.

Unfortunately, those most impacted by these revisions will be the least able to absorb the associated costs. For middle-class and low-income homeowners, even slight changes to monthly expenses could have substantial budgetary consequences. These impacts will be most pronounced for low-income and borrowers with lower credit scores, since the added financial burden of insurance reduces the ability of disadvantaged households to borrow.¹ Increased flood insurance mandates will also lead to reductions in residential lending activity, which will stymie appropriate infill development and new construction. Creating additional barriers to infill development is a mistake, as the City of Ukiah must be well-positioned to encourage this type of growth to limit regional sprawl and non-sustainable land uses increasingly subject to fire hazards within the wildland urban interface.

An important objective of the National Flood Insurance Program (NFIP) is to break the cycle of flood damage but the City of Ukiah has experienced relatively few claims since commencing participation in the NFIP in 1982. Per the FEMA NFIP Insurance Mitigation Division, only 60 documented losses totaling \$1,041,230.16 across the entire 95482 zip code have been identified. This implies that the impacts of flooding within City limits are relatively constrained, as this zip code extends far-beyond City limits and includes large swaths of unincorporated Mendocino County.

Upon review and consultation, most of the areas subject to revised designations are not historically associated with flood hazards, even during notable events, such as those in 1994 and 2005/2006 (DR – 1628 CA). The impacts to mobile home park residents are concerning, as the City of Ukiah has taken efforts to preserve existing mobile home parks as affordable housing. Specifically, the revised flood hazard maps would impact the Manor Oak Mobile Home Estates and additional mobile home parks along East Gobbi Street to increased insurance requirements. FEMA published its Affordability Framework in 2018, but it is unclear how or if this framework would protect or assist residents, particularly those with modest incomes.

We encourage you to review the technical response that has been submitted in coordination with the County of Mendocino and assist the City of Ukiah in addressing concerns with these proposed flood map revisions. We believe that, based on technical merits, our appeal is fully justified. As conveyed, the expansion of flood hazard areas would be tremendously impactful to residents and businesses, especially those who reside in mobile home parks. Thank you for your consideration and review of these concerns.

Sincerely,



Mari Rodin, Mayor, City of Ukiah

Enclosed: City of Ukiah FEMA Map Revision Review; GHD and Northern Hydrology & Engineering; March 8, 2023

¹ Unintended Consequences of “Mandatory” Flood Insurance Kristian S. Blickle and João A. C. Santos Federal Reserve Bank of New York Staff Reports, no. 1012 April 2022 JEL classification: G21, G28, Q5, Q54



AGENDA SUMMARY REPORT

SUBJECT: Receive Report of the Completed Local Road Safety/Action Plan Completed by the Consultant TJKM.

DEPARTMENT: Public Works

PREPARED BY: Seth Strader, Administrative Analyst

PRESENTER: Tim Eriksen, Director of Public Works/City Engineer

ATTACHMENTS:

1. F08152024 Ukiah LRSAP Final Report_Amended (002)

Summary: Council will receive a report on the updated Local Road Safety/Action Plan completed by the consultant TJKM.

The City of Ukiah's Local Road Safety/Action Plan (LRS/AP) is a comprehensive plan that creates a framework to systemically identify and analyze traffic safety related issues and recommend projects and countermeasures. The LRS/AP aims to reduce fatal and severe injury (KSI) collisions through a prioritized list of improvements that can enhance safety on local roadways. It is viewed as a guidance document that can be a source of information and ideas for the Council, City Staff and community when considering future infrastructure development and improvements.

Background: The City is teamed with Mendocino County of Governments (MCOG) and Caltrans to work with TJKM on a Local Roadway Safety/Action Plan (LRS/AP). TJKM is a multidisciplinary firm with extensive expertise in broad areas of transportation, parking, and land use. TJKM provides expertise and services for transportation planning, traffic operations, freeway and corridor studies, traffic engineering design (including PS&E), intelligent transportation systems (ITS), traffic safety, and multimodal studies. This work includes complete street services to meet the needs of motorists, bicyclists, pedestrians, and public transportation riders.

Discussion: The City of Ukiah's Local Road Safety/Action Plan (LRS/AP) provides a framework for identifying and analyzing traffic safety issues, and recommending projects and countermeasures. The goal of the LRS/AP is to reduce fatal and severe injury collisions by implementing improvements to enhance roadway safety. This latest update, building on the 2022 Local Roadway Safety Plan (LRSP), adopts a proactive stance in meeting safety needs and serves as a guidance document. The LRS/AP is a living document, routinely reviewed and updated by the City and safety partners to reflect evolving collision trends, community needs, and priorities. With the LRS/AP as a guide, the City will be able and ready to consider future capital improvement projects and apply for grant funds, such as the federal Highway Safety Improvement Program (HSIP) and Safe Streets and Roads for All (SS4A). The complete study can be found in Attachment 1.

The preparation of this report (or plan) was programmed through the Mendocino Council of Governments' FY 2023/24 Transportation Planning Work Program and funded with State (Regional Planning Assistance) Discretionary Grant funds. The report is based on technical data collected and analyzed by TJKM, a multidisciplinary firm specializing in transportation and traffic safety. The findings and recommendations within the LRS/AP were reviewed by the Technical Advisory Committee (TAC) and other safety partners to ensure a comprehensive and technically sound approach. Given the report is a guidance document, the

recommendations from the report do not necessarily reflect final project recommendations from City staff. However, the data and recommendations will be valuable for project development and future capital investment consideration and prioritization.

Input for the LRS/AP was sought through multiple stakeholder meetings and workshops. Specifically, three virtual stakeholder meetings were held with various departments and agencies to review project goals, findings, and gather feedback on proposed safety measures.

Recommended Action: Receive report of the completed Local Road Safety/Action Plan completed by the consultant TJKM.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: State (Regional Planning Assistance) Discretionary Grant

PREVIOUS CONTRACT/PURCHASE ORDER NO.:

COORDINATED WITH: Jason Benson, Senior Engineer and Tim Eriksen, Director of Public Works/City Engineer

Mayor Duenas is the city representative on the MCOG Board.

DIVERSITY-EQUITY INITIATIVES (DEI):

CLIMATE INITIATIVES (CI):

GENERAL PLAN ELEMENTS (GP): GP-A4 - Public Facilities, Services, and Infrastructure Element GP-A3 - Mobility Element

Approved:


Sage Sangiacomo, City Manager



CITY OF UKIAH, CALIFORNIA

Local Road Safety/Action Plan



August 2024
Updated Final Report



The preparation of this report (or plan) was programmed through the Mendocino Council of Governments' FY 2023/24 Transportation Planning Work Program and funded with State (Regional Planning Assistance) Discretionary Grant funds.

\$89,707 is the dollar amount for the contract related to the preparation of this Final Report/Plan.

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APPENDICES

Appendix A: Matrix of Planning Goals, Policies, and Projects
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Executive Summary

The City of Ukiah's Local Road Safety/Action Plan (LRS/AP) is a comprehensive plan that creates a framework to systemically identify and analyze traffic safety related issues and recommend projects and countermeasures. The LRS/AP aims to reduce fatal and severe injury (KSI) collisions through a prioritized list of improvements that can enhance safety on local roadways.

This update to the previous Local Roadway Safety Plan (LRSP) adopted in 2022 takes a proactive approach to addressing safety needs. It is viewed as a guidance document that can be a source of information and ideas. As indicated by this update, it is also be a living document, one that is routinely reviewed and updated by City staff and their safety partners to reflect evolving collision trends and community needs and priorities. With the LRS/AP as a guide, the City will be able and ready to apply for grant funds, such as the federal Highway Safety Improvement Program (HSIP) and Safe Streets and Roads for All (SS4A).

Chapter 1 – Introduction

The Introduction presents the project, describes how this report is organized, summaries the vision and goals, and the study area for the LRS/AP.

Chapter 2 – Safety Partners

This chapter covers Ukiah's collaborative approach to road safety, detailing the involvement of various city departments, local organizations, and agencies in developing and implementing the Local Road Safety/Action Plan. It highlights the engagement of diverse stakeholders through meetings and online platforms, as well as the city leadership's commitment to enhancing road safety through a multi-faceted approach. The chapter introduces Mendocino Council of Government (MCOG) Technical Advisory Committee (TAC) that will serve as the body to review and monitor the recommendations and Safety Project implementation and construction.

Chapter 3 – Existing Planning Efforts

This chapter summarizes existing City and regional planning documents and projects that are relevant to the LRS/AP. It ensures that the recommendations of the LRS/AP are in line with existing goals, objectives, policies, or projects. This chapter summarized the following documents: Bicycle and Pedestrian Master Plan (2015), Doolin Creek: A Vision for Restoration and Enhancement (2015), City of Ukiah Safe Routes to School Plan (2014), Ukiah Valley Area Plan (2011), City of Ukiah Pavement Management Program Update (2010), Ukiah Downtown Streetscape Improvement Plan (2009), Downtown Ukiah Parking Improvement Study (2007), and City of Ukiah General Plan (1995). Additionally, regional plans have been created, such as the Mendocino Council of

City of Ukiah

Local Road Safety/Action Plan

Governments 2024 Regional Transportation Improvement Program, 2022 Mendocino County Regional Transportation Plan & Active Transportation Plan, Mendocino County Safe Routes to School Plan (2014), and Mendocino County Rail-with-Trail Corridor Plan (2012).

Chapter 4 – Collision Data Collection and Analysis

Collision data was obtained and analyzed for a three-year period from 2020 to 2022 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) and compared with previous LRSP's (2015-2019) collision trends.

For the purpose of this update, California State Routes/Highways were not included as part of this collision data collection and analysis.

- The collision analysis identified general trends of collisions in the Ukiah. There were a total of 244 collisions reported Citywide from 2020 to 2022. Out of these, 157 were property damage only (PDO) (64 percent), 47 collisions (19 percent) led to complaint of pain injury and 25 collisions (10 percent) led to a visible injury. There were 15 fatal and severe injury (KSI) collisions, 15 collisions (6 percent) led to a severe injury, and there were no fatalities.
- KSI Collisions peaked during 2 p.m. to 3 p.m. The highest amount of injury collisions were observed between 3 p.m. to 4 p.m.
- Vehicle-Pedestrian collisions (47 percent) have the highest amount of KSI collisions followed by broadside (33 percent) collisions.
- The highest violation categories contributing to KSI collisions were unsafe speed (27 percent). For all injury collisions, the highest violation category was improper turning (34 percent).
- Out of all KSI collisions, 47 percent collisions occurred in dark conditions including dusk or dawn.

Chapter 5 - Emphasis Areas

Emphasis areas are a focus of the LRS/AP that are identified through the various collision types and factors resulting in KSI collisions within the City of Ukiah. The four emphasis areas for Ukiah are:

- Improve Intersection Safety
- Reduce Nighttime Collisions
- Reduce Broadside Collisions
- Improve Pedestrian/Bicycle Safety



Chapter 6 – Equity

The Equity chapter underscores Ukiah's commitment to advancing fair and equitable transportation safety improvements for all residents. It analyzes collision data with respect to equity-emphasis communities (EEC), which comprise 75% of the city's census tracts and 72% of its population. Key findings reveal that 86% of total collisions and 80% of killed or severely injured (KSI) collisions occur in EEC. The analysis considers various factors including collision types, modes of transportation, violation categories and lighting conditions to provide a comprehensive overview of safety challenges in vulnerable communities.

Chapter 7 – Countermeasure Identification

Engineering countermeasures were selected for each of the high-risk locations. These were based off of approved countermeasures from the Caltrans Local Roadway Safety Manual (LRSM) used in HSIP grant calls for projects. The intention is to give the City potential countermeasures for each location that can be implemented either in future HSIP calls for projects, or using other funding sources, such as the City's Capital Improvement Program. Non-engineering countermeasures were also selected using the E's strategies, and are included with the emphasis areas.

Chapter 8 – Safety Projects

A set of four safety projects were created for high-risk intersections and roadway segments, using HSIP approved countermeasures. These safety projects are:

- Project 1: Improve Safety at Non-Signalized Intersections.
- Project 2: Improve Pedestrian and Bicycle Safety at Non-Signalized Intersections.
- Project 3: Improve Safety at Roadway Segments.
- Project 4: Improve Safety at Roadway Segments.

Chapter 9 – Evaluation and Implementation

The LRS/AP is a guidance document that is recommended to be updated every two to five years in coordination with the safety partners. The LRS/AP document provides engineering, education, enforcement, and emergency medical service related countermeasures that can be implemented throughout the City to reduce KSI collisions. After implementing countermeasures, the performance measures for each emphasis area should be evaluated annually. The most important measure of success of the LRS/AP should be reducing KSI collisions throughout the City. If the number of KSI collisions does not decrease over time, then the emphasis areas and countermeasures should be re-evaluated.

Safe Street and Roads for All (SS4A) Action Plan Components

SS4A defines nine action plan components that are integral to any safety action plan in order to satisfy SS4A grant requirements. Of these nine criteria, seven have to be met in order for SS4A grants to be submitted for funding. The table below describes SS4A Action Plan Components and the sections of the LRS/AP that satisfy the seven relevant components.

Action Plan Component	Section
1. Leadership Commitment and Goal Setting	N/A
2. Planning Structure	Ch-2, Ch-9
3. Safety Analysis	Ch-4
4. Engagement and Collaboration	Ch-2
5. Equity Considerations	Ch-6
6. Policy and Process Changes	N/A
7. Strategy and Project Selections	Ch-7, Ch-8
8. Progress and Transparency	Ch-9 and Mendocino Council of Governments (MCOG) website https://www.mendocinocog.org
9. Action Plan Adoption Date	August 2024

1. Introduction

The Mendocino Council of Governments (MCOG) is assisting with updating the comprehensive Local Road Safety/Action Plan (LRS/AP) for the City of Ukiah. The updated LRS/AP would enable Ukiah to enhance safety for all modes of transportation and all ages and abilities.

What is a LRS/AP?

The LRS/AP is a localized data-driven traffic safety plan that provides opportunities to address unique highway safety needs and reduce the number of KSI collisions. The LRS/AP creates a framework to systemically identify and analyze traffic safety-related issues, and recommend safety projects and countermeasures. The LRS/AP facilitates the development of local agency partnerships and collaboration, resulting in the development of a prioritized list of improvements that can qualify for HSIP and SS4A funding.

The LRS/AP is a proactive approach to addressing safety needs and is viewed as a living document that can be constantly reviewed and revised to reflect evolving trends, and community needs and priorities.

Vision and Goals of the LRS/AP

- **Goal #1:** Systemically identify and analyze roadway safety problems and recommend improvements
- **Goal #2:** Improve the safety of all road users by using proven effective countermeasures
- **Goal #3:** Ensure coordination and response of key stakeholders to implement roadway safety improvements within Ukiah
- **Goal #4:** Serve as a resource for staff who continually seek funding for safety improvements
- **Goal #5:** Recommend how safety improvements can be made in a manner that is fair and equitable for all Ukiah residents

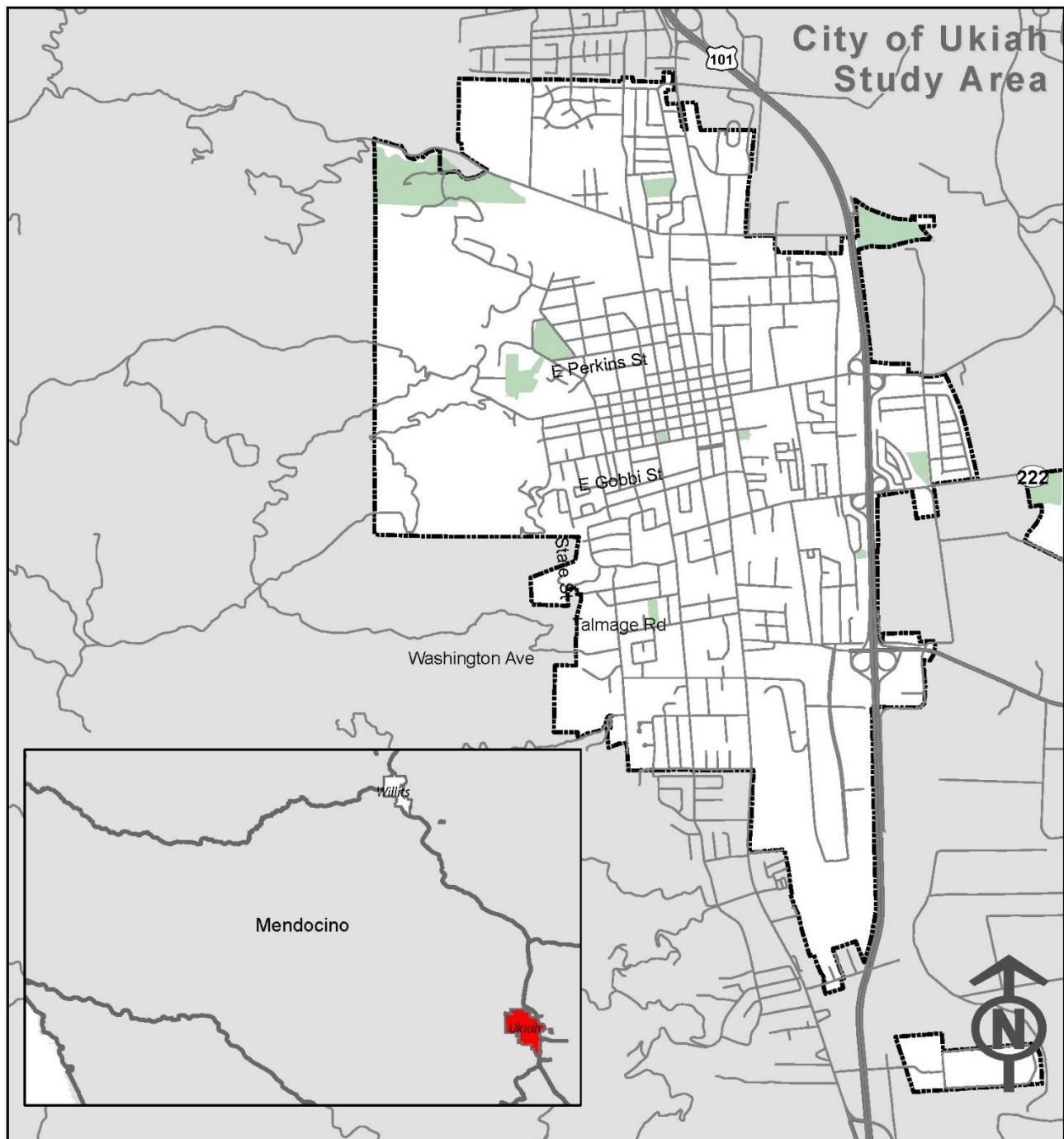
Study Area

The City of Ukiah is located in Mendocino County, California, covering a total area of about 4.83 square miles. Ukiah is the County seat and the largest city in Mendocino County and is located at an elevation of 633 feet.

The City's estimated population is 16,607 (2020 census). The City is accessible via US Route 101 corridor. **Figure 1** shows the study area.

City of Ukiah
Local Road Safety/Action Plan

Figure 1. Study Area: City of Ukiah



2. Safety Partners

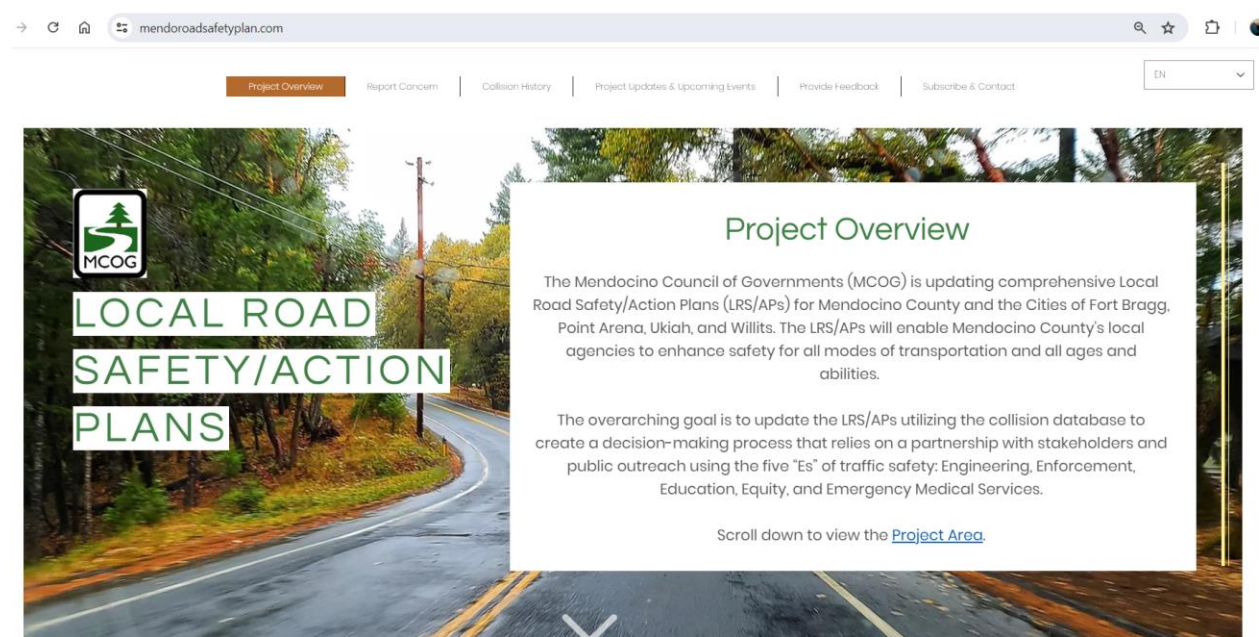
Safety partners are vital to the development and implementation of an LRS/AP. For the City of Ukiah, these include representatives from Public Works, Police Department, Fire Department, School District, Caltrans District 1, and other interested citizens and community members. Three stakeholder meetings among these departments/agencies were conducted to review project goals and findings, and to solicit feedback from the group during the project timeline.

This stakeholder outreach was supplemented by a project website (mendocinoroadsafetyplan.com), with an interactive map input platform. Project related info was also published on the City's website. As part of the project website, a public input platform called maptionnaire was published online and advertised on social media to solicit input public comments regarding traffic safety. The maptionnaire tool was open for public comments starting February 18, 2024 and closed on June 30, 2024.

No public comments were submitted for City of Ukiah during this period. **Figure 2** shows the landing page of LRS/AP's project website.

In addition to project website, five Public Workshops, three virtual and two in-person (in Fort Bragg and Ukiah), were held to introduce the project, present data information and recommendations, and provide a forum for comments and feedback.

Figure 2. Project Website



Leadership Commitment to Road Safety

The City of Ukiah is deeply committed to enhancing road safety and significantly reducing traffic fatalities and severe injuries for all road users. Recognizing the vital importance of safe streets, the City has made it a top priority to create a safer transportation environment for residents and visitors alike.

This dedication to improving road safety is rooted in Ukiah's core values of prioritizing the well-being and quality of life for all community members, whether they drive, walk, bike, or use public transit.

To achieve these road safety goals, the City is implementing a multi-faceted, evidence-based approach that addresses the various factors contributing to traffic incidents. This strategy includes:

- Infrastructure improvements to enhance road design and safety features
- Public awareness campaigns to educate residents on safe road use practices
- Collaboration with local law enforcement to ensure traffic laws are effectively upheld

By adopting this comprehensive approach, the City is confident it can make substantial progress in reducing serious injuries and fatalities on City roadways.

The City's leadership team is fully committed to this safety initiative and have dedicated the necessary resources to drive meaningful change. Regular assessment of progress, analysis of traffic data, and engagement with community stakeholders will ensure Ukiah stays on course to meet its safety objectives.

Technical Advisory Committee

The Technical Advisory Committee (TAC), a committee of Mendocino Council of Governments (MCOG), will serve as the body to review and monitor the recommendations and Safety Project implementation and construction. The TAC consists of nine (9) voting members or their authorized technical representatives, as follows: the County Director of Transportation, the County Director of Planning & Building Services, the Mendocino Transit Authority General Manager, the Caltrans Transportation Planning Branch Chief, one technical representative appointed by each of the four cities, and the County Air Pollution Control Officer. Additionally, one (1) non-voting member shall be a rail representative appointed by North Coast Railroad Authority. TAC meetings are typically once a month.

The nine (9) voting members or their authorized technical representatives of TAC consists as follows:

City of Ukiah
Local Road Safety/Action Plan

Agency

- City of Ukiah
- City of Willits
- City of Fort Bragg
- City of Point Arena
- Mendocino County Department of Transportation
- Mendocino County Planning & Building Services
- Mendocino Transit Authority
- Caltrans
- Air Quality Management District

The TAC will ensure a comprehensive and equitable approach to safety improvements by fostering interagency coordination and community engagement. Regular monitoring and evaluation of safety metrics will allow for adaptive management, enabling the team to adjust strategies as needed. In addition, Ukiah's Public Works Department will also be accountable for the progress made toward the plan goals.

3. Existing Planning Efforts

This chapter summarizes the planning documents, projects underway, and studies reviewed for the City of Ukiah LRS/AP, being developed as a part of Mendocino Council of Governments LRS/AP's for local agencies. The purpose of this review is to ensure the LRS/AP vision, goals, and E's strategies are aligned with prior planning efforts, planned transportation projects and non-infrastructure programs. The documents reviewed are listed below:

- Ukiah Bicycle and Pedestrian Master Plan (2015)
- Doolin Creek: A Vision for Restoration and Enhancement (2015)
- City of Ukiah Safe Routes to School Plan (2014)
- Ukiah Valley Area Plan (2011)
- City of Ukiah Pavement Management Program Update (2020/21)
- Ukiah Downtown Streetscape Improvement Plan (2009)
- Downtown Ukiah Parking Improvement Study (2007)
- City of Ukiah General Plan (1995)
- Mendocino Council of Governments 2024 Regional Transportation Improvement Program (2024)
- Mendocino County Regional Transportation Plan & Active Transportation Plan (2022)
- Mendocino County Safe Routes to School Plan (2014)
- Mendocino County (MCOG/GRTA) Rail-with-Trail Corridor Plan (2012)

The following sections include brief descriptions of these documents and how they inform the development of the LRS/AP. A brief description of each document is summarized in **Table 1**. A more detailed list of relevant policies is in **Appendix A**.

Table 1. Document Review Summary

Document	Highlights
Ukiah Bicycle & Pedestrian Master Plan (2015)	The goal of the Ukiah Bicycle and Pedestrian Master Plan (BPMP or Plan) is to improve bicycling and walking in the City of Ukiah as a comfortable and convenient transportation and recreation option.
Doolin Creek: A Vision for Restoration and Enhancement (2015)	This report provides long term guidance for the preservation of the healthy portions of the creek, restoration and enhancement of degraded areas, and reestablishing parts of the creek as a place for human use and appreciation.
City of Ukiah Safe Routes to School Plan (2014)	This plan presents infrastructure and programmatic projects recommended to improve student safety and access to seven public schools in the City of Ukiah.
Ukiah Valley Area Plan (2011)	This plan is an element of the County General Plan governing land use and development on the unincorporated lands in the Ukiah Valley.

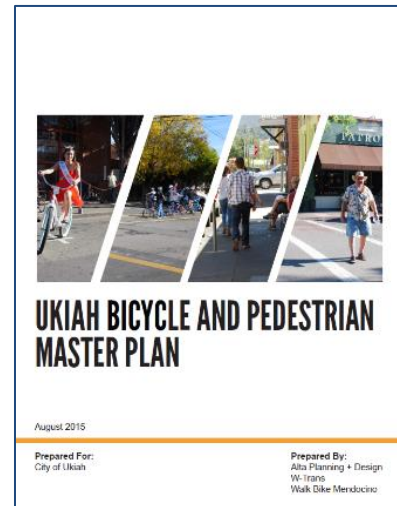
City of Ukiah
Local Road Safety/Action Plan

Document	Highlights
City of Ukiah Pavement Management Program Update (2020/21)	This report assists policy makers in utilizing MTC's StreetSaver pavement management program to improve overall maintenance and rehabilitation strategies.
Ukiah Downtown Streetscape Improvement Plan (2009)	The purpose of this plan is to upgrade State Street and Main Street from Norton Street to Gobbi Street to provide for a cohesive, pedestrian-friendly, attractive, and complete downtown core.
Downtown Ukiah Parking Improvement Study (2007)	This report studies existing parking conditions in downtown Ukiah and identify potential solutions.
City of Ukiah General Plan (1995)	Last updated in 2004, Circulation element of the General Plan details long range plans for the City of Ukiah including bicycle, pedestrian, vehicle and transit policies.
Mendocino Council of Governments 2024 Regional Transportation Improvement Program (2024)	The RTIP is a program of highway, local road, transit and active transportation projects that a region plans to fund with State and Federal revenue.
Mendocino County Regional Transportation Plan & Active Transportation Plan (2022)	Details improvements on all modes of transportation on County significant corridors.
Mendocino County Safe Routes to School Plan (2014)	Safe Routes to School is a program with a simple goal: helping more children get to school by walking and bicycling.
Mendocino County (MCOG/GRTA) Rail-with-Trail Corridor Plan (2012)	This plan identifies priority improvements for walking and biking facilities along the existing, currently unused, rail line running through Mendocino County. The plan's focus was on Hopland, Ukiah and Willits, with potential interregional connections, along the North Coast Railroad Authority (NCRA) railway.

City of Ukiah
Local Road Safety/Action Plan

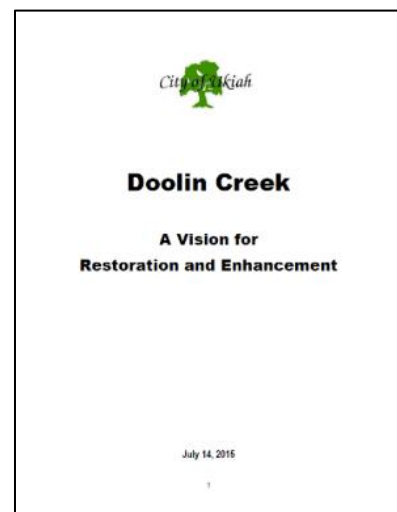
Ukiah Bicycle and Pedestrian Master Plan (2015)

The goal of the update to the Ukiah Bicycle and Pedestrian Master Plan (BPMP or Plan) is to improve bicycling and walking in the City of Ukiah as a comfortable and convenient transportation and recreation option. The plans goals include improve safety and education, greater citywide access, a high quality of life and establish an effective implementation strategy.



Doolin Creek: A Vision for Restoration and Enhancement (2015)

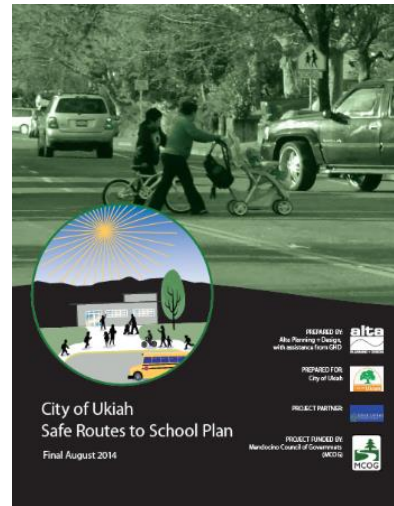
The goal of this Plan is to provide long-term guidance for the preservation of the healthy portions of the creek, restoration and enhancement of degraded areas, and reestablishing parts of the creek as a place for human use and appreciation. In attempting to manage the creek in an environmentally sensitive manner and protect it from further degradation, to prepare a conceptual restoration and enhancement plan. This study largely does not have projects or policies related to traffic safety.



City of Ukiah Local Road Safety/Action Plan

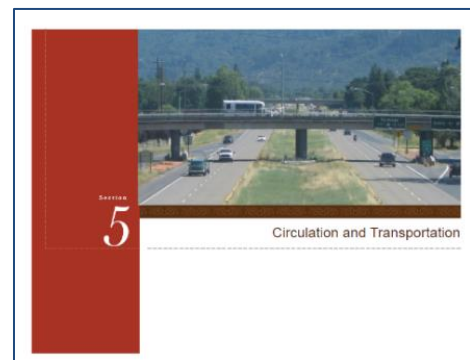
Ukiah Safe Routes to School Plan (2014)

The City of Ukiah Safe Routes to School Plan identifies and prioritizes capital projects, non-infrastructure strategies, and next steps for establishing a Safe Routes to School program in Ukiah. The Safe Routes to School Plan's recommendations are based on input gathered from the initial discussions with City and school staff, "walk audit" observations, best practices from other communities, and additional stakeholder input. School improvement concepts were identified for each of the seven Ukiah Schools and evaluated through a ranking system of five criteria (addresses a known safety issue, potential to serve the most students and increase rate of walking/biking, existing community support, feasibility and cost, communitywide benefits).



Ukiah Valley Area Plan (2011)

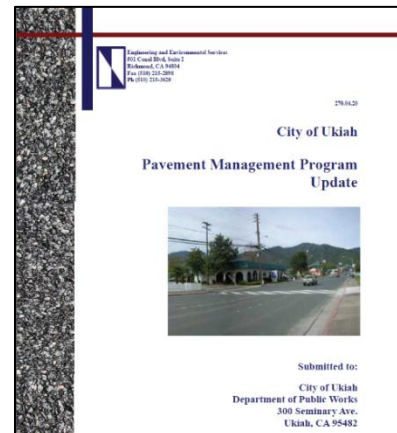
The Ukiah Valley Area Plan (UVAP) is an individual element of the Mendocino County General Plan and represents a commitment to a comprehensive, long-range, and inter-jurisdictional planning document designed to meet the needs of the County, as well as the shared needs of the City. The Circulation and Transportation section of the UVAP seeks to coordinate driver, pedestrian, bicyclist, and transit user needs with land use, air quality, plant and animal habitat, storm water runoff, noise, energy consumption, and greenhouse gas emission goals. The plan states that acquisition of land for road widening and new road construction is expensive and has social and environmental cost implications, and therefore, the County and City will be proactive in facilitating the use of alternative modes of transportation such as bicycling and walking.



City of Ukiah Local Road Safety/Action Plan

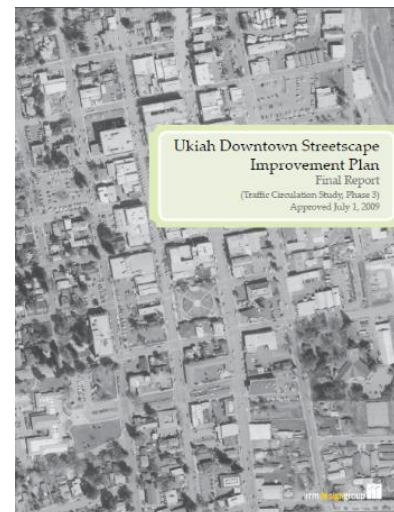
City of Ukiah Pavement Management Program Update (2020/21)

The purpose of this report is to assist policy makers in utilizing the results of MTC's StreetSaver PMP. This report assesses the adequacy of current and projected revenues to meet the maintenance needs recommended by the PMP program. It also maximizes the return from expenditures by: implementing a multi-year road rehabilitation and maintenance program; developing a preventative maintenance program; and prioritizing and selecting the most cost effective repairs. This study largely does not have projects or policies related to traffic safety.



Ukiah Downtown Streetscape Improvement Plan (2009)

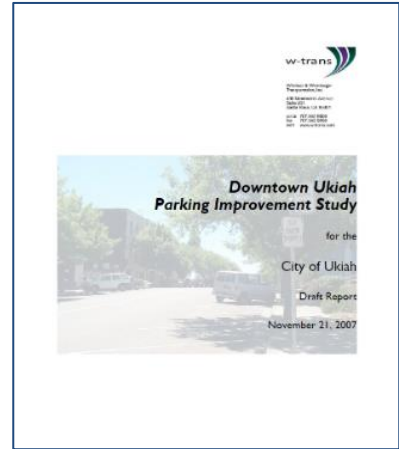
The Ukiah Downtown Streetscape Improvement Plan is part of the City of Ukiah's efforts to resolve traffic, circulation, and urban design issues associated with its downtown area. The purpose of this plan is to upgrade State Street and Main Street from Norton Street to Gobbi Street in order to provide a cohesive, pedestrian-friendly, attractive, and complete downtown core.



City of Ukiah Local Road Safety/Action Plan

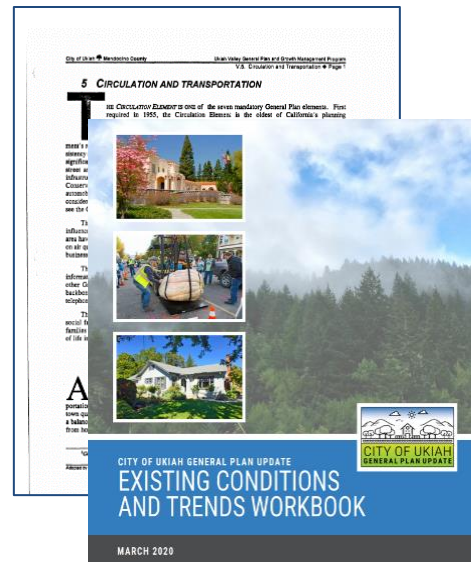
Downtown Ukiah Parking Improvement Study (2007)

The Downtown Ukiah Parking Study's purpose was to determine existing parking conditions in downtown Ukiah and identify potential solutions. This study largely does not have projects or policies related to traffic safety.



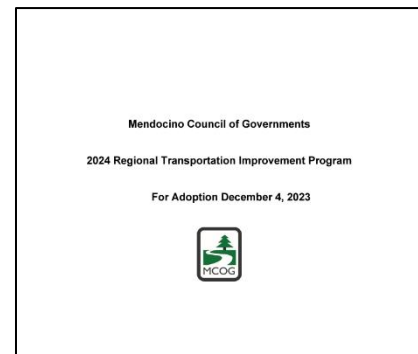
Ukiah General Plan (1995)

The General Plan presents a consolidated framework of decisions for guiding where and how development should occur in the City of Ukiah. The plan's Circulation and Transportation Element addresses the street and transportation network with its emphasis on the movement of people and products. The general plan now being updated.



Mendocino Council of Governments 2024 Regional Transportation Improvement Program (2024)

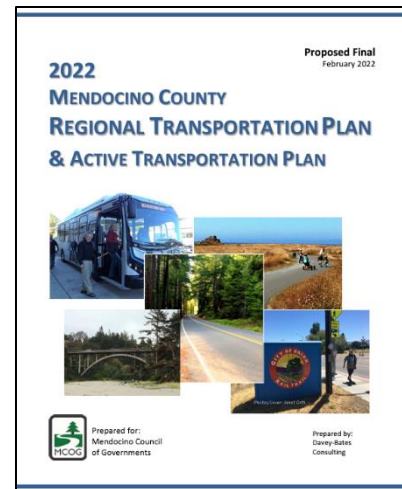
The RTIP is a program of highway, local road, transit and active transportation projects that a region plans to fund with State and Federal revenue programmed by the California Transportation Commission in the State Transportation Improvement Program (STIP).



City of Ukiah
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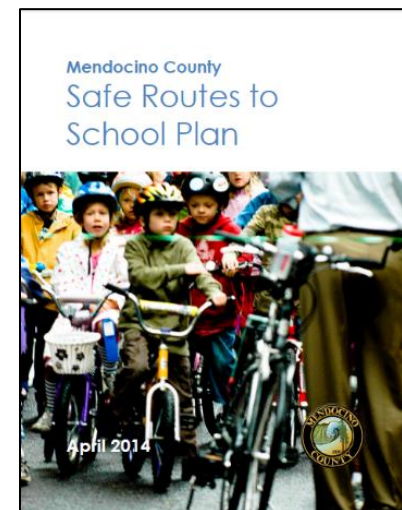
Mendocino County Regional Transportation Plan & Active Transportation Plan (2022)

This Plan is intended to identify priority improvements for all modes of transportation within all jurisdictions of Mendocino County, which include the Cities of Ukiah, Willits, Fort Bragg, and Point Arena and the unincorporated areas of the County of Mendocino.



Mendocino County Safe Routes to School Plan (2014)

Safe Routes to School is a program with a simple goal: helping more children get to school by walking and bicycling. The plan envision active kids using safe streets, helped by engaged adults (from teachers to parents, engineers, planners, and police officers), surrounded by responsible drivers. The plan is the first area-wide Safe Routes to School plan in Mendocino County, designed to serve schools in the unincorporated areas of the county. The plan includes recommendations for a Safe Routes to School program that will strive to enhance children's health and well-being, ease traffic congestion near the school to improve safety, increase the number of students getting regular physical activity, improve air quality around schools and community members' overall quality of life, increase the number of students who walk and/or bike to and from school and provide clear projects and programs for implementation.



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Mendocino County (MCOG/GRTA) Rail-with-Trail Corridor Plan (2012)

The Mendocino County Rail-with-Trail Corridor Plan (Plan) provides an analysis of general conditions along the length of the 103-mile corridor and identifies priority RWT projects for the Cities of Ukiah and Willits and the County of Mendocino. Completed in conjunction with MCOG and Great Redwood Trail Agency (GRTA), the Plan provides jurisdictions along the rail corridor (City of Ukiah, City of Willits, County of Mendocino, and Caltrans) with information to assist with implementation of the RWT. This Plan is funded by Caltrans' Community Based Transportation Planning (CBTP) grant funds and local matching funds. For this Plan, MCOG consulted with representatives from the County of Mendocino, the cities of Willits and Ukiah, North Coast Railroad Authority (NCRA), and Caltrans. The Plan was developed with community, stakeholder, and public agency input throughout its preparation.



4. Collision Data Collection and Analysis

This chapter summarizes the results of a citywide collision analysis for collisions that occurred in the City of Ukiah between January 2015 and December 2019 as part of the LRSP adopted in 2022, with an updated summary of collision analysis spanning January 2020 to December 2022 to supplement and revise the earlier results as part of the plan update. The city-wide collision data set was retrieved from TIMS and SWITRS.

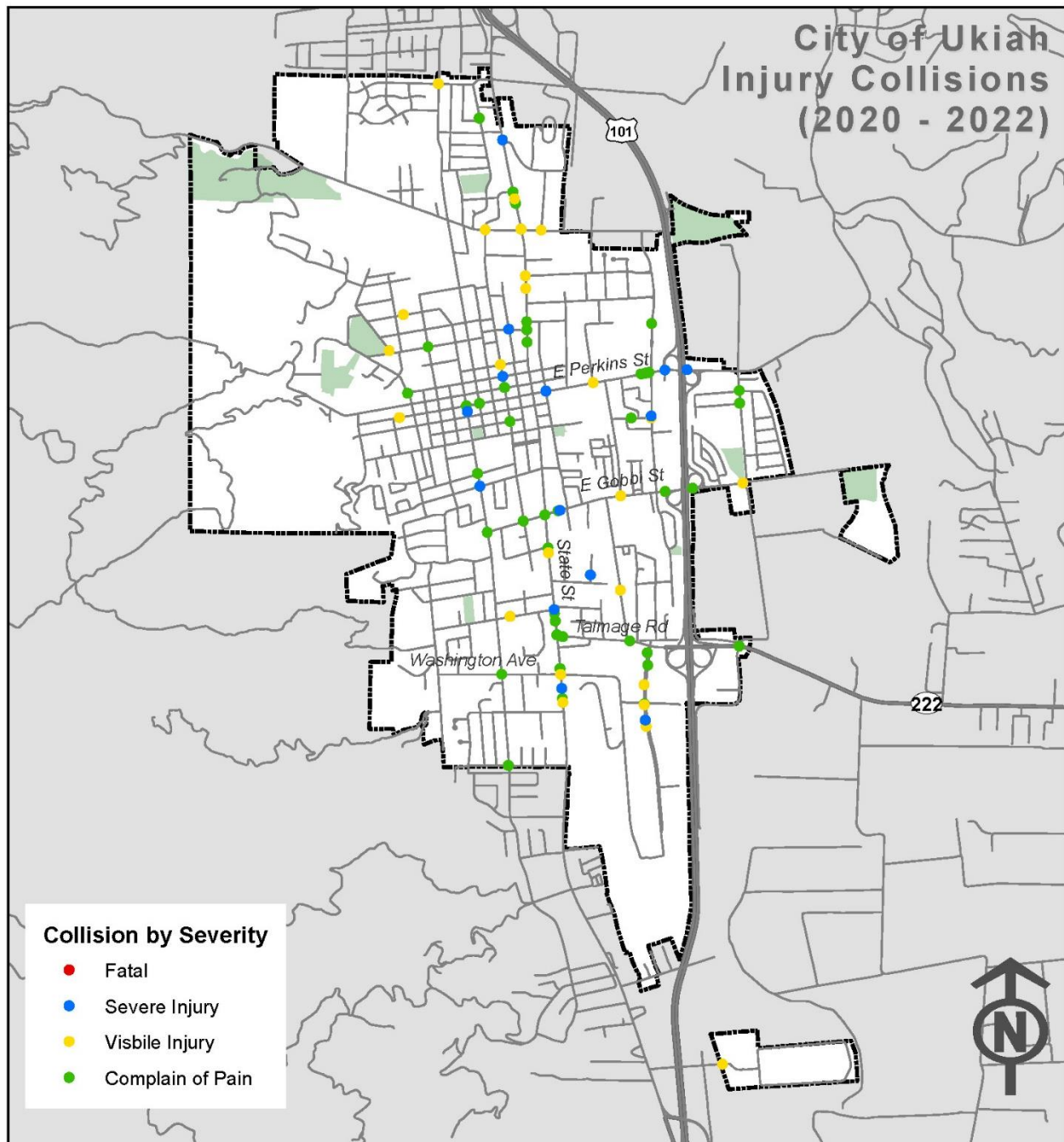
The LRS/AP focuses on systemically identifying and analyzing traffic safety issues to recommend appropriate safety strategies and improvements. This chapter starts with an analysis of citywide collisions of all severity, including Property Damage Only (PDO) collisions, retrieved from TIMS and SWITRS. Further on, a detailed analysis was conducted for high-injury collisions, including KSI collisions that have occurred on Ukiah's roadways. After this data was separated, a comprehensive evaluation was conducted based on factors such as collision severity, type of collision, primary collision factor, lighting, weather and time of the day. The following is a brief overview of the sections:

- Demographic and Jurisdiction Characteristics
- Data Collection
- Collision Data Analysis
- KSI Collision Analysis
- Geographic Collision Analysis
- High Injury Network
- Summary

Figure 3 illustrates all the injury collisions that have occurred in Ukiah from January 2020 to December 2022.

City of Ukiah
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Figure 3. All Injury Collisions on Ukiah Roadways (2020 – 2022)



Demographic and Jurisdiction Characteristics

This section provides an understanding of the demographics of the City of Ukiah and Mendocino County, including characteristics like the population, centerline miles of roadway and commute to work. The data was collected from the United States Census Bureau.

Population

According to the 2020 census, the population of Ukiah is 16,607 which is 18.1 percent of the county population. The population as well as the centerline miles are listed in **Table 2**.

Table 2. Ukiah and Mendocino Population and Centerline Miles

	Population	Percent of County Population	Centerline Miles	Percent of County Centerline Miles
Point Arena	460	0.5%	2.3	0.2%
Willits	4,988	5.4%	20.5	1.8%
Fort Bragg	6,983	7.6%	27.75	2.5%
Ukiah	16,607	18.1%	58.9	5.3%
Unincorporated	62,563	68.3%	1,009.9	90.2%
Total	91,601		1,119.35	

Commute to Work

According to five-year estimates from the American Community Survey (ACS) 2022¹ from the U.S. Census, approximately 99 percent of residents travel by cars or vans to work, out of which 89 percent drive alone and 10 percent carpool. About one percent of residents took transit. The different modes of transportation used to commute to work for the City are listed in **Table 3**.

Table 3. Ukiah Commute to Work Census Data

Commute to Work	Ukiah
Drive alone	89%
Carpool	10%
Public Transportation	1%

Source: Data from the Census Bureau [ACS 5-year Estimate](#) 2022

¹ <https://data.census.gov/table/ACSST5Y2022.S0804?q=Ukiah%20city,%20California&y=2022&tp=true>

Jurisdiction Rankings

From 2020 to 2022, Ukiah reported zero fatal traffic collisions, with an annual traffic fatality rate per 100,000 populations of zero for Ukiah and 21.47 for County as a whole. **Table 4** shows the comparison of traffic fatality rates and population.

Table 4. Jurisdiction Ranking

Jurisdiction	Fatal Traffic Collisions (2020-2022)	Population	3-year annual Fatality Rate per 100,000
Ukiah	0*	1,607	0
Mendocino County	59*	91,601	21.47
California	12,921	39,538,223	10.89
United States	124,558	331,449,281	12.52
*Note: These numbers include all state route collisions fatalities.			

Source: TIMS, Census, NHTSA

Office of Traffic Safety (OTS) Rankings

Additional information on collisions in the City of Ukiah is provided by the California Office of Traffic Safety (OTS). The OTS is designated by the Governor to receive federal traffic safety funds for coordinating California's highway safety programs. OTS rankings from 2021, the latest available year, indicate that the City of Ukiah ranks in the top, meaning higher collisions rates in DUI collisions (age less than 21) (seven out of 101 similarly sized cities), bicycle collisions (age less than 15) (21 out of 101 similarly sized cities) and pedestrian collisions (age less than 15) (22 out of 101 similarly sized cities). These rankings take into account fatal and injury crashes per population and per VMT. Overall Ukiah ranks 64 out 101 similarly sized cities in California in fatal and injury collisions. **Table 5** provides a summary of the 2021 rankings².

Table 5. Office of Traffic Safety Ratings 2021

OTS 2021 Ranking	Ukiah	OTS 2021 Ranking	Ukiah
Total Fatality and Injury	64/101	Bicycle	51/101
Alcohol Involved	41/101	Speed Related	83/101
Pedestrian	74/101	Nighttime	74/101

² California Office of Traffic Safety. (2021). Office of Traffic Safety Rankings 2021. https://www.ots.ca.gov/media-and-research/crash-rankings-results/?wpv_view_count=1327&wpv-wpcf-year=2021&wpv-wpcf-city_county=Ukiah&wpv_filter_submit=Submit

Collision Data

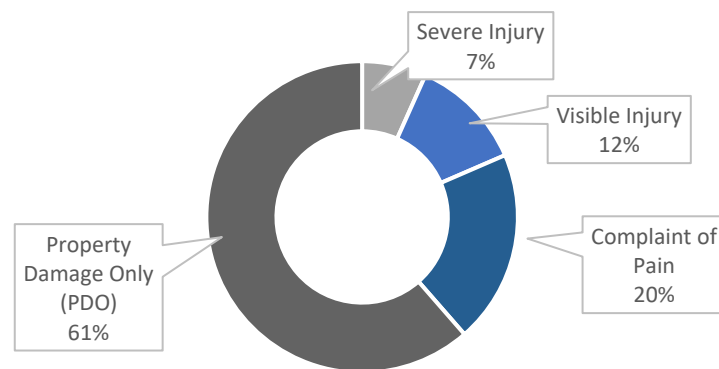
Collision data analysis helps understand different factors that might be influencing collision patterns and various factors leading to collisions in a given area. For the purpose of this analysis, a five-year jurisdiction-wide collision data, from 2015 to 2019 was retrieved from TIMS³ and SWITRS⁴ database. Additionally, collision data from 2020 to 2022 is included to update and refine preceding findings. Collisions on State Route/ Highway 101 were excluded from this analysis. The collision data was further analyzed and plotted in ArcMap to identify high-risk intersections and roadways segments.

Collision Data Analysis

Collision Severity

There were a total of 637 collisions and 24 KSI collisions reported Citywide from 2015 to 2019 and there were a total of 254 collisions reported jurisdiction-wide from 2020 to 2022. Out of 254 collisions, 156 collisions (61 percent) were PDO collisions, 51 collisions (20 percent) led to complaint of pain injury and 30 collisions (12 percent) led to a visible injury. There were 17 KSI collisions, 17 collisions (7 percent) led to a severe injury and zero collisions led to a fatality. Note the graphs and charts presented in this chapter includes collisions from 2020 to 2022. **Figure 4** illustrates the classification of all collisions based on severity. This collision analysis doesn't include collisions that occurred on state routes.

Figure 4. Collisions by Severity (2020-2022)



³ UC Berkeley Safe TREC. (2021). Transportation Injury Mapping System <https://tims.berkeley.edu/>

⁴ California Highway Patrol. (2021). Statewide Integrated Traffic Records System. <https://www.chp.ca.gov/programs-services/services-information/switrs-internet-statewide-integrated-traffic-records-system>

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The analysis first includes a comparative evaluation between all collisions and KSI collisions, based on various factors including but not limited to the collision trend, primary collision factor, collision type, facility type, motor vehicle involved with, weather, lighting, and time of the day. Further on, a comprehensive analysis is conducted for only KSI collisions. KSI collisions cause the most damage to those affected, infrastructure and the aftermath of these collisions lead to great expenses for jurisdiction administration. The LRS/AP process thus focuses on these collision locations to proactively identify and counter their respective safety issues.

The collision data was segregated by fatality type, i.e. based on collisions occurring on intersections and roadway segments. For the purposes of the analysis, a collision was said to have occurred at an intersection if it occurred within 250 feet of it. The reported collisions categorized by facility type and collision severity are presented in **Table 6**.

Table 6. Collisions by Severity and Fatality Type

Collision Severity	2015-2019	2020-2022	2015-2022
Killed	0	0	0
Severe Injury	24	17	41
Visible Injury	67	30	97
Complaint of Pain	124	51	175
Property Damage Only (PDO)	422	156	578
Total	637	254	873

Note: State Route/Highway 101 Collisions are excluded from the analysis.

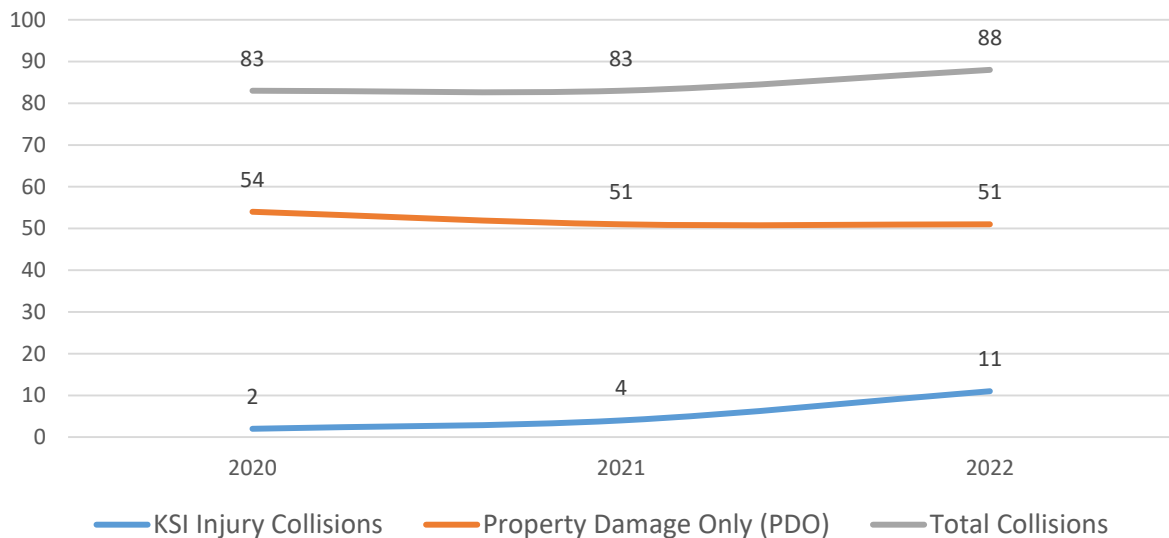
Preliminary Analysis

Collision Severity by Year

For all collisions, the number increased from 2015 to 2019 and 2020 to 2022. The highest number of collisions (152 collisions) were observed in 2019 and the lowest number of collisions (83) were observed in 2020 and 2021.

A total of 17 KSI collisions occurred in the City of Ukiah from 2020-2022. The lowest number of KSI collisions (two collisions) were observed in 2020. Overall, KSI collisions were observed to rise from 2020 to 2022, with the highest number of KSI collisions (11 collisions) occurring in the year 2022. **Figure 5** illustrates the three-year collision trend for all collisions, KSI collisions and also PDO collisions.

Figure 5. Yearly Collision Trend (2020-2022)

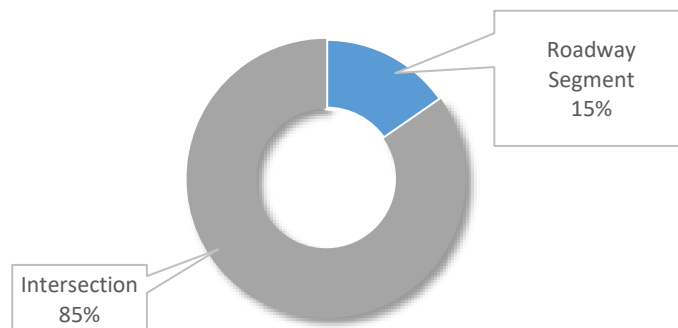


Intersection vs. Roadway Collisions (2020-2022)

When evaluating roadways vs intersections, it was observed that the majority of collisions occurred at intersections. In the City of Ukiah from 2015-2019, 87 percent of all collisions (551 collisions) occurred at intersections whereas 13 percent (86 collisions) occurred on roadway segments.

In 2020-2022, 85% of all collisions (215 collisions) occurred at intersections whereas 15 percent (39 collisions) occurred on roadway segments. When only KSI collisions are considered, an even greater portion of collisions occurred on intersection, with 88 percent (15 collisions) whereas 12 percent (2 collisions) occurred on roadway segments. This classification by facility type can be observed in **Figure 6**.

Figure 6. Intersection vs. Roadway Collisions - All Collisions (2020-2022)

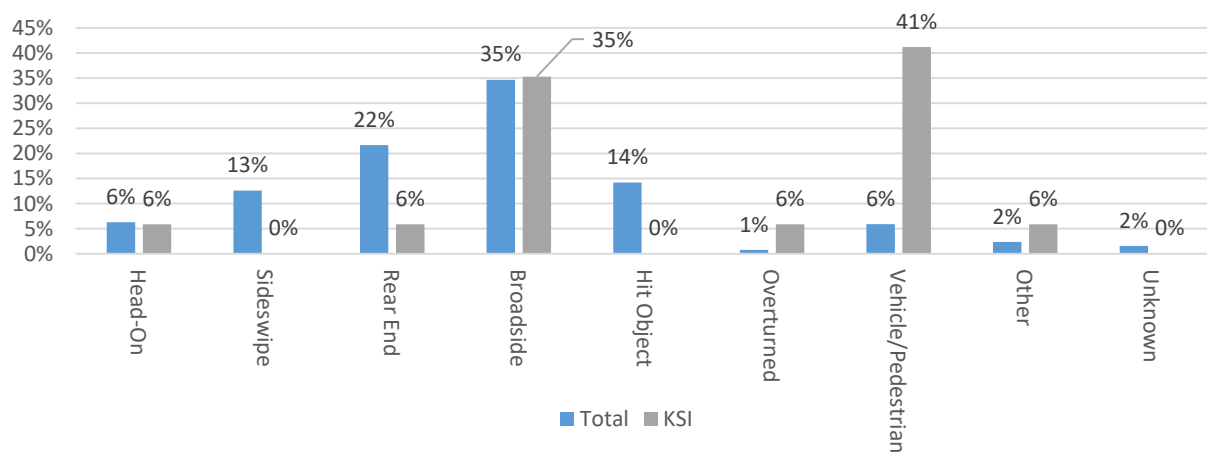


Collision Type

Considering all collisions from 2015-2019, the most commonly occurring collision type was rear end collisions (27 percent) and broadside collisions (26 percent).

Whereas, for 2020-2022, common collision types were broadside collisions (35 percent) and rear end collisions (22 percent). The collision type for KSI collisions are noticeably different. Considering only KSI collisions, 41 percent of the collisions are vehicle/pedestrian collisions, and 35 percent are broadside collisions in 2020-2022. **Figure 7** illustrates the collision type for all collisions as well as KSI collisions.

Figure 7. Collision Type – All Collisions vs. KSI Collisions (2020-2022)

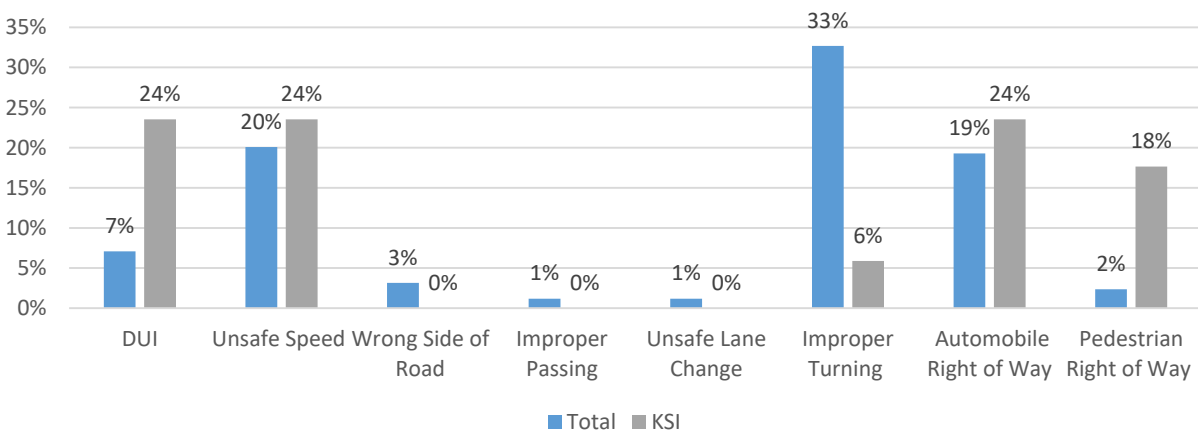


Violation Category

Considering all collisions, the most common violation category was observed to be unsafe speed (27 percent), improper turning (22 percent) and automobile right of way (16 percent) in 2015-2019.

For 2020-2022, improper turning (33 percent) and unsafe speed (20 percent) were top categories. For KSI collisions in 2020-2022, driving under the influence (24 percent), automobile right of way (24 percent) and unsafe speed (24 percent) was observed to be the main violation categories. **Figure 8** illustrates the violation category for all collisions and KSI collisions.

Figure 8. Violation Category: All Collisions vs. KSI Collisions (2020-2022)

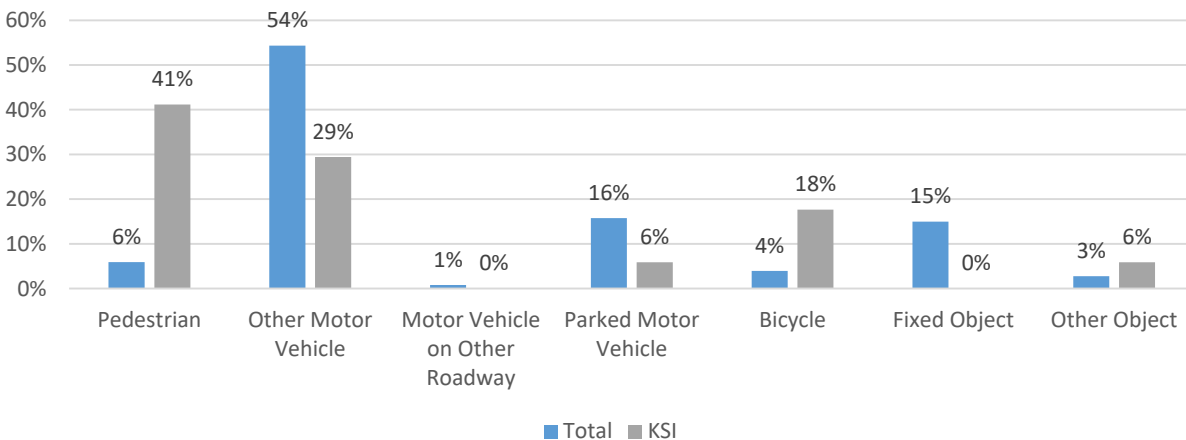


Motor Vehicle Involved With

Considering all collisions, 56 percent of the collisions are motor vehicle involved with another motor vehicle in 2015-2019.

For 2020-2022, 54 percent of collisions involved with other motor vehicle. The trends for KSI collisions are noticeably different. For KSI collisions in 2020-2022, 41 percent of the collisions involved a pedestrian, 29 percent involved another motor vehicle and 18 percent involved a bicycle, indicating that pedestrians are more likely to be involved in a killed or severe injury collision. **Figure 9** illustrates the percentage for all collisions as well as KSI collisions.

Figure 9. Motor Vehicle Involved With: All Collisions vs. KSI Collisions (2020-2022)

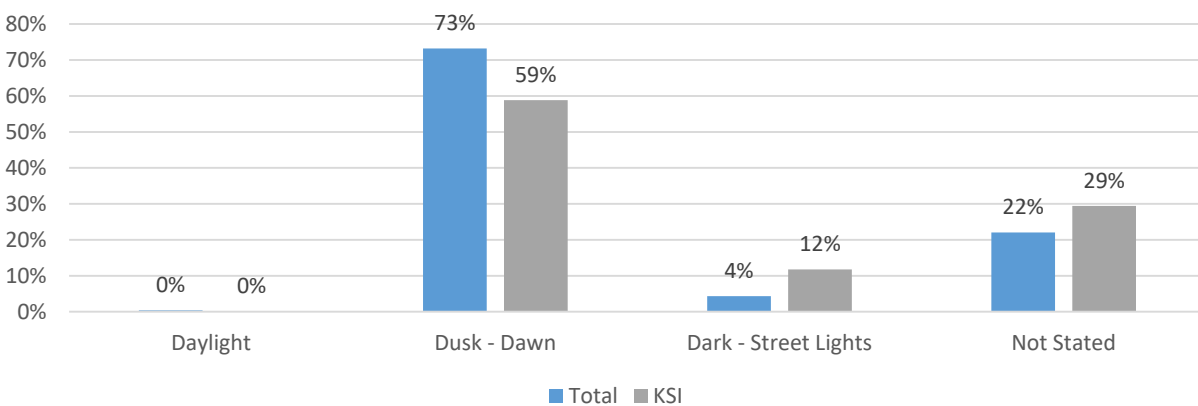


Lighting

For collisions of all severity in 2015-2019, 78 percent of collisions have occurred in daylight and 15 percent of collisions have occurred in the dark on streets with street lights.

For 2020-2022, 73 percent of collisions have occurred in daylight and four percent in dark on street lights with street lights. For KSI collisions in 2020-2022, 59 percent of collisions have occurred in daylight and 12 percent of collisions occurred in the dark on streets with street lights. **Figure 10** illustrates the lighting condition for all collisions and KSI collisions.

Figure 10. Lighting Conditions: All Collisions vs. KSI Collisions (2020-2022)

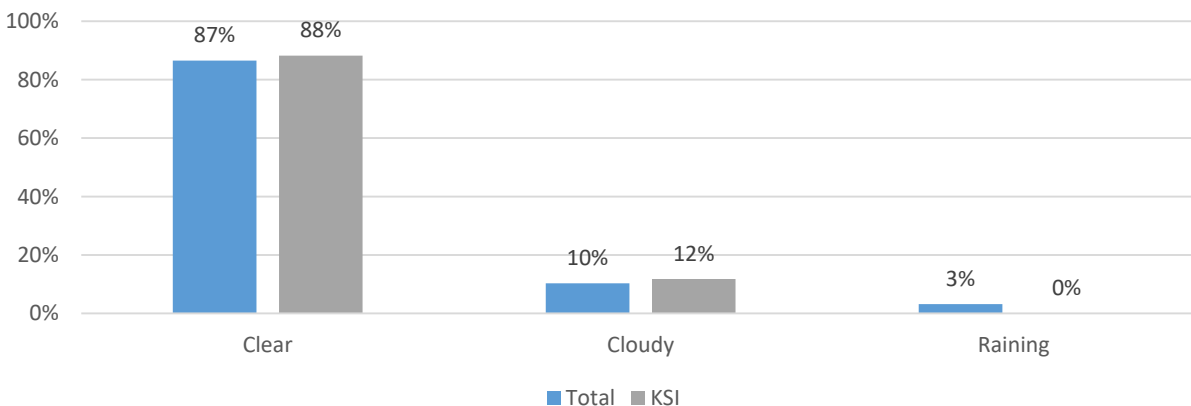


Weather

For all collisions in 2015-2019, 77 percent of the collisions have occurred during clear weather conditions and 15 percent collisions have observed to occur during cloudy weather conditions.

In 2020-2022, 87 percent of collisions have occurred during clear weather conditions and 10 percent of collisions occurred in cloudy weather conditions. For KSI collisions, 88 percent of the collisions occurred during clear weather conditions and 12 percent of collisions occurred during cloudy weather conditions. **Figure 11** illustrates the percentage distribution of weather conditions during the occurrence of collisions of all severity as well as KSI collisions.

Figure 11. Weather Conditions: All Collisions vs. KSI Collisions (2020-2022)



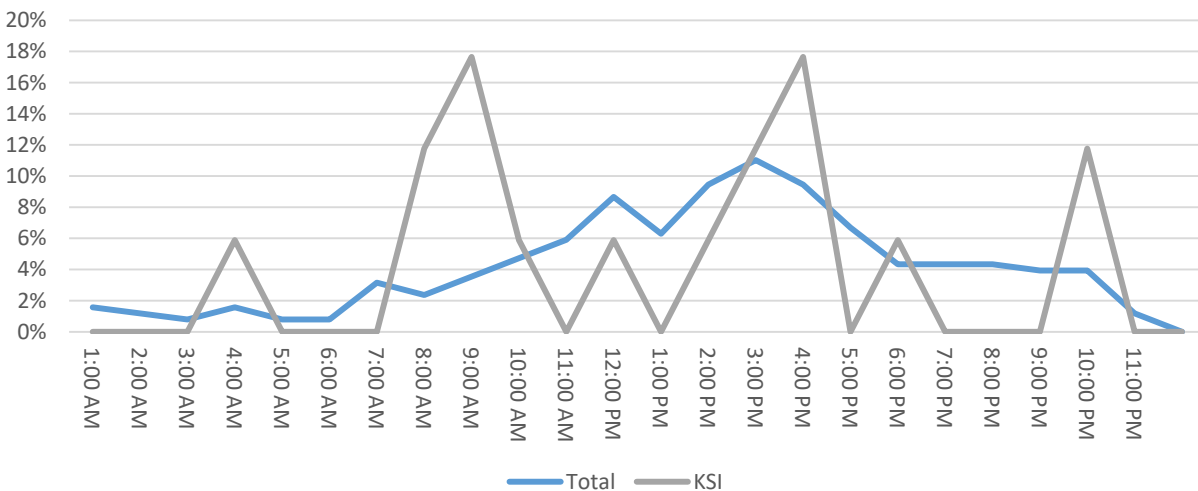
Time of the Day

For collisions of all severity in 2015-2019, a maximum number of collisions have occurred between 11:00 am to 12:00 pm (11 percent) and no collisions have occurred between 11:00 pm to 12:00 am (zero percent).

For 2020-2022, a maximum number of collisions occurred between 2:00 p.m. to 4:00 p.m. in 2020-2022. For all KSI collisions in 2020-2022, a maximum number of collisions have occurred between 8:00 am to 10:00 am, 3:00 pm to 5:00 pm, and 9:00 pm to 11:00 pm.

Figure 12 illustrates the percentage of collisions occurring during the day for all collisions as well as KSI collisions.

Figure 12. Time of the Day: All Collisions vs. KSI Collisions (2020-2022)



Fatal and Severe Injury Collision Analysis

General Characteristics

This section describes a detailed collision analysis performed for KSI collisions occurring at roadway segments and intersections in the City of Ukiah. Of the total 24 KSI collisions that occurred from 2015-2019 in Ukiah, 21 collisions (88 percent) occurred at intersections and three collisions (12 percent) occurred on roadways.

In 2020-2022, 17 KSI collisions that occurred in Ukiah, 15 collisions (88 percent) occurred at intersections and two collisions (12 percent) occurred on roadways. This distribution is illustrated in **Figure 13**.

Figure 13. KSI Collisions: Roadway Segments and Intersections (2020-2022)

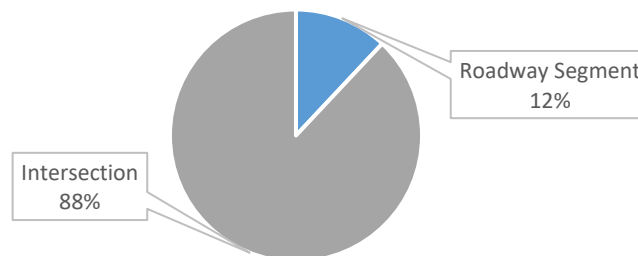
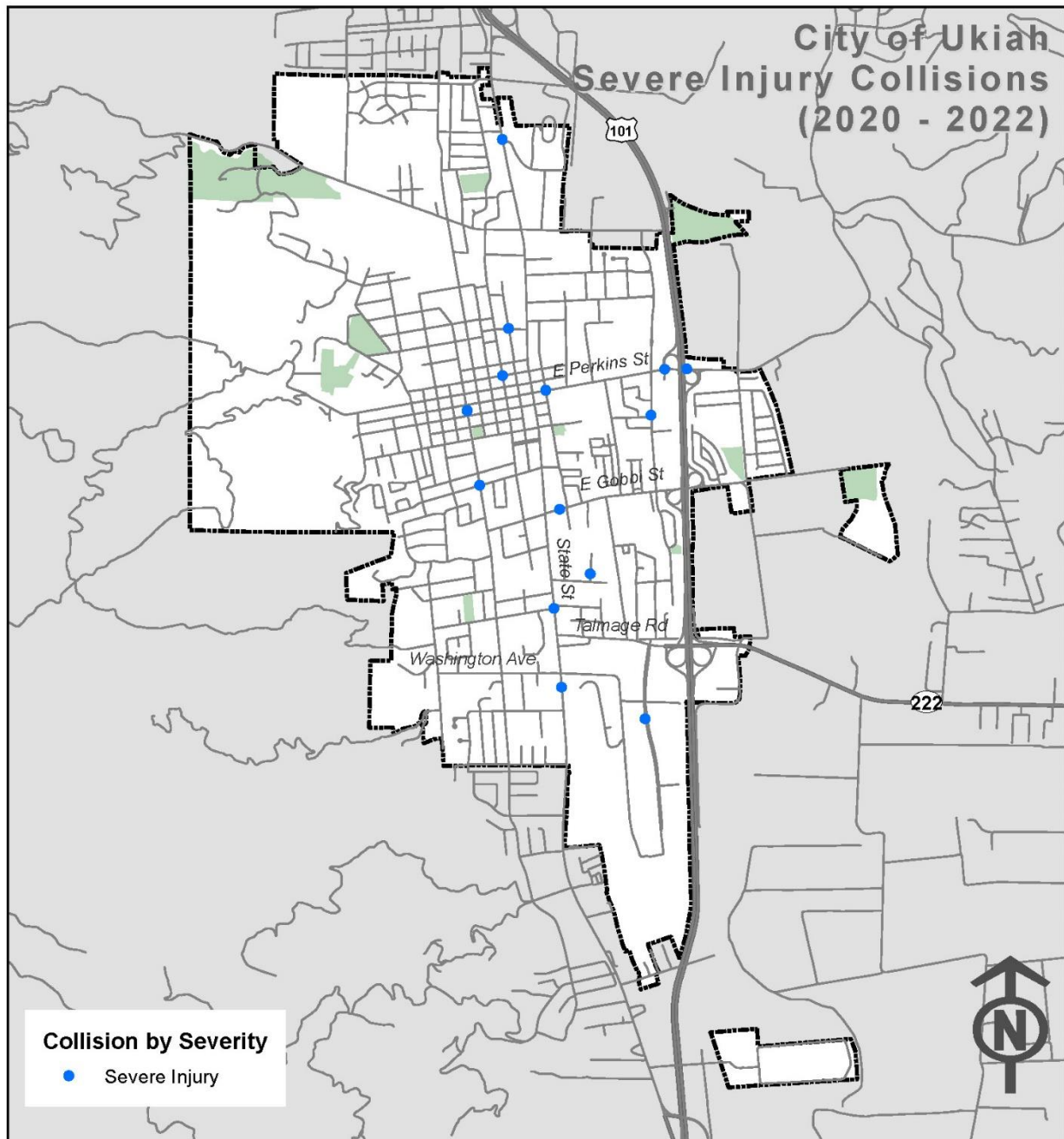


Figure 14 maps all KSI collisions from 2020-2022 within the City of Ukiah.

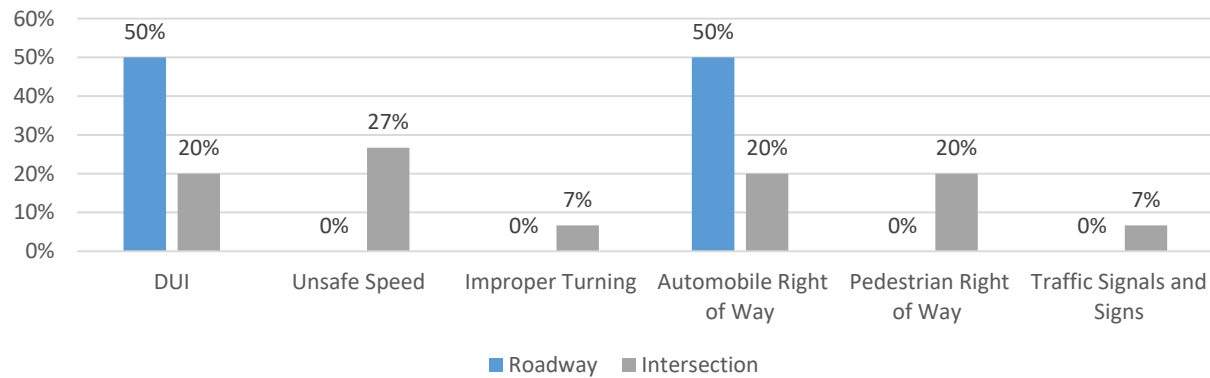
Figure 14. Ukiah KSI Collisions (2020-2022)



Violation Category

For KSI collisions on roadways in 2020-2022, driving under the influence (50 percent) and unsafe speed (50 percent) were observed to be major violation categories on roadways. **Figure 15** illustrates the violation category for KSI collisions.

Figure 15. KSI Collisions: Violation Category (2020-2022)



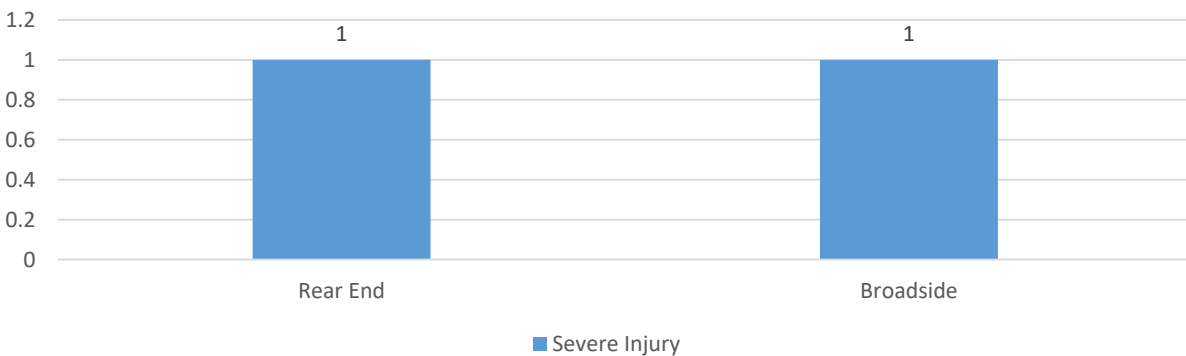
KSI Roadway Collision Analysis

A total of three KSI collisions occurred in Ukiah on roadway segments between 2015 and 2019 and a total of two collisions occurred on the roadway segments from 2020-2022. The following analysis details the collision attributes of roadway KSI collisions.

Collision Type vs. Severity

For roadway KSI collisions in 2020-2022, the most common collision type was rear-end and broadside collisions. **Figure 16** shows the severity of roadway KSI collisions as well as the collision type.

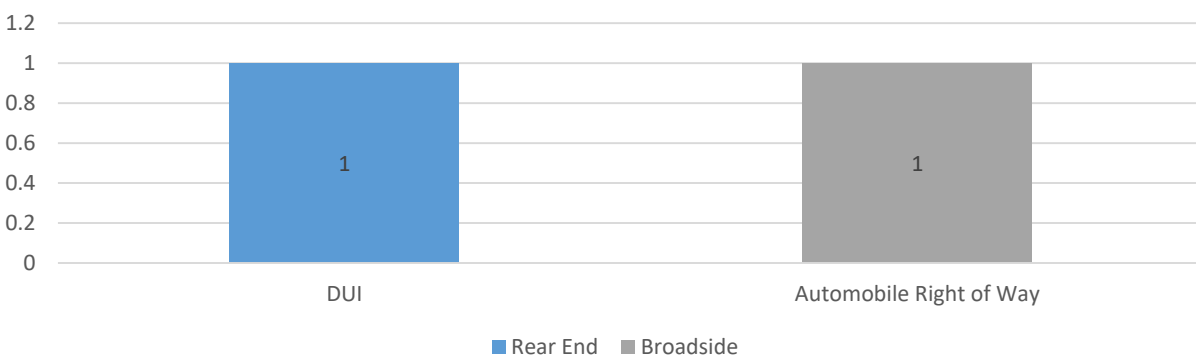
Figure 16. KSI Roadway Collisions by Type and Severity (2020-2022)



Collision Type vs. Violation Category

For roadway KSI collisions in 2020-2022, the most common collision type was rear-end and broadside collisions. The violation categories that led to these collision types on roadways were DUI violations and automobile right-of-way violations. **Figure 17** shows the violation category of roadway KSI collisions as well as the collision type.

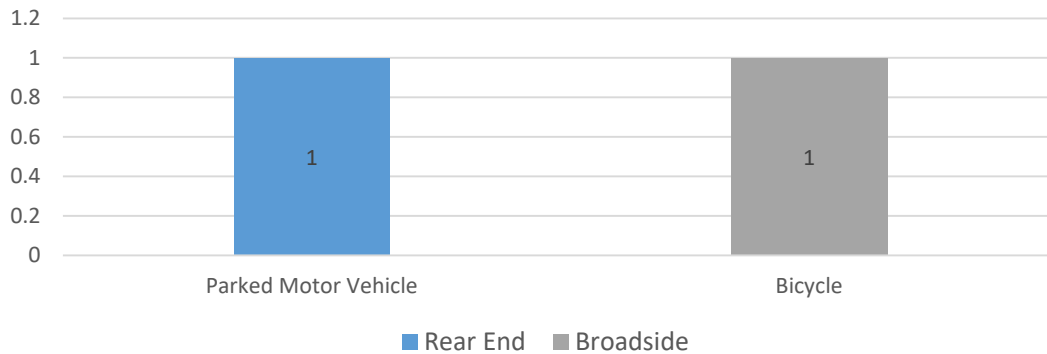
Figure 17. KSI Roadway Collisions by Type and Violation Category (2020-2022)



Collision Type vs. Motor Vehicle Involvement With

For roadway KSI collisions in 2020-2022, the most common collision type was rear-end and broadside collisions which involved parked motor vehicle and bicycle. **Figure 18** shows the violation category of roadway KSI collisions as well as the collision type.

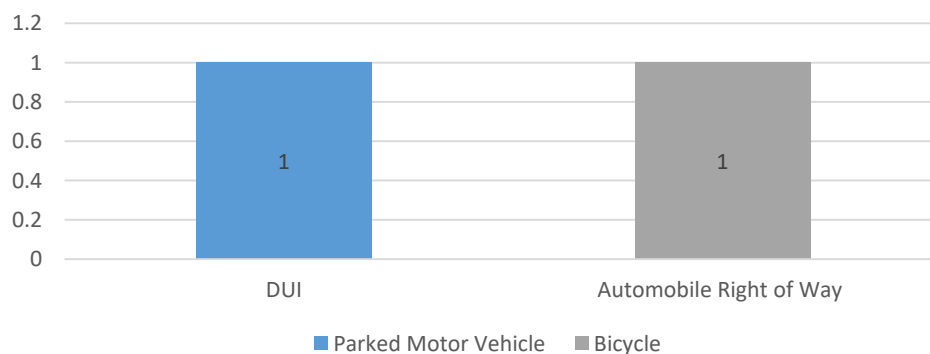
Figure 18. KSI Roadway Collisions by Type and Motor Vehicle Involvement (2020-2022)



Motor Vehicle Involved With vs. Violation Category

For roadway KSI collisions in 2020-2022, the most common collision type occurred due to parked motor vehicle and bicycle collisions with each driving under the influence and automobile right-of-way violations on roadways. **Figure 19** shows the violation category of roadway KSI collisions as well as the collision type.

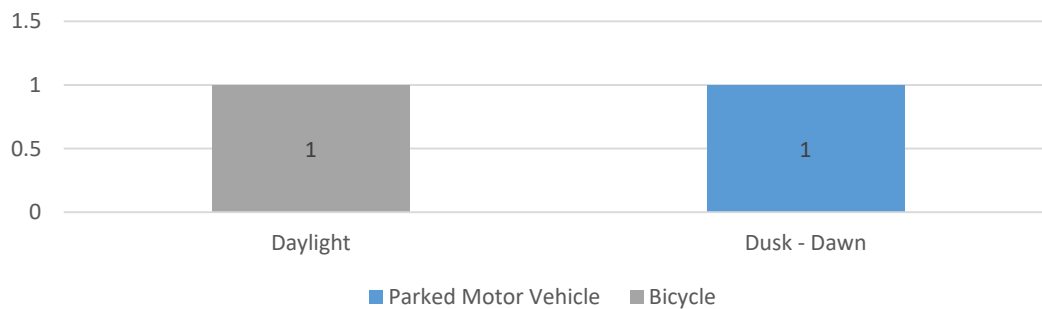
Figure 19. KSI Roadway Collisions by Motor Vehicle Involvement and Violation Category (2020-2022)



Motor Vehicle Involved With vs. Lighting Conditions

For roadway KSI collisions in 2020-2022, the most common collision type occurred due to parked motor vehicle and bicycle collisions. These collisions occurred during the daylight and dusk-dawn. **Figure 20** shows the violation category of roadway KSI collisions as well as the collision type.

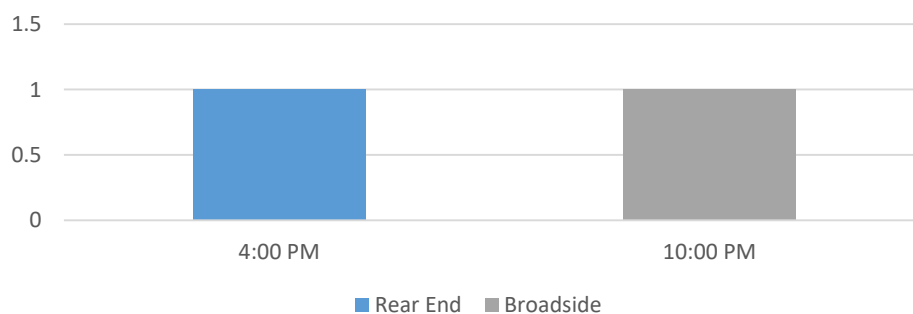
Figure 20. KSI Roadway Collisions by Motor Vehicle Involvement and Lighting Conditions (2020-2022)



Collision Type vs. Time of Day

For roadway KSI collisions in 2020-2022, the most common collision type was rear-end and broadside collisions that occurred between 4:00 pm and 10:00 pm. The rear-end collision occurred between 4:00 pm and the broadside collision occurred at 10:00 pm. **Figure 21** shows the violation category of roadway KSI collisions as well as the collision type.

Figure 21. KSI Roadway Collisions by Collision Type and Time of Day (2020-2022)



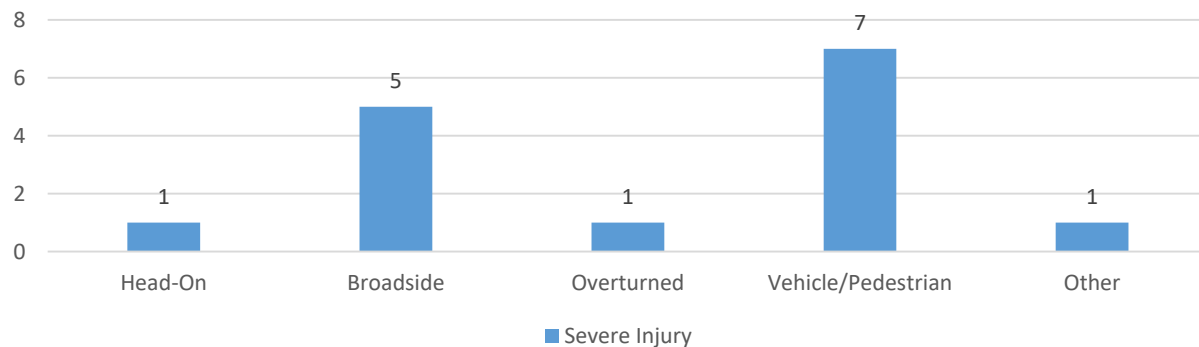
KSI Intersection Collision Analysis

A total of 21 KSI collisions occurred in Ukiah at intersections between 2015 and 2019 and 15 KSI collisions from 2020-2022. The following analysis details the collision attributes of intersection KSI collisions.

Collision Type vs. Severity

For intersection KSI collisions in 2020-2022, the most common collision type was vehicle/pedestrian collisions. **Figure 22** illustrates the severity as well as the collision type.

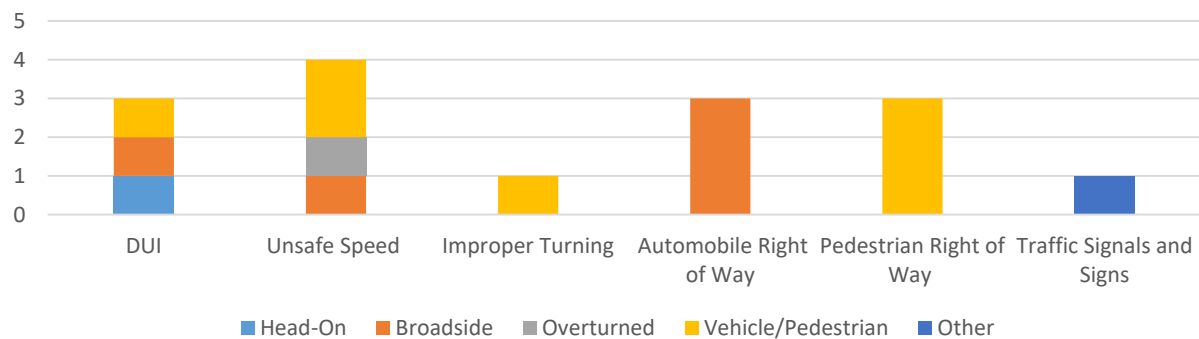
Figure 22. KSI Intersection Collisions by Type and Severity (2020-2022)



Collision Type vs. Violation Category

For intersection KSI collisions in 2020-2022, the most common collision violation category was DUI and unsafe speed collisions. **Figure 23** shows the severity of intersection KSI collisions as well as the collision type.

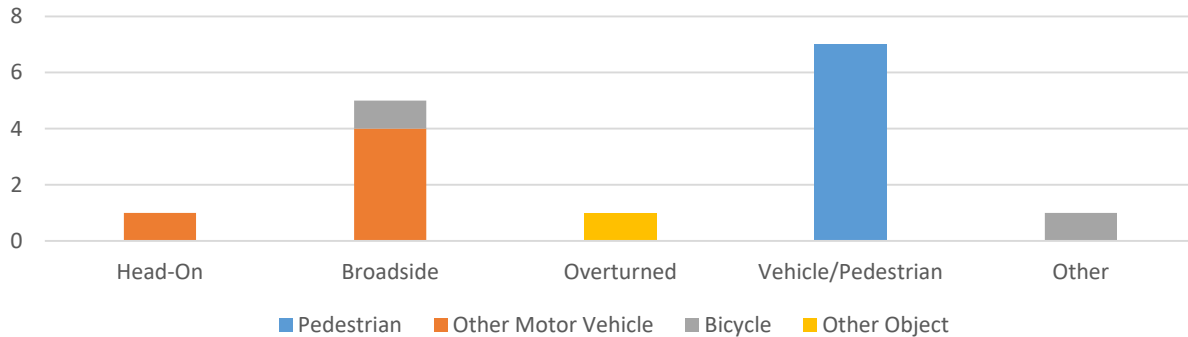
Figure 23. KSI Intersection Collisions by Type and Violation Category (2020-2022)



Collision Type vs. Motor Vehicle Involvement With

For intersection KSI collisions in 2020-2022, the most common collision type was vehicle/pedestrian collisions which involved with a pedestrian. **Figure 24** shows the violation category of roadway KSI collisions as well as the collision type.

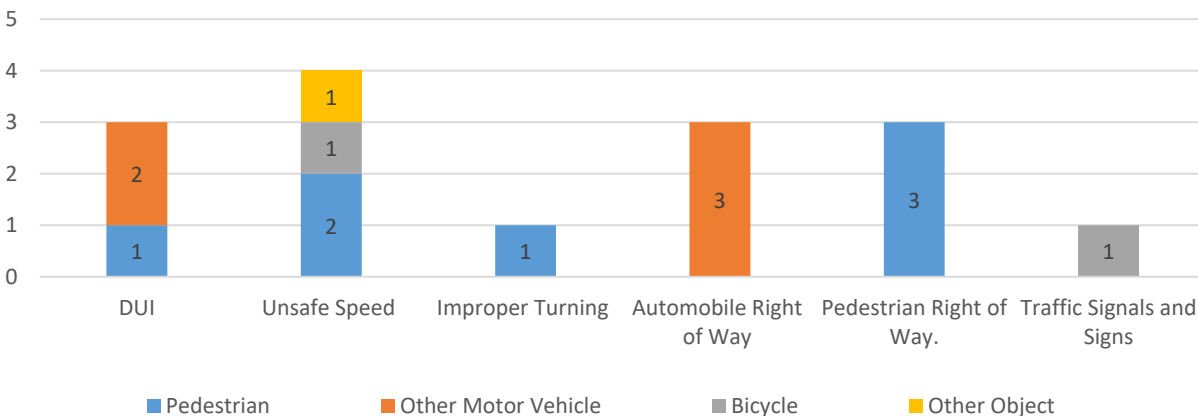
Figure 24. KSI Intersection Collisions by Type and Motor Vehicle Involved With (2020-2022)



Motor Vehicle Involved With vs. Violation Category

For intersection KSI collisions in 2020-2022, the most common violation category was DUI and unsafe speed collisions which involved a pedestrian. **Figure 25** shows the severity of intersection KSI collisions as well as the collision type.

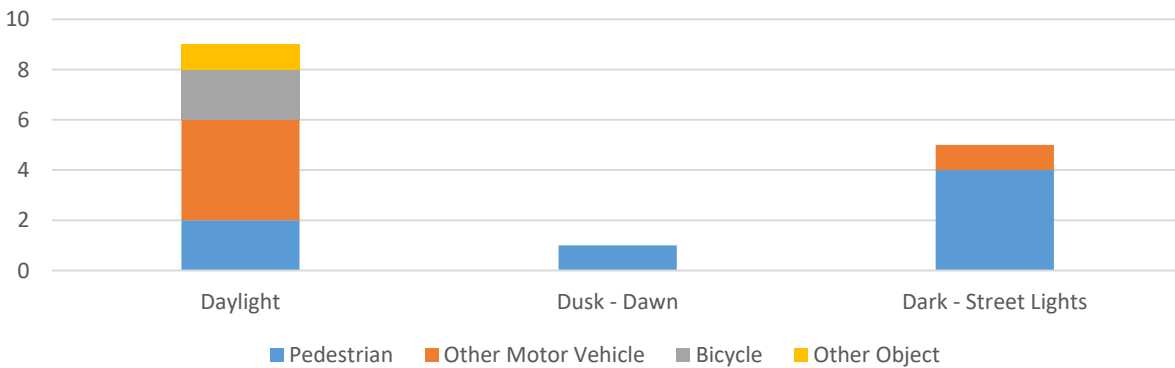
Figure 25. KSI Intersection Collisions by Motor Vehicle Involved With and Violation Category (2020-2022)



Motor Vehicle Involved With vs. Lighting Conditions

For intersection KSI collisions in 2020-2022, the most common collision type occurred due to a pedestrian in daylighting conditions. Some of these collisions occurred during the daylight and some occurred at night. **Figure 26** shows the severity of intersection KSI collisions as well as the collision type.

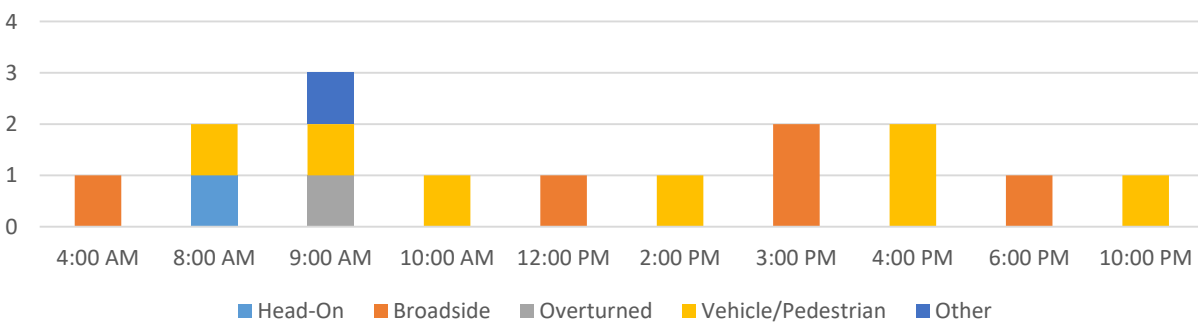
Figure 26. KSI Intersection Collisions by Motor Vehicle Involved With and Lighting (2020-2022)



Collision Type vs. Time of Day

For intersection KSI collisions in 2020-2022, the most common collision type was vehicle/pedestrian collisions occurring between 9:00 am to 10:00 pm. **Figure 27** shows the severity of intersection KSI collisions as well as the collision type.

Figure 27. KSI Intersection Collisions Ukiah by Type and Time of Day (2020-2022)



Geographic Collision Analysis

This section describes a detailed geographic collision analysis performed for injury collisions occurring at roadway segments and intersections in the City of Ukiah. The above collision analysis was used to identify five main collision factors that highlight the top trends among collisions in the City of Ukiah. These five collision factors were identified to be broadside collisions, improper turning, unsafe speed collisions, nighttime collisions and pedestrian right of way violation collisions.

Broadside Collisions

For KSI collisions in the City of Ukiah, 33 percent of collisions were broadside collisions compared to 35 percent of all severity collisions. **Figure 28** shows the distribution of broadside collisions throughout Ukiah between 2020 and 2022. State Street, Gobbi Street, and North Oak Street have a higher concentration of broadside collisions, compared to other Ukiah roads.

Improper Turning Collisions

For KSI collisions in the City of Ukiah, 7 percent of collisions were due to improper turning. This trend rose to 34 percent when consider all severity collisions. **Figure 29** shows the distribution of improper turning collisions throughout Ukiah between 2020 and 2022. East Gobi Street, Airport Park Boulevard and State Street have a higher concentration of improper turning collisions, compared to other Ukiah roads.

Unsafe Speed Collisions

For KSI collisions in the City of Ukiah, 27 percent of collisions were unsafe speed collisions. **Figure 30** shows the distribution of unsafe speed collisions throughout Ukiah between 2020 and 2022. South Dore Street, North Oak Street and State Street have a higher concentration of unsafe speed collisions, compared to other Ukiah roads.

Nighttime Collisions

For KSI collisions in the City of Ukiah, 47 percent of collisions occurred in the dark or during dusk or dawn compared to 27 percent of all severity collisions, meaning nighttime collisions are more likely to result in a KSI collision. **Figure 31** shows the distribution of nighttime collisions throughout Ukiah between 2020 and 2022. State Street, Gobbi Street, and South Dore Street have a higher concentration of nighttime collisions, compared to other Ukiah City roads.

Pedestrian Right of Way Violations

For KSI collisions in the City of Ukiah, 20 percent of collisions were due to pedestrian right of way violations, compared to just three percent for all severity collisions. **Figure**

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32 shows the distribution of pedestrian right of way violation collisions throughout the City of Ukiah between 2020 and 2022. State Street has a higher concentration of pedestrian right of way collisions, compared to other Ukiah roads.

Figure 28. Broadside Collisions

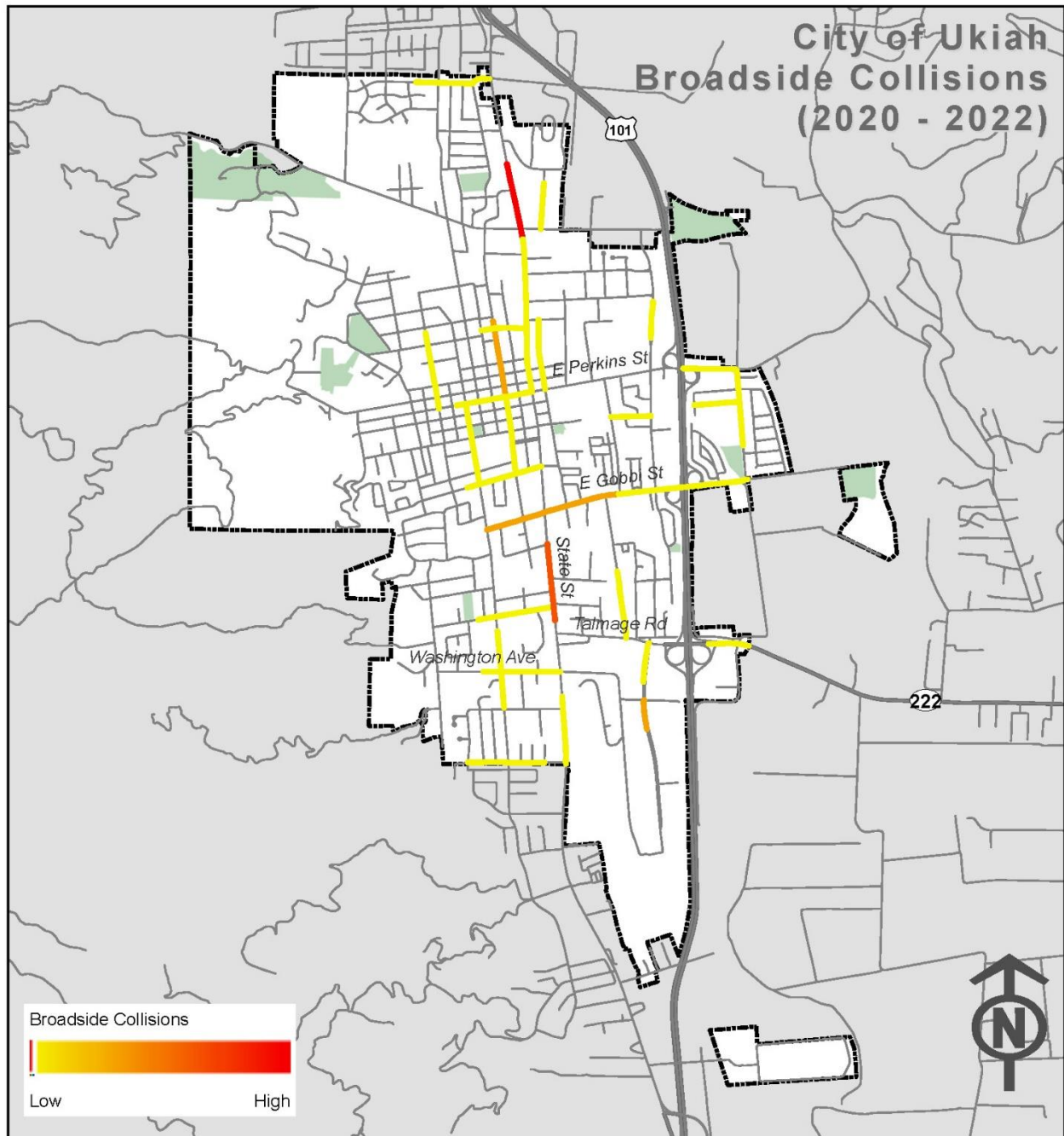


Figure 29. Improper Turning Collisions

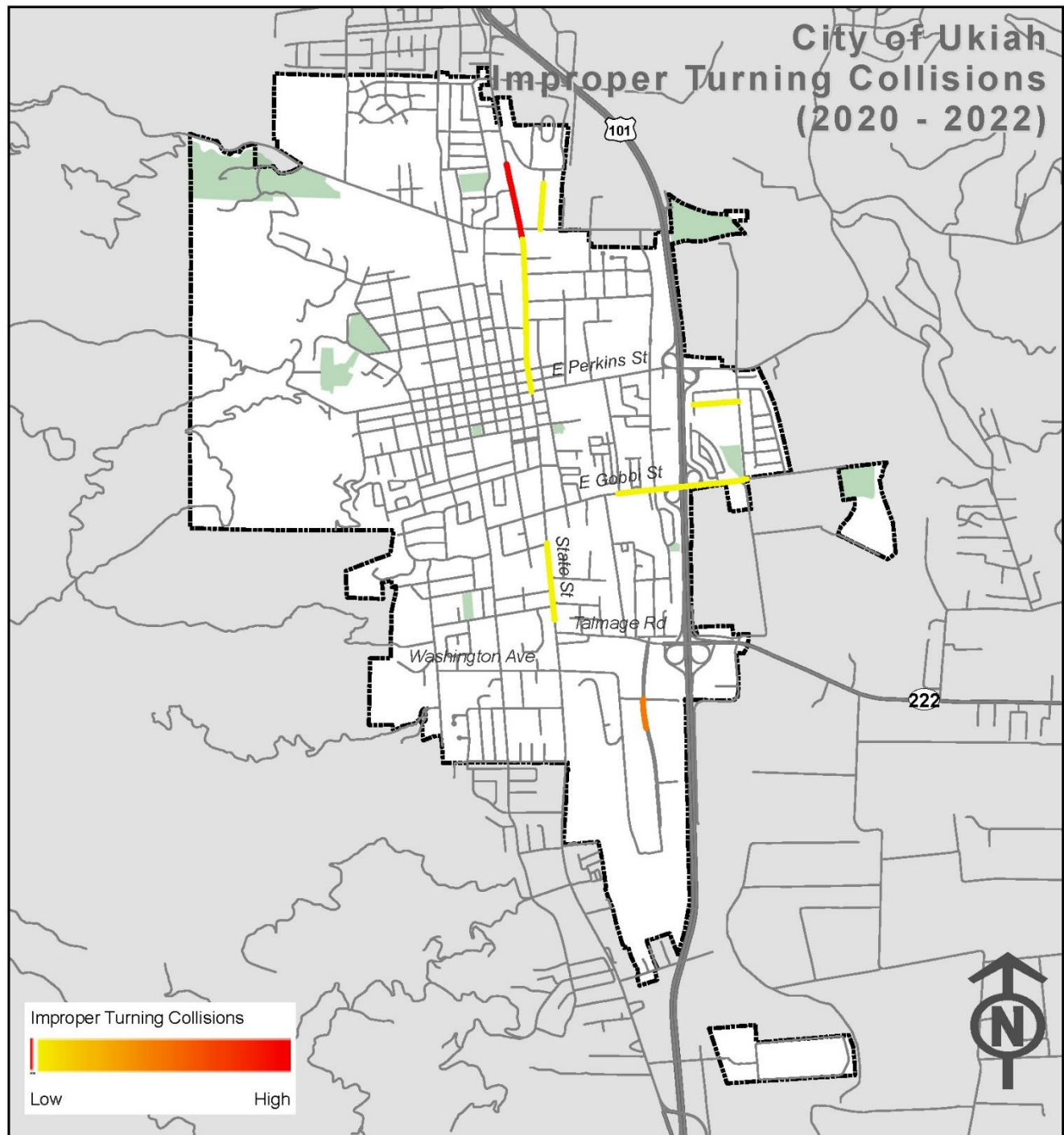


Figure 30. Unsafe Speed Collisions

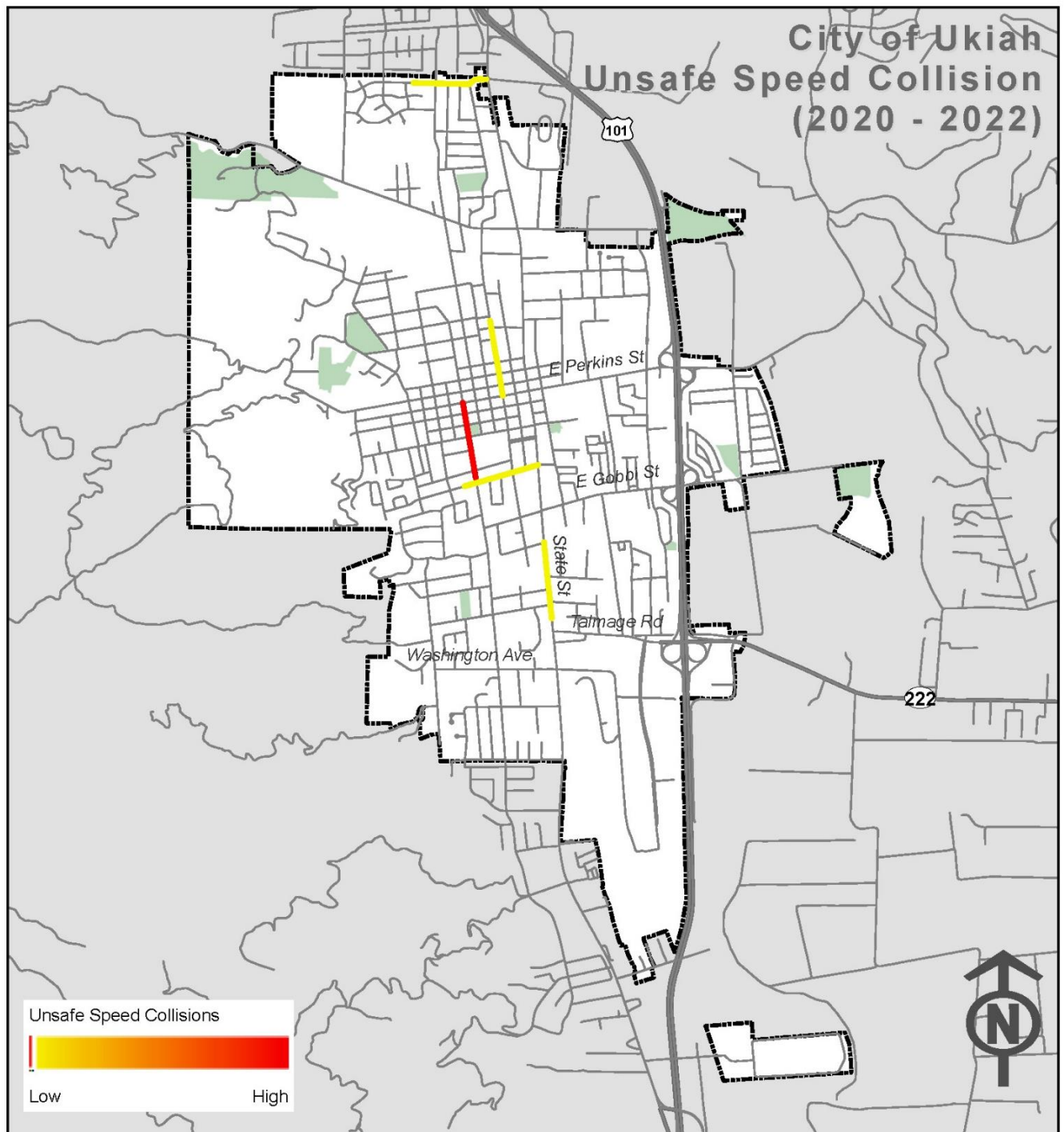


Figure 31. Nighttime Collisions

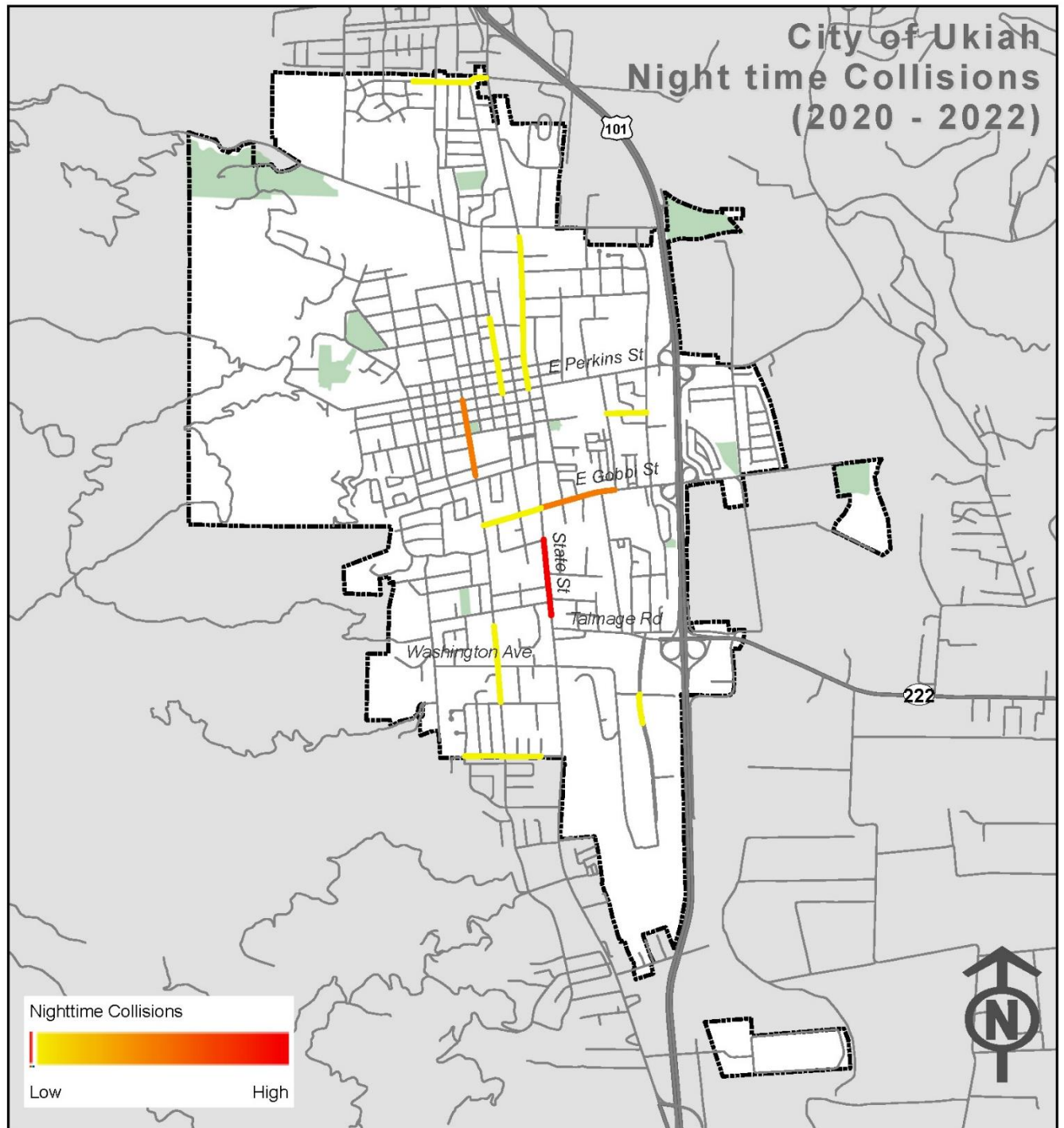
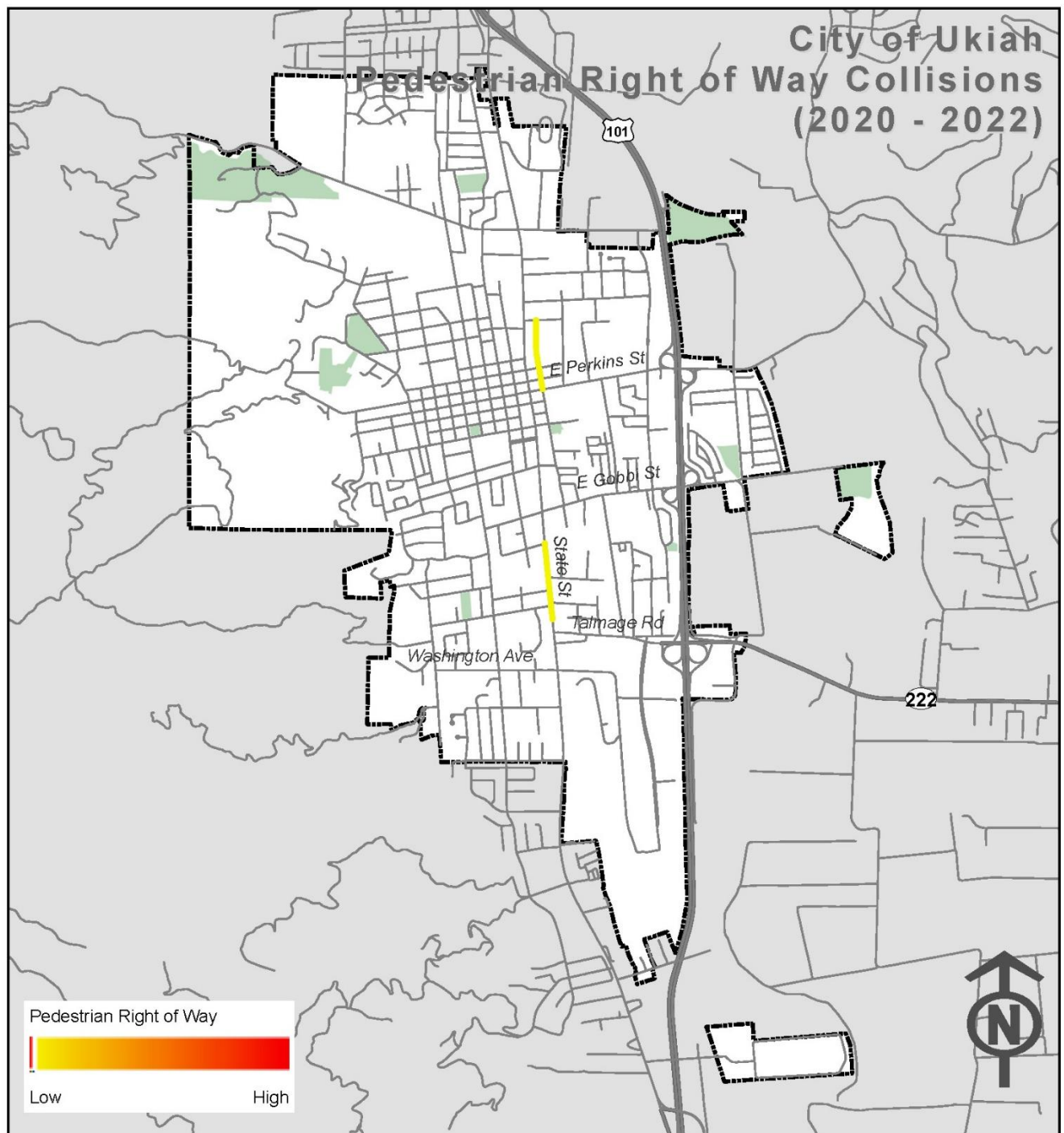


Figure 32. Pedestrian Right of Way Violations



Collision Severity Weight

A collision severity weight was used to identify the high severity collision network, using the Equivalent Property Damage Only (EPDO) method. The EPDO method accounts for both the severity and frequency of collisions by converting each collision to an equivalent number of PDO collisions. The EPDO method assigns a crash cost and score to each collision according to the severity of the crash weighted by the comprehensive crash cost. These EPDO scores are calculated using a simplified version of the comprehensive crash costs per HSIP Cycle 12 application. The weights used in the analysis are shown below in **Table 7**.

Table 7. EPDO Score used in HSIP Cycle 12

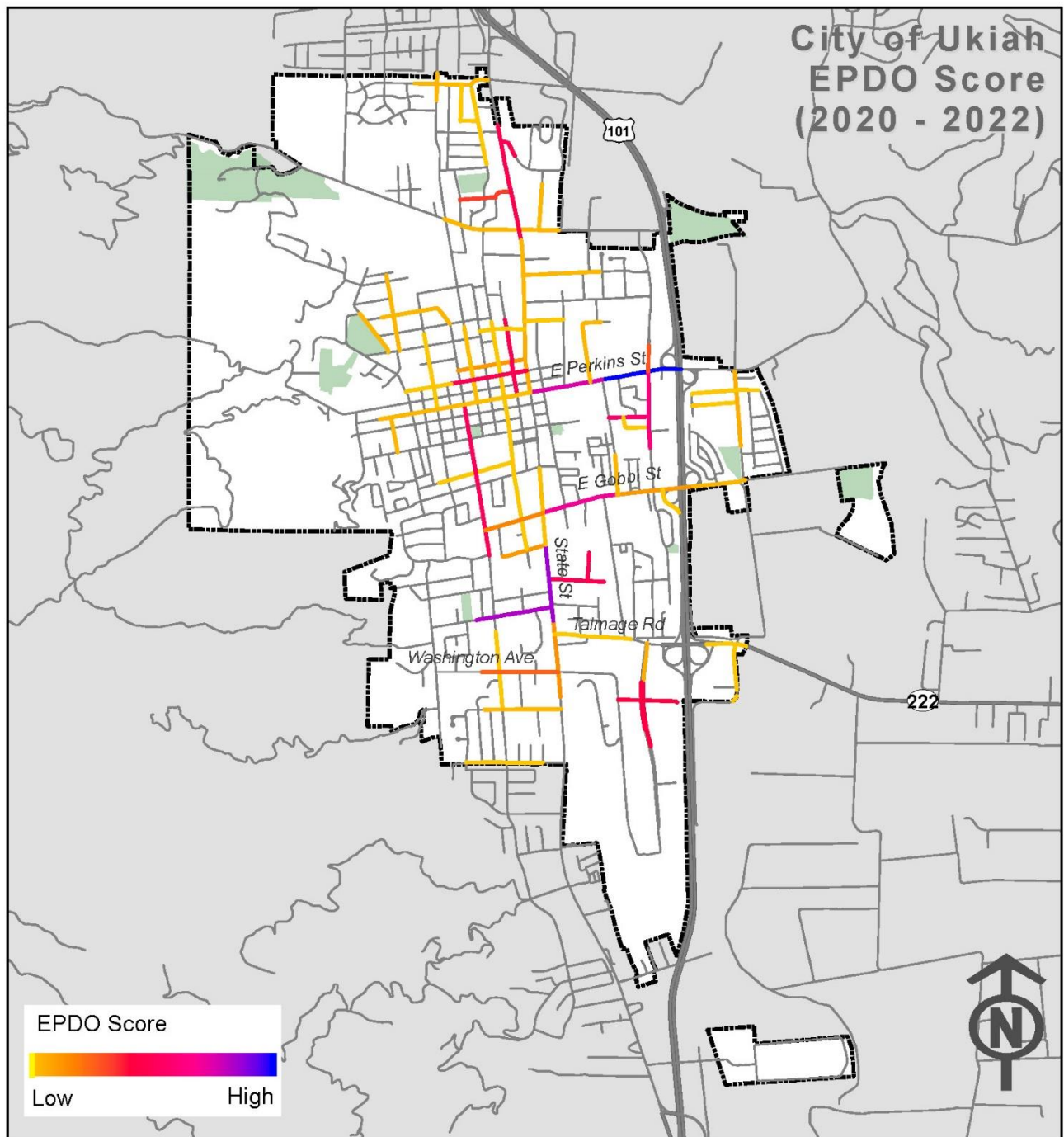
Collision Severity	EPDO Score
KSI Combined	165*
Visible Injury	11
Possible Injury	6
PDO	1

*This is the score used in HSIP Cycle 12 for collisions on roadways segments, to simplify the analysis this study uses the same score for all KSI collisions regardless of location

The EPDO scores for all collisions can then be aggregated in a variety of ways to identify collision patterns, such as location hot-spots. The weighted collisions for the City of Ukiah were geolocated onto Ukiah's road network. **Figure 33** shows the location and geographic concentration of collisions by their EPDO score.

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Figure 33. Ukiah EPDO Score



High-Injury Locations

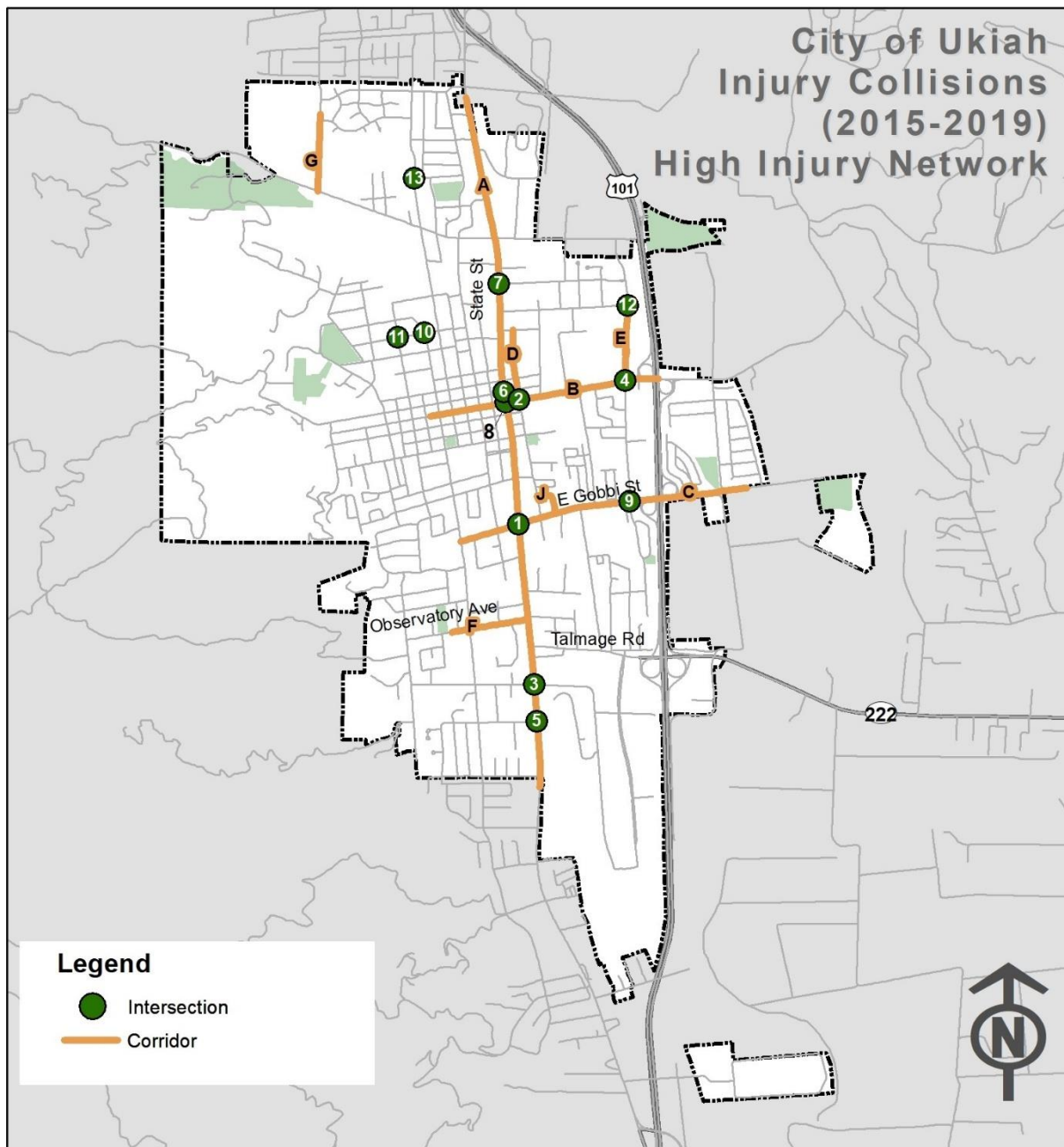
Following the detailed collision analysis, the next step was to identify the high-risk roadway segments and intersections in the City of Ukiah. The methodology for scoring the high injury locations is the same method used in the severity weight section.

Figure 34 shows the top eight high-collision roadway segments, and top 13 high-collision intersections based on 2015-2019 collision analysis.

Figure 35 shows the top eight high-collision roadway segments, and top 11 high-collision intersections based on 2020-2022 collision analysis.

For the purposes of the high collision network analysis, intersections include collisions that occurred within 250 feet of it and roadways include all collisions that occurred along the roadway except for collisions that occurred occur directly at an intersection, or collisions that occurred at a distance of zero feet from an intersection as per the SWITRS.

Figure 34. City of Ukiah High Injury Network (2015-2019)



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High Injury Intersections (2015-2019)

Table 8 lists the most significant high-collision intersections identified in the 2015-2019 analysis.

Table 8. High Injury Intersections (2015-2019)

ID	Intersection	Total	KSI	Veh/ Ped	Hit Object	DUI	Unsaf e Speed	Bike	EPDO Score
Collisions									
1	Gobbi St and State St	5	2	2	0	0	1	1	358
2	Main St and Perkins St	2	2	3	0	1	0	0	330
3	Washington Ave and Hastings Ave and S State St	11	1	4	1	0	0	1	245
4	Perkins St and South Orchard Ave	7	1	3	0	0	4	1	206
5	Wabash Ave and State St	6	1	0	0	0	4	0	195
6	Standley St and State St	4	1	1	0	1	2	0	183
7	Ford Rd and State St	3	1	1	0	0	1	0	182
8	Perkins St and S State St	2	1	2	0	0	0	0	176
9	East Gobbi St and South Orchard Ave	2	1	1	0	0	0	1	171
10	Dora Ave and Grove Ave	1	1	0	1	0	0	0	165
11	Grove Ave and Spring St	1	1	0	0	0	0	1	165
12	Clara Ave and North Orchard Ave	1	1	0	0	1	0	0	165
13	Arlington and North Bush St	1	1	0	1	0	0	0	165

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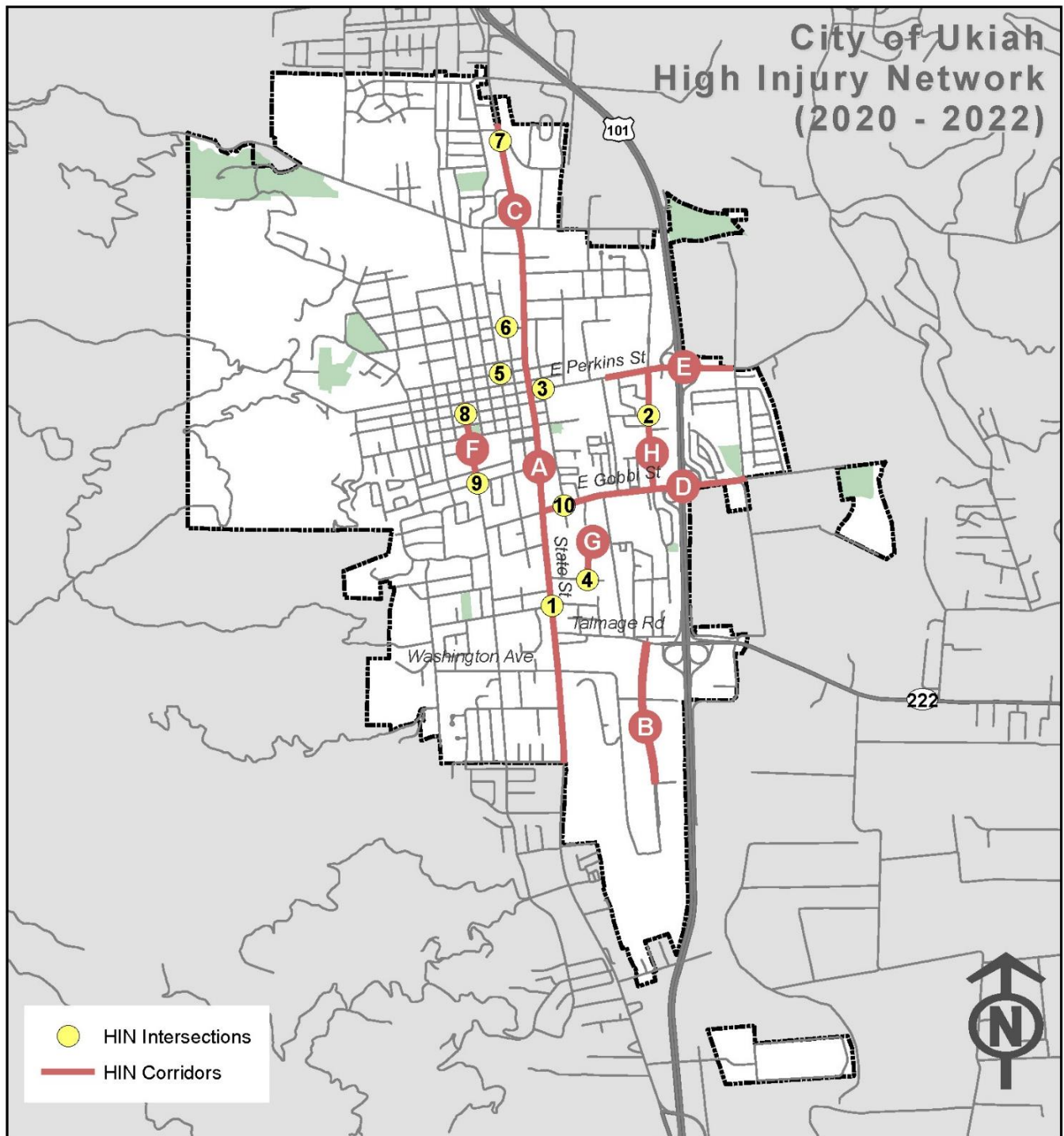
High Injury Corridors (2015-2019)

Table 8 lists the most significant high-collision roadway segments identified in the 2015-2019 analysis.

Table 9. High Injury Corridors (2015-2019)

ID	Corridors	Total	KSI	Ped	Hit Object	DUI	Unsafe Speed	Bike	Length (miles)	EPDO Score
		Collisions								
A	State St: Beacon Ln to Ford Rd	36	3	5	2	0	23	3	2.5	728
B	N Orchard Ave: Clara Ave to E Perkins St	4	2	1	0	0	1	2	0.3	342
C	Perkins St: Hortense St to Redwood Hwy SR 101	11	1	4	0	1	6	1	2.3	235
D	Gobbi St: S Dora St to Washo Dr	5	1	2	0	1	1	2	3.8	199
E	Main St: Norton St to E Perkins St	3	1	2	0	1	0	1	2.8	177
F	Observatory Ave: Marwen Dr to State St	3	1	1	1	0	1	0	0.5	177
G	Despina Dr: Capps Ln to Low Gap Rd	1	1	1	0	0	0	0	0.7	165
H	Marshall St: S Main St to E Gobbi St	1	1	0	1	1	0	0	0.12	165

Figure 35. City of Ukiah High Injury Network (2020-2022)



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High Injury Intersections (2020-2022)

There are 11 intersections that were identified as high injury intersections for 2020-2022. A total of 12 KSI collisions occurred at these intersections. The intersection of South State Street and Observatory Avenue has the highest EPDO score. **Table 10** lists the most significant high-collision intersections identified in the 2020-2022 analysis.

Table 10. High Injury Intersections (2020-2022)

ID	Intersections	Total	Killed	Severe Injury	Pedestrian/ Bicycle	EPDO Score
1	S State St & Observatory Ave	6	0	2	2	359
2	S Orchard Ave & Peach St	2	0	1	1	176
3	N Main St and E Perkins St	2	0	1	1	171
4	N State St & Bicarelli Dr	2	0	1	0	171
5	Apple Ave & Cherry St	1	0	1	0	165
6	N Oak St & W Smith St	1	0	1	1	165
7	Scott St & N School St	1	0	1	1	165
8	N State St & Mazzoni St	1	0	1	1	165
9	S Dora St & W Church St	1	0	1	1	165
10	S Dora St & W Mill St	1	0	1	1	165
11	E Gobbi St & S Main St	1	0	1	0	165

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High Injury Corridors

Eight corridors were identified as high injury corridors for 2020-2022. There was a total eight KSI collisions on these corridors. The corridor with the highest EPDO score is S State Street from Beacon Lane to W Perkins Street. **Table 11** lists the most significant high-collision roadway segments identified in 2020-2022 analysis.

Table 11. High Injury Corridors (2020-2022)

ID	Corridors	Total Injury Collisions	Killed	Severe Injury	Pedestrian/Bicycle	Length (miles)	EPDO Score
A	S State St: Beacon Ln to W Perkins St	8	0	1	1	2.5	217
B	Airport Park Blvd: Talmage Rd to Entrance to Costco Warehouse	7	0	1	2	0.6	216
C	N State St: W Perkins St to Ukiah City Limit	7	0	1	2	1.1	211
D	E Gobbi St: S State St to Washo Dr	4	0	1	0	1.0	183
E	E Perkins St: S State St to Oak Manor Dr	4	0	1	0	0.8	183
F	S Dora: W Church St to W Mill St	2	0	1	1	0.3	171
G	Apple Ave: Entire length from Cherry St	1	0	1	0	0.1	165
H	S Orchard Ave: E Perkins to E Gobbi St	1	0	1	1	0.3	165

5. Emphasis Areas

Emphasis areas are focus areas for the LRS/AP that are identified through the comprehensive collision analysis of the identified high injury network within the City of Ukiah. Emphasis areas help in identifying appropriate safety strategies and countermeasures with the greatest potential to reduce collisions occurring at these high-risk locations. In addition, traffic safety related concerns were heard at Stakeholder Meetings and Public Workshops conducted for this plan.

This chapter summarizes the identified top four emphasis areas. These emphasis areas were derived from the systemic safety analysis of injury collisions (**Appendix B**) that occurred in the City from January 1, 2020 to December 31, 2022, along with safety concerns that were received as a part of the Stakeholder Outreach and Public Workshops.

The following are the identified emphasis areas –

1. Improve Intersection Safety
2. Reduce Nighttime Collisions
3. Reduce Broadside Collisions
4. Improve Pedestrian/Bicycle Safety

The Five E's OF Traffic Safety

LRS/AP utilizes a comprehensive approach to safety incorporating “5 E’s of traffic safety”: **E**ngineering, **E**nforcement, **E**ducation, and **E**mergency Medical Services (EMS). While the fifth E, **E**quity, is not discussed in this chapter, it is still an area that needs to be considered and addressed as outlined in Chapter 6. This approach recognizes that not all locations can be addressed solely by infrastructure improvements. Incorporating the 5 E’s of traffic safety is often required to ensure successful implementation of significant safety improvements and reduce the severity and frequency of collisions throughout a jurisdiction.

Some of the common violation types that may require a comprehensive approach are speeding, failure-to-yield to pedestrians, red light running, aggressive driving, failure to wear safety belts, distracted driving, and driving while impaired. When locations are identified as having these types of violations, coordination with the appropriate law enforcement agencies is needed to arrange visible targeted enforcement to reduce the potential for future driving violations and related crashes and injuries.

To improve safety, education efforts can also be used to supplement enforcement. Additionally, education efforts can supplement enforcement to improve the efficiency of each. Education can also be employed in the short-term to address high crash locations

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until the recommended infrastructure project can be implemented, addressed under Engineering improvements and countermeasures. Similarly, Emergency Medical Services entails strategies around supporting organizations that provide rapid response and care when responding to collisions causing injury, by stabilizing victims and transporting them to facilities.

Existing Traffic Safety Efforts in the City of Ukiah

The City of Ukiah has already implemented safety strategies corresponding to the E's of traffic safety. The strategies detailed in this chapter can supplement these existing programs and concentrate them on high injury collision locations and crash types. These initiatives are summarized in the table below:

Table 12. Existing Programs Summary

Document/Program	Description	E's Addressed
Ukiah Bicycle & Pedestrian Master Plan (2015)	The goal of the Ukiah Bicycle and Pedestrian Master Plan (BPMP or Plan) is to improve bicycling and walking in the City of Ukiah as a comfortable and convenient transportation and recreation option.	Engineering
City of Ukiah Safe Routes to School Plan (2014)	Ukiah Safe Routes to School is a citywide program that encourages and enables school children to walk and bicycle to school by implementing projects and activities that improve the health, well-being, and safety of children and result in less traffic congestion and emissions caused by school-related travel.	Engineering Education
Ukiah Downtown Streetscape Improvement Plan (2009)	The purpose of this plan is to upgrade State Street and Main Street from Norton Street to Gobbi Street to provide for a cohesive, pedestrian-friendly, attractive, and complete downtown core.	Engineering
Ukiah Police Department Ongoing Programs and Resources	The City Police Department has a number of programs and resources to reduce traffic fatalities and injuries including a crosswalk safety pamphlet, a bicycle safety pamphlet and an ongoing commitment to enforcing traffic violations at key location in Ukiah including schools.	Enforcement, Education
Mendocino Council of Governments 2024 Regional Transportation Improvement Program (2024)	The RTIP is a program of highway, local road, transit and active transportation projects that a region plans to fund with State and Federal revenue.	Engineering
Mendocino County Regional Transportation Plan & Active Transportation Plan (2022)	Details improvements for all modes of transportation on County significant corridors.	Engineering
Mendocino County Safe Routes to School Plan (2014)	In addition to the Citywide program the countywide Safe Routes to School is also a resource to a program with a simple goal: helping more children get to school by walking and bicycling.	Engineering Education

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Document/Program	Description	E's Addressed
Walk and Bike Mendocino	Walk and Bike Mendocino promotes walking and biking as a primary transportation choice in short distance travel in Mendocino County.	Education

Factors Considered in the Determination of Emphasis Areas

This section presents collision data analysis of collision type, collision factors, facility type, roadway geometries, analyzed for the various emphasized areas. Emphasis areas were determined by factors that led to the highest amount of injury collisions, with a specific emphasis on KSI injury collisions. In addition to the collision data, emphasis areas were also determined by the feedback received from stakeholders. This section also presents comprehensive programs, policies and countermeasures to reduce collisions in specific emphasis areas.

Emphasis Area 1 – Intersection Safety

A total 44 collisions occurred on the high injury network in the City. Of these collisions, 35 (80 percent) occurred at an intersection, including 12 KSI collisions. The following are major findings based on intersection injury collisions that occurred on the high injury network in the City of Ukiah followed by strategies to make these locations safer.

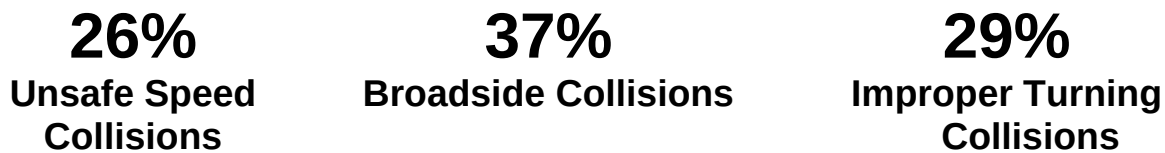


Table 13. Emphasis Area 1 Strategies

Objective To reduce the number of KSI collisions at intersections			
	Strategy	Performance Measure	Agencies/ Organizations
Education	Conduct public information and education campaign for intersection safety laws regarding traffic signals, stop signs, and turning left or right.	Number of education campaigns	City/ School District/ Police Department
Enforcement	Targeted enforcement at high-risk intersections to monitor traffic law violations right-of-way violations, speed limit laws and other violations that occur at intersections.	Number of tickets issued	Police Department
Engineering	• SI02, Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number • SI03, Improve signal timing (coordination, phases, red, yellow, or operation) • SI07, Convert signal to mast arm (from pedestal-mounted) • SI08, Install raised pavement markers and striping (Through Intersection) • SI16RA/NS04RA/NS05RA, Convert intersection to roundabout • NS08, Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs • NS09, Upgrade intersection pavement markings (NS.I.)	Number of intersections improved	City
EMS	SI04EV, Install emergency vehicle pre-emption systems	EMS vehicle response time	Mendocino County Local Emergency Services Agency

Emphasis Area 2 – Broadside Collisions

A total 44 collisions occurred on the high injury network. Of these collisions, 15 (34 percent) were broadside collisions, including five KSI collisions. The following are major findings based on broadside injury collisions on the high injury network in the City of Ukiah followed by strategies to make these locations safer:



Table 14. Emphasis Area 2 Strategies

Objective Reduce the number of KSI broadside collisions			
	Strategy	Performance Measure	Agencies/ Organizations
Education	Conduct public information and education campaign for intersection safety laws regarding traffic signals, stop signs, and turning left or right.	Number of education campaigns	City/ School District/ Police Department
Enforcement	Targeted enforcement at high-risk intersections to monitor traffic law violations right-of-way violations, speed limit laws and other violations that occur at intersections.	Number of tickets issued	Police Department
Engineering	• SI02, Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number • SI03, Improve signal timing (coordination, phases, red, yellow, or operation) • SI07, Convert signal to mast arm (from pedestal-mounted) • SI08, Install raised pavement markers and striping (Through Intersection) • SI16RA/NS04RA/NS05RA, Convert intersection to roundabout • NS08, Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs • NS09, Upgrade intersection pavement markings (NS.I.)	Number of locations improved	City
EMS	SI04EV, Install emergency vehicle pre-emption systems	EMS vehicle response time	Mendocino County Local Emergency Services Agency

Emphasis Area 3 – Nighttime Collisions

A total 44 collisions occurred on the high injury network. Of these collisions, 12 (27 percent) were pedestrian-bicycle collisions, including nine KSI collisions. The following are major findings based on pedestrian-bicycle collisions on the high injury network in the City of Ukiah followed by strategies to make these locations safer:



Table 15. Emphasis Area 3 Strategies

Objective			
Reduce the number of KSI collisions that occur at nighttime			
	Strategy	Performance Measure	Agencies/ Organizations
Education	Conduct public information and education campaign for safety laws regarding and the larger risk of collisions during the nighttime.	Number of education campaigns	City/ Police Department
Enforcement	Targeted enforcement at high-risk locations to monitor collisions that occur at nighttime.	Number of tickets issued	Police Department
Engineering	• SI01NT/NS01NT/R01NT, Install lighting • SI02, Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size and number • SI9, Install flashing beacon as warning • NS08, Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs • R22, Install/Upgrade signs with new fluorescent sheeting (regulatory or warning) • R26, Install dynamic/ variable speed warning signs • R27, Install delineators, reflectors and/or object markers	Number of locations improved	City
EMS	SI04EV, Install emergency vehicle pre-emption systems.	EMS vehicle response time	Mendocino County Local Emergency Services Agency

Emphasis Area 4 – Pedestrian and Bicycle Collisions

A total 44 collisions occurred on the high injury network. 12 (27 percent) of these collisions were pedestrian-bicycle collisions, including nine KSI collisions. The following are major findings based on pedestrian-bicycle collisions on the high injury network in the City of Ukiah followed by strategies to make these locations safer:

75%
**Pedestrian
 Collisions**

33%
**Pedestrian ROW
 Violations**

42%
Nighttime collisions

Table 16. Emphasis Area 4 Strategies

Objective Reduce the number of KSI pedestrian and bicycle collisions			
	Strategy	Performance Measure	Agencies/ Organizations
Education	Conduct pedestrian safety campaigns and outreach to raise their awareness of pedestrian safety needs through media outlets, social media and Bike and Walk Mendocino. Update pamphlet for crosswalk safety for Ukiah every three-five years.	Number of education campaigns	City/ School District/ Police Department
Enforcement	Targeted enforcement at high-risk locations especially near schools and downtown.	Number of tickets issued	Police Department
Engineering	- SI21PB, Install advance stop bar before crosswalk (Bicycle Box) - SI22PB, Modify signal phasing to implement a Leading Pedestrian Interval (LPI) - NS09, Upgrade intersection pavement markings - NS21PB, Install raised medians (refuge islands) - NS23PB/R36PB, Install/upgrade pedestrian crossing (with enhanced safety features) - R33PB, Install bike lanes - R37PB, Install raised pedestrian crossing - R38PB, Install Rectangular Rapid Flashing Beacons (RRFB) - High-visibility ladder crosswalks - Mid-block curb extension - In-road yield sign for pedestrian crossing at crosswalk - Pedestrian safety improvements at on ramp off/ramps	Number of locations improved	City
EMS	SI04EV, Install emergency vehicle pre-emption systems	EMS vehicle response time	Mendocino County Local Emergency Services Agency

5. Equity

Through this LRS/AP update, the city of Ukiah seeks to advance equity in identifying and addressing its transportation safety needs. The City recognizes that transportation benefits and costs can accrue unequally across communities. Despite transportation's ability to connect communities to opportunities, resources, and destinations, historical patterns of decisions and investments in transportation have not addressed, and even aggravated or created, inequalities in wealth, access, and health.

Inequalities in transportation safety result in an undue concentration of collisions, unsafe roadways, or severe injury collisions in communities with social, economic, or other vulnerabilities. Data shows that roadway collisions disproportionately impact people who are Black, American Indian, and live in rural communities (USDOT's National Roadway Safety Strategy 2022).⁵ Non-motorists, such as pedestrians and bicyclists, are more likely to be involved in a KSI collision than motorists. Traditional safety strategies such as enforcement face backlash for their discriminatory outcomes that burden racial minorities. These measures do not address policy or built environment limitations, resulting in safety hazards to roadway uses. Hence, a commitment to make roads safe for all users must consider equity seriously in analyzing roadway safety and recommending improvements.

It is a core goal of this LRS/AP to recommend safety improvements in a manner that is fair and equitable for all the City's residents, in line with a federal commitment to creating an equitable transportation system that is safe, efficient, and sustainable. Planning and decision-making processes followed in this LRS/AP update adequately consider inputs and feedback from communities with limited means or ability to participate effectively. Three virtual stakeholder meetings and five public workshops (three virtual and two in-person workshops) were held with residents during the LRS/AP update to gather insights into safety burdens faced by communities, share data and findings, and gather feedback on safety countermeasures and recommendations. LRS/AP is also guided by public inputs received through the online public input platform and feedback from the safety partners.

This chapter details how the safety data is analyzed with respect to equity-emphasis communities (EEC) to identify the impact of collisions in vulnerable communities. USDOT's⁶ commitment to expanding "access and opportunity to all communities while

⁵<https://www.transportation.gov/sites/dot.gov/files/2022-02/USDOT-National-Roadway-Safety-Strategy.pdf>

⁶ https://www.transportation.gov/sites/dot.gov/files/2022-04/Equity_Action_Plan.pdf

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focusing on underserved, overburdened, and disadvantaged communities” guides this plan in prioritizing safety projects to benefit the most vulnerable of the communities. The LRS/AP includes elements from the FHWA recommended Safe Systems Approach and prioritizes the needs of vulnerable road users such as bicyclists and pedestrians in identifying countermeasures and developing the countermeasure toolbox. The projects identified are also analyzed for their adherence to the Justice40 commitment to directing benefits of investments to vulnerable communities.

Average Annual Fatality Rate in the City

The City residents are less likely to be killed in a collision as compared to the average Californian. The average annual fatality rate (AAFR) for the City of Ukiah is 0.8 persons killed per 100,000 residents for 2017-2021 and 0.4 for 2018-2022, which is very modest when compared to the rate for the state of California (10.12 persons killed per 100,000 residents in 2017-2021, and 10.40 in 2018-2022). AAFR has been calculated based on the methodology provided by the Safe Streets for All grant program. The calculation worksheet and methodology are available in **Appendix C**.

Equity Emphasis Communities

Equity-emphasis communities are communities facing disadvantages in climate and disaster risk burden, environmental burden, health vulnerability, social vulnerability, and transportation insecurity due to underinvestment in their transportation systems. The LRS/AP utilizes the concept of transportation disadvantage developed by the USDOT to identify EEC. The five areas, developed using data including the 2020 American Community Survey, capture various population characteristics indicating vulnerabilities as described below:⁷

- **CLIMATE AND DISASTER RISK BURDEN:** measures current and future risks to an area from climate and natural disasters based on potential losses from existing hazard exposure and vulnerability.
- **ENVIRONMENTAL BURDEN:** measures factors such as pollution, hazardous facility exposure, water pollution and the built environment.
- **HEALTH VULNERABILITY:** measures the prevalence of health conditions such as asthma, cancer, high blood pressure, diabetes, and poor mental health
- **SOCIAL VULNERABILITY:** identifies populations that are at a higher risk due to certain social conditions.

⁷ <https://www.transportation.gov/priorities/equity/justice40/etc-explorer-indicator-table>

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- **TRANSPORTATION INSECURITY:** it is the condition in which people are unable to regularly and reliably satisfy the travel necessary to meet the needs of daily life.

The EEC are communities (census tracts) facing cumulative transportation disadvantages, as identified in USDOT's Equitable Transportation Communities Explorer (ETCE). For each community, ETCE calculates a disadvantage ranking for all its census tracts. These rankings are reported as national percentiles, where a 65th percentile rank or above is considered disadvantaged.

The City has a large share of equity-emphasis communities. In Ukiah, EEC makes up 75 percent of census tracts, shown in **Figure 36**. These census tracts comprise 72 percent of the City's 16.9K residents. In comparison, 37 percent of communities in California and 35 percent of communities in Mendocino County have such a disadvantage. Specifically, the city faces disadvantages due to social vulnerability (73 percent) and Environmental Burden (69 percent). The City also ranks higher for these elements, including climate and disaster risk burden (56 percent), compared to California, as shown in **Figure 37**. Ukiah ranks higher for all elements except transportation insecurity when compared to the County.

Figure 36. City of Ukiah Equity-Emphasis Communities

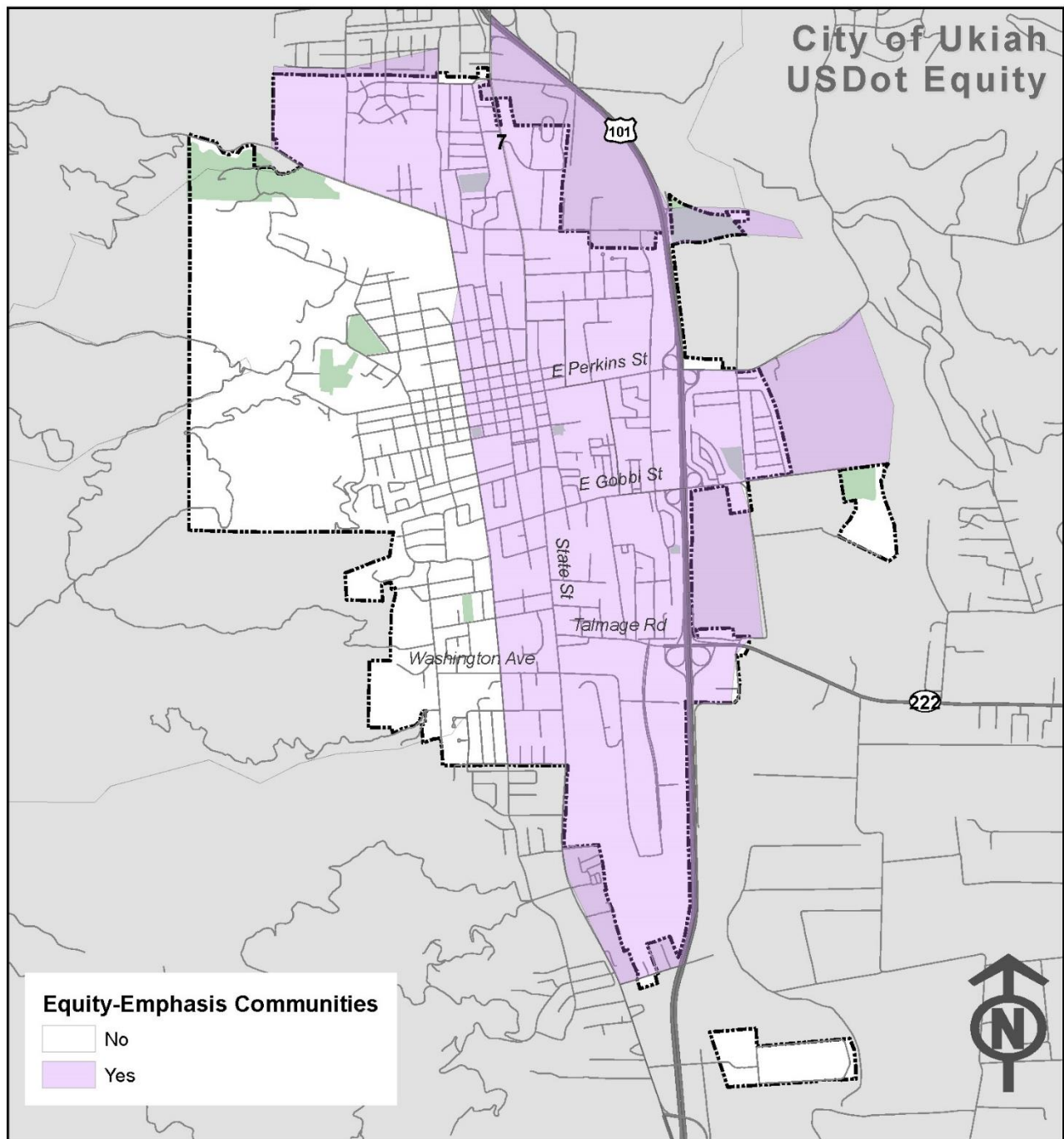
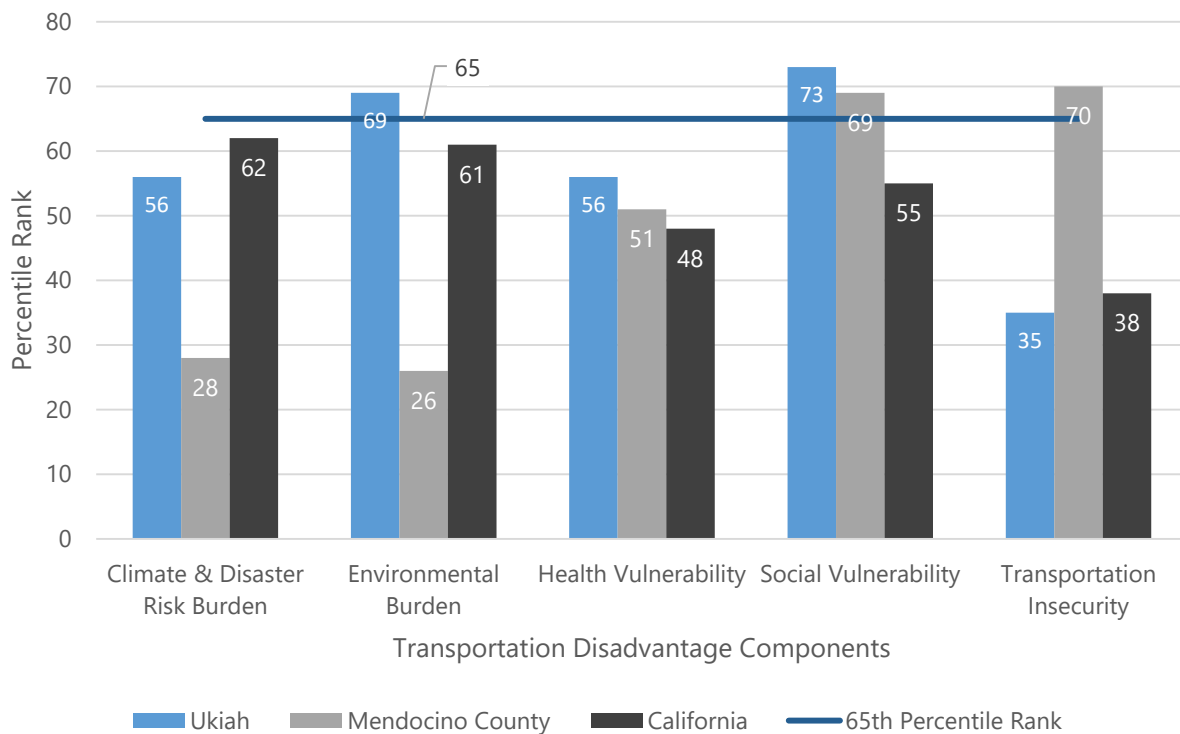


Figure 37. City of Ukiah Transportation Disadvantage



Roadway Safety in Equity Emphasis Communities

Roadway safety burdens in equity emphasis communities in the City of Ukiah are identified after overlaying collision data on the equity data from ETCE. The data considered in this analysis is limited to collisions leading to a fatality or an injury and is available in **Appendix D**. Trends in roadway collision in EEC for collision severity, collision type, violation category, motor vehicle involved with, mode, and lighting conditions, as compared to other communities (non-EEC within the City), and to the overall City, are as follows:

- EEC saw a higher share of collisions when compared to their share in area or percentage. Eighty-six percent of total collisions and 80 percent of KSI collisions in the City occurred in these communities (**Figure 38**), accounting for 75 percent of land area.
- These communities face lower severity collisions. In EEC, 16 percent of collisions were KSI, compared to 25 percent in other communities and 17 percent in the City.
- Broadside collisions were the most common type (48 percent), followed by rear end collisions (17 percent). EEC has a lower share of vehicle-pedestrian collisions (15 percent) than other communities (25 percent). However, these collisions were

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more deadly, as 50 percent of KSI collisions were between a vehicle and a pedestrian.

Figure 38. Collision Share in Equity-Emphasis Community

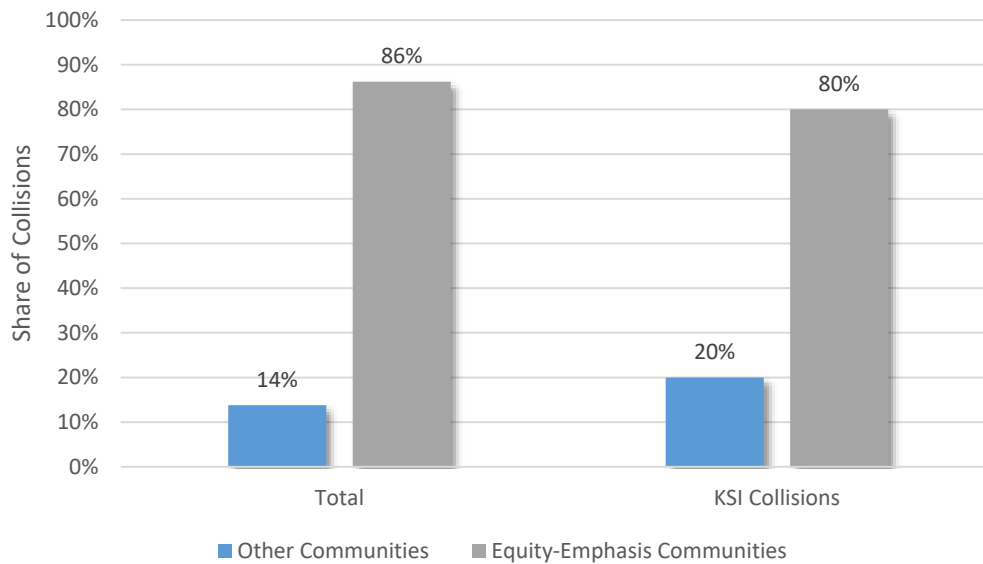
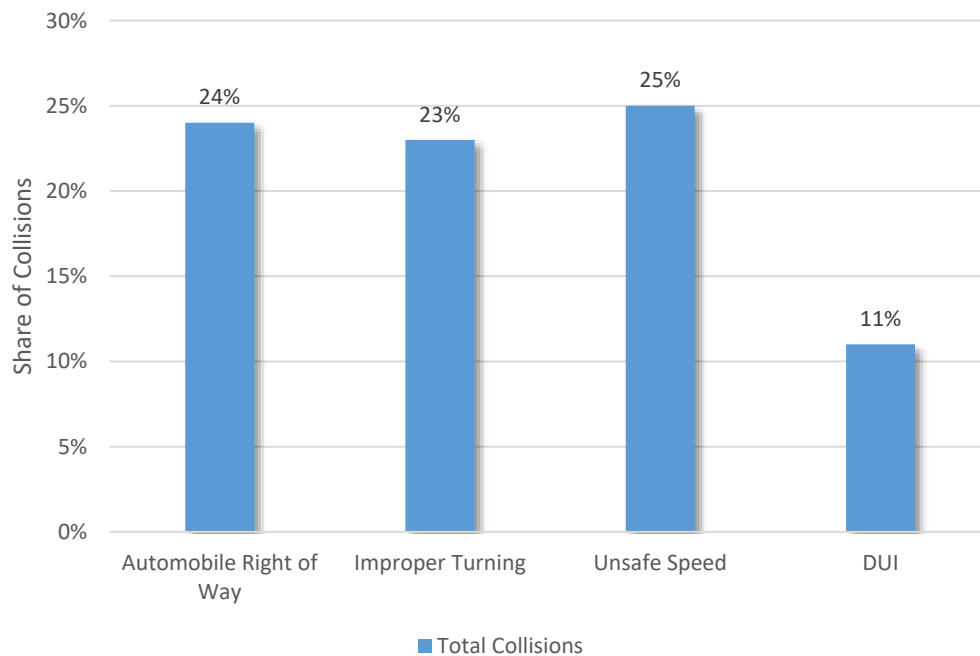


Figure 39. Top Violation Categories



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- The top violation categories for collisions EEC are automobile right of way violations (24 percent), improper turning (23 percent), unsafe speeds (15 percent) and DUI (11 percent). These contributed to approximately 83 percent of the total collisions, shown in **Figure 39**.
- EEC reported a higher share of collisions that involved a passenger car (57 percent), followed by a pickup truck and bicycle (11 percent each). However, the share of bicycle collisions is higher for other communities (17 percent).
- Majority of the collisions occurred during the day (75 percent).

6. Countermeasure Identification

This section summarizes the process of selecting countermeasures on Ukiah streets as part of the analysis for the LRS/AP. Countermeasures were selected for each of the identified high-risk intersections and roadway segments based on extensive review of existing conditions at the site and characteristics of identified collisions on the High Injury Network.

Identified collision factors and existing conditions were cross referenced with the Caltrans LRSM identified countermeasures that are HSIP approved. Countermeasures that best fit the site and had the highest opportunity for systemic implementation were selected.

Countermeasure Selection

In 2010, the Federal Highway Administration (FHWA) published a set of three manuals local and rural road owners to present a simple, data driven safety analysis framework for rural agencies across the country. In conjunction with these documents, California Department of Transportation (Caltrans) developed the LRSM. The goal of this manual is to *“maximize the safety benefits for local roadways by encouraging all local agencies to proactively identify and analyze their safety issues and to position themselves to compete effectively in Caltrans’ statewide, data-driven call-for-projects.”*⁸ Although, the LRSM identifies all of California’s local roadway safety issues and the countermeasures that address them, this document only highlights the issues and countermeasures relevant to the local roads of the City of Ukiah. This section identifies the different solutions for the City from HSIP-qualified and non-HSIP countermeasures. It also provides a brief description along with their corresponding crash reduction factors (CRF), expected life and baseline cost. An excerpt of the LRSM, detailing each available HSIP countermeasure referenced in the recommendations tables, is included as **Appendix C**.

The countermeasures have been divided into following categories:

- Signalized (SI) – countermeasures only applicable for signalized intersections;
- Non-Signalized (NS) – countermeasures only applicable to stop-controlled, or uncontrolled intersections;
- Roadway Segment (R) – countermeasures only applicable to roadway segments; and
- Other (O) – countermeasures that do not qualify for HSIP funding.

⁸ <https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/hsip/2024/lrsm2024.pdf>

Draft Countermeasure Toolbox

Non-Signalized Intersections Countermeasures

NS01NT – Add intersection lighting. Non-signalized intersections that have a disproportionate number of night-time crashes and do not currently provide lighting at the intersection or at its approaches. Crash data should be studied to ensure that safety at the intersection could be improved by providing lighting (this strategy would be supported by a significant number of crashes that occur at night).

- Crash Reduction Factor – 40%
- Expected Life – 20 years

NS08 – Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs. The visibility of intersections and, thus, the ability of approaching drivers to perceive them can be enhanced by installing larger regulatory and warning signs at or prior to intersections. A key to success in applying this strategy is to select a combination of regulatory and warning sign techniques appropriate for the conditions on a particular unsignalized intersection approach.

- Crash Reduction Factor – 15%
- Expected Life – 10 years

NS09 – Upgrade intersection pavement markings. Unsignalized intersections that are not clearly visible to approaching motorists, particularly approaching motorists on the major road. The strategy is particularly appropriate for intersections with patterns of rear-end, right-angle, or turning crashes related to lack of driver awareness of the presence of the intersection.

- Crash Reduction Factor – 25%
- Expected Life – 10 years

NS23PB – Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features). Adding pedestrian crossings that include enhanced safety features has the opportunity to enhance pedestrian safety at locations noted as being especially problematic. The enhanced safety elements help delineate a portion of the roadway that is designated for pedestrian crossing.

- Crash Reduction Factor – 35%
- Expected Life – 20 years

NS24PB - Install Rectangular Rapid Flashing Beacon (RRFB). RRFB includes pedestrian-activated flashing lights and additional signage that enhance the visibility of marked crosswalks and alert motorists to pedestrian crossings. It uses an irregular flash pattern that is similar to emergency flashers on police vehicles. RRFBs are

- Crash Reduction Factor – 35%
- Expected Life – 20 years

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installed at unsignalized intersections and mid-block pedestrian crossings.

Roadway Countermeasures

R22 – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning). The target for this strategy should be on roadway segments with patterns of head on, nighttime, non-intersection, run-off road, and sideswipe crashes related to lack of driver awareness of the presence of a specific roadway feature or regulatory requirement. Ideally this type of safety CM would be combined with other sign evaluations and upgrades (install chevrons, warning signs, delineators, markers, beacons, and relocation of existing signs per MUTCD standards.).

- Crash Reduction Factor – 15%
- Expected Life – 10 years

R26 – Install dynamic/variable speed warning signs. This strategy primarily addresses crashes caused by motorists traveling too fast around sharp curves. It is intended to get the drivers attention and give them a visual warning that they may be traveling over the recommended speed for the approaching curve. Care should be taken to limit the placement of these signs to help maintain their effectiveness.

- Crash Reduction Factor – 30%
- Expected Life – 10 years

R35PB – Install sidewalk/pathway (to avoid walking along roadway). Sidewalks and walkways provide people with space to travel within the public right-of-way that is separated from roadway vehicles. The presence of sidewalks on both sides of the street has been found to be related to significant reductions in the “walking along roadway” pedestrian crash risk compared to locations where no sidewalks or walkways exist.

- Crash Reduction Factor – 80%
- Expected Life – 20 years

R36PB – Install/upgrade pedestrian crossing (with enhanced safety features). Adding pedestrian crossings has the opportunity to greatly enhance pedestrian safety at locations noted as being problematic. The enhanced safety elements, which may include curb extensions, medians and pedestrian crossing islands, beacons, and lighting, combined with pavement markings delineating a portion of the roadway that is designated for pedestrian crossing.

- Crash Reduction Factor – 35%
- Expected Life – 20 years

R38PB – Install Rectangular Rapid Flashing Beacon (RRFB). RRFB includes pedestrian-activated flashing

- Crash Reduction Factor – 35%

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lights and additional signage that enhance the visibility of marked crosswalks and alert motorists to pedestrian crossings.

- Expected Life – 20 years

Other Countermeasures

Bulb outs/curb extensions. Curb extensions (also called bulb-outs) extend the sidewalk into the parking lane to narrow the roadway and provide additional pedestrian space at key locations; they can be used at corners and at mid-block. Curb extensions enhance pedestrian safety by increasing pedestrian visibility, shortening crossing distances, slowing turning vehicles, and visually narrowing the roadway.

Speed Feedback Signs. Speed feedback signs, also known as dynamic speed displays, provide drivers with feedback about their speed in relationship to the posted speed limit. When appropriately complemented with police enforcement, speed feedback signs can be an effective method for reducing speeds at a desired location.

In Road Yield/stop Signs. In-street pedestrian crossing signs (MUTCD R1-6 or R1-6a) are placed within the roadway, either between travel lanes or in a median. The sign may be used to remind road users of laws regarding right-of-way at an unsignalized pedestrian crossing. This countermeasure is used with other crosswalk visibility enhancements to indicate optimal or preferred locations for people to cross and to help reinforce the driver requirement to yield the right-of-way to pedestrians at crossing locations.

7. Safety Projects

This chapter summarizes the process of selecting safety projects as part of the analysis for the City of Ukiah's LRS/AP. The next step after the identification of high-risk locations, emphasis areas and applicable countermeasures was to identify location specific safety improvements for all high-risk roadway segments and intersections.

Specific countermeasures and improvements were selected from the 2024 LRSM, where:

- SI refers to improvements at signalized locations,
- NS refers to improvements at non-signalized locations, and
- R refers to improvements at roadway segments.

The corresponding number refers to the countermeasure number in the LRSM (2024). The countermeasures were grouped into safety projects for high-risk intersections and roadway segments. A total of four safety projects were developed. All countermeasures were identified based on the technical teams' assessment of viability that consisted of extensive analysis, observations, and City staff input. The most applicable and appropriate countermeasures as identified have been grouped together to form projects that can help make high-risk locations safer.

Table 17 lists the safety projects for high-risk intersections and roadway segments, along with total base planning level cost (2024 dollar amounts) estimates and the resultant preliminary Benefit-Cost (B/C) Ratio. The "Total Benefit" estimates were calculated for the proposed improvements being evaluated in the proactive safety analysis. This "Total Benefit" is divided by the "Total Cost per Location" estimates for the proposed improvements, giving the resultant B/C Ratio. The B/C Ratio Calculation follows the methodology as mentioned in the LRSM (2024).

Appendix F lists the HSIP Analyzers for each project which includes the complete cost, benefit and B/C Ratio.

The next step in the process will be to prepare grant ready materials for HSIP Cycle 12 applications. It should be noted that while the LRS/AP projects were based on high-risk locations, HSIP applications can be expanded to include many locations across the city.

Once the desired projects are selected, our team recommends three potential options for selecting locations to include in the HSIP applications:

- Select the top projects ranked by crash cost
- City identifies desired intersections
- Apply for various intersections citywide with more generic cost estimates

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Table 17. List of Viable Safety Projects

Location	CM1	CM2	CM3	Cost per Location	B/C Ratio
Project 1: Improve Safety at Non-Signalized Intersections.					
S State St & Observatory Ave		NS08		\$3,950	85.5
S Orchard Ave & Peach St		NS08		\$975	
N Main St and E Perkins St	NS01NT	NS08	NS09	\$51,680	
N State St & Bricarelli Dr		NS08		\$2,975	
N Oak St & W Smith St	NS01NT	NS08		\$25,200	
Scott St & N School St		NS08		\$1,950	
S Dora St & W Church St		NS08	NS09	\$4,000	
S Dora St & W Mill St	NS01NT	NS08		\$25,750	
E Gobbi St & S Main St		NS08		\$5,800	
Project 2: Improve Pedestrian and Bicycle Safety at Non-Signalized Intersections.					
N. Orchard Ave & Clara Ave	NS23PB	NS24PB		\$69,520	45.73
S Orchard Ave & Peach St	NS23PB	NS24PB		\$45,545	
N Main St and E Perkins St	NS23PB			\$84,000	
N Oak St & W Smith St	NS23PB			\$87,520	
Scott St & N School St	NS23PB			\$6,338	
S Dora St & W Church St		NS24PB		\$53,445	
S Dora St & W Mill St	NS23PB			\$80,900	
Project 3: Improve Safety at Roadway Segments.					
S State St: Beacon Ln to W Perkins St	R22	R26		\$63,250	95.41
Airport Park Blvd: Talmage Rd to Entrance to Costco Warehouse		R26		\$30,000	
N State St: W Perkins St to Ukiah City Limits	R22	R26		\$20,900	
E Gobbi St: S State St to Washo Dr	R22		Repavement*	\$37,525	
E Perkins St: S State St to Oak Manor Dr		R26		\$30,000	
S Dora: W Church St to W Mill St	R22	R26		\$45,675	
S Orchard Ave: E Perkins to E Gobbi St	R22			\$7,125	
Project 4: Improve Safety at Roadway Segments.					
S State St: Beacon Ln to W Perkins St		R36PB		\$13,450	38.16
Airport Park Blvd: Talmage Rd to Entrance to Costco Warehouse	R35PB	R36PB		\$455,400	
S Dora: W Church St to W Mill St			R38PB	\$24,000	

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Notes: *Improvements are not included in the estimated cost per location but recommended at respective location. CM – countermeasure. B/C ratio is the dollar amount of benefits divided by the cost of the countermeasure.

NS01NT – Add intersection lighting.

NS08 – Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs.

NS09 – Upgrade intersection pavement markings.

NS23PB – Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features).

NS24PB – Install RRFB

R22 – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning).

R26 – Install dynamic/variable speed warning signs.

R35PB – Install sidewalk/pathway (to avoid walking along roadway).

R36PB – Install/upgrade pedestrian crossing (with enhanced safety features).

R38PB – Install Rectangular Rapid Flashing Beacon (RRFB).

Table 18 mentions projects funded by the Highway Safety Improvement Program (HSIP) that the City submitted for consideration during the 2022 HSIP Cycle 11 funding round. These projects were awarded funding for Cycle 11.

Table 18. Cycle 11 HSIP Applications

Location	CM1	CM2	CM3	Total Estimated Project Cost	HSIP Funds Requested	B/C Ratio
HSIP Application 1: Systemic Improvements at Signalized Intersections - Install traffic signal hardware, improve signal timing and coordination and provide protected left-turn phases.						
Washington Ave and Hastings Ave and S State St	S02	S03	S07	\$302,900	\$151,450	36.87
Perkins St and South Orchard Ave	S02	S03				
Standley St and State St		S03				
East Gobbi and South Orchard Ave	S02	S03	S07			
Airport Park Boulevard and Talmage Road	S02	S03				
HSIP Application 2: Improve roadway lighting in two corridors and the following improvements in all 10 corridors: install and/or upgrade pedestrian crossings with enhanced safety features including the installation of Rectangular Rapid Flashing Beacons (RRFB).						
Perkins St: Hortense St to Redwood Hwy SR 101			R37PB	\$4,101,200	\$3,691,080	17.12
Gobbi St: S Dora St to Washo Dr		R35PB	R37PB			
Despina Dr: Capps Ln to Low Gap Rd		R35PB	R37PB			
State St: Beacon Ln to Ford Rd		R35PB				

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Location	CM1	CM2	CM3	Total Estimated Project Cost	HSIP Funds Requested	B/C Ratio
Main St: Norton St to E Perkins St		R35PB				
Observatory Ave: Marwen Dr to State St	R01	R35PB				
Brush Street	R01					
N Bush Street	R01	R35PB	R37PB			
Low Gap Road		R35PB	R37PB			
Airport Park Boulevard		R35PB				

Notes: For B/C ratio calculation, 5-year (2015-2019) collision data was utilized. Total estimated cost and Costs requested include contingency, PS&E, environmental and construction costs. These HSIP application followed LRSM 2022 countermeasure codes which are described below:

S02, Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number
S03, Improve signal timing (coordination, phases, red, yellow, or operation)
S07, Provide protected left turn phase (left turn lane already exists)
R01, Add Segment Lighting
R35PB, Install/upgrade pedestrian crossing (with enhanced safety features)
R37PB, Install Rectangular Rapid Flashing Beacon (RRFB)

These projects address critical safety improvements for the City. These projects have been further prioritized based on the goals and vision outlined in Chapter 1 in order to meet Strategy and Project Selection SS4A criteria. The six criteria for the prioritization are safety benefits, benefits to vulnerable road users, school safety impact, equity impact, public engagement, and ease of implementation. Each criterion is scored separately and then weighed to arrive at the final scores for each project, as described in **Table 19**. A project can receive a maximum score of 100. The project prioritization worksheets are available in **Appendix G**. **Table 20** presents the projects in the priority order.

Table 19. Prioritization Matrix

Criteria	Description	Weight
Safety Benefits	Safety benefits are evaluated using the Benefit-to-Cost (BCR) ratio. BCR is calculated based on five-year collision data and 2024 planning-level cost estimates, as per the HSIP norms. Projects are then grouped into three equal-range buckets based on the BCR and receive safety scores as follows: - Projects in the highest bucket - 100 - Projects in the Middle bucket - 50	40%

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Criteria	Description	Weight
	Projects in the Lowest bucket - 20	
Benefit to Vulnerable Road Users	Considers improvements benefiting pedestrians, bicyclists, transit users, or persons with disabilities. - Projects with benefits - 100 - Projects without benefits - 0	15%
School Safety Impact	Considers safety improvements on roadways and intersections within 1/4 mile of an existing school. - Projects in proximity to schools - 100 - Projects without proximity to schools - 0	10%
Equity Impact	Considers the location of a project entirely or partially in an equity-emphasis community (EEC). - Projects in EEC - 100 - Projects outside of EEC - 0	15%
Public Engagement	Considers projects that have garnered community and stakeholder support during the CSAP outreach process. - Projects with community support - 100 - Projects without community support - 0	10%
Ease of Implementation	Projects are scored based on the complexity of their countermeasures. For projects with multiple countermeasures, the lowest category score is applied. - High-ease improvements like signs, lights, striping, and crosswalks - 100 - Medium-ease improvements like sidewalks, medians, and new signals - 50 - Low-ease improvements requiring lane/geometry changes, right-of-way acquisition, or utility or drainage work – 20	10%

Table 20. Priority Project List

Priority	Project	Priority Score (out of 100)
1	Project 3: Improve Safety at Roadway Segments.	75
2	Project 1: Improve Safety at Non-Signalized Intersections.	75
3	Project 2: Improve Pedestrian and Bicycle Safety at Non-Signalized Intersections.	58
4	Project 4: Improve Safety at Roadway Segments.	53

8. Evaluation and Implementation

This chapter describes the steps the City may take to evaluate the success of this plan and steps needed to update the plan in the future. The LRS/AP is a guidance document and requires periodic updates to assess its efficacy and re-evaluate potential solutions. It is recommended to update the plan every two to five years in coordination with the identified safety partners. This document was developed based on community needs, stakeholder input, and collision analysis conducted to identify priority emphasis areas throughout the City. The implementation of strategies under each emphasis area would aim to reduce KSI collisions in the coming years.

Funding is a critical component of implementing any safety project. While the HSIP program is a common source of funding for safety projects, there are numerous other funding sources that could be pursued for such projects. Potential funding sources are listed below in **Table 21**.

Table 21. Potential Funding Sources

Funding Source	Funding Agency	Amount Available	Next Estimated Call for Projects	Applicable E's	Notes
Active Transportation Program	Caltrans, California Transportation Commission	~\$223 million per year	2026	Engineering, Education	Can use used for most active transportation related safety projects as well as education programs
Highway Safety Improvement Program	Caltrans	TBD	2024	Engineering	Most common grant source for safety projects
Surface Transportation Block Group Program	FHWA (Administered through MCTC)	Varies by FY	TBD	Engineering	Typically used for roadway projects
Office of Traffic Safety Grants	California Office of Traffic Safety	Varies by grant	Closes January 31 st annually	Education, Enforcement, Emergency Response	10 grants available to address various components of traffic safety
Affordable Housing and Sustainable Communities Program	Strategic Growth Council and Dept. of Housing and Community Development	~\$405 million	TBD	Engineering, Education	Must be connected to affordable housing projects; typically focuses on bike/ped infrastructure/ programs

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Funding Source	Funding Agency	Amount Available	Next Estimated Call for Projects	Applicable E's	Notes
Urban Greening	California Natural Resources Agency	\$23.75 million	TBD	Engineering	Focused on bike/ pedestrian infrastructure and greening public spaces
Local Streets and Road Maintenance and Rehabilitation	CTC (distributed to local agencies)	\$1.5 billion statewide	N/A; distributed by formula	Engineering	Typically pays for road maintenance type projects
RAISE Grant	USDOT	~\$1 billion	TBD	Engineering	Typically used for larger infrastructure projects
Sustainable Transportation Equity Project	California Air Resources Board	~\$19.5 million	TBD; most recent call in 2023	Engineering, Education	Targets projects that will increase transportation equity in disadvantaged communities
Safe Street for All (SS4A)	USDOT	\$200k - \$50 million	2026	Engineering	Two types of SS4A grants available: Action Plan Grants and Implementation Grants
Transformative Climate Communities	Strategic Growth Council	~\$90 million	TBD; most recent call in 2022	Engineering	Funds community-led projects that achieve major reductions in greenhouse gas emissions in disadvantaged communities

Implementation

The LRS/AP document provides engineering, education, enforcement, equity and emergency medical service related countermeasures that can be implemented throughout the City to reduce KSI collisions. It is recommended that the City of Ukiah implement the selected projects high-collision locations in coordination with other projects proposed for the City's infrastructure development in their future Capital Improvement Plans.

The success of the LRS/AP can be achieved by fostering communication among the City and the safety partners.

Monitoring and Evaluation

For the success of the LRS/AP, it is crucial to monitor and evaluate the E-strategies continuously. Monitoring and evaluation help provide accountability, ensures the effectiveness of the countermeasures for each emphasis area, and help making decisions on the need for new strategies. The process would help the City make informed decisions regarding the implementation plan's progress and accordingly, update the goals and objectives of the plan.

After implementing countermeasures, the strategies should be evaluated annually as per their performance measures. The evaluation should be recorded in a before-after study to validate the effectiveness of each countermeasure.

Pre-Implementation Data Collection

Before any safety project is implemented, comprehensive baseline data should be collected within the project area to enable future before/after comparison analysis. Data to be compiled includes:

Collision Data:

- Collision types (pedestrian, angle, rear-end, etc.)
- Collision severity levels
- Locations and corridors
- Contributing factors

Traffic Data:

- Vehicle traffic volumes
- Pedestrian and bicycle traffic counts

Operations Data:

- 85th percentile and pace speeds
- Vehicle/pedestrian/bicycle conflict observations
- Observable road user behavior and compliance levels

Statistical Analysis Methodology

Appropriate statistical techniques can be applied to account for regression-to-mean effects, traffic volume changes over time, and other potential biases. Recommended approaches include Empirical Bayes method and advanced regression modeling.

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Using these techniques, an estimate of the predicted long-term safety performance should be calculated assuming no safety improvements were implemented. This becomes the baseline for comparison.

Post-Implementation Data Collection

After allowing sufficient time following project implementation (typically 1-3 years), the same scope of "after" data can be re-collected to enable before/after comparison.

Performance Evaluation Measures

The following key safety performance measures can be evaluated by comparing predicted vs. actual post-implementation conditions:

1. Total collisions
2. Fatal and serious injury collisions (KSI)
3. Collisions by type (pedestrian, intersection, roadway departure, etc.)
4. Operating speeds
5. Conflicts between modes (vehicle/pedestrian/bicycle)

Supplemental Measures for Behavioral Safety Projects

For safety initiatives focused on influencing driver, pedestrian, or bicyclist behavior (e.g. education campaigns, enforcement activities), leading indicators of compliance can be tracked, such as:

1. Speeding violations
2. Impaired driving arrests/citations
3. Distracted driving violations
4. Pedestrian and bicycle traffic counts
5. Observed yielding/compliance behavior

Project Evaluation Report

All findings from the before/after analysis should be documented in a comprehensive Project Evaluation Report containing:

- Project scope and description of implemented countermeasures
- Implementation costs
- Data collection processes and sources
- Statistical analysis methodology
- Summary of before/after performance results
- Assessment of whether intended benefits were achieved
- Lessons learned and recommendations
- Supplemental policy, program or design guidance as applicable

Continual Monitoring Process

To ensure ongoing effectiveness evaluation, city should establish:

- Routine schedules for MOE (Measure of Effectiveness) data collection and analysis
- Designated staff responsibilities for MOE activities
- Integration of MOE findings into annual performance reviews
- Mechanism for refining project approach based on evaluation results

LRS/AP Update

The LRS/AP is a guidance document and is recommended to be updated every two to five years after adoption. After monitoring performance measures focused on the status and progress of the E's strategies in each emphasis area, the next LRS/AP update can be tailored to resolve any continuing safety problems.

Aside from the Technical Advisory Committee and City of Ukiah's review and monitoring of the projects as outlined in Chapter 2, an annual stakeholder meeting with the safety partners is also recommended to discuss the progress for each emphasis area and oversee the implementation plan. The document should then be updated as per the latest collision data, emerging trends, and the E's strategies' progress and implementation.

A copy of the final LRS/AP will be located on Mendocino Council of Governments (MCOG) website at <https://www.mendocinocog.org/>

Appendices:

APPENDIX A: MATRIX OF PLANNING GOALS, POLICIES, AND PROJECTS

Matrix of Planning Goals, Policies, and Projects

Document	Highlights
City of Ukiah General Plan (2009)	• Goal CT-1: Consider all types of circulation and transportation issues in land use decisions • Goal CT-3: Design new development and redevelopment projects to be as accessible by foot, bicycle, and transit as they are by auto. • Policy CT-6.4: Promote safe bicycle usage. • Implementation Measure CI-6.4(a): Through the Public Safety Department, maintain an educational program promoting bicycle use and bicycle safety. • Policy CJ'-7.1: Treat pedestrian access as an integrated part of all road improvements within the City and within urbanized development areas of the County. • Implementation Measure CT-7.l(b): Pedestrian walkways shall be integrated and designed to provide direct access between areas
Ukiah Bicycle & Pedestrian Master Plan (2015)	• Safety and Education Policy 1-1: Utilize the City's Traffic Engineering Committee for the identification, analysis, and resolution of safety issues related to bicycle and pedestrian travel within the City of Ukiah. The Traffic Engineering Committee includes representatives from the Mendocino Transit Authority, the public, the Public Works Department, Police Department, Planning Department, and other relevant departments. • Safety and Education Policy 1-2: Expand and support school commute safety education, marketing, and physical improvements, including educational curriculum, on-bike training, safety handbooks, helmet subsidy programs, marketing materials on the benefits of bicycling and walking, and a 'toolbox', of physical measures to improve safety on school commute routes for bicyclists and pedestrians. • Safety and Education Policy 1-3: Accommodate the needs of all travelers through a "Complete Streets" approach to designing new transportation improvements. Complete Streets are roadways designed to facilitate safe, comfortable, and efficient travel for all roadway users. Complete Streets accommodations include bike lanes sidewalks, crosswalks, curb ramps, etc. • Safety and Education Policy 1-4: Where possible, incorporate traffic calming techniques as described in published documents produced by organizations such as the Institute of Transportation Engineers, including measures to manage vehicle speeds and flows - such as traffic circles, traffic diverters, and raised crosswalks – so as to maximize the safety of bicycle and pedestrian movement in residential and commercial neighborhoods. • Safety and Education Policy 1-5: Educate adults on the rights and responsibilities of bicyclists and pedestrians through public information, and education of drivers, cyclists, and pedestrians. Support adult bicycle training courses, and inclusion of bicycle and pedestrian laws as part of traffic school curriculum and driving test questions. Produce a

City of Ukiah
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Document	Highlights
	safety brochure that illustrates basic rules of the road and other good practices for distribution in schools and libraries. • Safety and Education Policy 1-6: Coordinate with the Ukiah Police Department to enhance enforcement of existing bicycle and pedestrian laws. • Safety and Education Policy 2-1: Monitor bicycle and pedestrian commute modes and accident statistics over the life of this Plan to measure the effectiveness of improvements and achievement of stated objectives. Prepare annual summary reports on mode split (the percentage of various travel modes used by citizens for work trips, shopping trips, etc.) and accident data.
City of Ukiah Safe Routes to School Plan (2014)	Projects • Reduced and Extended School Zone Speed Limits • Dora Street and Gobbi Street Intersection Improvements • Gobbi Street Bike Lanes • “Level 1” Uncontrolled Crosswalk Enhancement • Grove Avenue/Bush Street Buffered Bike Lanes • Dora Street Buffered Bike Lanes • North Bush Street/Low Gap Roundabout • Enhanced Uncontrolled Crosswalks • Helen Ave and Washington Ave Class III Shared Bikeways • Despina Drive/Low Gap Intersection Improvements • Clay/Peach Street Sidewalk and Bikeway Gap Closure • East Perkins Street Road Diet Study • Leslie Street Curb Extensions and Sidewalk Improvements • School Parking Lot Redesign Options • North Bush Street – Island Pathway Access Upgrades • Arlington Drive at North Bush Street Enhanced Crosswalk and Curb Extensions • Gobbi Street at Oak Street Curb Ramps and Crosswalk • Mendocino Drive at Alice Avenue Crossing Improvement • Despina Drive and Capps Lane Enhanced Intersection • Low Gap Road/Orr Creek Pathway Study
Ukiah Downtown Streetscape Improvements Plan (2009)	Projects • Gobbi Street Intersection: Enhanced intersection treatment. • Between Gobbi Street and Mill Street: Raised Median • Mill Street Intersection: Enhanced crosswalks to highlight pedestrian crossing. • Seminary Avenue Intersection: Enhanced intersection treatment and bulb-outs to reduce crossing distance. • Between Stephenson Street and Church Street: Raised median/pedestrian refuge island. • Perkins Street Intersection: Signal timing changes and enhanced intersection treatment. • Standley Street Intersection: Signal timing changes. • Standley Street and Henry Street: Conversion of one-way to two-way. • Between Smith Street and Henry Street: raised median.

Document	Highlights
	- Gibson Creek Crossing: Gateway and pedestrian crossing with bollards or street lights. The planned alterations to Main Street include: - Gobbi Street Intersection: Enhanced intersection treatment. - Cleveland Lane Intersection: New crosswalks. - Clay Street to Norton Street: Dedicated bike lanes. - Smith Street Intersection: Enhanced Crosswalks. - Continuous sidewalks to fill in existing gaps. - Widened sidewalks along State Street in order to accommodate new planters, trees, street furniture, outdoor restaurant/café seating, and other pedestrian amenities.
The Ukiah Valley Area Plan (2010)	Goal CT-2: Enhance pedestrian, bicycle, and transit connectivity between land use types. Policy CT-2.1: Integrate pedestrian access into the circulation system of the urbanized areas of the Ukiah valley. Implementation Measure CT-2.1 (a): The land development code shall develop pedestrian access design standards that address: - Accessibility to the disabled, with appropriate grades, ramps, and curb cuts. - Separation of sidewalks or paths from auto travel lanes by an appropriate combination of grade separations, parking lanes or landscaping when feasible. - Requirements for landscaped areas and tree shading when appropriate and with respect to solar access. - Streetscape amenities such as lighting. Implementation Measure CT-2.1 (b): Pedestrian Walkways: To the extent allowed under state law, require private development projects provide pedestrian walkways that provide direct access between key destinations. Implementation Measure CT-2.1 (c): When considering new development projects, the County shall require bicycle and pedestrian access across the property to provide connections for a route between the center of Calpella (along North State Street) and the Brush Street Triangle or between the City and the center of Talmage. The County will request that MCOG develop a map of these pedestrian linkages and include that map in the next Regional Transportation Plan update. Policy CT-2.2: Develop a safe and integrated bicycle transportation system in order to promote the use of bicycles as a viable and attractive alternative to the automobile. Implementation Measure CT-2.2 (a): Bicycle Route Standards. The land development code shall include standards for safe bicycle lanes or paths, as appropriate, for development projects. Consider bicycle safety in the design of roadways, intersections, and rights-of way encroachments. Implementation Measure CT-2.2 (b) Bicycle Route Requirements. Require that roads linking residential areas with schools, shopping, services, or employment be designed to include bicycle lanes.

Document	Highlights
	• Implementation Measure CT-2.2 (c): Bicycle Route Construction. Construct and maintain bicycle routes and lanes in accordance with the Area Plan Bicycle Route map and the Mendocino County Regional Bikeway Plan. Seek funds through MCOG for the construction of bicycle lanes on routes identified in a County bicycle plan, including in conjunction with County road improvement or widening projects. • Ensure that bicycle routes connect residential, retail, and employment centers. • Work with Human Health Services (HHS) in applying for funding to plan and implement bicycle projects. • Implementation Measure CT-2.2 (d): Bicycle Parking. Adopt and implement standards for safe and secure bike storage in new development. Develop incentives to place bike storage facilities at exiting places of employment and parking lots. • Implementation Measure CT-2.2 (e): Bicycle Route Updates. Periodically update plans to extend the system of bicycle lanes and routes in appropriate locations throughout the Ukiah Valley. • Policy CT-2.3: Coordinate transportation planning needs, developer obligations, and construction responsibilities. • Implementation Measure CT-3.2 (d): Mitigation and Impact Fees. Require development impact fees, development agreements and other secured funding sources where necessary to fund transportation improvements to maintain an acceptable level of service on County roads and for all transportation modes. • Implementation Measure CT-3.2 (e): Travel Demand Management Strategies. Mitigate trips generated by new development using travel demand management strategies, such as: free transit passes, mixed use development with concentrated employment centers and residential communities, efficient walking, and bicycle connections.
Mendocino County (MCOG/GRTA) Rail-with-Trail Plan (2012)	• GOAL 1: Improve Non-Motorized Mobility and Accessibility - Expand and enhance non-motorized mobility for persons living in, working in, and visiting Mendocino County, including access to and connections with other transportation modes. • GOAL 2: Preserve the Transportation System - Design a RWT that will efficiently utilize the NWP corridor, support the region's current blueprint planning efforts which calls for improved options for bicycling, walking, and equestrians, and allow for future rail service along the NWP line. • GOAL 3: Enhance Public Safety and Security - Design the RWT segments to respond to safety and security needs as well as neighborhood privacy concerns. • GOAL 4: Reflect Community Values - Promote community values and identity, including use by multiple user groups, such as bicyclists, pedestrians, and equestrians (where feasible) and incorporate public involvement in decision making processes.

Document	Highlights
	- GOAL 5: Enhance the Environment - Assist in greenhouse gas reduction by encouraging and facilitating non-motorized vehicle trips. - GOAL 6: Allow for Regional Connections- Provide non-motorized connections to adjacent streets and land uses including transit, shopping, institutional, office, and residential areas. - GOAL 7: Implementation Funding - Develop a funding, financing, and implementation strategy identifying eligible grant sources and/or potential development requirements supporting construction. Projects - Segment S10 from East Gobbi Street to Clara Avenue: The southern half of this segment between Gobbi Street and Perkins Street is funded for construction in 2015. - Segment S9 from Norgard Lane to East Gobbi Street: Along with Segment S10, this paved pathway would connect NWP Rail Trail, Phase 1 (East Gobbi Street-Clara Avenue) to the south and provide a connection from the south and north ends of the city. - Segment S11 from Clara Avenue to Brush Street: This segment would connect to Mazzoni Street which provides direct access to the current campus of Redwood Academy/Accelerated Achievement Academy.
Mendocino County Safe Routes to School Plan (2014)	Goals Goal 1: Improve the health of Mendocino County children by focusing attention on and increasing active travel to school. <i>Objective A: Increase the number of students walking and bicycling to school</i> <i>Objective B: Annually increase the number of children exposed to Safe Routes to School education and encouragement activities</i> <i>Objective C: Increase the number of county residents that are familiar with Safe Routes to School and resources available</i> Goal 2: Support school travel routes that are accommodating, safe, convenient, and “complete” for all modes. <i>Objective A: Increase funding for walking, bicycling and transit investments near schools</i> <i>Objective B: Review school connections and potential Safe Routes to School needs during project development for all county roads</i> <i>Objective C: Incorporate Safe Routes to School policies, priorities, and design guidance into future county general plan updates</i> <i>Objective D: Limit traffic speeds and volumes along key routes to schools</i> Goal 3: Maximize interagency cooperation in all Safe Routes to School project and programs in an effort to build a sustainable program.

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Document	Highlights
	<i>Objective A: Establish an ongoing countywide Safe Routes to School program that serves all interested schools in Mendocino County.</i> <i>Objective B: Seek and secure outside grant funding for Safe Routes to School programs and activities, and leverage local funding for school area improvements</i>
Mendocino County Regional Transportation Plan & Active Transportation Plan (2022)	Goals: • Provide an assessment of the current modes of transportation as well as identify potential new travel options for the region. • Predict future needs for travel and goods movement. • Identify specific actions and improvements in order to address the needs of mobility and accessibility. • Identify guidance and documentation of public policy decisions by local, regional, state and federal officials regarding transportation expenditures and financing. • Identify needed transportation improvements to serve as a foundation for development of other programs such as the Regional Transportation Improvement Program (RTIP). • Promote consistency between other transportation plans developed by local, state and federal agencies in responding to statewide and interregional transportation issues and needs. • Involve community-based organizations as part of the public, federal, state and local agencies, tribal governments, as well as elected officials, early in the transportation planning process so as to include them in discussions and decisions on the social, economic, air quality and environmental issues related to transportation.
Mendocino Council of Governments 2024 Regional Transportation Improvement Program (2024)	Projects: • North State Street Intersection and Interchange Improvements, Ukiah - Along North State Street, from Ford Road/Empire Drive to the northbound on/off-ramps of U.S. 101. Install medians, landscape and aesthetic features, and a roundabout at the KUKI Lane intersection • Roundabout at Low Gap and North Bush, Ukiah - Construction of a new roundabout to replace an all way STOP controlled intersection • Ukiah Downtown Streetscape, Ph 2 - Will encourage walking and biking in downtown commercial area along major arterial, increasing access to business, and beautifying downtown. In addition to implementing several objectives of the RTP, this project implements the Ukiah Downtown Streetscape improvement Plan, approved by the City of Ukiah in 2009. It is also consistent with the Ukiah Bicycle and Pedestrian Master Plan. This will add to downtown streetscape improvements funded through other sources.

APPENDIX B. CONSOLIDATED COLLISION DATABASE

CASE_ID	ACCIDENT_YEAR	PROC_DATE	JURIS	COLLISION_DATE	COLLISION_TIME	Hour_
9446171	2021	24-05-2022 00:00:00	2303	9/10/2021 0:00	1800	18
9519915	2022	13-02-2023 00:00:00	2303	24-12-2022 00:00:00	1725	17
9374421	2021	17-12-2021 00:00:00	2303	3/10/2021 0:00	653	6
9425877	2021	29-03-2022 00:00:00	2303	21-11-2021 00:00:00	1839	18
9500485	2022	6/10/2022 0:00	2303	7/8/2022 0:00	2319	23
9050813	2020	20-03-2020 00:00:00	2303	8/1/2020 0:00	1140	11
9106980	2020	16-09-2020 00:00:00	2303	27-05-2020 00:00:00	1916	19
9121510	2020	21-07-2020 00:00:00	2303	7/2/2020 0:00	732	7
9378644	2021	21-12-2021 00:00:00	2303	22-09-2021 00:00:00	2054	20
9484757	2022	29-08-2022 00:00:00	2303	9/7/2022 0:00	1328	13
9500295	2022	18-11-2022 00:00:00	2303	3/9/2022 0:00	924	9
9500579	2022	10/10/2022 0:00	2303	9/9/2022 0:00	1539	15
9525274	2022	13-02-2023 00:00:00	2303	15-11-2022 00:00:00	1153	11
9526711	2022	14-03-2023 00:00:00	2303	21-10-2022 00:00:00	2345	23
9068003	2020	12/3/2020 0:00	2303	5/1/2020 0:00	1029	10
9120552	2020	29-07-2020 00:00:00	2303	1/4/2020 0:00	1459	14
9120626	2020	31-07-2020 00:00:00	2303	25-02-2020 00:00:00	1457	14
9121511	2020	16-07-2020 00:00:00	2303	13-02-2020 00:00:00	819	8
9148846	2020	18-09-2020 00:00:00	2303	18-07-2020 00:00:00	1838	18
91668611	2021	3/1/2022 0:00	9150	19-12-2021 00:00:00	22	0
9243859	2021	15-04-2021 00:00:00	2303	11/2/2021 0:00	1106	11
9243900	2020	21-04-2021 00:00:00	2303	31-12-2020 00:00:00	1143	11
9249300	2020	22-04-2021 00:00:00	2303	11/12/2020 0:00	1637	16
9278073	2021	12/7/2021 0:00	2303	3/5/2021 0:00	2236	22
9278751	2021	17-06-2021 00:00:00	2303	13-04-2021 00:00:00	1507	15
9321861	2021	29-09-2021 00:00:00	2303	16-07-2021 00:00:00	1307	13
9322058	2021	29-09-2021 00:00:00	2303	2/7/2021 0:00	1951	19
9325300	2021	12/10/2021 0:00	2303	28-06-2021 00:00:00	1133	11
9343729	2021	22-10-2021 00:00:00	2303	2/6/2021 0:00	1130	11
9414462	2022	17-03-2022 00:00:00	2303	12/1/2022 0:00	1436	14
9416678	2022	30-03-2022 00:00:00	2303	8/1/2022 0:00	1445	14
9416768	2022	12/4/2022 0:00	2303	13-01-2022 00:00:00	1749	17
9484870	2022	29-08-2022 00:00:00	2303	25-06-2022 00:00:00	1013	10
9500292	2022	10/10/2022 0:00	2303	14-07-2022 00:00:00	1724	17
9509881	2022	7/12/2022 0:00	2303	14-10-2022 00:00:00	1508	15
9509882	2022	7/12/2022 0:00	2303	19-10-2022 00:00:00	1025	10
9509883	2022	7/12/2022 0:00	2303	28-10-2022 00:00:00	1127	11
9510317	2022	8/12/2022 0:00	2303	6/9/2022 0:00	1742	17
9203244	2020	6/1/2021 0:00	2303	3/7/2020 0:00	1140	11
9243665	2021	22-04-2021 00:00:00	2303	15-01-2021 00:00:00	1542	15
9414404	2021	28-03-2022 00:00:00	2303	30-11-2021 00:00:00	1720	17
9439015	2022	26-05-2022 00:00:00	2303	28-03-2022 00:00:00	2109	21
9441468	2022	24-05-2022 00:00:00	2303	11/3/2022 0:00	858	8
9457182	2022	12/7/2022 0:00	2303	27-05-2022 00:00:00	1454	14

CASE_ID	OFFICER_ID	REPORTING_DISTRICT	DAY_OF_WEEK	CHP_SHIFT	POPULATION	CNTY_CITY_LOC
9446171	98	2303	6	5	3	2303
9519915		2303	6	5	3	2303
9374421		2303	7	5	3	2303
9425877	498	2303	7	5	3	2303
9500485	498	2303	7	5	3	2303
9050813	105	2303	3	5	3	2303
9106980	176	2303	3	5	3	2303
9121510			5	5	3	2303
9378644		2303	3	5	3	2303
9484757		2303	6	5	3	2303
9500295	4016		6	5	3	2303
9500579			5	5	3	2303
9525274		2303	2	5	3	2303
9526711		2303	5	5	3	2303
9068003	105	2303	7	5	3	2303
9120552	100	2303	3	5	3	2303
9120626	100	2303	2	5	3	2303
9121511			4	5	3	2303
9148846	4898	2303	6	5	3	2303
91668611	21816		7	3	3	2303
9243859			4	5	3	2303
9243900		2303	4	5	3	2303
9249300			5	5	3	2303
9278073		2303	1	5	3	2303
9278751		2303	2	5	3	2303
9321861	4016		5	5	3	2303
9322058	498	2303	5	5	3	2303
9325300		2303	1	5	3	2303
9343729	4016		3	5	3	2303
9414462		2303	3	5	3	2303
9416678			6	5	3	2303
9416768	109	2303	4	5	3	2303
9484870		2303	6	5	3	2303
9500292	498	2303	4	5	3	2303
9509881			5	5	3	2303
9509882			3	5	3	2303
9509883			5	5	3	2303
9510317	106	2303	2	5	3	2303
9203244		2303	5	5	3	2303
9243665			5	5	3	2303
9414404	4101	2303	2	5	3	2303
9439015		2303	1	5	3	2303
9441468		2303	5	5	3	2303
9457182		2303	5	5	3	2303

CASE_ID	SPECIAL_COND	BEAT_TYPE	CHP_BEAT_TYPE	CITY_DIVISION_LAPD	CHP_BEAT_CLASS
9446171	0	0	0		0
9519915	0	0	0		0
9374421	0	0	0		0
9425877	0	0	0		0
9500485	0	0	0		0
9050813	0	0	0		0
9106980	0	0	0		0
9121510	0	0	0		0
9378644	0	0	0		0
9484757	0	0	0		0
9500295	0	0	0		0
9500579	0	0	0		0
9525274	0	0	0		0
9526711	0	0	0		0
9068003	0	0	0		0
9120552	0	0	0		0
9120626	0	0	0		0
9121511	0	0	0		0
9148846	0	0	0		0
91668611	0	2			2
9243859	0	0	0		0
9243900	0	0	0		0
9249300	0	0	0		0
9278073	0	0	0		0
9278751	0	0	0		0
9321861	0	0	0		0
9322058	0	0	0		0
9325300	0	0	0		0
9343729	0	0	0		0
9414462	0	0	0		0
9416678	0	0	0		0
9416768	0	0	0		0
9484870	0	0	0		0
9500292	0	0	0		0
9509881	0	0	0		0
9509882	0	0	0		0
9509883	0	0	0		0
9510317	0	0	0		0
9203244	0	0	0		0
9243665	0	0	0		0
9414404	0	0	0		0
9439015	0	0	0		0
9441468	0	0	0		0
9457182	0	0	0		0

CASE_ID	BEAT_NUMBER	PRIMARY_RD	SECONDARY_RD	DISTANCE	DIRECTION
9446171	2	EAST GOBBI ST	SOUTH ORCHARD AV	766	E
9519915		S DORA ST	W PERKINS ST	118	S
9374421	12	SOUTH STATE ST	HASTINGS AV	290	S
9425877	2	SOUTH STATE ST	OBSERVATORY AV	80	S
9500485	1	NORTH STATE ST	GARRETT DR	163	S
9050813		NORTH STATE ST	MAGNOLIA ST	149	S
9106980	2	SOUTH ORCHARD AV	PEACH ST	24	E
9121510	1	NORTH STATE ST	MAGNOLIA ST	1	S
9378644	1	EAST GOBBI ST	SOUTH STATE ST	287	E
9484757	2	APPLE AV	CHERRY ST	160	N
9500295	1	SOUTH STATE ST	TALMAGE RD	32	N
9500579	1	SCOTT ST	N SCHOOL ST	0	
9525274	2	SOUTH STATE ST	WASHINGTON AV	122	N
9526711		SOUTH ORCHARD AV	PEACH ST	44	N
9068003	1	NORTH MAIN ST	EAST PERKINS ST	0	
9120552	1	NORTH STATE ST	MAGNOLIA ST	248	S
9120626	1	NORTH OAK ST	WEST SMITH ST	0	
9121511	2	EAST GOBBI ST	S ORCHARD ST	191	E
9148846	2	SOUTH STATE ST	WABASH AV	254	N
91668611	901	GOBBI ST	MAIN ST	144	W
9243859	2	EAST PERKINS ST	SOUTH ORCHARD AV	37	W
9243900	1	NORTH STATE ST	MAGNOLIA ST	203	S
9249300	2	SOUTH STATE ST	S ENTRANCE TO QUALITY INN	17	S
9278073	2	AIRPORT PARK BL	COMMERCE DR	485	S
9278751	2	SOUTH STATE ST	FREITAS AV	107	S
9321861	2	S DORA ST	JONES ST	23	N
9322058	2	SOUTH STATE ST	WABASH AV	177	N
9325300	2	AIRPORT PARK BL	AIRPORT PARK BL 1100	17	W
9343729	2	AIRPORT PARK BL	COMMERCE DR	19	E
9414462		MAIN ST	PERKINS ST	0	
9416678	2	S DORA ST	WEST MILL ST	0	
9416768	1	NORTH STATE ST	SCOTT ST	250	S
9484870	2	EAST PERKINS ST	SOUTH ORCHARD AV	204	W
9500292	2	AIRPORT PARK BL	COMMERCE DR	375	N
9509881	1	EAST PERKINS ST	RT 101	53	E
9509882	2	SOUTH STATE ST	OBSERVATORY AV	0	
9509883	2	AIRPORT PARK BL	PRO COMMERCE DR	350	S
9510317	2	SOUTH STATE ST	OBSERVATORY AV	0	
9203244	2	AIRPORT PARK BL	AIRPORT PARK BL 1200	3	W
9243665	1	EAST PERKINS ST	SOUTH ORCHARD AV	116	W
9414404	2	SOUTH STATE ST	OBSERVATORY AV	0	
9439015	1	SOUTH STATE ST	OBSERVATORY AV	0	
9441468	1	NORTH STATE ST	FORD ST	263	S
9457182	2	AIRPORT PARK BL	TALMAGE RD	405	S

CASE_ID	INTERSECTION	Intersection_TJKM	WEATHER_1	WEATHER_2	STATE_HWY_IND
9446171	N	N	A	-	N
9519915	N	Y	A	-	N
9374421	N	N	A	-	N
9425877	N	Y	A	-	N
9500485	N	Y	A	-	N
9050813	N	Y	B	-	N
9106980	-	Y	A	-	N
9121510	N	Y	A	-	N
9378644	N	N	A	-	N
9484757	N	Y	A	-	N
9500295	N	Y	A	-	N
9500579	Y	Y	A	-	N
9525274	N	Y	A	-	N
9526711	N	Y	A	-	N
9068003	Y	Y	B	C	N
9120552	N	Y	A	-	N
9120626	Y	Y	A	-	N
9121511	N	Y	A	-	N
9148846	N	N	A	-	N
91668611	N	Y	B	-	N
9243859	N	Y	B	C	N
9243900	N	Y	A	-	N
9249300	N	Y	C	-	N
9278073	N	N	A	-	N
9278751	N	Y	A	-	N
9321861	N	Y	A	-	N
9322058	N	Y	A	-	N
9325300	N	Y	A	-	N
9343729	N	Y	A	-	N
9414462	Y	Y	A	-	N
9416678	Y	Y	A	-	N
9416768	N	Y	A	-	N
9484870	N	Y	A	-	N
9500292	N	N	A	-	N
9509881	N	Y	A	-	N
9509882	Y	Y	A	-	N
9509883	N	N	A	-	N
9510317	Y	Y	A	-	N
9203244	N	Y	A	-	N
9243665	N	Y	B	-	N
9414404	Y	Y	A	-	N
9439015	Y	Y	B	-	N
9441468	N	N	A	-	N
9457182	N	N	A	-	N

CASE_ID	CALTRANS_COUNTY	CALTRANS_DISTRICT	STATE_ROUTE	ROUTE_SUFFIX	POSTMILE_PREFIX
9446171					
9519915					
9374421					
9425877					
9500485					
9050813					
9106980					
9121510					
9378644					
9484757					
9500295					
9500579					
9525274					
9526711					
9068003					
9120552					
9120626					
9121511					
9148846					
91668611					
9243859					
9243900					
9249300					
9278073					
9278751					
9321861					
9322058					
9325300					
9343729					
9414462					
9416678					
9416768					
9484870					
9500292					
9509881					
9509882					
9509883					
9510317					
9203244					
9243665					
9414404					
9439015					
9441468					
9457182					

CASE_ID	POSTMILE	LOCATION_TYPE	RAMP_INTERSECTION	SIDE_OF_HWY	TOW_AWAY
9446171					Y
9519915					N
9374421					Y
9425877					N
9500485					Y
9050813					Y
9106980					Y
9121510					N
9378644					Y
9484757					Y
9500295					N
9500579					N
9525274					Y
9526711					N
9068003					N
9120552					Y
9120626					N
9121511					Y
9148846					N
91668611					Y
9243859					N
9243900					Y
9249300					Y
9278073					N
9278751					N
9321861					Y
9322058					Y
9325300					Y
9343729					Y
9414462					N
9416678					N
9416768					Y
9484870					N
9500292					N
9509881					Y
9509882					Y
9509883					N
9510317					N
9203244					Y
9243665					Y
9414404					Y
9439015					N
9441468					Y
9457182					Y

CASE_ID	COLLISION_SEVERITY	NUMBER_KILLED	NUMBER_INJURED	PARTY_COUNT
9446171	4	0	1	1
9519915	2	0	1	2
9374421	2	0	1	2
9425877	4	0	1	2
9500485	2	0	2	3
9050813	3	0	1	3
9106980	3	0	1	2
9121510	4	0	1	2
9378644	4	0	1	3
9484757	2	0	1	1
9500295	4	0	2	3
9500579	2	0	1	2
9525274	4	0	1	3
9526711	2	0	1	2
9068003	4	0	1	2
9120552	4	0	1	2
9120626	2	0	1	2
9121511	4	0	1	2
9148846	4	0	1	2
91668611	2	0	2	2
9243859	4	0	1	2
9243900	4	0	1	2
9249300	4	0	1	3
9278073	3	0	1	1
9278751	3	0	1	2
9321861	4	0	1	2
9322058	3	0	1	2
9325300	4	0	1	2
9343729	4	0	1	2
9414462	2	0	1	2
9416678	2	0	1	2
9416768	4	0	1	2
9484870	4	0	1	2
9500292	3	0	1	2
9509881	2	0	1	2
9509882	2	0	1	2
9509883	2	0	1	2
9510317	3	0	1	2
9203244	3	0	1	1
9243665	4	0	1	3
9414404	4	0	2	2
9439015	2	0	1	2
9441468	3	0	1	2
9457182	4	0	1	1

CASE_ID	PRIMARY_COLL_FACTOR	PCF_CODE_OF_VIOL	PCF_VIOL_CATEGORY	PCF_VIOLATION
9446171	A	-	1	23153
9519915	A	-	3	22350
9374421	A	-	1	23152
9425877	A	-	11	21954
9500485	A	-	1	23153
9050813	A	-	8	22107
9106980	A	-	9	21801
9121510	A	-	8	22107
9378644	A	-	5	21460
9484757	A	-	3	22350
9500295	A	-	3	22350
9500579	A	-	12	22450
9525274	A	-	3	22350
9526711	A	-	10	21950
9068003	A	-	9	21802
9120552	A	-	8	22107
9120626	A	-	3	22350
9121511	A	-	8	22107
9148846	A	-	10	21950
91668611	A	-	1	23153
9243859	A	-	3	22350
9243900	A	-	8	22107
9249300	A	-	3	22350
9278073	A	-	8	22107
9278751	A	-	17	21235
9321861	A	-	3	22350
9322058	A	-	9	21804
9325300	A	-	9	21801
9343729	A	-	12	21453
9414462	A	-	10	21950
9416678	A	-	3	22350
9416768	A	-	8	22107
9484870	A	-	8	22107
9500292	A	-	11	21954
9509881	A	-	9	21801
9509882	A	-	9	21801
9509883	A	-	9	21804
9510317	A	-	8	22107
9203244	A	-	8	22107
9243665	A	-	8	22107
9414404	A	-	9	21801
9439015	A	-	10	21950
9441468	A	-	1	23152
9457182	A	-	3	22350

CASE_ID	PCF_VIOL_SUBSECTION	HIT_AND_RUN	TYPE_OF_COLLISION	MVIW	PED_ACTION
9446171	A	N	E	I	A
9519915		F	G	B	D
9374421	A	N	C	E	A
9425877	A	N	G	B	E
9500485	A	N	G	B	D
9050813		N	C	E	A
9106980	A	N	D	C	A
9121510		N	D	C	A
9378644	A	N	D	C	A
9484757		N	F	J	A
9500295		N	C	C	A
9500579	A	N	H	G	A
9525274		N	C	C	A
9526711	C	F	G	B	D
9068003	A	N	D	C	A
9120552		N	C	E	A
9120626		N	G	B	B
9121511		N	D	C	A
9148846	A	N	G	B	D
91668611	F	N	D	C	A
9243859		N	C	C	A
9243900		N	D	C	A
9249300		N	C	C	A
9278073		N	E	I	A
9278751	G	N	D	J	A
9321861		N	C	C	A
9322058	A	N	D	C	A
9325300	A	N	D	C	A
9343729	A	N	D	C	A
9414462		N	G	B	B
9416678		N	D	G	A
9416768	A	N	B	E	A
9484870		N	B	C	A
9500292	A	N	G	B	E
9509881		N	D	C	A
9509882		N	D	C	A
9509883		N	D	G	A
9510317		N	B	C	A
9203244		N	E	I	A
9243665		N	A	C	A
9414404	A	N	A	C	A
9439015	A	N	G	B	D
9441468	B	N	C	C	A
9457182		N	E	I	A

CASE_ID	ROAD_SURFACE	ROAD_COND_1	ROAD_COND_2	LIGHTING	CONTROL_DEVICE
9446171	A	H	-	A	D
9519915	A	C	-	B	D
9374421	A	H	-	B	D
9425877	A	H	-	C	D
9500485	A	H	-	C	D
9050813	B	H	-	A	D
9106980	A	H	-	A	D
9121510	A	H	-	A	D
9378644	A	H	-	C	A
9484757	A	H	-	A	D
9500295	A	H	-	A	A
9500579	A	H	-	A	A
9525274	A	H	-	A	A
9526711	A	H	-	C	D
9068003	B	H	-	A	A
9120552	A	H	-	A	D
9120626	A	H	-	A	A
9121511	A	H	-	A	A
9148846	A	H	-	A	D
91668611	A	H	-	C	D
9243859	B	H	-	A	A
9243900	A	H	-	A	D
9249300	B	H	-	B	A
9278073	A	H	-	C	D
9278751	A	H	-	A	D
9321861	A	H	-	A	D
9322058	A	H	-	A	D
9325300	A	H	-	A	D
9343729	A	H	-	A	A
9414462	A	H	-	A	A
9416678	A	H	-	A	A
9416768	A	H	-	C	D
9484870	A	H	-	A	D
9500292	A	H	-	A	D
9509881	A	H	-	A	A
9509882	A	H	-	A	D
9509883	A	H	-	A	D
9510317	A	H	-	A	A
9203244	A	H	-	A	D
9243665	A	H	-	A	A
9414404	A	H	-	C	D
9439015	B	H	-	C	D
9441468	A	H	-	A	D
9457182	A	H	-	A	D

CASE_ID	CHP_ROAD_TYPE	PEDESTRIAN_ACCIDENT	BICYCLE_ACCIDENT	MOTORCYCLE_ACCIDENT
9446171	0			
9519915	0	Y		
9374421	0			
9425877	0	Y		
9500485	0	Y		
9050813	0			
9106980	0			
9121510	0			
9378644	0			
9484757	0			Y
9500295	0			
9500579	0		Y	
9525274	0			
9526711	0	Y		
9068003	0			
9120552	0			
9120626	0	Y		
9121511	0			
9148846	0	Y		
91668611	0			
9243859	0			
9243900	0			
9249300	0			
9278073	0			
9278751	0			
9321861	0			
9322058	0			
9325300	0			
9343729	0			
9414462	0	Y		
9416678	0		Y	
9416768	0			
9484870	0			
9500292	0	Y		
9509881	0			Y
9509882	0			Y
9509883	0		Y	
9510317	0			
9203244	0			
9243665	0			
9414404	0			
9439015	0	Y		
9441468	0			
9457182	0			

CASE_ID	TRUCK_ACCIDENT	NOT_PRIVATE_PROPERTY	ALCOHOL_INVOLVED	STWD_VEHTYPE_AT_FAULT
9446171		Y	Y	-
9519915		Y		-
9374421	Y	Y	Y	A
9425877		Y		N
9500485		Y	Y	A
9050813		Y		D
9106980		Y		A
9121510		Y		A
9378644		Y		-
9484757		Y		C
9500295		Y		D
9500579		Y		L
9525274		Y		A
9526711		Y		-
9068003		Y		A
9120552		Y		A
9120626		Y		A
9121511		Y		A
9148846		Y		N
91668611		Y		A
9243859		Y		A
9243900		Y		D
9249300		Y		A
9278073		Y		A
9278751		Y		M
9321861		Y		A
9322058		Y		A
9325300		Y		A
9343729		Y		A
9414462		Y		A
9416678		Y		D
9416768		Y		-
9484870		Y		A
9500292		Y		N
9509881		Y		A
9509882		Y		A
9509883		Y		L
9510317		Y		-
9203244		Y		A
9243665		Y		A
9414404		Y		A
9439015	Y	Y	Y	F
9441468		Y	Y	A
9457182		Y		D

CASE_ID	CHP_VEHTYPE_AT_FAULT	COUNT_SEVERE_INJ	COUNT_VISIBLE_INJ	COUNT_COMPLAINT_PAIN
9446171		0	0	1
9519915		1	0	0
9374421	1	1	0	0
9425877	60	0	0	1
9500485	1	1	1	0
9050813	22	0	1	0
9106980	1	0	1	0
9121510	1	0	0	1
9378644		0	0	1
9484757	2	1	0	0
9500295	22	0	0	2
9500579	4	1	0	0
9525274	1	0	0	1
9526711	99	1	0	0
9068003	1	0	0	1
9120552	1	0	0	1
9120626	7	1	0	0
9121511	1	0	0	1
9148846	60	0	0	1
91668611	1	1	1	0
9243859	7	0	0	1
9243900	22	0	0	1
9249300	7	0	0	1
9278073	1	0	1	0
9278751	94	0	1	0
9321861	1	0	0	1
9322058	1	0	1	0
9325300	1	0	0	1
9343729	1	0	0	1
9414462	1	1	0	0
9416678	22	1	0	0
9416768		0	0	1
9484870	7	0	0	1
9500292	60	0	1	0
9509881	1	1	0	0
9509882	1	1	0	0
9509883	4	1	0	0
9510317		0	1	0
9203244	7	0	1	0
9243665	1	0	0	1
9414404	1	0	0	2
9439015	26	1	0	0
9441468	1	0	1	0
9457182	22	0	0	1

CASE_ID	COUNT_PED_KILLED	COUNT_PED_INJURED	COUNT_BICYCLIST_KILLED
9446171	0	0	0
9519915	0	1	0
9374421	0	0	0
9425877	0	1	0
9500485	0	2	0
9050813	0	0	0
9106980	0	0	0
9121510	0	0	0
9378644	0	0	0
9484757	0	0	0
9500295	0	0	0
9500579	0	0	0
9525274	0	0	0
9526711	0	1	0
9068003	0	0	0
9120552	0	0	0
9120626	0	1	0
9121511	0	0	0
9148846	0	1	0
91668611	0	0	0
9243859	0	0	0
9243900	0	0	0
9249300	0	0	0
9278073	0	0	0
9278751	0	0	0
9321861	0	0	0
9322058	0	0	0
9325300	0	0	0
9343729	0	0	0
9414462	0	1	0
9416678	0	0	0
9416768	0	0	0
9484870	0	0	0
9500292	0	1	0
9509881	0	0	0
9509882	0	0	0
9509883	0	0	0
9510317	0	0	0
9203244	0	0	0
9243665	0	0	0
9414404	0	0	0
9439015	0	1	0
9441468	0	0	0
9457182	0	0	0

CASE_ID	COUNT_BICYCLIST_INJURED	COUNT_MC_KILLED	COUNT_MC_INJURED	PRIMARY_RAMP
9446171	0	0	0	-
9519915	0	0	0	-
9374421	0	0	0	-
9425877	0	0	0	-
9500485	0	0	0	-
9050813	0	0	0	-
9106980	0	0	0	-
9121510	0	0	0	-
9378644	0	0	0	-
9484757	0	0	1	-
9500295	0	0	0	-
9500579	1	0	0	-
9525274	0	0	0	-
9526711	0	0	0	-
9068003	0	0	0	-
9120552	0	0	0	-
9120626	0	0	0	-
9121511	0	0	0	-
9148846	0	0	0	-
91668611	0	0	0	-
9243859	0	0	0	-
9243900	0	0	0	-
9249300	0	0	0	-
9278073	0	0	0	-
9278751	0	0	0	-
9321861	0	0	0	-
9322058	0	0	0	-
9325300	0	0	0	-
9343729	0	0	0	-
9414462	0	0	0	-
9416678	1	0	0	-
9416768	0	0	0	-
9484870	0	0	0	-
9500292	0	0	0	-
9509881	0	0	1	-
9509882	0	0	1	-
9509883	1	0	0	-
9510317	0	0	0	-
9203244	0	0	0	-
9243665	0	0	0	-
9414404	0	0	0	-
9439015	0	0	0	-
9441468	0	0	0	-
9457182	0	0	0	-

CASE_ID	SECONDARY_RAMP	LATITUDE	LONGITUDE	COUNTY	CITY	POINT_X
9446171	-			MENDOCINO	UKIAH	-123.1957855
9519915	-			MENDOCINO	UKIAH	-123.2123489
9374421	-			MENDOCINO	UKIAH	-123.2049026
9425877	-			MENDOCINO	UKIAH	-123.205574
9500485	-			MENDOCINO	UKIAH	-123.2103577
9050813	-			MENDOCINO	UKIAH	-123.2093582
9106980	-			MENDOCINO	UKIAH	-123.1989517
9121510	-			MENDOCINO	UKIAH	-123.2094879
9378644	-			MENDOCINO	UKIAH	-123.2055359
9484757	-			MENDOCINO	UKIAH	-123.2030411
9500295	-			MENDOCINO	UKIAH	-123.205368
9500579	-			MENDOCINO	UKIAH	-123.2095108
9525274	-			MENDOCINO	UKIAH	-123.2050629
9526711	-			MENDOCINO	UKIAH	-123.1989517
9068003	-			MENDOCINO	UKIAH	-123.2066727
9120552	-			MENDOCINO	UKIAH	-123.2092743
9120626	-			MENDOCINO	UKIAH	-123.2098389
9121511	-			MENDOCINO	UKIAH	-123.1977921
9148846	-			MENDOCINO	UKIAH	-123.2048264
91668611	-	39.1434288	-123.2054672	MENDOCINO	UKIAH	-123.2054138
9243859	-			MENDOCINO	UKIAH	-123.1991959
9243900	-			MENDOCINO	UKIAH	-123.2093124
9249300	-			MENDOCINO	UKIAH	-123.205501
9278073	-			MENDOCINO	UKIAH	-123.1986694
9278751	-			MENDOCINO	UKIAH	-123.2061539
9321861	-			MENDOCINO	UKIAH	-123.2114792
9322058	-			MENDOCINO	UKIAH	-123.2047958
9325300	-			MENDOCINO	UKIAH	-123.1987391
9343729	-			MENDOCINO	UKIAH	-123.1988678
9414462	-			MENDOCINO	UKIAH	-123.2066727
9416678	-			MENDOCINO	UKIAH	-123.2112808
9416768	-			MENDOCINO	UKIAH	-123.2081528
9484870	-			MENDOCINO	UKIAH	-123.1997757
9500292	-			MENDOCINO	UKIAH	-123.1989136
9509881	-			MENDOCINO	UKIAH	-123.1964545
9509882	-			MENDOCINO	UKIAH	-123.2056198
9509883	-			MENDOCINO	UKIAH	-123.198742
9510317	-			MENDOCINO	UKIAH	-123.2056198
9203244	-			MENDOCINO	UKIAH	-123.1988545
9243665	-			MENDOCINO	UKIAH	-123.1994705
9414404	-			MENDOCINO	UKIAH	-123.2056198
9439015	-			MENDOCINO	UKIAH	-123.2056198
9441468	-			MENDOCINO	UKIAH	-123.2083511
9457182	-			MENDOCINO	UKIAH	-123.1986847

CASE_ID	POINT_Y	Fatal	Severe_Injury	Visible_Injury	Complain_of_Pain	EPDO	HIN_Intersection
9446171	39.14492416				1	6	
9519915	39.14890289		1			165	8
9374421	39.13337708		1			165	
9425877	39.13761139				1	6	
9500485	39.16433334		1			165	7
9050813	39.16101456			1		11	
9106980	39.14883041			1		11	2
9121510	39.16140747				1	6	
9378644	39.1434288				1	6	
9484757	39.13985825		1			165	4
9500295	39.13641739				1	6	
9500579	39.15361786		1			165	6
9525274	39.13450241				1	6	
9526711	39.14895248		1			165	2
9068003	39.15018845				1	6	3
9120552	39.16074753				1	6	
9120626	39.15093994		1			165	5
9121511	39.1446991				1	6	
9148846	39.13280487				1	6	
91668611	39.14345932		1			165	10
9243859	39.15140915				1	6	
9243900	39.1608696				1	6	
9249300	39.13719				1	6	
9278073	39.13138199			1		11	
9278751	39.14102936			1		11	
9321861	39.14541245				1	6	
9322058	39.13259506			1		11	
9325300	39.13554392				1	6	
9343729	39.13264847				1	6	
9414462	39.15018845		1			165	3
9416678	39.14469147		1			165	9
9416768	39.15292358				1	6	
9484870	39.1513176				1	6	
9500292	39.13372803			1		11	
9509881	39.15162253		1			165	
9509882	39.13783264		1			165	1
9509883	39.131725		1			165	
9510317	39.13783264			1		11	1
9203244	39.13259666			1		11	
9243665	39.15136719				1	6	
9414404	39.13783264				1	6	1
9439015	39.13783264		1			165	1
9441468	39.15596008			1		11	
9457182	39.13483429				1	6	

CASE_ID	HIN_Corridor
9446171	D
9519915	F
9374421	A
9425877	A
9500485	C
9050813	C
9106980	
9121510	C
9378644	D
9484757	G
9500295	A
9500579	
9525274	A
9526711	H
9068003	
9120552	C
9120626	
9121511	D
9148846	A
91668611	D
9243859	E
9243900	C
9249300	A
9278073	B
9278751	A
9321861	F
9322058	A
9325300	B
9343729	B
9414462	
9416678	
9416768	C
9484870	E
9500292	B
9509881	E
9509882	
9509883	B
9510317	
9203244	B
9243665	E
9414404	
9439015	
9441468	C
9457182	B

APPENDIX C: AVERAGE ANNUAL FATALITY RATES CALCULATION

Average Annual Fatality Rate

City	Year	Total Fatalities	Population	% of Disadvantaged census tracts	Disadvantaged Population	Average Annual Fatality Rate	Average Fatalities Per
California	2017-2021	19894	39300000	37%	36%	10.4	3978.8
Mendocino County	2017-2021	136	87100	35%	31%	28.2	27.2
Ukiah	2017-2021	4	16900	75%	72%	4.73	0.8
California	2018-2022	20438	39300000	37%	36%	0.0	4087.6
Mendocino County	2018-2022	123	87100	35%	31%	2.4	24.6
Ukiah	2018-2022	2	16900	75%	72%	2.37	0.4

Notes on Sources and methodology

Total Fatalities: NHTSA. 2017-2021 and 2018-2022 data on Persons Killed in Fatal Crashes. Accessed from: <https://cdan.dot.gov/query>

Population, and Disadvantaged population share: Data from USDOT ETCE based on National Results, The population data from ETCE used for two time frame are constant 2020 ACS population data, hence there is no difference between 2017-2021 and 2018-2022 periods. Accessed from: <https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/ETC-Explorer---National-Results/>

Average Annual Fatality Rate: Calculated per 100,000 persons. Methodology used as prescribed by the Safe Streets for All Grant 2024 instructions accessed from: <https://www.transportation.gov/sites/dot.gov/files/2024-02/SS4A-FY24-Calculate-Fatality-Rate.pdf>

Average Fatalities Per Year: $\frac{\text{Total Fatalities}}{5}$

APPENDIX D: EQUITY EMPHASIS COMMUNITIES COLLISION ANALYSIS

Equity Emphasis Communities Collision Analysis

USDOT Equitable Transportation Community (ETC) Explorer Census Tract Data

Remarks: Census tract-wise data was downloaded from the explorer from the National Results section. Relevant columns have been retained in the table presented below.

Census Tract FIPS Code (2020)	Census Tract	Transportation Insecurity Percentile Rank	Health Vulnerability Percentile Rank	Environmental Burden Percentile Rank	Social Vulnerability Percentile Rank	Climate & Disaster Risk Burden Percentile Rank	Disadvantaged Communities Index Score	Disadvantaged Communities Index Percentile Rank	Disadvantaged Communities Indicator
6045011300	Tract 113	72	38	22	82	16	3	53	0
6045011400	Tract 114	25	75	40	39	43	2	18	0
6045011501	Tract 115.01	64	17	84	73	45	3	78	1
6045011502	Tract 115.02	35	51	89	92	55	4	83	1
6045011600	Tract 116	15	80	81	87	81	4	84	1
6045011700	Tract 117	84	35	27	49	16	3	47	0

Collision Analysis

Equity Indicator	Other Communities	EEC	Other Communities	EEC
	# Collisions		Percentage	
All Collisions	12	75	14%	86%
KSI Collisions	3	12	20%	80%
Collision Severity	All Collisions		KSI Collisions	
Fatal Injury	0%	0%	0%	0%
Serious Injury	25%	16%	100%	100%
Minor Injury	33%	28%	0%	0%
Complain of Pain	42%	56%	0%	0%
Total	100%	100%	100%	100%
Type of Collision	All Collisions		KSI Collisions	
Head-On	8%	4%	0%	0%
Sideswipe	0%	5%	0%	0%
Read End	8%	17%	0%	8%
Broadside	42%	48%	67%	25%
Hit Object	8%	8%	0%	0%
Overturned	0%	1%	0%	8%
Vehicle/Pedestrian	25%	15%	33%	50%

	Other Communities	EEC	Other Communities	EEC
Other	8%	1%	0%	8%
Total	100%	100%	100%	100%
Violation Category	All Collisions		KSI Collisions	
DUI	0%	11%	0%	25%
Pedestrian Right of Way	8%	7%	0%	25%
Pedestrian Violation	8%	4%	0%	0%
Traffic Signals and Signs	8%	9%	0%	8%
Other Hazardous Violation	0%	1%	0%	0%
Unsafe Speed	33%	15%	67%	17%
Wrong Side of Road	17%	5%	0%	0%
Improper Passing	0%	1%	0%	0%
Improper Turning	0%	23%	0%	8%
Automobile Right of Way	25%	24%	33%	17%
Total	97%	100%	100%	100%
Motor Vehicle Involved With	All Collisions		KSI Collisions	
Not stated	0%	1%	0%	0%
Other Object	0%	0%	0%	0%
Pedestrian	25%	16%	33%	50%
Other Motor Vehicle	42%	52%	33%	17%
Motor Vehicle on Other Roadway	0%	1%	0%	0%
Parked Motor Vehicle	0%	7%	0%	8%
Bicycle	25%	9%	33%	17%
Animal	0%	0%	0%	0%
Fixed Object	0%	9%	0%	0%
Other Object	8%	4%	0%	8%
Total	100%	100%	100%	100%
Mode	All Collisions		KSI Collisions	
Not Stated	8%	9%	33%	8%
Passenger Car	42%	57%	33%	58%
Motorcycle/Scooter	0%	1%	0%	8%
Pickup or Panel Truck	8%	11%	33%	0%

	Other Communities	EEC	Other Communities	EEC
Truck or Truck Tractor	0%	4%	0%	8%
Other Bus	8%	0%	0%	0%
Bicycle	17%	11%	0%	17%
Other Vehicle	0%	1%	0%	0%
Pedestrian	8%	5%	0%	0%
Moped	8%	0%	0%	0%
Total	100%	100%	100%	100%
Lighting	All Collisions		KSI Collisions	
Daylight	58%	75%	67%	50%
Dusk - Dawn	8%	5%	33%	8%
Dark - Street Lights	33%	20%	0%	42%
Total	100%	100%	100%	100%

APPENDIX E: LRSM 2024

Local Roadway Safety Manual

A Manual for California's Local Road Owners

Version 1.7 April 2024



Created by Caltrans in conjunction with FHWA and SafeTREC
for the express benefit of California Local Agencies.



U. S. Department of Transportation
Federal Highway Administration

Safe Transportation
Research & Education Center
SafeTREC

Document History

Version 1.0: 4/20/2012

The California Department of Transportation - Division of Local Assistance developed the first version of the Local Roadway Safety Manual (Version 1.0) in 2012 to support the Cycle 5 HSIP call-for-projects.

Version 1.1: 4/26/2013

Based on feedback and lessons learned from Cycle 5, Caltrans updated Appendix B: “Table of Countermeasures and Crash Reduction Factors” to better clarify text in “Where to use”, “Why it works”, and “General Qualities” for several of the countermeasures included in the original manual.

No other changes were made to the Local Roadway Safety Manual as part of Version 1.1.

Version 1.2: 03/10/2015

Based on feedback and lessons learned from Cycle 6, Caltrans made minor updates to the text of the document as needed for achieving consistency with overall Caltrans local HSIP guidance documents. The following sections were updated: 1.2, 4.2, 5.1, 6.2, and Appendix B, E, F & G.

Version 1.3: 04/29/2016

Caltrans made updates to the text of the document as needed in the following sections: 4.2, 5.1 and Appendix B.

Version 1.4: 06/08/2018

3/30/18 - Caltrans made updates to the crash costs in Appendix D, some of the website links in Appendix G, and some other texts of the document.

6/8/18 - Countermeasure S22 (“Modify signal phasing to implement a Leading Pedestrian Interval (LPI)”) is added.

Version 1.5: April 2020

Caltrans added a few more countermeasures (e.g. Pedestrian Scramble, Install Separated Bike Lanes, Reduced Left-Turn Conflict Intersections, and Curve Shoulder widening), renumbered the countermeasures and updated the crash costs in Appendix D.

Version 1.6: April 2022

For Cycle 11 Call-for-projects, Countermeasure S04 (Provide Advanced Dilemma Zone Detection for high-speed approaches) was deleted and Countermeasure NS05mr (Convert intersection to mini-roundabout) added. The HSIP Funding Eligibility was changed to 90% except for S03, of which the HSIP Funding Eligibility stays at 50%. The crash costs in Appendix D were updated.

Version 1.7: April 2024

For Cycle 12 Call-for-projects, Countermeasures SI14 (Install right-turn lane (S.I.)) and R32 (Speed Safety Cameras) were added. All countermeasures were re-numbered. The crash costs in Appendix D were updated.

Future Updates:

In the future, Caltrans anticipates that additional changes will be needed to keep the Local Roadway Safety Manual consistent with future Calls-for-Projects' Guidelines and Application Instructions. In addition, new local HSIP programs, improvements to California data on local roadways, data analysis tools, and the latest safety research and methodologies may give rise to the need to make more significant changes to this manual.

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1. Introduction and Purpose

The information in this document is geared towards local road managers and other practitioners with responsibility for operating and maintaining local roads, regardless of safety-specific highway training. The primary goal of this document is to provide an easy-to-use and comprehensive framework of the steps and analysis tools needed to identify locations with roadway safety issues and the appropriate countermeasures. For novice practitioners, the concepts and framework will be new, while experienced safety practitioners may find this manual to be mostly review. In both cases, the manual will provide the practitioners with a good understanding of how to complete a proactive safety analysis and ensure they have the best opportunity to secure HSIP safety funding during Caltrans calls-for-projects.

It's expected that novice and experienced practitioners will utilize this manual to help position their local agency to better compete in future Caltrans' calls-for-projects for safety programs. Inexperienced local roadway practitioners are also a target audience for this manual to gain exposure to the basic concepts that make up a proactive safety analysis of a local agency's roadway network.

The intent of this manual is to focus on key safety activities that every local agency should conduct on an annual basis (or as established by the agency) with the objective of reducing the number and severity of crashes within their jurisdiction. This manual defines this overall process as a "proactive safety analysis" approach to roadway safety. The Highway Safety Manual (HSM), documents a very similar process and refers to it as the "Roadway Safety Management Process." While the process in this document is similar and suggests the same primary elements, the HSM goes into significantly more detail, focuses more on scientific and mathematical equations behind the process, and intends to provide a comprehensive understanding of the overall processes to be applied by individual agencies across the nation. In contrast, this manual attempts to streamline the discussion; and make accommodations for the more novice safety practitioners, provide an adequate understanding of the process to complete an initial safety analysis of their roadway network, and instruct them on how to prepare applications that will compete well in Caltrans' statewide calls-for-projects. In general, this manual is intended to follow the research and methodologies presented in the HSM; however, to support Caltrans' statewide calls-for-projects process, it is important to note this manual deviates from the HSM in areas related to countermeasure selection and benefit / cost calculations. The logic behind these deviations is explained at the specific topic sections.

This manual is not intended to cover many of the day-to-day basics of traffic engineering including: maintain standard signage per the Manual on Uniform Traffic Control Devices (MUTCD); maintain sight distance (cut vegetation, remove parking); maintain a recovery zone; work with local traffic law enforcement; monitor collisions; address complaints; and manage litigation. These activities are understood to be critical elements of a local agency's traffic engineering responsibilities, but are not within the intended scope of this document.

1.1 California Local Roadway Safety Challenges and Opportunities

California's local roads are managed by more than 600 local agencies, including: cities, counties, and tribal governments. These local roads vary from flat multi-lane urban arterials to rural gravel roads in mountainous areas. California local agencies invest extensive resources on roadway safety every year, yet many roadways operate with outdated or insufficient safety features. A portion of these roadways even lack basic signing, pavement markings, alignment, and traffic control devices. Limited funding often prevents agencies from constructing safety projects, which can be expected. At the same time, the lack of safety data, design challenges, and lack of adequate training also hinder local agencies' accurate evaluation of their roadway network safety issues, which is more preventable.

Many small California local agencies are challenged by a lack of crash data. Without data, they have no way to identify High Crash Concentration Locations (HCCLs) or high risk roadway features, which can leave them "flying blind" with respect to the safety of their overall roadway network. Without data and analysis results, local officials may overreact when a tragic crash occurs, resulting in resources being spent in areas that will not maximize the overall application of safety funds. In conjunction with the collision mapping and analysis tools developed by UC Berkeley's SafeTREC, this document helps ensure all California local agencies have direct access to data on fatal and injury crashes within their jurisdictions and the analysis tools to effectively assess and prioritize future safety projects.

1.2 Safe System Approach

The Infrastructure Investment and Jobs Act (IIJA), aka Bipartisan Infrastructure Law (BIL), was signed into law on November 15, 2021. Under IIJA, the Highway Safety Improvement Program (HSIP), codified as Section 148 of Title 23, United States Code (23 U.S.C §148), is a core federal-aid program to States for the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. The IIJA emphasizes the "safe system approach":

Safe system approach means a roadway design that emphasizes minimizing the risk of injury or fatality to road users; and that (i) takes into consideration the possibility and likelihood of human error; (ii) accommodates human injury tolerance by taking into consideration likely accident types, resulting impact forces, and the ability of the human body to withstand impact forces; and (iii) takes into consideration vulnerable road users. (23 U.S.C. 148(a)(9)).

FHWA recognizes that the funding available through HSIP alone will not achieve the goal of zero fatalities on the Nation's roads. The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes. It involves a paradigm shift to improve safety culture, increase collaboration across all safety stakeholders, and refocus transportation system design and operation on anticipating human mistakes and lessening impact forces

to reduce crash severity and save lives. FHWA encourages States to prioritize safety in all Federal-aid investments and in all appropriate projects, using not only HSIP funding but also other Federal-aid funding.

The IIJA emphasizes the importance of vulnerable road user (non-motorized road user) safety in the HSIP by adding a definition for vulnerable road users, creating a vulnerable road user special rule, and requiring States to develop and update a vulnerable road user safety assessment. All of these provisions address the increasing number of fatalities involving vulnerable road users on U.S. roads. It is imperative that States consider the needs of all road users as part of the HSIP. Investment in highway safety improvement projects that promote and improve safety for all road users, particularly vulnerable road users, aligns with the IIJA and will help Build a Better America. States and other funding recipients should prioritize projects that maximize the existing right-of-way for accommodation of non-motorized modes and transit options that increase safety, equity, accessibility, and connectivity. Projects that separate users in time and space, match vehicle speeds to the built environment, and increase visibility (e.g., lighting) advance implementation of a Safe System approach and improve safety for vulnerable road users.

1.3 The State's Role in Local Roadway Safety

The California Department of Transportation (Caltrans)—Division of Local Assistance is responsible for administering California's HSIP safety funding intended for local roadway safety improvements. This funding primarily comes to the state through two federal programs: Highway Safety Improvement Program (HSIP)—a federal-aid program focused on reducing fatalities and serious injuries on all public roads; and the Active Transportation Program (ATP)—a federal aid and state funded program focused on improving safety and the overall use of non-motorized, active transportation modes of travel. Under SAFETEA-LU, High Risk Rural Roads Program (HR3) was established to focus on addressing rural road safety needs. Under the Infrastructure Investment and Jobs Act (IIJA), it is now a 'special rule' under HSIP that if triggered, directs that a certain amount of HSIP funds will need to be allocated for those rural roads that meet the definition.

Caltrans' administration of these programs encompasses many responsibilities, including: establishing program guidance; reviewing applications for improvements on local roadways; ranking applications/projects on a statewide basis; selecting projects for funding based on the greatest potential for reducing fatalities and injuries; programming the selected projects in the Federal Statewide Transportation Improvement Program (FSTIP); and assisting with programming and delivery issues throughout the delivery of the local agency projects. One goal for developing this document is to improve Caltrans' overall data-driven approach to statewide project selection of safety projects and to maximize the long-term safety improvements across California. To show the relationship between Caltrans' project selection process and this manual, a diagram showing the HSIP Call-for-Projects Process is provided in Appendix A.

Many State Departments are also actively engaged in California's Strategic Highway Safety Plan (SHSP). Caltrans developed the SHSP in a cooperative process with local, State, federal, and private sector safety stakeholders. The SHSP is a data-driven, comprehensive plan that established statewide goals, objectives, integrated the five E's of traffic safety— engineering, enforcement, education, emergency response, and emerging technologies. This manual directly supports many of the emphasis areas of the California SHSP. Local agencies are encouraged to participate in ongoing SHSP update efforts and can find more information on the SHSP at the following website: <https://dot.ca.gov/programs/safety-programs/shsp>.

Local Roadway Safety Plan (LRSP) and Systemic Safety Analysis Report Program (SSARP)

The state-funded Systemic Safety Analysis Report Program (SSARP) was established in 2016. The intent of the SSARP was to assist local agencies in performing a collision analysis, identifying safety issues on their roadway networks, and developing a list of systemic low-cost countermeasures that can be used to prepare future HSIP and other safety program applications. Late 2019, the program was evolved to Local Roadway Safety Plan (LRSP) so that the focus is not just engineering solutions but also include safety improvements in other areas such as enforcement, Education and emergency response.

The state funding for the LRSP/SSARP program is made available by exchanging the local Highway Safety Improvement Program (HSIP) federal funds for State Highway Account (SHA) funds.

For more information, please visit the LRSP/SSARP webpage at <https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program/local-roadway-safety-plans>.

1.4 The Local Roadway Crash Problem

Approximately 3,000 people die in California traffic crashes every year, representing nearly 10% of all traffic fatalities in the United States. Fifty-seven percent of these fatalities occur on local roadways, while only forty-three percent occur on the California State Highway System. A comparison of rural and urban roadways shows that local rural roadways have fatality rates 2 to 3 times higher than urban roadways per vehicle miles traveled. Based on these statistics, the total annual cost of local roadway fatal crashes to California is over \$8 billion, while only \$120 million is available annually in HSIP safety funds.

These statistics demonstrate the large and complex safety issues facing California. Through the development of this document, Caltrans is striving to help local agencies proactively identify high risk roadway features, roadway network locations/corridors with the highest safety needs, and encourage them to select effective low-cost improvements, whenever appropriate.

1.5 Reactive vs. Proactive Safety Issue Identification

Safety issues are identified on local roadways through a wide range of approaches. Although no single approach works best for all local agencies, some are far more effective at improving long-term roadway safety. Many agencies, often larger ones, have staff whose full-time job is dedicated to roadway safety; allowing them to focus on safety initiatives, be trained in the latest safety research, and have access to safety analysis data, tools and procedures. These agencies often utilize a 'proactive' approach to analyze their roadway network and identify safety issues.

At the same time many agencies, often the smaller ones, lack the financial ability to dedicate large portions of their staff resources to analyze safety issues and their staff has limited access to roadway safety training, safety expertise, and the latest safety analysis tools and procedures. Unfortunately, this can often result in identifying their safety issues in 'reaction' to tragic events.

The following is a basic outline of the differences in proactive vs. reactive identification approaches used by local agencies:

Reactive Approach

For this document, an agency is considered to be utilizing a reactive approach to roadway safety if they primarily identify safety improvements in reaction to:

- Recent crashes triggering safety investigations
- Specific crash concentrations triggering safety investigations
- Stakeholder identification of locations with safety issues and requests for improvements
- New funding becoming available

Crash concentrations and crash trends may be missed if local agencies rely exclusively on these identifiers for their roadway safety effort. They may also miss many opportunities to effectively utilize low-cost, systemic type improvements. This document encourages local agencies to adopt a more proactive approach to their roadway safety.

Proactive Approach

An agency is considered to be using a proactive approach to roadway safety if they go beyond the elements of a reactive approach and identify safety improvements by analyzing the safety of their entire roadway network, in one of the following ways:

- One-time, network-wide safety analysis of their roadways driven by new source of funding.
- Routine safety analyses of the roadway network (Preferred Approach!)

Agencies with a proactive approach utilize both systemic and spot location improvements (as defined in section 1.5 below). Applying improvements systemically across an entire corridor or network allows an agency to proactively address locations that have not had crash concentrations in the past, but have

similar features as those currently experiencing high levels of crashes. In addition, even though a spot location improvement may be based on 'past' crashes, agencies making improvements based on countermeasures with proven crash reduction factors at their highest crash locations often have the best chance of proactively reducing future crashes.

This document encourages safety practitioners to pursue a proactive approach and routinely analyze the safety of their roadway networks to yield the best overall safety results.

1.6 Implementation Approaches

When an agency proactively identifies their safety issues throughout their roadway network, it is likely they will find high crash concentrations at intersections, roadway segments, and corridors. The safety practitioner should consider which implementation approach to utilize. Typical approaches include:

- Systemic Approach
- Spot Location Approach
- Comprehensive Approach incorporating human behavior issues

Each of these approaches has benefits and drawbacks. As Local agency practitioners identify their safety issues and analyze the data for crash patterns, they should be open to implementing a combination of these approaches, as documented in Sections 2 and 3 of this manual.

Systemic Approach

The Systemic Approach is primarily based on application of proven safety countermeasures at multiple crash locations, corridors, or geographic areas. Implementation of the Systemic Approach is generally based on 'system-wide' crash data with the estimates of the impacts being made in terms of benefits measured in traffic crash reduction and deployment cost. Identified locations experiencing high levels of crashes and locations with similar geometric features can be treated systemically with low-cost, proven safety countermeasures. *Note: The term "Systemic" used throughout in this manual is often exchanged with the term "Systematic" in many national safety documents and research studies. In general, safety practitioners will find these terms interchangeable. This manual uses "Systemic" to match the new HSM and the FHWA CMF Clearinghouse.*

Benefits of the Systemic Approach may include:

- Widespread effect. The Systemic Approach addresses safety issues at a large number of locations or on an entire local roadway network. It can also generate projects that combine HCCLs and locations with the potential for crashes and still have high Benefit to Cost (B/C) ratios. An example of this type of project could be upgrading pavement delineation and warning signs along a rural corridor: crashes may not have occurred on every curve or segment along the corridor, but all of the corridor's pavement delineation and warning signs can be upgraded at one time. For urban applications, an example could be protecting the left-turn phase of signalized intersections with

existing left-turn pockets: severe crashes may not have occurred at each of the left-turn movements, but with minor changes to the signal hardware and signing, all or many of a city's unprotected left-turn phases can be protected with one safety project.

- Crash type prevention. By focusing on a predominant crash type, an agency can address locations that have not experienced significant numbers of these types of crashes, but have similar characteristics or conditions as existing HCCLs. The resulting B/C ratios for these types of projects will be less than if only HCCLs are included; but by using low-cost countermeasures and including as many high crash locations as possible, the resulting B/C ratios should still be high enough to allow agencies to proactively address locations that have not experienced high numbers of these types of crashes. For urban areas, projects improving pedestrian crossings can be good examples of the Systemic Approach. By applying the countermeasures systemically, the agency can often justify these projects based on relatively high B/C ratios, even though some of the improvement locations have not experienced enough crashes to yield moderate-to-high B/C ratios on their own.
- Cost-effectiveness. Implementing low-cost solutions across an entire system or corridor can be a more cost-effective approach to addressing system-wide safety issues. Even though this approach does not address all (or total) safety issues for a given location, the deployment of low-cost countermeasures often result in the highest overall safety benefit for an agency with limited safety funding. An example of this would be an agency choosing to install rumble stripes along an entire corridor for equal or less money than realigning a small portion the roadway to fix a single curve.
- Reduced data needs. The Systemic Approach can be used without a detailed crash history for specific locations, thereby reducing data needs. For example, consider a long rural corridor, which includes a section that passes through an Indian Reservation: Even if there is no documented crash data for the portion of the corridor that passes through the reservation, the entire limits can be treated with the same low-cost improvements. As long as there are sufficient past crashes documented for the entire corridor, the project will still have a reasonably high B/C ratio.

Drawbacks of the Systemic Approach may include:

- Justifying improvements can be difficult. Because this approach does not always address locations with a history of crashes and active stakeholders, it can be difficult to justify the improvements. The Systemic Approach will rarely include a recommendation for a large-scale safety improvement at a single location. Since large-scale projects usually garner attention from decision makers, the media, elected officials, and the general public, safety practitioners often need to make additional efforts to explain the Systemic Approach and its benefits to those groups. Safety practitioners can utilize the high B/C ratios of these systemic projects to convey their benefits compared to high-profile, single location projects with lower B/C ratios.

Spot Location Approach

The Spot Location Approach is typically based on an analysis of crash history to identify locations that have significantly higher crashes and treat them accordingly. It is important to practitioners to

understand that for many locations, safety issues can be complicated and sometimes the most appropriate fixes are not quick, easy or cheap.

Benefits of the Spot Location Approach may include:

- Focus on demonstrated needs. The Spot Location Approach focuses directly on locations with a history of crashes and specifically addresses those crashes. Intersection improvements are some of the most common spot location projects. Intersections tend to have higher concentrations of crashes resulting from opposing traffic movements. These high crash concentrations often require stand-alone improvements to adequately resolve the safety issues.
- Justifying improvements can be easy. Because this approach addresses locations with a history of crashes, it is usually easy to justify improvements. For urban areas, reconfiguring/ reconstructing an entire intersection can be a good example of an effective Spot Location Approach. Large urban intersections can have extremely high crash concentrations, making major changes to the intersection the only way to significantly reduce future crashes. With these types of scenarios, even the highest cost countermeasures can be cost effective.
- If low-cost countermeasures are used, this approach can prove very cost effective. The Spot Location Approach does not always have to include moderate or high cost improvements. It is often appropriate for local agencies to make low-cost improvements at one location at a time. Ongoing maintenance and development projects offer great opportunities for these low-cost improvements to be constructed with no additional expense to local agencies.

Drawbacks of the Spot Location Approach may include:

- Assumption that the past equals the future. This approach assumes locations with a history of crashes will continue to experience the same number and type of crashes in the future. When agencies do not account for the random nature of roadway crashes (i.e., Regression to the Mean), moderate to high cost projects can be erroneously justified. Practitioners can mitigate this by using 5 years of crash data when analyzing their roadways. In addition, significant changes to land use or roadway characteristics in or around proposed projects can either increase or decrease the expected number of future crashes.
- Minimal overall benefit to the roadway network. Some local agencies use this approach with medium and high cost improvements at locations which do not represent their worst high crash concentration locations. The result can be projects with low B/C ratios and overall safety benefits that are not as high as if they utilized a Systemic Approach. This drawback can be minimized by safety practitioners who analyze their entire roadway network, propose spot location fixes only at their highest crash locations, and utilize lower cost countermeasures wherever appropriate.

The Spot Location Approach to traffic safety is ideally implemented along with the Systemic Approach to provide the best combination of safety treatments. For instance, the Spot Location Approach can be applied at locations where low-cost countermeasures are not expected to be effective in significantly

reducing future crashes or at those locations that have had low-cost countermeasures previously installed systemically but, after an assessment, continue to show a higher-than-average crash rate.

Comprehensive Approach

The Comprehensive Approach introduces the concept of the “5 E’s of Safety”: Education, Enforcement, Engineering, Emergency Response and Emerging Technologies. This approach recognizes that not all locations can be addressed solely by infrastructure improvements. Incorporating the “5 E’s of Safety” is often required to achieve marked improvement in roadway safety. For instance, some roadway segments will be identified for which targeted enforcement is an appropriate countermeasure. Some of the most common violations are speeding, failure-to-yield, red light running, aggressive driving, failure to wear safety belts, distracted driving, and driving while impaired. When locations are identified as having these types of violations, coordination with the appropriate law enforcement agencies is needed to deploy visible targeted enforcement to reduce the potential for future driving violations and related crashes. To improve safety, education and outreach efforts can also be used to supplement enforcement efforts. Enforcement and/or education can also be effectively utilized as short-term ways to address high crash locations, until the recommended infrastructure project can be implemented.

1.7 Our “Safety Challenge” for Local Agencies

Caltrans, FHWA and Safe Transportation Research and Education Center (SafeTREC) “challenge” local agencies to initially commit one or more days to understanding and applying the concepts and tools outlined in this manual. Experienced safety practitioners working in agencies currently using a proactive approach can quickly review the topics in the manual and consider/test some of the new tools (e.g., TIMS) identified within it. In contrast, novice safety practitioners may need several days to better understand the underlying concepts in this manual to be able to complete the basic elements of a proactive safety analysis of their roadway network. In these situations, the room for knowledge growth, internal process improvements, and expected safety benefits will be even greater, which should more than offset the additional time invested.

By utilizing this simple framework for identifying, analyzing and implementing a proactive approach for improving safety on their roadways, practitioners will have a better understanding of their agencies’ unique safety issues, the proven low-cost countermeasures that can reduce crashes, and the existing and future funding to implement the projects. This small investment of time will help local agencies achieve significant reductions in future fatalities, injuries and overall crashes. We believe these local agencies may also gain the added unexpected benefit of improved job satisfaction of those involved, as there are few more rewarding tasks than knowing that your efforts will result in future roadway users arriving safely at their destination instead of becoming statistics.

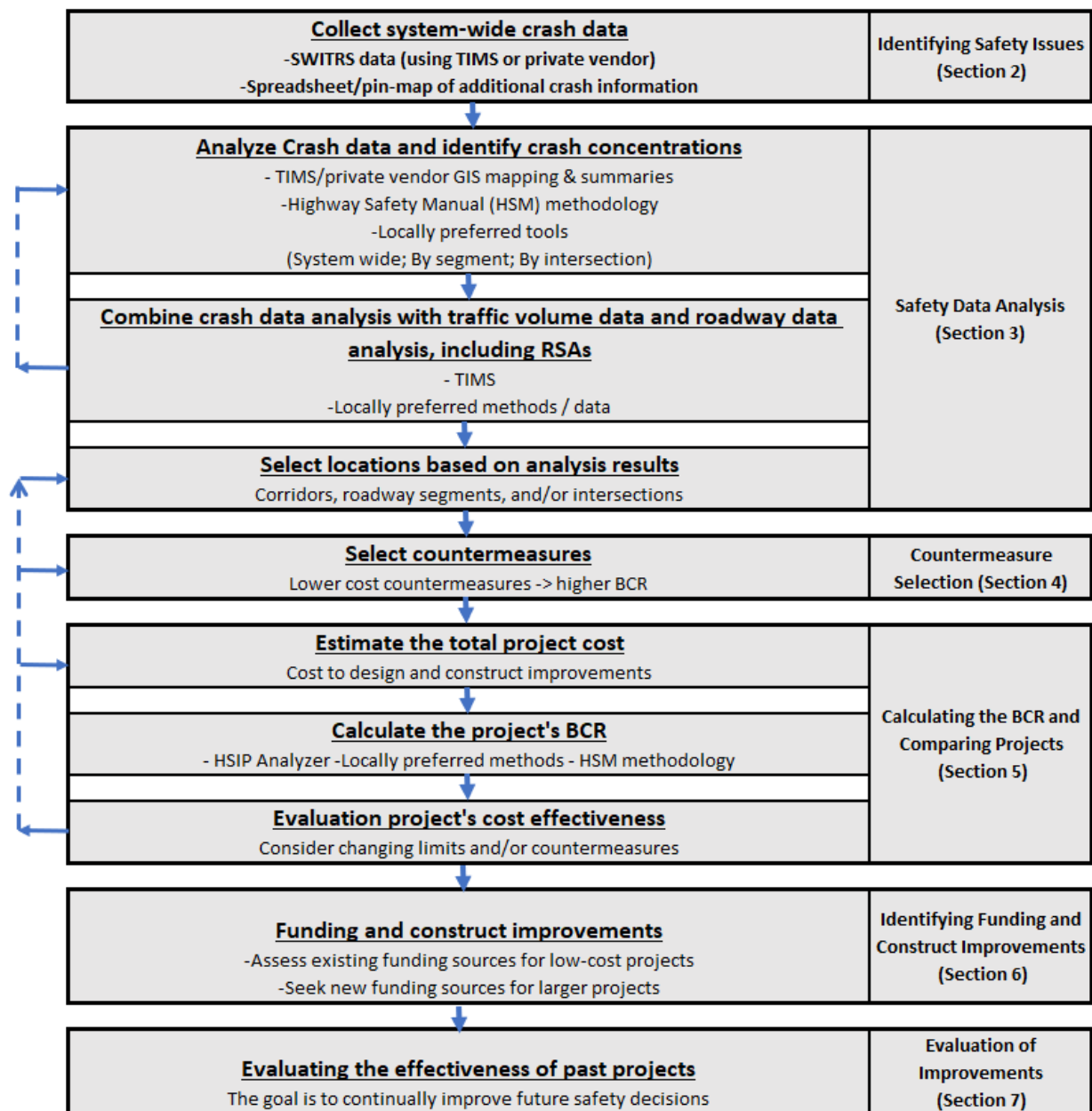
1.8 Summary of information in this Document

This document provides information on effectively identifying California’s local roadway safety issues and the countermeasures that address them, ultimately leading to the effective implementation of safety projects that improve safety on local roadways. The document is not intended to be a comprehensive guide for roadway design and improvement or the only guide local agencies utilize for their safety analysis of their roadways.

Caltrans also expects this document will directly support its efforts in selecting local agency safety projects. The expectation is that as local agencies throughout the state utilize the proactive safety analysis approach outlined in this document, their applications for HSIP and ATP projects will include lower cost improvements at locations with the highest safety needs. This will improve Caltrans’ data-driven approach to statewide project selection of safety projects and maximize the safety benefits across California.

The proactive safety analysis framework incorporated in this document is summarized in Figure 1.

Figure 1: Local Roadway Safety: Proactive Safety Analysis Approach



The above flowchart illustrates how each of the individual sections of this document work together to make up a proactive safety analysis approach. These sections are briefly outlined below:

Section 2 of this manual provides an overview of the types of data to collect for the identification of roadway safety issues. It discusses sources of crash data and how they can be used.

Section 3 summarizes the types of analyses that can be conducted to determine what roadway countermeasures should be implemented. This section is the link between the data (Section 2) and the selection of appropriate countermeasures (Section 4). It provides definitions and examples of the qualitative and quantitative factors that should be considered when evaluating roadway safety issues.

Section 4 provides a description of selected countermeasures that have been shown to improve safety on local roads. It includes a basic set of strategies to implement at locations experiencing a history of crashes and their corresponding crash modification factors (CMF). The interrelationship between CMFs and Crash Reduction Factors (CRFs) are defined and used interchangeably throughout this document.

Section 5 defines a methodology for calculating a B/C ratio for a potential safety project. It includes sources for estimating projected costs and benefits and the specific values/formulas Caltrans uses for its statewide evaluations of HSIP projects. This section also discusses the potential value in reevaluating projects' overall cost effectiveness at this point in the safety analysis, including: refining the project's costs and/or changing the mix of countermeasures and locations.

Section 6 identifies existing and new funding opportunities for safety projects that local agencies should be considering. This section also briefly discusses some unique project development issues and strategies for safety projects as they proceed through design and construction.

Section 7 presents the process to complete an evaluation of installed treatments. After the countermeasures are installed, assessing their effectiveness will provide valuable information and can help determine which countermeasures should continue to be installed on other roadways to make them safer as well as those that should be limited or discontinued.

Appendix A presents a flowchart of the HSIP Call-for-projects application process. This flowchart demonstrates how this document interacts with Caltrans Call-for-projects.

Appendix B contains Detailed Tables of countermeasures discussed in Section 4. This table includes detailed information about each countermeasure, including: where to use, why it works, general qualities (time, cost and effectiveness), crash type(s) addressed, crash reduction factor, and specific values for use in Caltrans HSIP calls-for-projects.

Appendix C includes a summary of "recommended actions" involved in a proactive safety analysis.

Appendix D contains the formulas used to calculate the B/C ratio of safety projects.

Appendix E presents TIMS tutorials that are available to assist local agencies in completing Caltrans call-for-projects application requirements and attachments. The tutorials include examples for Spot Location projects and systemic projects.

Appendix F presents a list of the abbreviations used in this document.

Appendix G presents a list of references.

2. Identifying Safety Issues

This document encourages local agency safety practitioners to proactively analyze their roadway networks with the intention of yielding the best overall safety benefits. When utilizing a proactive safety analysis approach, practitioners need to consider a wide range of data sources to get an overall picture of the safety needs.

There are a number of information sources that can be accessed to get a clearer picture of the roadway safety issues on the roadway network. These can be formal or informal sources, including:

Formal sources:

- State and local crash databases
- SafeTREC's TIMS website (or locally preferred mapping software)
- Law enforcement crash reports and citations
- Field assessments

Informal sources:

- Observational information from road maintenance crews, law enforcement, and first responders
- Citizen notification of safety concerns

Examining crash history will help practitioners identify locations with an existing roadway safety problem, and also identify locations that are susceptible to future roadway crashes. In addition to location identification, this data can provide information regarding crash causation that ultimately provides insight into identifying potentially effective countermeasures.

Emphasis on data-driven decisions is indicative of reliability and efficiency. The more reliable the data, the more likely the decisions regarding safety improvements will be effective. However, detailed, reliable crash data are not available in all areas. Under this circumstance, the practitioner should use the best available information and engineering judgment to make the best decisions. In an effort to mitigate these situations, UC Berkeley SafeTREC has developed the TIMS website, which includes GIS mapping tools to access fatal and injury crashes statewide. This site is now available to all California local agencies. See Section 2.2 for more details on TIMS.

It is generally accepted that at least 3 years, or preferably 5 years, of crash data be used for an analysis; additional years of crash data can provide better information. For low volume roadways and/or when only severe crashes are analyzed, more years of crash data may be necessary for an effective evaluation. Due to the randomness of crashes in a given year, a multi-year average of safety data will smooth outlier years of relatively high or low roadway crash rates. This concept is commonly referred to as "regression to the mean" and is critical in helping safety practitioners avoid making wrong inferences as they analyze their roadway network data. An example of this is an agency making a high-cost improvement at

a location in response to one or two tragic crashes. The Highway Safety Manual (HSM) includes more details on regression to the mean and methods to reduce the random nature of crashes.

There are some circumstances where additional years of crash data may not always be advantageous. First, it's important for practitioners to recognize that as more years of crash data are used, they need to consider changes in traffic patterns, physical infrastructure, land use, and demographics that may affect their projection of future crashes. Second, if practitioners only focus on many years of past crash data, they could miss emerging safety issues and crash trends. For these reasons, if practitioners sense one or more factors affecting crashes have changed or may be changing, they should consider looking at the crash data for the specific area on a yearly or 3-year moving average to expose any changes and crash trends that are occurring.

2.1 State and Local Crash Databases

California has a central repository for storing crash data called SWITRS, which stands for Statewide Integrated Traffic Records System. SWITRS is a comprehensive data source for doing roadway safety analysis that includes almost all public roads in the database except tribal roads which are currently not included. SWITRS information is available to California's local agencies, although many agencies have had difficulty identifying, extracting and utilizing their crash records from SWITRS. All California local agencies, especially those that currently have difficulty accessing and mapping crash data, are encouraged to utilize the SafeTREC TIMS website to access and map SWITRS data.

This document focuses on the SafeTREC TIMS website as a tool to access and map SWITRS data because TIMS is free to local agencies and the general public. At the same time, this document also acknowledges that TIMS currently does not offer some of the features currently available in some of the commercially available crash analysis software packages. For this reason, local agencies are encouraged to try TIMS, but they should not feel obligated to make a switch if they prefer using their vendor supplied crash analysis software. See section 2.2 for more details on TIMS.

Many agencies utilize one of several crash analysis software packages (e.g., Crossroads) to manage and access their crash records. Their use can be costly, but allows local road practitioners to identify locations with multiple roadway crashes, conduct an analysis that can produce predominant crash types, and identify associated roadway features that may have contributed. One drawback to agencies managing and updating their own individual databases is that the statewide database may become outdated and may not include the updated crash details like geo-coded locations. Agencies that manage and update their own individual databases are encouraged to share all updates, including any geo-coding information, with the SWITRS data managers at the California Highway Patrol. This will allow updated geo-coding and other crash features to be available on a statewide basis.

Recommended Action: Obtain at least 5 years of network-wide crash data to identify local roads that have a history of roadway crashes. This data will be used to identify predominant roadway crash locations, crash types and other common characteristics.

As practitioners gather formal and informal information relating to the safety of their roadway network, they are encouraged to develop one or more separate spreadsheets and/or pin-maps to help track and manage this data. (These spreadsheets/pin-maps should capture much of the data gathered in each of Sections 2.1 through 2.8). A spreadsheet and/or pin-map can serve as a database to help an agency identify locations and crash characteristics representing their greatest safety issues and guide them in identifying appropriate countermeasures.

The following spreadsheet is offered as an example, but each agency's spreadsheet should be reformatted to include data to meet their needs. Agencies should consider printing their spreadsheets on 'legal' or '11 x 17' paper for easy review of their data.

	General Information		Crash Information			Evaluation / Action		
Location & Date	Source/Type of information	Safety Issue/Problem	Nature of Crashes	Time of Day	Weather/Traffic Conditions	Staff Evaluation	Recommend Action	Resolution
1) Intersection "X"								
1) Feb 7, 2010	Input from law enforcement	Clearance Intervals need adjustment	V1-WB V2-SB Side-swipe	21:30	Dry, Night, Free-flowing	R. Jones 2/26/10	Increase all-red interval	Completed 2/26/10
1) Mar 9, 2010	Citizen Complaint	Ped Crossing unsafe due to RT turns	N/A	N/A	N/A	R. Jones 3/12/10	No RT on Red (Need study)	
2) Intersection "Y"								
2)								
3) Roadway Segment (PM 5.3 to PM 7.8)								
PM 6.4 to 6.8 Sep 29, 2011	Maintenance data	Extensive skid marks. Speed of Travel?	General WB: ROR	N/A	Dry Free-flowing	J. Smith 10/1/11	High Friction Overlay	Preparing HSIP App.
PM 7.1 Jan 5, 2011	Input from law enforcement	Stop Sign missing	N/A	N/A	N/A	J. Smith 1/5/11	Informed Maintenance	New sign 1/5/11

An example of a pin-map, which could be modified to capture much of the data gathered in Section 2, is shown in the following section as part of the TIMS output.

2.2 Transportation Injury Mapping System (TIMS)

The Safe Transportation Research and Education Center (SafeTREC) at the University of California, Berkeley, has developed a powerful website with tools for California's local agencies to gather data for their safety analyses. Their Transportation Injury Mapping System (TIMS) website provides safety practitioners with California crash data (SWITRS, i.e. Statewide Integrated Traffic Records System) and collision mapping and analysis tools. California local agencies are encouraged to utilize TIMS at: <https://tims.berkeley.edu/>

Site Features:

- Applications to query map and download geo-referenced SWITRS data.
- Summary tables based on data included in SWITRS individual crash reports. These summary tables can be generated based on specified data fields or spatial limits.
- Virtual field review by connecting the crash location to Google maps and Google Street View, allowing the examination of the existing roadway infrastructure and dimensions.
- A 'Help Tab' that provides step-by-step instructions.

Please note that SafeTREC is not able to incorporate all SWITRS crashes into TIMS due to poor crash location descriptions in the crash reports. Currently, TIMS includes the majority of California fatal and injury crashes but does not include Property Damage Only collisions.

Recommended Action: Consider augmenting your local agency's data collection approach with information available using the suite of TIMS tools. The TIMS tools (and/or purchased software applications) can help the safety practitioner complete or assist with each of the actions in Sections 2.1 through 2.8. This website includes several tutorials specifically designed to support the individual sections of this document. Local practitioners may find the TIMS output files as a great starting point to build their tracking spreadsheet discussed in the recommendation of Section 2.1.

2.3 Law Enforcement Crash Reports

Both State and local law enforcement officials can be an important source of roadway crash data. The actual law enforcement crash reports can be valuable in identifying the location and contributing circumstances to roadway crashes (e.g., did the highway hardware and features operate as intended: end treatment worked, no barrier in the passenger compartment, pavement not slippery when wet, signs visible, signal timing, etc.). The following variables can and should be extracted and compiled from the crash reports:

- Location
- Date and time
- Crash type
- Crash severity
- Weather conditions
- Lighting conditions
- Sequence of events and most harmful events
- Contributing circumstances
- Driver Variables: age of driver, DUIs, use of seat belt, etc.

Similar to the crash database, the information in the crash reports can be used to assist in the identification of potential infrastructure and non-infrastructure safety treatments and the deployment approach.

Recommended Action: Develop a working relationship with law enforcement officials responsible for enforcement and crash investigations. This could foster a partnership where sharing crash reports and safety information on problem roadway segments becomes an everyday occurrence. Practitioners with limited access to crash data are encouraged to use TIMS to assess the local crash report data.

2.4 Observational Information

Law enforcement officers, local agency maintenance crews, and Emergency Medical Services personnel can serve as valuable resources to identify problem areas. Since they travel extensively on local roads, they can continuously monitor roads for actual or potential problems (e.g., poor delineation, fixed objects near the roadway, missing signs, signs of vehicles leaving the road). Law enforcement observations of driver behavior and roadway elements can provide valuable information to the local road agency. Additionally, law enforcement officers are sometimes aware of problem areas based on citations written, even if crashes related to the violations have not yet occurred. Road maintenance crews may keep logs of their work, including sign and guardrail replacements, debris removal, and edge drop-off repairs. These logs can provide supplemental information about crashes and HCCLs that may not have been reported to law enforcement. Finally, Emergency Medical Service Crash Reports can provide an entirely different perspectives and set of observations relating to crash occurrences.

Information obtained from road maintenance crews, law enforcement officers, and Emergency Medical Services personnel can help support all three methods of implementation approaches: Spot Location treatments, systemic deployments, and the Comprehensive Approach. Often, traffic violations such as speeding and impaired driving lend themselves to education and enforcement solutions to address these behaviors and supplement the intended infrastructure countermeasures.

Recommended Action: Add information received from law enforcement, road maintenance crew, and Emergency Medical Service observations to the agency's tracking spreadsheet and/or pin-maps. Develop a system for maintenance crews to report and record observed roadway safety issues and a mechanism to address them.

2.5 Public Notifications

Occasionally, when unsafe situations are observed, local citizens may notify the local government by email, letter, telephone, or at a public meeting. Information identifying safety issues on local roads may also come from community or regional newspapers, newsletters, correspondence, and from local homeowner and neighborhood associations. These sources can serve as indicators that a safety issue may exist and may warrant further review and analysis to determine the extent of the issues. Citizen reports can be tracked along with official crash data; however, safety practitioners should not regard these reports as factual, unless proven by other methods. Local safety databases should only contain objective and verifiable data.

Recommended Action: Review and summarize information received from these sources, identifying segments or corridors with multiple notifications and record the locations, dates, and nature of the problem that are cited. Add information received from public notifications to tracking spreadsheets and/or pin-maps once confirmed.

2.6 Roadway Data and Devices

It is also valuable to obtain information about the existing roadway infrastructure. Currently, many local agencies have few of their roadway characteristics in a database. For these agencies, the establishment of a roadway database could be a long-term goal. The following roadway characteristics are often used to assist practitioners in safety analyses of roadway segments:

- Roadway surface (dirt, aggregate, asphalt, concrete)
- Roadway geometry (horizontal, vertical, flat)
- Lane information (number, width)
- Shoulder information (width, type)
- Median (type, width)
- Traffic control devices present (signs, pavement marking, signals, rumble stripes etc.)

- Roadside safety hardware (e.g., guardrail, crash cushions, drainage structures)

The TIMS site, described in Section 2.2, can provide safety practitioners with much of this roadway data virtually by using Google Maps and Google Street View. By utilizing TIMS (and/or private for-profit vendors), safety practitioners can save hours and even days of driving during the initial steps in the safety analysis of their network. Once agencies start to define individual safety projects for funding and future construction, actual field reviews are needed to ensure a complete understanding of the project location and context.

As local practitioners gather information about their existing roadway infrastructure, they need to determine whether it complies with the minimum standards for signs, breakaway supports, signals, pavement markings, protective barriers, etc. Practitioners should use the most current *California - Manual on Uniform Traffic Control Devices* (CA-MUTCD), which provides the minimum standard requirements for traffic control devices on all public streets, highways, bikeways, and private roads open to public travel.⁶ In addition to ensuring compliance with the MUTCD, geometric standards for sight distance, curve radius, and intersection skew angle and roadway standards for lane width, shoulder width, clear recovery zone, and super-elevation should also be evaluated.

Roadway information can be combined with crash data to help local practitioners identify appropriate locations and treatments to improve safety. For example, if a local rural segment is experiencing a high number of horizontal curve-related crashes, analysis of the inventory of roadway elements could reveal that the roadway does not have sufficient signage installed in advance of many of those curves to give motorists warning of the pending change in roadway geometry.

Recommended Action: Identify and track roadway characteristics for the intersections, roadway segments, and corridors, including compliance with the minimum standards. At a minimum, this should be done for locations being considered for safety improvements, but ideally agencies would establish an extensive database of roadway data to help them proactively identify high risk roadway features.

2.7 Exposure Data

The number of crashes can sometimes provide misleading information about the most appropriate locations for treatment. Introducing exposure data helps to create a more effective comparison of locations. Exposure data provides a common metric to the crash data so roadway segments and intersections can be compared more appropriately, helping local agencies prioritize their potential safety improvements.

The most common type of exposure data used on roadway segments is traffic volume. Ideally, volume would be broken down by pedestrians, bicycles, cars, motorcycles, and large trucks. A count of the number of vehicles and non-motorized users can provide information for comparison. For example, if

two roadway segments have the same number of crashes but different traffic volumes, the segment with fewer vehicles (i.e., less exposure) will have a higher crash rate, meaning that vehicles were more likely to experience a crash along that roadway segment. In situations where traffic volume is not available, segment length or population can serve as an effective exposure element for comparison.

Recommended Action: Consider the availability of exposure data and track it along with the other crash data to help prioritize potential locations for safety improvements.

2.8 Field Assessments and Road Safety Audits

Local road practitioners should always consider conducting field assessments in conjunction with their collection of crash data to help identify problem locations. An assessment can be as informal as driving, walking or virtually viewing the road network looking for evidence of roadway crashes. Ideally, informal field assessments are to be performed by multidisciplinary teams that include a traffic safety expert, law enforcement personnel, and others. The team can visit several sites and document evidence of crashes or deficiencies on the roadway or roadside, including: damaged trees or fences, skid marks, ruts on the shoulder, car parts on the shoulder, and/or pavement drop-offs. This information, along with observations of actual driver-behavior, can be used to develop recommendations for improvement.

Field reviews can also be more formalized such as in conducting a Road Safety Audit (RSA). A RSA is a formal safety performance examination of an existing or future road by an independent, multidisciplinary team. The team examines and reports on existing or potential road safety issues and identifies opportunities for safety improvements for all road users. Agencies considering RSAs for the first time are encouraged to consider requesting support from FHWA. For more information on FHWA's free RSA support, go to their website at: <http://safety.fhwa.dot.gov/rsa/>.

Informal field assessments and more formal RSAs provide an opportunity for local safety practitioners to gather and summarize all of the information sources discussed in Section 2. They can also be used to identify potential project delivery obstacles. The field assessments/RSAs should identify major environmental, right-of-way, infrastructure, and operational issues that need to be considered when applying countermeasures.

Recommended Action: Consider completing formal or informal field assessments and RSAs at certain locations to help ensure all relevant information is collected and available for the safety practitioners to complete their safety analysis and identify the most appropriate countermeasures. It's recommended that local agencies develop simple straightforward criteria on when one of these will be undertaken. The information gathered during the assessments should be added to the agency's tracking spreadsheet, as discussed in section 2.

3. Safety Data Analysis

Proactive safety analysis will assist in making informed decisions on the type, deployment levels, and locations for safety countermeasures. This builds on the previous discussions on information sources that identify safety issues. 'Safety Data Analysis' is one of the most critical steps in an agency's overall proactive safety analysis approach. Ideally, agencies regularly analyze the safety data for their entire roadway networks to identify and prioritize the locations with the most severe safety issues. This step is often skipped by agencies reacting to a recent tragic crash and the corresponding public outcry, which may leave their most critical safety locations undetected.

As agencies analyze their safety data, they will need to select the implementation approach that most effectively address the safety issues identified; Systemic Approach, Spot Location Approach, Comprehensive Approach, or a combination of these approaches. For example, if a high number of crashes are occurring at a particular curve or along a short segment of roadway, a spot treatment may be appropriate. However, systemic treatment of multiple locations experiencing similar crash types may be necessary and most beneficial for reducing overall fatalities and injuries. These implementation approaches were described in Section 1.5. With all of the approaches, safety practitioners should be looking for patterns in the crash data and not just the total number of crashes. These patterns include: types of crashes, severity of crashes, mode of travel, pavement conditions, time of day, etc. Identifying and analyzing the patterns in the crash data will help ensure the most appropriate countermeasure is selected and the safety problems are effectively addressed.

3.1 Quantitative Analysis

Crash data analysis is used to determine the extent of the roadway safety issues, the priority for application of scarce resources, and the selection of appropriate countermeasures. The two main quantitative analysis methods for roadway crashes are crash frequency and crash rate.

Crash Frequency

Crash frequency is defined as the number of crashes occurring within a determined study area. A practitioner can determine crash volumes using methods discussed in Section 2, including: State crash database (SWITRS), TIMS, local agency crash databases, law enforcement crash reports, pin-maps, etc. The practitioner should analyze the data to identify locations and crash characteristics with the highest frequency. There are numerous methods to assist practitioners in this process. Each agency will have their own preferred methods for initially selecting their top priority locations. The following are a few examples of the methods used to determine Crash Frequency:

- Summarize the crashes by attributes such as type, severity and location to identify patterns in the crash data and the most significant problem locations.
 - Top 10 (or 20) lists of intersections and roadway segments. It is common to weight more severe crashes higher in this process.

- Spatially display the sites on a pin-map or a GIS software package.
 - For small or rural agencies with lower volume roadways, network-wide pin-maps may be all that is needed to identify the highest priority locations.
- Develop collision diagrams showing the direction of movement of vehicles, types of crashes, and pedestrians involved in the crashes.

As stated earlier, this manual acknowledges many local agency safety practitioners may have their preferred methods for completing these analyses. For those agencies that do not and for those willing to try something new, Caltrans recommends using the TIMS website along with the processes outlined in this document to complete these analyses.

Once the crash frequency information is collected and displayed, the practitioner can complete a methodical analysis by geographic area, route, or a cluster analysis to determine which locations have experienced a high or moderate level of crashes. The resulting crash information can be further analyzed for recurring patterns or events. As agencies consider their locations with high levels of crashes, they should understand the overall random nature of crashes and the concept of “regression to the mean”, as discussed in Section 2. Otherwise, if the natural variations in crash occurrence are not accounted for, a site might be selected for study when the number of crashes is randomly high, or overlooked when the number of crashes is randomly low.

Crash Rate

Crash rate analysis can be a useful tool to determine how a specific roadway or segment compares with similar roadway types on the network. A simple count of the number of crashes can be inadequate when comparing multiple roadways of varying lengths and/or traffic volume. Local agencies are also encouraged to compare their crashes with those occurring in similar areas around the state; doing so will help in determining just how severe the number and types of crashes are in the local area. When working with limited budgets, Crash Rates are often used to prioritize locations for safety improvements that will achieve the greatest safety benefits with limited resources. Where traffic volume data is unavailable, other information can be used to provide exposure information. One often-used factor is the length of the roadway segment on each route studied. Comparing the number of roadway crashes per mile or per intersection can help an agency identify potential opportunities to improve safety. The FHWA Roadway Departure Safety and Intersection Safety manuals include the following formulas for calculating crash rates on roadway segments and intersections:

The crash rate for crashes on a roadway is calculated as:

$$R = (C \times 100,000,000) / (V \times 365 \times N \times L)$$

Where:

R = Crash rate for the road segment expressed as crashes per 100 million vehicle-miles of travel,

C = Total number of crashes in the study period

V = Traffic volumes using Average Annual Daily Traffic (AADT) volumes

N = Number of years of data

L = Length of the roadway segment in miles

The crash rate for crashes at an intersection is calculated as:

$$R = (1,000,000 \times C) / (365 \times N \times V)$$

Where:

R = Crash rate for the intersection expressed as crashes per million entering vehicles (MEV)

C = Total number of intersection-related crashes in the study period

N = Number of years of data

V = Traffic volumes entering the intersection daily

Similar to Crash Frequency, there are numerous methods for local safety practitioners to utilize Crash Rate in their safety data analysis and each will have their own preferred methods for initially selecting their top priority locations. The following are a few examples:

- Top 10 (or 20) lists of roadway segments with the highest crashes in relationship to roadway length, traffic volumes, and/or population density.
- Top 10 (or 20) lists of intersections, sorted by crash rate.
- Top 10 (or 20) lists of the highest volume intersections, sorted by crash frequency or rate.

Even though crash frequency and crash rate are helpful for local agency safety practitioners to effectively rank their most critical locations for improvements, the lack of reliable statewide traffic volumes for all roadway types precludes Caltrans from using the crash rate methodology in their statewide project scoring and ranking processes for the HSIP (discussed in more detail in Section 5).

Recommended Action: Complete a quantitative analysis of the roadway data using both Crash Frequency and Crash Rate methodologies. Safety practitioners should look for patterns in the crash data, including: types of crashes, severity of crashes, mode of travel, pavement conditions, roadway characteristics, time of day, intersection control, etc.

3.2 Qualitative Analysis

Qualitative analysis considers the physical characteristics of the roadway network, through the examination of maps, photographs, and field assessments. Certain roadway infrastructure characteristics relate to design standard and compliance issues and should continually be identified and upgraded on a network-wide basis (e.g., signing and pavement delineation characteristics relating to CA-MUTCD compliance as discussed in more detail below). Other roadway characteristics are more important as they relate to locations with high crash frequencies and rates (e.g., well defined pedestrian

paths crossing the roadway or a high number of utility poles/fixed objects adjacent to the edge of travel way). All of these characteristics should be accounted for in an agency's proactive safety analysis.

Ensuring Compliance with CA-MUTCD and Design Standards

It is important for local agencies to continually evaluate their roadways for compliance with the minimum safety standards. The CA-MUTCD provides the minimum standard requirements for traffic control devices on all public streets, highways, bikeways, and private roads open to public travel. In addition to ensuring compliance with the CA-MUTCD, geometric standards should be evaluated as they relate to sight distance, curve radius, and intersection skew angle and roadway standards for lane width, shoulder width, clear recovery zone, and super-elevation. Many local agencies have their own specific roadway design standards, while others rely on Caltrans' Highway Design Manual⁷, FHWA's "Green Book" policy manual⁸ and PEDSAFE guide⁹, and AASHTO's Roadside Design Guide¹⁰. If the traffic control devices or roadway geometry are not in compliance, appropriate devices/countermeasures should be installed. Non-compliance is an important consideration that can affect road safety and may have liability implications for a jurisdiction. Using CA-MUTCD compliant devices results in uniformity among California roadways and serves to meet road user expectations.

Field Assessments

While the qualitative analysis of compliance issues should continually occur on a network-wide basis, a qualitative analysis should also occur for each of the locations and corridors identified as a result of a 'Quantitative Analysis'. The consideration of roadway infrastructure characteristics in conjunction with crash frequency or crash rate gives a more complete picture of overall safety and should be used in an agency's identification and prioritization process for locations needing safety improvements. The qualitative assessment of HCCLs can be completed through the examination of maps and photographs, but the importance of in-field assessments by multi-disciplinary teams should not be underestimated. In some cases, field reviews of all potential project locations may not be practical, so safety practitioners are encouraged to utilize internet-mapping tools to view maps and photographs and virtually visit these sites from their offices.

Actual field visits or RSAs can be done at the highest priority locations before or during the countermeasure selection process. In many cases, field assessments are often the only way for practitioners to identify potential countermeasure implementation and project delivery obstacles. Without in-field assessments, right-of-way, infrastructure, and operational constraints can be overlooked, including: sensitive environmental resources (widening may not be feasible next to wetlands), roadway users (rumble strips may not be feasible on roadways with high bicycle volumes and narrow shoulders), or nearby roadway stakeholders (flashing beacons may be problematic for adjacent residents.) Assessments can provide critical information for local practitioners as they prioritize their crash locations and select countermeasures with the greatest potential for cost effective deployment.

Recommended Action: Incorporate qualitative analysis elements into agency's proactive analysis approach. Consider completing field assessments and RSAs to identify locations with roadway

infrastructure characteristics that relate to both compliance issues and high crash frequencies/rates. As part of field assessments, common roadway and crash characteristics should be identified for the potential systemic deployment of countermeasures. Rather than reviewing all crash sites individually, agencies may find the use of Internet mapping tools offers significant time savings. For agencies without a preferred virtual field review method, the SafeTREC TIMS website automatically links the SWITRS crash locations to Google Maps and Google Street View.

Caltrans recommends all agencies complete both quantitative and qualitative analyses before starting their applications for HSIP program funding. The findings from these analyses should be documented in spreadsheets and/or pin-maps similar to the ones discussed in Section 2.

4. Countermeasure Selection

Once locations and crash problems are identified as illustrated in Sections 2 and 3, the safety practitioners will need to select the set of proposed safety improvements to reduce the likelihood of future crashes. Individual elements of standard safety improvements are referred to as countermeasures and most countermeasures have corresponding Crash Modification Factors (CMFs).

When applied correctly, CMFs can help agencies identify the expected safety impacts of installing various countermeasures to reduce crashes. CMFs are multiplicative factors used to estimate the expected number of crashes after implementing a given countermeasure at a specific site (the lower the CMF, the greater the expected reduction in crashes). Crash Reduction Factors (CRFs) are directly connected to the CMFs and are another indication of the effectiveness of a particular treatment, measured by the percentage of crashes the countermeasure is expected to reduce. The CRF for a countermeasure is defined mathematically as $(1 - \text{CMF})$ (the higher the CRF, the greater the expected reduction in crashes). *NOTE: Given that CRF values can be more intuitive when analyzing roadways for potential “reductions” in crashes; this document shows CRF values in the countermeasure tables. The terms CMFs and CRFs are used interchangeably throughout the text of this section and in other sections of this document.*

In an effort to stretch the limited highway safety funding, local transportation agencies are encouraged to identify and implement the optimal combination of countermeasures to achieve the greatest benefits. Combined with crash cost data and project cost information, CRFs can help safety practitioners compare the B/C ratio of multiple countermeasures and then choose the most appropriate application for their proposed safety improvement projects.

As agencies consider the overall scope/cost of their projects, they also need to consider the number of locations to which each countermeasure may be applied in order to maximize the B/C ratio and the overall effectiveness of their limited safety funding. For HCCLs with varying causes, the Spot Location Approach may be the most appropriate. In contrast, the Systemic Approach should be considered where a high proportion of similar crash types tend to occur at locations that share common geometric or operational elements. In these situations, installing the same low-cost safety countermeasure at multiple locations can increase the cost effectiveness of the safety improvement, allowing an increased number of treatments to be applied.

It is important to note that there are many safety issues and corresponding countermeasures that are more “maintenance” in nature (e.g., visibility issues relating to the need for brush clearing and roadway departure issues relating to the need to replace shoulder backing). As these issues are identified when investigating crash locations, it’s expected that the local safety practitioners would take the necessary steps to remedy the situation in the short-term. For this reason, most of the common maintenance-type safety countermeasures are not included in this document.

4.1 Selecting Countermeasures and Crash Modification Factors / Crash Reduction Factors

Selecting an appropriate countermeasure and corresponding CMF is similar to choosing the right tool for a job. In some cases, a countermeasure and CMF may not be perfect, but will still work well enough to get the job done by providing a reasonable estimation of the countermeasure's effect. In other cases, using an improper countermeasure or CMF may do more harm than good. Applying a CMF that does not fit a specific situation may give a false sense of the countermeasure's safety effectiveness and may result in an increased safety problem.

The Federal Highway Administration (FHWA) is leading a concerted effort to develop information on CMFs and makes it available to State and local agencies to assist with highway safety planning. The CMF Clearinghouse, a free online database introduced in 2009 and accessible at <http://www.cmfclearinghouse.org/>, details the varying quality and reliability of CMFs available to transportation professionals.

FHWA has identified three main considerations to assure appropriate selection of CMFs for a given countermeasure: the **availability** of relevant CMFs, the **applicability** of available CMFs, and the **quality** of applicable CMFs. The following sections detail these considerations and describe how Caltrans recommended CRF and service life values meet these criteria.

Availability: The availability of a CMF that applies to a specific situation depends on whether research has been conducted to determine the safety effects of a particular countermeasure or combination of countermeasures, and whether researchers have documented it. The CMF Clearinghouse contains more than 2,900 CMFs and receives quarterly updates to include the latest research.

At this point, Caltrans has established a small subset of 82 countermeasures and a single CRF for each of these countermeasures that must be used when submitting applications for Caltrans statewide calls-for-projects. This methodology allows for a statewide data-driven process that facilitates a fair and accurate comparison of project applications. (The reason for limiting the number of countermeasures is further explained below under “applicability”).

Applicability: In general, once a local safety practitioner determines that one or more CMFs exist for a specific countermeasure, the next step is to determine which CMF is the most applicable. Applicability depends on how closely the CMF represents the situation to which it will be applied. Safety practitioners should evaluate the potentially applicable CMFs, eliminating any that are not appropriate for the situation. Practitioners should only choose the most appropriate CMFs for their specific project based on factors including but not limited to: urban areas vs. rural areas; low vs. high traffic volumes; 2-lane vs. 6-lane roadways; individual vs. combination treatments; signalized vs. non-signalized intersections; and minor crashes vs. fatal crashes. If practitioners choose to use a CMF outside the range of applicability, the safety effect will likely be over or underestimated.

The mix of countermeasures and CRFs included in this document is intended to meet Caltrans' goal for a data-driven award process for local agencies to follow that allows for a fair and accurate comparison of project applications. Where possible and appropriate, the CRF value intended for use in statewide calls-for-projects is based on research studies that specifically established the CRF to be used for 'all' project areas, roadway types, and traffic volumes. Where not all applicability factors have already been established by prior research, Caltrans worked closely with FHWA to approximate CRFs for countermeasures often utilized by local agencies.

Quality: Often a search of the CMF Clearing House results in multiple CMFs for the same countermeasure. A practitioner needs to examine the quality of each CMF. The quality of a CMF can vary greatly depending on several factors associated with the process of developing the CMF. The primary factors that determine the quality of a CMF are the study design, sample size, standard error, potential bias, and data source. The CMF Clearinghouse provides a star rating for each based on a scale of 1 to 5, where 5 indicates the highest quality. The most reliable CMFs in the HSM are indicated with a bold font.

Wherever possible, the CRFs included in this document are based on research that has a CMF Clearinghouse star rating of 3 or more. For countermeasures that do not have corresponding research of a star rating of 3 or more but were deemed important to provide flexibility to local practitioners, Caltrans worked closely with FHWA to establish CRFs based on the best available research.

4.2 List of Countermeasures

The list of countermeasures discussed in this section is not an all-inclusive list, and only includes those available in the Caltrans' HSIP Cycle 12 Call-for-projects. Only thoroughly researched countermeasures with a readiness to be applied by local agencies on a statewide basis are utilized. In addition, the California Local HSIP program places further restrictions on the eligibility of some countermeasures to meet the most critical needs on California local roadways. Practitioners are encouraged to utilize the FHWA CMF Clearinghouse for a more comprehensive list as they establish their local agency specific set of proposed improvements and prioritize their projects.

The countermeasures listed in the following three tables have been sorted into 3 categories: Signalized Intersection, Non-Signalized Intersection, and Roadway Segment. Pedestrian and bicycle related countermeasures have been included in each of these categories, as the consideration of non-motorized travel is important for all roadway classifications and locations. The countermeasures included in these tables are also used in the HSIP Analyzer. When selecting countermeasures and CMFs to apply to their specific safety needs, local agency safety practitioners should consider the **availability, applicability, and quality** of CMFs, as discussed in section 4.1.

Only Crash Types, CRFs, Expected Lives, and HSIP Funding Eligibility of the countermeasures for use in Caltrans local HSIP program are provided in this section. Fields in the countermeasure tables are:

- **Crash Types** - “All”, “P & B” (Pedestrian and Bicycle), “Night”, “Emergency Vehicle”, or “Animal”.
- **CRF** - Crash Reduction Factor used for HSIP calls-for-projects.
- **Expected Life** - 10 years or 20 years.
- **Funding Eligibility** – the maximum HSIP reimbursement ratio for HSIP Cycle 12 Call-for-projects.
 - Eighty-one (85) countermeasures: 90%
 - One (1) countermeasure: 50% (CM No. SI03: Improve signal timing, as this CM will improve the signal operation rather than merely the safety.)
- **Systemic Approach Opportunity** - Opportunity to Implement Using a Systemic Approach: “Very High”, “High”, “Medium” or “Low”.

The list of countermeasures presented in this section is intended to be a quick-reference summary. Appendix B of this manual provides more details on each of these countermeasures including Where to use, Why it works, General Qualities (Time, Cost and Effectiveness), and information from FHWA CMF Clearinghouse (Crash Types Addressed and range of Crash Reduction Factor).

Recommended Action: At this point, agencies should use all information and results obtained by completing the actions in Sections 2, 3 and 4 to select the appropriate countermeasures for their HCCLs and systemic improvements. As novice safety practitioners select countermeasures, they must realize that a reasonable level of traffic ‘engineering judgment’ is required and that this manual should not be used as a simple cheat-sheet for preparing and submitting applications for funding.

Table 1. Countermeasures for Signalized Intersections

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
SI01NT	Lighting	Add intersection lighting (S.I.)	Night	40%	20	90%	Medium
SI02	Signal Mod.	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	All	15%	10	90%	Very High
SI03	Signal Mod.	Improve signal timing (coordination, phases, red, yellow, or operation)	All	15%	10	50%	Very High
SI04EV	Signal Mod.	Install emergency vehicle pre-emption systems	Emergency Vehicle	70%	10	90%	High
SI05	Signal Mod.	Install left-turn lane and add turn phase (signal has no left-turn lane or phase before)	All	55%	20	90%	Low
SI06	Signal Mod.	Provide protected left turn phase (left turn lane already exists)	All	30%	20	90%	High
SI07	Signal Mod.	Convert signal to mast arm (from pedestal-mounted)	All	30%	20	90%	Medium
SI08	Operation/ Warning	Install raised pavement markers and striping (Through Intersection)	All	10%	10	90%	Very High
SI09	Operation/ Warning	Install flashing beacons as advance warning (S.I.)	All	30%	10	90%	Medium
SI10	Operation/ Warning	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	90%	Medium
SI11	Geometric Mod.	Install raised median on approaches (S.I.)	All	25%	20	90%	Medium
SI12PB	Geometric Mod.	Install pedestrian median fencing on approaches	P & B	35%	20	90%	Low
SI13	Geometric Mod.	Create directional median openings to allow (and restrict) left-turns and u-turns (S.I.)	All	50%	20	90%	Medium
SI14	Geometric Mod.	Install right - turn lane (S.I.)	All	15%	20	90%	Medium
SI15	Geometric Mod.	Reduced Left-Turn Conflict Intersections (S.I.)	All	50%	20	90%	Medium
SI16RA	Geometric Mod.	Convert intersection to roundabout (from signal)	All	Varies	20	90%	Low
SI17RA	Geometric Mod.	Convert intersection to compact roundabout (from signal)	All	Varies	20	90%	Low
SI18PB	Ped and Bike	Install pedestrian countdown signal heads	P & B	25%	20	90%	Very High
SI19PB	Ped and Bike	Install pedestrian crossing (S.I.)	P & B	25%	20	90%	High
SI20PB	Ped and Bike	Pedestrian Scramble	P & B	40%	20	90%	High
SI21PB	Ped and Bike	Install advance stop bar before crosswalk (Bicycle Box)	P & B	15%	10	90%	Very High
SI22PB	Ped and Bike	Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	P & B	60%	10	90%	Very High

Table 2. Countermeasures for Non-Signalized Intersections

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
NS01NT	Lighting	Add intersection lighting (NS.I.)	Night	40%	20	90%	Medium
NS02	Control	Convert to all-way STOP control (from 2-way or Yield control)	All	50%	10	90%	High
NS03	Control	Install signals	All	30%	20	90%	Low
NS04RA	Control	Convert intersection to roundabout (from all way stop)	All	Varies	20	90%	Low
NS05RA	Control	Convert intersection to roundabout (from stop or yield control on minor road)	All	Varies	20	90%	Low
NS06RA	Control	Convert intersection to compact roundabout (from all way stop)	All	Varies	20	90%	Medium
NS07RA	Control	Convert intersection to compact roundabout (from stop or yield control on minor road)	All	Varies	20	90%	Medium
NS08	Operation/ Warning	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	All	15%	10	90%	Very High
NS09	Operation/ Warning	Upgrade intersection pavement markings (NS.I.)	All	25%	10	90%	Very High
NS10	Operation/ Warning	Install Flashing Beacons at Stop-Controlled Intersections	All	15%	10	90%	High
NS11	Operation/ Warning	Install flashing beacons as advance warning (NS.I.)	All	30%	10	90%	High
NS12	Operation/ Warning	Install transverse rumble strips on approaches	All	20%	10	90%	High
NS13	Operation/ Warning	Improve sight distance to intersection (Clear Sight Triangles)	All	20%	10	90%	High
NS14	Operation/ Warning	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	90%	Medium
NS15	Geometric Mod.	Install splitter-islands on the minor road approaches	All	40%	20	90%	Medium
NS16	Geometric Mod.	Install raised median on approaches (NS.I.)	All	25%	20	90%	Medium
NS17	Geometric Mod.	Create directional median openings to allow (and restrict) left-turns and u-turns (NS.I.)	All	50%	20	90%	Medium
NS18	Geometric Mod.	Reduced Left-Turn Conflict Intersections (NS.I.)	All	50%	20	90%	Medium
NS19	Geometric Mod.	Install right-turn lane (NS.I.)	All	20%	20	90%	Low
NS20	Geometric Mod.	Install left-turn lane (where no left-turn lane exists)	All	35%	20	90%	Low
NS21PB	Ped and Bike	Install raised medians / refuge islands (NS.I.)	P & B	45%	20	90%	Medium
NS22PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	P & B	25%	10	90%	High
NS23PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	90%	Medium
NS24PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
NS25PB	Ped and Bike	Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))	P & B	55%	20	90%	Low

Table 3. Countermeasures for Roadways

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R01NT	Lighting	Add segment lighting	Night	35%	20	90%	Medium
R02	Remove/ Shield Obstacles	Remove or relocate fixed objects outside of Clear Recovery Zone	All	35%	20	90%	High
R03	Remove/ Shield Obstacles	Install Median Barrier	All	25%	20	90%	Medium
R04	Remove/ Shield Obstacles	Install Guardrail	All	25%	20	90%	High
R05	Remove/ Shield Obstacles	Install impact attenuators	All	25%	10	90%	High
R06	Remove/ Shield Obstacles	Flatten side slopes	All	30%	20	90%	Medium
R07	Remove/ Shield Obstacles	Flatten side slopes and remove guardrail	All	40%	20	90%	Medium
R08	Geometric Mod.	Install raised median	All	25%	20	90%	Medium
R09	Geometric Mod.	Install median (flush)	All	15%	20	90%	Medium
R10PB	Geometric Mod.	Install pedestrian median fencing on approaches	P & B	35%	20	90%	Low
R11	Geometric Mod.	Install acceleration/ deceleration lanes	All	25%	20	90%	Low
R12	Geometric Mod.	Widen lane (initially less than 10 ft)	All	25%	20	90%	Medium
R13	Geometric Mod.	Add two-way left-turn lane	All	30%	20	90%	Medium
R14	Geometric Mod.	Road Diet (Reduce travel lanes and add a two way left-turn and bike lanes)	All	35%	20	90%	Medium
R15	Geometric Mod.	Widen shoulder	All	30%	20	90%	Medium
R16	Geometric Mod.	Curve Shoulder widening (Outside Only)	All	45%	20	90%	Medium
R17	Geometric Mod.	Improve horizontal alignment (flatten curves)	All	50%	20	90%	Low
R18	Geometric Mod.	Flatten crest vertical curve	All	25%	20	90%	Low
R19	Geometric Mod.	Improve curve superelevation	All	45%	20	90%	Medium
R20	Geometric Mod.	Convert from two-way to one-way traffic	All	35%	20	90%	Medium
R21	Geometric Mod.	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	90%	High

Table 3. Countermeasures for Roadways (Continued)

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R22	Operation/ Warning	Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)	All	15%	10	90%	Very High
R23	Operation/ Warning	Install chevron signs on horizontal curves	All	40%	10	90%	Very High
R24	Operation/ Warning	Install curve advance warning signs	All	25%	10	90%	Very High
R25	Operation/ Warning	Install curve advance warning signs (flashing beacon)	All	30%	10	90%	High
R26	Operation/ Warning	Install dynamic/variable speed warning signs	All	30%	10	90%	High
R27	Operation/ Warning	Install delineators, reflectors and/or object markers	All	15%	10	90%	Very High
R28	Operation/ Warning	Install edge-lines and centerlines	All	25%	10	90%	Very High
R29	Operation/ Warning	Install no-passing line	All	45%	10	90%	Very High
R30	Operation/ Warning	Install centerline rumble strips/strips	All	20%	10	90%	High
R31	Operation/ Warning	Install edgeline rumble strips/strips	All	15%	10	90%	High
R32	Operation/ Warning	Speed Safety Cameras	All	20%	10	90%	High
R33PB	Ped and Bike	Install bike lanes	P & B	35%	20	90%	High
R34PB	Ped and Bike	Install Separated Bike Lanes	P & B	45%	20	90%	High
R35PB	Ped and Bike	Install sidewalk/pathway (to avoid walking along roadway)	P & B	80%	20	90%	Medium
R36PB	Ped and Bike	Install/upgrade pedestrian crossing (with enhanced safety features)	P & B	35%	20	90%	Medium
R37PB	Ped and Bike	Install raised pedestrian crossing	P & B	35%	20	90%	Medium
R38PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
R39AL	Animal	Install animal fencing	Animal	80%	20	90%	Medium

5. Calculating the B/C Ratio and Comparing Projects

Practitioners need to consider the expected B/C ratio of their proposed projects. This is an important step in a proactive safety analysis process because it provides two key pieces of information: First, it defines the cost effectiveness of the proposed projects; and second, it gives the safety practitioner a means to help prioritize their safety projects both inside the agency's traffic safety section and against other proposed operational and maintenance projects competing for funding.

5.1 Estimate the Benefit of Implementing Proposed Improvements

Sections 2 through 4 provide the practitioner all the information needed to calculate the expected 'Benefit' of the proposed safety projects. The resulting expected benefit value is derived by applying the proposed countermeasures and corresponding CMFs to the expected crashes. It is of critical importance for the practitioner to understand that misapplication of a CMF will lead to misinformed decisions. Four main factors need to be considered when applying countermeasures and CMFs to calculate the expected benefit value: (1) how to estimate the number of expected crashes without treatment, (2) how to apply CMFs by type and severity, (3) how to apply multiple CMFs if multiple treatments are to be included in the same project, and (4) how to apply a benefit value by crash severity. The following text explains how these factors affect the expected benefit value in more detail.

Estimating expected crashes without treatment: Before applying CMFs, local safety practitioners first need to select countermeasures and CMFs. The CMF is applied to the expected safety performance (expected crashes) without any treatment in order to estimate the expected crashes with the treatment. The reduction in expected crashes multiplied by the expected costs per each crash gives the practitioner the expected benefit.

As mentioned earlier in this manual, the random nature of roadway crashes suggests that over time the number of crashes at any particular locations will change. This concept is known as "regression to the mean" and it gives rise to the concern that a site might be selected for study when the crashes are at a randomly high fluctuation, or overlooked from study when the site is at a randomly low fluctuation. The HSM presents several methods for estimating the expected safety performance of a roadway or intersection including the Empirical Bayes method, which combines observed information from the site of interest with information from similar sites to estimate the expected crashes without treatment. Another common way to minimize the impact of regression to the mean is to increase the number of years of crash data being analyzed.

For statewide calls-for-projects, Caltrans strives to ensure that all projects are fairly ranked based on a consistent statewide approach. Given this, Caltrans has avoided using methodology requiring agencies to mathematically adjust their crash data (e.g., Empirical Bayes) and instead has opted to use 3 to 5 years of "observed crashes" in estimating "expected crashes."

Applying CMFs by type and severity: Section 4.1 of this manual discusses the application of CMFs and the need for them to represent the situation to which they will be applied. It also stresses the need for

practitioners to choose the most appropriate CMFs for their specific project. In many circumstances, estimating the change in crashes by type and severity is useful; however, local safety practitioners only can use this approach when CMFs exist for the specific crash types and severities in question. If practitioners choose to use a CMF outside the range of applicability, the safety effect may be over- or underestimated. (For example: past research relating to installing a channelized left turn lane, has estimated CMFs as high as 68% for Right-Angle crashes of all severities and as low as 11% for Rear-End crashes with severities of only fatal and injury).

Applying multiple CMFs: In real-world scenarios, transportation agencies commonly install more than one countermeasure per project as part of their safety improvement program. This leads to the question, "What is the safety effect of the combined countermeasures?" The calculation methods that Transportation agencies use include: applying the CMF for the single countermeasure expected to achieve the greatest reduction, applying CMFs separately by crash type and summing them to get a project-level effect, and applying CMFs based on a review of crash patterns, etc. Regardless of the specific method employed, "engineering judgment" is required when combining multiple CMFs and it is important for local agencies to apply their method consistently throughout their analysis to ensure a fair comparison of projects.

One common practice is to assume that CMFs are multiplicative when they are applied to the same set of crash data. In other words, each successive countermeasure will achieve an additional benefit when implemented in combination with other countermeasures. The multiplicative method is a common, generally accepted method and is presented in the HSM and in the CMF Clearinghouse. This method is also used in the HSIP calls-for-projects.

To allow agencies maximum flexibility in combining countermeasures and locations into a single project while ensuring all projects can be consistently ranked on a statewide basis, Caltrans only allows up to three (3) individual countermeasures can be utilized in the B/C ratio for a project location site. The CMFs are multiplicative if there are multiple countermeasures, i.e. each successive countermeasure will achieve an additional benefit based on the remainder of the crashes after the effect of the prior countermeasures, not the original number of the crashes.

More information on these requirements and procedures are provided in the documents (Application Form Instructions, etc.) for each call-for-projects.

Applying benefit value by crash severity: The last step in estimating the overall benefit of a proposed improvement project is to multiply the expected reduction in crashes by a generally accepted value for the "cost" of crashes. In other words, the expected "benefit" value for a project is actually the expected "reduction in costs" value from reducing future crashes. There are many sources for the costs of crashes (e.g., HSM, FHWA & National Safety Council) and some of the sources vary widely depending on how they account for the economic value of a life and when the numbers were last updated.

When calculating the “benefit” to be used in calculating an improvement’s B/C ratio, it is important for the practitioner to consider whether a total benefit value for the “life” of the improvement is needed or if the benefit value should be annualized (i.e., benefit per year). Whichever method is used to calculate the overall cost of the improvements must also be used for calculating the benefit.

Caltrans has currently chosen to use published Cost-of-Crash values from the first edition of the HSM and increase the values by 4% annually. These values may be updated in the future, when updated cost-of-crash values are published by FHWA or another national source. The specific values for each of the crash severities and the formulas used to calculate the total benefit are shown in Appendix D.

Recommended Action: Prepare Total Benefit estimates for the proposed projects being evaluated in the proactive safety analysis.

5.2 Estimate the Cost of Implementing Proposed Improvements

After calculating the expected benefit of the proposed safety projects, the next step for the practitioner is to develop an estimate of the Total Project Costs. These costs need to include both the construction costs and the project development and administration costs. The most common approach to estimating construction costs is through an “Engineer’s Cost Estimate.” A Template for Detailed Engineer’s Estimate and Cost Breakdown by Countermeasures is included in the HSIP Analyzer. When calculating the administration costs for a project, the complexity of the improvements must be accounted for: Low-cost countermeasures, typically used in the Systemic Approach, often have minimal environmental and right-of-way impacts and require minimal design effort. In contrast, many medium to high cost improvements tend to have greater impacts to the environment and right-of-way and require significant design efforts. It’s crucial to account for these differences to accurately determine the true B/C ratio of the projects and prioritize them correctly.

When an agency is initially evaluating several potential locations and countermeasures as part of their proactive safety analysis or in preparing for Caltrans call-for-projects, they should consider first using rough ‘ballpark’ cost estimates using previous projects that had similar scope, if possible. Ballpark cost estimates can allow the practitioner to quickly establish B/C ratios for all of their potential projects and identify the projects with high cost effectiveness and with a reasonable chance of receiving HSIP funding in a Caltrans call-for-projects.

Recommended Action: Prepare ‘Total Project Cost’ estimates for the proposed projects being evaluated in the proactive safety analysis.

5.3 Calculate the B/C Ratio

In general, the B/C ratio is calculated by taking a project’s overall benefit (as calculated in Section 5.1) and dividing it by the project’s overall cost (as calculated in Section 5.2). There are, however, several

methods and input-factors available for calculating a project's B/C ratio and practitioners may want to consider other methods as defined in the HSM.

Based on Caltrans' need for a fair, data-driven, statewide project selection process for HSIP call-for-projects, Caltrans requires the B/C ratio for all applications to be completed using the same process. Applicants must utilize the HSIP Analyzer to calculate the B/C ratio of the project. Additional details and formulas included in the calculation are included in this document as Appendix D.

Recommended Action: Calculate the B/C ratio for each of the proposed projects being evaluated in the proactive safety analysis.

5.4 Compare B/C Ratios and Consider the Need to Reevaluate Project Elements

By implementing a comprehensive proactive safety analysis approach, agencies will likely identify more potential safety projects than they can fund and deliver. It will be important for an agency to prioritize their projects internally before funding is sought. It is not uncommon for projects to have a B/C ratio as low as 0.1 or as high as 100. Once the relative cost effectiveness of an agency's potential projects has been established, the projects with low to mid-ranged B/C ratios should be reassessed. Projects with very low initial B/C ratios may be dropped while projects with low to mid ranged B/C ratios may be redefined by changing the limits of the proposed improvements to focus on higher crash locations or incorporating lower-cost countermeasures. This reiterative process is illustrated in Figure 1 in Section 1 of this document.

At the conclusion of this step, the local agency should have several potential safety projects ready to move into the project development and construction phases. Ideally, there will be a variety of low cost safety projects and potentially a few higher cost roadway reconstruction projects. How each local agency prioritizes their list of safety improvements will vary, but projects with the highest B/C ratios should generally have a high overall priority. It should be understood that available funding will play a key role in local agency prioritization (e.g., higher-cost projects may have to wait for funding to become available while low-cost improvements with lower B/C ratios can be constructed with in-house maintenance crews), but in the goal of maximizing overall safety benefits, the role of politics and public influence should be minimized.

Recommended Action: Compare, reevaluate, and prioritize the potential safety projects. Consider changing the project limits to maximize the number of fatal and injury crashes addressed within the limits. Consider lower cost countermeasures in areas where high and medium cost countermeasures resulted in low B/C ratios.

6. Identifying Funding and Construct Improvements

Funding strategies for implementing safety projects need to vary as widely as local agency's roadway types, project costs, and proposed improvements. At this point in the proactive safety analysis process, local agencies should have several potential safety projects ready to move into the project development and construction phases. There are likely a wide range of 'approaches' to fund each of these projects. This section of the document discusses some of the most common approaches.

6.1 Existing Funding for Low-cost Countermeasures

For projects utilizing low-cost countermeasures, the total project cost may be low enough that the agency can construct the project using its existing roadway funding by utilizing the ongoing activities of their roadway maintenance staff and equipment. Other low-cost projects (e.g., overlays, sealcoats, drainage, signing, and striping projects) may be more important to incorporate into larger maintenance projects. It is common for agencies to have 1-, 5-, and 10-year plans for making these standard maintenance improvements. With upfront planning and coordination between agency staff, the low-cost safety projects identified through the proactive safety analysis can be incorporated with minimal costs to an agency's maintenance program. Maximizing the cost effectiveness of the program may even allow the transportation managers to justify increasing the funding for their overall roadway maintenance program.

In addition to their maintenance program, transportation managers should also strategically seek out planned capital improvement and development projects that can incorporate low and medium cost countermeasures identified in their safety analysis. Local agencies may also find opportunities to partner with private enterprises and insurance companies to fund special safety projects that further both organizations' strategic goals.

Recommended Action: Survey planned maintenance, developer and capital projects to determine whether they overlap any of the proposed safety projects. Where projects overlap, leverage the existing funding sources to include safety countermeasures.

6.2 HSIP and Other Funding Sources

In addition to the HSIP Program, the Division of Local Assistance's web site includes several other Caltrans administered funding programs:

<https://dot.ca.gov/programs/local-assistance>

Recommended Action: Consider all potential funding opportunities to incorporate the identified safety countermeasures.

6.3 Project Development and Construction Considerations

In general, roadway safety projects don't garner the same level of attention from decision makers, media, elected officials, and the general public, that large operational and development-driven projects do. As a result, local safety practitioners and project sponsors often find their projects have difficulty in competing for the agencies' limited project delivery resources. Establishing and implementing a comprehensive safety analysis process can assist safety practitioners in delivering their safety programs in many ways, including:

- Credibility and awareness to individual projects and delivery schedules.
- Increased stakeholders tracking and delivery of a project when low-cost improvements are incorporated into ongoing maintenance and capital projects.
- An increased focus on low-cost countermeasures typically corresponds to projects with less environmental, right-of-way and other impacts; resulting in projects that have streamlined project delivery processes and short construction schedules.

Recommended Action: Safety practitioners should follow their safety projects all the way through the project delivery and construction process. In addition, they should establish a safety program delivery plan that brings awareness and support to the expedited delivery of safety projects. Where possible, safety practitioners should involve the media and even consider having their own program intended to "toot their own safety-horn."

7. Evaluation of Improvements

Evaluation of the effectiveness of roadway treatments following installation should be used to guide future decisions regarding roadway countermeasures. Field reviews should also be conducted shortly after the project is completed to insure the project is operating as intended.

A record of crash history and countermeasure installation forms the foundation for assessing how well the implemented strategies have performed. An important database to maintain is a current list of installed countermeasures with documented “when/where/why” information. Periodic assessments will provide the necessary information to make informed decisions on whether each countermeasure contributed to an increase in safety, whether the countermeasure could or should be installed at other locations, and which factors may have contributed to each countermeasure’s success.

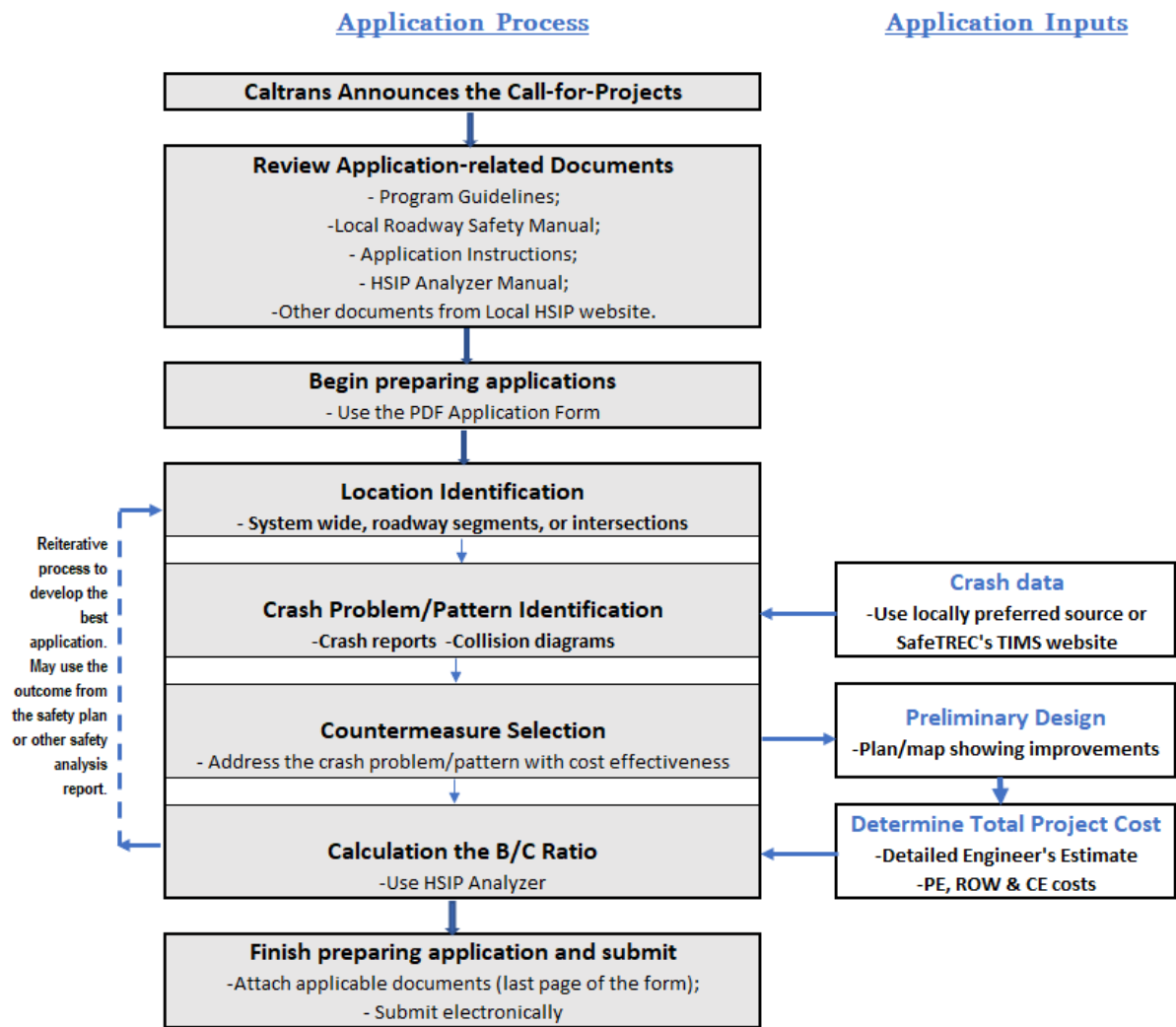
In order to perform the assessment, it is necessary to collect the required information for a certain period after strategies have been deployed at the locations. The time period varies, but whenever possible, 3 to 5 years is recommended to reduce the effects of the random nature of roadway crashes (i.e., Regression to the Mean). The information required may consist of public input and complaints, police reports, observations from maintenance crews, and local and State crash data.

It is important to keep the list of safety installations up-to-date since it will serve as a record of countermeasure deployment history (see table below for an example). By using this type of system, assessment dates can be scheduled to review the crashes and other pertinent information on segments where roadway countermeasures have been installed. Making “after” assessments will inform the practitioner on the effectiveness of past improvements and can provide data to help justify the value of continuing and expanding the local agency’s safety program in the future.

Location	Type of Countermeasure Installed	Date Installed	Crashes Before (Duration and Severity)	Crashes After (Duration and Severity)	Comments

Recommended Action: Develop a spreadsheet or database to track future safety project installations and record 3 or more years of “before” and “after” crash information at those locations. Once safety countermeasures are constructed, schedule and track assessment dates to ensure they happen.

Appendix A: HSIP Call-for-Projects Application Process



Appendix B: Detailed Tables of Countermeasures

The intent of the information contained in this appendix is to provide local agency safety practitioners with a list of effective countermeasures that are appropriate remedies to many common safety issues. The tables in Section 4.2 present a quick summary of the specific values that the Caltrans Division of Local Assistance uses to assess and select projects for its calls-for-projects. In addition to the same information as in Section 4.2, this appendix also includes notes for Caltrans HSIP calls-for-projects and “General information” regarding where the countermeasure should be used, why it works, the general qualities that can be used to suggest the potential complexity of installation, and information from FHWA CMF Clearinghouse on the type of crashes where the countermeasure is best used and a range of their expected overall effectiveness.

The countermeasures have been sorted into 3 categories: Signalized Intersection, Non-Signalized Intersection, and Roadway Segment. Pedestrian and bicycle related countermeasures have been included in each of these categories.

Caltrans gives careful consideration to the fair application of its calls-for-projects process. Starting in 2012, the award of safety funding has been solely based on a determined benefit-to-cost ratio for each project. The fixed set of countermeasures and CRFs included in these tables are intended to allow for all projects to be evaluated consistently and fairly throughout the project selection process. However, at this time, there are no CRFs/CMFs available for several safety improvements, such as: "dynamic/variable speed regulatory signs", "non-motorized signs and markings (regulatory and warning)", "Square-up (reduce curve radius) turn lanes" and non-infrastructure elements. These safety improvement items can be included in project applications, but they will not be included into the B/C ratio calculations, unless the safety improvements meet the intent of other separate countermeasures included in the attached lists. Caltrans is interested in adding these countermeasures (and many others) to these tables once CRFs/CMFs have been established. Caltrans will continue to periodically update this list of allowable countermeasures and CRFs as new safety research data becomes available. With this in mind, Caltrans is interested in feedback and suggestions from local agency safety practitioners on the overall countermeasure list as well as specific details of individual countermeasures, including locally developed safety effectiveness information.

Caltrans used the following references to assist its team in developing the information shown in the following tables. Safety Practitioners are encouraged to utilize these references for a more expansive list of countermeasures and CRFs / CMFs.

The Crash Modification Factors Clearinghouse

<https://www.cmfclearinghouse.org/>

NCHRP Report 500 Series: Volumes 4, 5, 6, 7, 10, 12, 13, and others

<https://www.trb.org/Main/Blurbs/152868.aspx>

Highway Safety Manual (HSM)
<http://www.highwaysafetymanual.org>

Pedestrian and Bicycle - Tools to Diagnose and Solve the Problem
https://safety.fhwa.dot.gov/ped_bike/tools_solve/

FHWA Local and Rural Road / Training, Tools, Guidance and Countermeasures for Locals
https://safety.fhwa.dot.gov/local_rural/training/

For each countermeasure (CM):

(Title) CM No., CM Name

- CM No. is
 - SI01NT through SI22PB for Intersection Countermeasures – Signalized,
 - NS01NT through NS24PB for Intersection Countermeasures – Unsignalized, or
 - R01NT through R39AL for Roadway Countermeasures.

Some CM Numbers have two letters at the end – this is used to quickly identify the specific feature of the CM. For example, “NT” - reducing night crashes, “PB” – reducing Pedestrian and Bicycle crashes, “EV” – countermeasure toward Emergency Vehicle involved crashes, “AL”- countermeasure toward Animal involved crashes, and “RA” – roundabout.

For HSIP Calls-for-projects:

- **Funding Eligibility** - 90% or 50%.
- **Crash Types Addressed** - “All”, “Pedestrian and Bicycle”, “Night”, “Emergency Vehicle”, or “Animal”.
- **CRF** - Crash Reduction Factor used for HSIP calls-for-projects.
- **Expected Life** - 10 years or 20 years.
- **Notes** - Specific requirements are provided for utilizing the countermeasure on applications for Caltrans statewide calls-for-projects.
-

General Information:

- **Where to use** – Roadway segments and intersections with specific common characteristics can be addressed with similar countermeasures that are most effective.
- **Why it works** – A discussion of the benefit of a countermeasure is important to determine its appropriateness in addressing certain roadway crash types at areas with specific issues as determined by the data and roadway features.
- **General Qualities (Time, Cost and Effectiveness)** – This category is more subjective and can vary substantially. ‘Time’ refers to the approximate relative time it can take to implement the countermeasure. Costs can vary considerably due to local conditions, so ‘cost’ represents the relative cost of applying a countermeasure. A relative overall ‘effectiveness’ is also provided for some countermeasures. All of this subjective information may not be applicable to the unique circumstances for the agency and should not be utilized without verification by the safety practitioner.

- **FHWA CMF Clearinghouse**

- **Crash Types Addressed** – In order to effectively reduce the number and severity of roadway crashes, it is necessary to match countermeasures to the crash types they are intended to address. Depending on the type of problem, one or more of a range of countermeasures could be the most effective way to reduce the number and severity of future crashes.
- **Crash Reduction Factor** – The crash reduction factor (CRF) is an indication of the effectiveness of a particular treatment, measured by the percentage of crashes it is expected to reduce. Note: As mentioned earlier in this section, the effectiveness of a countermeasure can also be expressed as a Crash Modification Factor (CMF), which is defined mathematically as $1 - \text{CRF}$. However, this document uses CRFs as they can be more insightful when analyzing roadways for potential “reductions” in crashes. There is a range of CRF values that exist for each of the countermeasures (or similar countermeasures). The range of CRFs is provided to give local safety practitioners a clear understanding that they may need to go to the FHWA CMF Clearinghouse to find the most appropriate countermeasure and CRF for their specific projects and local prioritization.

B.1 Intersection Countermeasures – Signalized

SI01NT, Add intersection lighting (Signalized Intersection => S.I.)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		"night" crashes		40%	20 years
Notes:	This CM only applies to "night" crashes (all types) occurring within limits of the proposed roadway lighting 'engineered' area.				
General information					
Where to use:					
Signalized intersections that have a disproportionate number of night-time crashes and do not currently provide lighting at the intersection or at its approaches. Crash data should be studied to ensure that safety at the intersection could be improved by providing lighting (this strategy would be supported by a significant number of crashes that occur at night).					
Why it works:					
Providing lighting at the intersection itself, or both at the intersection and on its approaches, improves the safety of an intersection during nighttime conditions by (1) making drivers more aware of the surroundings at an intersection, which improves drivers' perception-reaction times, (2) enhancing drivers' available sight distances, and (3) improving the visibility of non-motorists. Intersection lighting is of particular benefit to non-motorized users. Lighting not only helps them navigate the intersection, but also helps drivers see them better.					
General Qualities (Time, Cost and Effectiveness):					
A lighting project can usually be completed relatively quickly, but generally requires at least 1 year to implement because the lighting system must be designed and the provision of electrical power must be arranged. The provision of lighting involves both a fixed cost for lighting installation and an ongoing maintenance and power cost which results in a moderate to high cost. Some locations can result in high B/C ratios, but due to higher costs, these projects often result in medium to low B/C ratios.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Night, All	CRF: 20-74%

SI02, Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		15%	10 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the upgraded signals. This CM does not apply to improvements like "battery backup systems", which do not provide better intersection/signal visibility or help drivers negotiate the intersection (unless applying past crashes that occurred when the signal lost power). If new signal mast arms are part of the proposed project, CM "S2" should not be used and the signal improvements would be included under CM "S7".				
General information					
Where to use:					
Signalized intersections with a high frequency of right-angle and rear-end crashes occurring because drivers are unable to see traffic signals sufficiently in advance to safely negotiate the intersection being approached. Signal intersection improvements include new LED lighting, signal back plates, retro-reflective tape outlining the back plates, or visors to increase signal visibility, larger signal heads, relocation of the signal heads, or additional signal heads.					
Why it works:					
Providing better visibility of intersection signals aids the drivers' advance perception of the upcoming intersection. Visibility and clarity of the signal should be improved without creating additional confusion for drivers.					
General Qualities (Time, Cost and Effectiveness):					
Installation costs and time should be minimal as these type strategies are classified as low cost and implementation does not typically require the approval process normally associated with more complex projects. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance crews. However, This CM can be effectively and efficiently implemented using a systematic approach with numerous locations, resulting in low to moderate cost projects that are more appropriate to seek state or federal funding.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Rear-End, Angle	CRF: 0-46%

SI03, Improve signal timing (coordination, phases, red, yellow, or operation)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
50%		All		15%	10 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new signal timing. For projects coordination signals along a corridor, the crashes related to side-street movements should not be applied. This CM does not apply to projects that only 'study' the signal network and do not make physical timing changes, including corridor operational studies and improvements to Traffic Operation Centers (TOCs). In Caltrans calls for projects, this CM has a HSIP reimbursement ratio of 50%, considering that it will improve the signal operation rather than merely the safety.				
General information					
Where to use:					
Locations that have a crash history at multiple signalized intersections. Signalization improvements may include adding phases, lengthening clearance intervals, eliminating or restricting higher-risk movements, and coordinating signals at multiple locations. Understanding the corridor or roadway's crash history can provide insight into the most appropriate strategy for improving safety.					
Why it works:					
Certain timing, phasing, and control strategies can produce multiple safety benefits. Sometimes capacity improvements come along with the safety improvements and other times adverse effects on delay or capacity occur. Corridor improvements often have the highest benefit but may take longer to implement. Projects focused on capacity improvements (without a separate focus on signal timing safety needs) may not result in a reduction in future crashes.					
General Qualities (Time, Cost and Effectiveness):					
In general, these low-cost improvements to multiple signalized intersections can be implemented in a short time. Typically these low cost improvements are funded through local funding by local maintenance crews. However, some projects requiring new interconnect infrastructure can have moderate to high costs making them more appropriate to seek state or federal funding. The expected effectiveness of this CM must be assessed for each individual project.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		All	CRF: 0 - 41%

SI04EV, Install emergency vehicle pre-emption systems

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Emergency Vehicle - only		70%	10 years
Notes:	This CM only applies to "E.V." crashes occurring on the approaches / influence area of the new pre-emption system.				
General information					
Where to use:					
Corridors that have a history of crashes involving emergency response vehicles. The target of this strategy is signalized intersections where normal traffic operations impede emergency vehicles and where traffic conditions create a potential for conflicts between emergency and nonemergency vehicles. These conflicts could lead to almost any type of crash, due to the potential for erratic maneuvers of vehicles moving out of the paths of emergency vehicles					
Why it works:					
Providing emergency vehicle preemption capability at a signal or along a corridor can be a highly effective strategy in two ways; any type of crash could occur as emergency vehicles try to navigate through intersections and as other vehicles try to maneuver out of the path of the emergency vehicles. In addition, a signal preemption system can decrease emergency vehicle response times therefore decreasing the time in receiving emergency medical attention, which is critical in the outcome of any crash. When data is not available for past crashes with emergency vehicles, an agency may consider combining the E.V. pre-emption improvements into a comprehensive project that also makes significant signal hardware and/or signal timing improvements.					
General Qualities (Time, Cost and Effectiveness):					
Costs for installation of a signal preemption system will vary from medium to high, based upon the number of signalized intersections at which preemption will be installed and the number of emergency vehicles to be outfitted with the technology. The number of detectors, a requirement for new signal controllers, and the intricacy of the preemption system could increase costs. This CM is considered systemic as it is usually implemented on a corridor-basis.					
FHWA CMF Clearinghouse:	Crash Types Addressed:		Emergency Vehicle - only	CRF:	70%

SI05, Install left-turn lane and add turn phase (signal has no left-turn lane or phase before)

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	55%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new left turn lanes. This CM does NOT apply to converting a single-left into double-left turn.		
General information			
Where to use:			
Intersections that do not currently have a left turn lane or a related left-turn phase that are experiencing a large number of crashes. Many intersection safety problems can be traced to difficulties in accommodating left-turning vehicles, in particular where there is currently no accommodation for left turning traffic. A key strategy for minimizing collisions related to left-turning vehicles (angle, rear-end, sideswipe) is to provide exclusive left-turn lanes and the appropriate signal phasing, particularly on high-volume and high-speed major-road approaches. Agencies need to document their consideration of the MUTCD, Section 4D.19 guidelines; the section on implementing protected left-turn phases.			
Why it works:			
Left-turn lanes allow separation of left-turn and through-traffic streams, thus reducing the potential for rear-end collisions. Left-turn phasing also provides a safer opportunity for drivers to make a left-turn. The combination of left-turn storage and a left turn signal has the potential to reduce many collisions between left-turning vehicles and through vehicles and/or non-motorized road users.			
General Qualities (Time, Cost and Effectiveness):			
Implementation time may vary from months to years. At some locations, left-turn lanes can be quickly installed simply by restriping the roadway. At other locations, widening of the roadway, acquisition of additional right-of-way, and extensive environmental processes may be needed. Such projects require a substantial time for development and construction. Costs are highly variable and range from very low to high. Installing a protected left turn lane and phase where none exists results in a high Crash Reduction Factor and is often highly effective.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF: 17 - 58 %

SI06, Provide protected left turn phase (left turn lane already exists)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		30%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new left turn phases. This CM does NOT apply to converting a single-left into double-left turn (unless the single left is unprotected and the proposed double left will be protected).				
General information					
Where to use:					
Signalized intersections (with existing left turns pockets) that currently have a permissive left-turn or no left-turn protection that have a high frequency of angle crashes involving left turning, opposing through vehicles, and non-motorized road users. A properly timed protected left-turn phase can also help reduce rear-end and sideswipe crashes between left-turning vehicles and the through vehicles as well as vehicles behind them. Protected left-turn phases are warranted based on such factors as turning volumes, delay, visibility, opposing vehicle speed, distance to travel through the intersection, presence of non-motorized road users, and safety experience of the intersections. Agencies need to document their consideration of the MUTCD, Section 4D.19 guidelines; the section on implementing protected left-turn phases.					
Why it works:					
Left turns are widely recognized as the highest-risk movements at signalized intersections. Providing Protected left-turn phases (i.e., the provision for a specific phase for a turning movement) for signalized intersections with existing left turn pockets significantly improve the safety for left-turn maneuvers by removing the need for the drivers to navigate through gaps in oncoming/opposing through vehicles. Where left turn pockets are not protected, the pedestrian and bicyclist crossing phase often conflicts with these left turn maneuvers. Drivers focused on navigating the gaps of oncoming cars may not anticipate and/or perceive the non-motorized road users.					
General Qualities (Time, Cost and Effectiveness):					
If the existing traffic signal only requires a minor modification to allow for a protected left-turn phase, then the cost would also be low. The time to implement this countermeasure is short because there is no actual construction that has to take place. In-house signal maintainers can perform this operation once the proper signal phasing is determined so the cost is low. In addition, the countermeasure is tried and proven to be effective. Has the potential of being applied on a systemic/systematic approach.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Rear-End, Sideswipe, Broadside	CRF: 16 - 99%

SI07, Convert signal to mast arm (from pedestal-mounted)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	30%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the converted signal heads that are relocated from median and/or outside shoulder pedestals to signal heads on master arms over the travel-lanes. Projects using CM "S7" should not also apply "S2" in the B/C calc.			
General information				
Where to use:				
Intersections currently controlled by pedestal mounted traffic signals (in medians and/or on outside shoulder) that have a high frequency of right-angle and rear-end crashes occurring because drivers are unable to see traffic signals in advance to safely negotiate the intersection. Intersections that have pedestal-mounted signals may have poor visibility and can result in vehicles not being able to stop in time for a signal change. Care should be taken to place the new signal heads (with back plates) as close to directly over the center of the travel lanes as possible.				
Why it works:				
Providing better visibility of intersection signs and signals aids the drivers' advance perception of the upcoming intersection. Visibility and clarity of the signal should be improved without creating additional confusion or distraction for drivers.				
General Qualities (Time, Cost and Effectiveness):				
Dependent on the scope of the project. Costs are generally moderate for this type of project. There is usually no right-of-way costs, minimal roadway reconstruction costs, and a shorter project development timeline. At the same time, new mast arms can be expensive. Some locations can result in high B/C ratios, but due to moderate costs, some locations may result in medium to low B/C ratios.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Rear-End, Angle	CRF:	12 - 74%

SI08, Install raised pavement markers and striping (Through Intersection)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	10%	10 years
Notes:	This CM only applies to crashes occurring in the intersection and influence areas of the new pavement markers and/or markings.			
General information				
Where to use:				
Intersections where the lane designations are not clearly visible to approaching motorists and/or intersections noted as being complex and experiencing crashes that could be attributed to a driver's unsuccessful attempt to navigate the intersection. Driver confusion can exist in regard to choosing the proper turn path or where through-lanes do not line up. This is especially relevant at intersections where the overall pavement area of the intersection is large, and multiple turning lanes are involved or other unfamiliar elements are presented to the driver.				
Why it works:				
Adding clear pavement markings can guide motorists through complex intersections. When drivers approach and traverse through complex intersections, drivers may be required to perform unusual or unexpected maneuvers. Providing more effective guidance through an intersection will minimize the likelihood of a vehicle leaving its appropriate lane and encroaching upon an adjacent lane.				
General Qualities (Time, Cost and Effectiveness):				
Costs of implementing this strategy will vary based on the scope and number of applications. Applying raised pavement markers is relatively low cost but can be variable and determined largely by the material used for pavement markings (paint, thermoplastic, epoxy, RPMs etc.). When using this type delineators, an issue of concern is the cost-to-service-life of the material. (Note: When HSIP safety funding is used for these installations in high-wear-locations, the local agency is expected to maintain the improvement for a minimum of 10 years.) When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance 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:	Wet, Night, All	CRF:	10 - 33%

SI09, Install flashing beacons as advance warning (S.I.)

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	30%	10 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new flashing beacons.		
General information			
Where to use:			
At signalized intersections with crashes that are a result of drivers being unaware of the intersection or are unable to see the traffic control device in time to comply.			
Why it works:			
Increased driver awareness of an approaching signalized intersection and an increase in the driver's time to react. Driver awareness of both downstream intersections and traffic control devices is critical to intersection safety. Crashes often occur when the driver is unable to perceive an intersection, signal head or the back of a stopped queue in time to react. Advance flashing beacons can be used to supplement and call driver attention to intersection control signs. Most advance warning flashing beacons can be powered by solar, thus reducing the issues relating to power source.			
General Qualities (Time, Cost and Effectiveness):			
Before choosing this CM, the agency needs to confirm the ability to provide power to the site (solar may be an option). Flashing beacons can be constructed with minimal design, environmental and right-of-way issues and have relatively low costs. This combined with a relatively high CRF, can result in high B/Cs for locations with a history of crashes and lead to a high effectiveness.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	Rear End, Angle	CRF: 36 - 62%

SI10, Improve pavement friction (High Friction Surface Treatments)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	55%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the improved friction overlay. This CM is not intended to apply to standard chip-seal or open-graded maintenance projects for long segments of corridors or structure repaving projects intended to fix failed pavement.			
General information				
Where to use:				
Nationally, this countermeasure is referred to as "High Friction Surface Treatments" or HFST. Signalized Intersections noted as having crashes on wet pavements or under dry conditions when the pavement friction available is significantly less than needed for the actual roadway approach speeds. This treatment is intended to target locations where skidding and failure to stop is determined to be a problem in wet or dry conditions and the target vehicle is unable to stop due to insufficient skid resistance.				
Why it works:				
Improving the skid resistance at locations with high frequencies of wet-road crashes and/or failure to stop crashes can result in reductions of 50 percent for wet-road crashes and 20 percent for total crashes. Applying HFST can double friction numbers, e.g. low 40s to high 80s. This CM represents a special focus area for both FHWA and Caltrans, which means there are extra resources available for agencies interested in more details on High Friction Surface Treatment projects.				
General Qualities (Time, Cost and Effectiveness):				
This strategy can be relatively inexpensive and implemented in a short timeframe. The installation would be done by either agency personnel or contractors and can be done by hand or machine. In general, This CM can be very effective and can be considered on a systematic approach.				
FHWA CMF Clearinghouse:		Crash Types Addressed:	Wet, Night, ALL	CRF: 10 - 62 %

SI11, Install raised median on approaches (S.I.)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		25%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new raised median. All new raised medians funded with HSIP funding should not include the removal of the existing roadway structural section and should be doweled into the existing roadway surface. This requirement is being implemented to maximize the safety-effectiveness of the limited HSIP funding and to minimize project impacts. Landscaping, if included in the project, is considered non-participating.				
General information					
Where to use:					
Intersections noted as having turning movement crashes near the intersection as a result of insufficient access control. Application of this CM should be based on current crash data and a clearly defined need to restrict or accommodate the movement.					
Why it works:					
Raised medians next to left-turn lanes at intersections offer a cost-effective means for reducing crashes and improving operations at higher volume intersections. The raised medians prohibit left turns into and out of driveways that may be located too close to the functional area of the intersection.					
General Qualities (Time, Cost and Effectiveness):					
Raised medians at intersections may be most effective in retrofit situations where high volumes of turning vehicles have degraded operations and safety, and where more extensive CMs would be too expensive because of limited right-of-way and the constraints of the built environment. The result is This CM can be very effective and can be considered on a systematic approach. Raised medians can often be installed directly over the existing pavement. When agencies opt to install landscaping in conjunction with new raised medians, the portion of the cost for landscaping and other non-safety related items that exceeds 10% of the project total cost is not federally participated and must be funded by the applicant.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Angle	CRF: 21 -55 %

SI12PB, Install pedestrian median fencing on approaches

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring on the approaches/influence area of the new pedestrian median fencing.			
General information				
Where to use:				
Signalized Intersections with high pedestrian-generators nearby (e.g. transit stops) may experience a high volumes of pedestrians J-walking across the travel lanes at mid-block locations instead of walking to the intersection and waiting to cross during the walk-phase. When this safety issue cannot be mitigated with signal timing and shoulder/sidewalk treatments, then installing a continuous pedestrian barrier in the median may be a viable solution.				
Why it works:				
Adding pedestrian median fencing has the opportunity to enhance pedestrian safety at locations noted as being problematic involving pedestrians running/darting across the roadway outside the intersection crossings. Pedestrian median fencing can significantly reduce this safety issue by creating a positive barrier, forcing pedestrians to the designated pedestrian crossing.				
General Qualities (Time, Cost and Effectiveness):				
Costs associated with this strategy will vary widely depending on the type and placement of the median fencing. Impacts to transit and other land uses may need to be considered and controversy can delay the implementation. In general, this CM can be effective as a spot-location approach.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF:	25- 40%

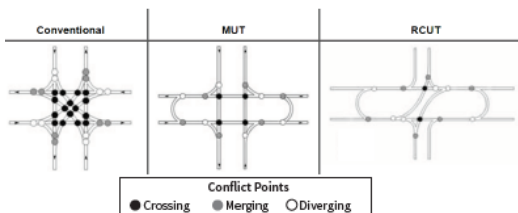
SI13, Create directional median openings to allow (and restrict) left-turns and U-turns (S.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	50%	20 years
Notes:	This CM only applies to crashes occurring in the intersection / influence area of the new directional openings.			
General information				
Where to use:				
Crashes related to turning maneuvers include angle, rear-end, pedestrian, and sideswipe (involving opposing left turns) type crashes. If any of these crash types are an issue at an intersection, restriction or elimination of the turning maneuver may be the best way to improve the safety of the intersection.				
Why it works:				
Restricting turning movement into and out of an intersection can help reduce conflicts between through and turning traffic. The number of access points, coupled with the speed differential between vehicles traveling along the roadway, contributes to crashes. Affecting turning movements by either allowing them or restricting them, based on the application, can ensure safe movement of traffic.				
General Qualities (Time, Cost and Effectiveness):				
Turn prohibitions that are implemented by closing a median opening can be implemented quickly. The cost of this strategy will depend on the treatment. Impacts to businesses and other land uses must be considered and controversy can delay the implementation. In general, This CM can be very effective and can be considered on a systematic approach.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	51%

SI14, Install right-turn lane (S.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	15%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new right-turn lanes.			
General information				
Where to use:				
A right-turn lane may be appropriate in situations where there are an unusually high number of rear-end collisions on a single major road approach. The need for right turn lanes should be assessed on an individual approach basis. Many collisions at signalized intersections are related to right-turn maneuvers. It is also important to ensure that the right-turn lanes are of sufficient length to allow vehicles to decelerate and "queue up" before turning, ideally without affecting the flow of through traffic. When considering new right-turn lanes, potential impacts to non-motorized users should be considered and mitigated as appropriate.				
Why it works:				
The provision of right-turn lanes can minimize collisions between vehicles turning right and following vehicles, particularly on high-volume and high-speed major roads. Installation of a right turn lane at a signalized intersection is expected to reduce total crashes and improve overall intersection delay.				
General Qualities (Time, Cost and Effectiveness):				
Implementing this strategy may take from months to years. At some locations, right-turn lanes can be quickly and simply installed by restriping the roadway. At other locations, widening of the roadway, acquisition of additional right-of-way, and extensive environmental processes may be needed. Such projects require a substantial time for development and construction. Costs are highly variable and range from very low to high. The expected effectiveness of this CM must be assessed for each individual location.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Rear-End	CRF:	14-27%

SI15, Reduced Left-Turn Conflict Intersections (S.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	50%	20 years
Notes:	This CM only applies to crashes occurring in the intersection / influence area of the new Reduced Left-Turn Conflict.			
General information				
Where to use and Why it works:				
Reduced left-turn conflict intersections are geometric designs that alter how left-turn movements occur in order to simplify decisions and minimize the potential for related crashes. Two highly effective designs that rely on U-turns to complete certain left-turn movements are known as the restricted crossing U-turn (RCUT) and the median U-turn (MUT). Restricted Crossing U-turn (RCUT): The RCUT intersection modifies the direct left-turn and through movements from cross-street approaches. Minor road traffic makes a right turn followed by a U-turn at a designated location (either signalized or unsignalized) to continue in the desired direction. The RCUT is suitable for a variety of circumstances, including along rural, high-speed, four-lane, divided highways or signalized routes. It also can be used as an alternative to signalization or constructing an interchange. RCUTs work well when consistently used along a corridor, but also can be used effectively at individual intersections. Median U-turn (MUT) The MUT intersection modifies direct left turns from the major approaches. Vehicles proceed through the main intersection, make a U-turn a short distance downstream, followed by a right turn at the main intersection. The U-turns can also be used for modifying the cross-street left turns. The MUT is an excellent choice for heavily traveled intersections with moderate left-turn volumes. When implemented at multiple intersections along a corridor, the efficient two-phase signal operation of the MUT can reduce delay, improve travel times, and create more crossing opportunities for pedestrians and bicyclists.				
<i>MUT and RCUT Can Reduce Conflict Points by 50%</i> 				
General Qualities (Time, Cost and Effectiveness):				
Implementing this strategy may take from months to years, depending on whether additional R/W is required. Such projects require a substantial time for development and construction. Costs are highly variable and range from very low to high. The expected effectiveness of this CM must be assessed for each individual location.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Angle/Left-turn/Rear-End/All	CRF:	34.8-100%

SI16RA, Convert intersection to roundabout (from signal)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	Varies	20 years
Notes:	This CM only applies to crashes occurring in influence area of the new roundabout. This CM is not intended for compact roundabouts (SI17RA). 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.			
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%

SI17RA, Convert intersection to compact roundabout (from signal)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	Varies	20 years
Notes:	This CM only applies to crashes occurring in the intersection and/or influence area of the new control. The benefit of this CM is calculated using Caltrans procedure. The CRF is dependent on the ADT and the project location (Rural/Urban). The benefit comes from both the reduction in the number and the severity of the crashes.			
General information				
Where to use:				
Compact roundabouts are characterized by a small inscribed circle diameter (80-100 ft). Compact roundabouts offer most of the benefits of regular roundabouts with the added benefit of a smaller footprint. They are best suited to environments where speeds are already low and environmental constraints would preclude the use of a larger roundabout. Compact roundabouts may require minimal additional pavement, and in many cases existing curb or sidewalk can be left in place. As a result, compact roundabouts rarely require the purchase of right of way. Compact roundabouts are similar to single-lane roundabouts regarding design vehicle assumptions, ability to process traffic volumes, and signing. Compact roundabouts are intended to be pedestrian and bicyclist-friendly because their perpendicular approach legs require very low vehicle speeds to make a distinct right turn into and out of the circulatory roadway. Capacity should not be a critical issue for this type of roundabout to be considered.				
Why it works:				
Compact roundabouts may be an optimal solution for a safety or operational issue at an existing intersection where there is insufficient right-of-way for a standard roundabout installation. The benefits of compact roundabouts are the Compact size, operational efficiency, traffic safety improvement and traffic Calming.				
General Qualities (Time, Cost and Effectiveness):				
Construction costs for compact roundabouts vary widely depending upon the extent of sidewalk modifications or other geometric improvements and the types of materials used. In most cases, compact roundabouts have been installed with little or no pavement widening. Construction costs can be moderate for compact roundabouts that include raised islands and pedestrian improvements.				
FHWA CMF Clearinghouse:		Crash Types Addressed:	NA	CRF: NA

SI18PB, Install pedestrian countdown signal heads

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	25%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the intersection/crossing with the new countdown heads.			
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%

SI19PB, Install pedestrian crossing (S.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	25%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the intersection/crossing with the new crossing. This CM is not intended to be used for high-cost aesthetic enhancements to intersection crosswalks (i.e. stamped concrete or stamped asphalt).			
General information				
Where to use:				
Signalized Intersections with no marked crossing and pedestrian signal heads, where pedestrians are known to be crossing intersections that involve significant turning movements. They are especially important at intersections with (1) multiphase traffic signals, such as left-turn arrows and split phases, (2) school crossings, and (3) double-right or double-left turns. At signalized intersections, pedestrian crossings are often safer when the left turns have protected phases that do not overlap the pedestrian walk phase.				
Why it works:				
Adding pedestrian crossings has the opportunity to enhance pedestrian safety at locations noted as being problematic. Nearly one-third of all pedestrian-related crashes occur at or within 50 feet of an intersection. Of these, 30 percent may involve a turning vehicle. Another 22 percent of pedestrian crashes involve a pedestrian either running across the intersection or darting out in front of a vehicle whose view was blocked just prior to the impact. Finally, 16 percent of these intersection-related crashes occur because of a driver violation (e.g., failure to yield right-of-way). When agencies opt to install aesthetic enhancement to intersection crosswalks like stamped concrete/asphalt, the project design and construction costs can significantly increase. For HSIP applications, these costs must be accounted for in the B/C calculation, but these costs (over standard crosswalk markings) must be tracked separately and are not federally reimbursable and will increase the agency's local-funding share for the project costs.				
General Qualities (Time, Cost and Effectiveness):				
Costs associated with this strategy will vary widely, depending if curb ramps and sidewalk modifications are required with the crossing. When considered at a single location, these low cost improvements may be 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 to high cost projects that are appropriate to seek state or federal funding.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF:	25%

SI20PB, Pedestrian Scramble

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	Pedestrian and Bicycle	40%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the intersection with the new pedestrian crossing.		
General information			
Where to use:			
Pedestrian Scramble is a form of pedestrian "WALK" phase at a signalized intersection in which all vehicular traffic is required to stop, allowing pedestrians/bicyclists to safely cross through the intersection in any direction, including diagonally. Pedestrian Scramble may be considered at signalized intersections with very high pedestrian/bicycle volumes, e.g. in an urban business district.			
Why it works:			
Pedestrian Scramble has been shown to reduce injury risk and increase bicycle ridership due to its perceived safety and comfort.			
General Qualities (Time, Cost and Effectiveness):			
Not involving any additional R/W, Pedestrian Scramble should not require a long development process and should be implemented reasonably soon. A systemic approach may be used in implementing this CM, resulting in cost efficiency with low to moderate cost.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF: -10% to 51%

SI21PB, Install advance stop bar before crosswalk (Bicycle Box)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	15%	10 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the intersection-crossing with the new advanced stop bars.			
General information				
Where to use:				
Signalized Intersections with a marked crossing, where significant bicycle and/or pedestrians volumes are known to occur.				
Why it works:				
Adding advance stop bar before the striped crosswalk has the opportunity to enhance both pedestrian and bicycle safety. Stopping cars well before the crosswalk provides a buffer between the vehicles and the crossing pedestrians. It also allows for a dedicated space for cyclists, making them more visible to drivers (This dedicated space is often referred to as a bike-box.)				
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:	35%

SI22PB, Modify signal phasing to implement a Leading Pedestrian Interval (LPI)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	60%	10 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the intersections with signalized pedestrian crossing with the newly implemented Leading Pedestrian Interval (LPI).			
General information				
Where to use:				
Intersections with signalized pedestrian crossing that have high turning vehicles volumes and have had pedestrian vs. vehicle crashes.				
Why it works:				
A leading pedestrian interval (LPI) gives pedestrians the opportunity to enter an intersection 3-7 seconds before vehicles are given a green indication. With this head start, pedestrians can better establish their presence in the crosswalk before vehicles have priority to turn right or left. LPIs provide (1) increased visibility of crossing pedestrians; (2) reduced conflicts between pedestrians and vehicles; (3) Increased likelihood of motorists yielding to pedestrians; and (4) enhanced safety for pedestrians who may be slower to start into the intersection.				
General Qualities (Time, Cost and Effectiveness):				
Costs for implementing LPIs are very low, since only minor signal timing alteration is required. This makes it an easy and inexpensive countermeasure that can be incorporated into pedestrian safety action plans or policies and can become routine agency practice. When considered at a single location, the LPI is usually local-funded. 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:	59%

B.2 Intersection Countermeasures – Non-signalized

NS01NT, Add intersection lighting (NS.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Night	40%	20 years
Notes:	This CM only applies to "night" crashes (all types) occurring within limits of the proposed roadway lighting 'engineered' area.			
General information				
Where to use:				
Non-signalized intersections that have a disproportionate number of night-time crashes and do not currently provide lighting at the intersection or at its approaches. Crash data should be studied to ensure that safety at the intersection could be improved by providing lighting (this strategy would be supported by a significant number of crashes that occur at night).				
Why it works:				
Providing lighting at the intersection itself, or both at the intersection and on its approaches, improves the safety of an intersection during nighttime conditions by (1) making drivers more aware of the surroundings at an intersection, which improves drivers' perception-reaction times, (2) enhancing drivers' available sight distances, and (3) improving the visibility of non-motorists. Intersection lighting is of particular benefit to non-motorized users as lighting not only helps them navigate the intersection, but also helps drivers see them better.				
General Qualities (Time, Cost and Effectiveness):				
A lighting project can usually be completed relatively quickly, but generally requires at least 1 year to implement because the lighting system must be designed and the provision of electrical power must be arranged. The provision of lighting involves both a fixed cost for lighting installation and an ongoing maintenance and power cost. For rural intersections, studies have shown the installation of streetlights reduced nighttime crashes at unlit intersections and can be more effective in reducing nighttime crashes than either rumble strips or overhead flashing beacons. Some locations can result in high B/C ratios, but due to higher costs, these projects often result in medium to low B/C ratios.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Night, All	CRF:	25- 50%

NS02, Convert to all-way STOP control (from 2-way or Yield control)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	50%	10 years
Notes:	This CM only applies to crashes occurring in the intersection and/or influence area of the new control. CA-MUTCD warrant must be met.			
General information				
Where to use:				
Unsignalized intersection locations that have a crash history and have no controls on the major roadway approaches. However, all-way stop control is suitable only at intersections with moderate and relatively balanced volume levels on the intersection approaches. Under other conditions, the use of all-way stop control may create unnecessary delays and aggressive driver behavior. MUTCD warrants should always be followed.				
Why it works:				
All-way stop control can reduce right-angle and turning collisions at unsignalized intersections by providing more orderly movement at an intersection, reducing through and turning speeds, and minimizing the safety effect of any sight distance restrictions that may be present. Advance public notification of the change is critical in assuring compliance and reducing crashes.				
General Qualities (Time, Cost and Effectiveness):				
The costs involved in converting to all-way stop control are relatively low. All-way stop control can normally be implemented at multiple intersections with just a change in signing on intersection approaches, and typically are very quick to implement. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance 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:	Left-turn, Angle	CRF:	6 - 80%

NS03, Install signals

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	30%	20 years
Notes:	This CM only applies to crashes occurring in the intersection and/or influence area of the new signals. All new signals must meet MUTCD "safety" warrants: 4, 5 or 7. Given the over-arching operational changes that occur when an intersection is signalized, no other intersection CMs can be applied to the intersection crashes in conjunction with this CM.			
General information				
Where to use:				
Traffic signals can be used to prevent the most severe type crashes (right-angle, left-turn). Consideration to signalize an unsignalized intersection should only be given after (1) less restrictive forms of traffic control have been utilized as the installation of a traffic signal often leads to an increased frequency of crashes (rear-end) on major roadways and introduces congestion and (2) signal warrants have been met. Refer to the CA MUTCD, Section 4C.01, Studies and Factors for Justifying Traffic Control Signals.				
Why it works:				
Traffic signals have the potential to reduce the most severe type crashes but will likely cause an increase in rear-end collisions. A reduction in overall injury severity is likely the largest benefit of traffic signal installation.				
General Qualities (Time, Cost and Effectiveness):				
Typical traffic signal costs fall in the medium to high category and are affected by application, type of signal and right-of-away considerations. Projects of this magnitude should only be considered after alternate and lesser means of correction have been evaluated. Some locations can result in high B/C ratios, but due to higher costs, these projects often result in medium to low B/C ratios.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	0 - 74%

NS04RA/NS05RA, Convert intersection to roundabout

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	Varies	20 years
Notes:	This CM only applies to crashes occurring in the intersection and/or influence area of the new control. 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.		
General information			
Where to use:			
Intersections that have a high frequency of right-angle and left-turn type crashes. Whether such intersections have existing crash patterns or not, a roundabout provides an alternative to signalization. The primary target locations for roundabouts should be moderate-volume unsignalized intersections. Roundabouts may not be a viable alternative in many suburban and urban settings where right-of-way is limited.			
Why it works:			
Roundabouts provide an important alternative to signalized and stop/yield-controlled intersections. Modern roundabouts differ from traditional traffic circles in that they operate in such a manner that traffic entering the roundabout must yield the right-of-way to traffic already in it. Roundabouts can serve moderate traffic volumes with less delay than all-way stop-controlled intersections and provide fewer conflict points. Crashes at roundabouts tend to be less severe because of the speed constraints and elimination of left-turn and right-angle movements.			
General Qualities (Time, Cost and Effectiveness):			
Construction of roundabouts are usually relatively costly and major projects, requiring the environmental process, right-of-way acquisition, and implementation under an agency's long-term capital improvement program. Even with roundabouts higher costs, they still can have a relatively high effectiveness.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	Left-turn, Angle	CRF: 12 - 78 %

NS06RA/NS07RA, Convert intersection to compact roundabout

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	Varies	20 years
Notes:	This CM only applies to crashes occurring in the intersection and/or influence area of the new control. The benefit of this CM is calculated using Caltrans procedure. The CRF is dependent on the ADT and the project location (Rural/Urban). The benefit comes from both the reduction in the number and the severity of the crashes.			
General information				
Where to use:				
Compact roundabouts are characterized by a small inscribed circle diameter (80-100 ft). Compact roundabouts offer most of the benefits of regular roundabouts with the added benefit of a smaller footprint. They are best suited to environments where speeds are already low and environmental constraints would preclude the use of a larger roundabout. Compact roundabouts may require minimal additional pavement, and in many cases existing curb or sidewalk can be left in place. As a result, compact roundabouts rarely require the purchase of right of way. Compact roundabouts are similar to single-lane roundabouts regarding design vehicle assumptions, ability to process traffic volumes, and signing. Compact roundabouts are intended to be pedestrian and bicyclist-friendly because their perpendicular approach legs require very low vehicle speeds to make a distinct right turn into and out of the circulatory roadway. Capacity should not be a critical issue for this type of roundabout to be considered.				
Why it works:				
Compact roundabouts may be an optimal solution for a safety or operational issue at an existing intersection where there is insufficient right-of-way for a standard roundabout installation. The benefits of compact roundabouts are the Compact size, operational efficiency, traffic safety improvement and traffic Calming.				
General Qualities (Time, Cost and Effectiveness):				
Construction costs for compact roundabouts vary widely depending upon the extent of sidewalk modifications or other geometric improvements and the types of materials used. In most cases, compact roundabouts have been installed with little or no pavement widening. Construction costs can be moderate for compact roundabouts that include raised islands and pedestrian improvements.				
FHWA CMF Clearinghouse:		Crash Types Addressed:	NA	CRF: NA

NS08, Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	15%	10 years
Notes:	This CM only applies to crashes occurring in the influence area of the new signs. The influence area must be determined on a location by location basis.		
General information			
Where to use:			
The target for this strategy should be approaches to unsignalized intersections with patterns of rear-end, right-angle, or turning collisions related to lack of driver awareness of the presence of the intersection.			
Why it works:			
The visibility of intersections and, thus, the ability of approaching drivers to perceive them can be enhanced by installing larger regulatory and warning signs at or prior to intersections. A key to success in applying this strategy is to select a combination of regulatory and warning sign techniques appropriate for the conditions on a particular unsignalized intersection approach.			
General Qualities (Time, Cost and Effectiveness):			
Signing improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number of signs. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance 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:	All	CRF: 11 - 55%

NS09, Upgrade intersection pavement markings (NS.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	25%	10 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new pavement markings. This CM is not intended to be used for general maintenance activities (i.e. the replacement of existing pavement markings in-kind) and must include upgraded safety features over the existing pavement markings and striping.			
General information				
Where to use:				
Unsignalized intersections that are not clearly visible to approaching motorists, particularly approaching motorists on the major road. The strategy is particularly appropriate for intersections with patterns of rear-end, right-angle, or turning crashes related to lack of driver awareness of the presence of the intersection. Also at minor road approaches where conditions allow the stop bar to be seen by an approaching driver at a significant distance from the intersection. Typical improvements include "Stop Ahead" markings and the addition of Centerlines and Stop Bars.				
Why it works:				
The visibility of intersections and, thus, the ability of approaching drivers to perceive them can be enhanced by installing appropriate pavement delineation in advance of and at intersections will provide approaching motorists with additional information at these locations. Providing visible stop bars on minor road approaches to unsignalized intersections can help direct the attention of drivers to the presence of the intersection. Drivers should be more aware that the intersection is coming up, and therefore make safer decisions as they approach the intersection.				
General Qualities (Time, Cost and Effectiveness):				
Pavement marking improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number of markings. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance 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. Note: When federal safety funding is used for these installations in high-wear-locations, the local agency is expected to maintain the improvement for a minimum of 10 years.				
FHWA CMF Clearinghouse:		Crash Types Addressed:	All	CRF: 13 - 60%

NS10, Install Flashing Beacons at Stop-Controlled Intersections

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	15%	10 years
Notes:	This CM only applies to crashes occurring on the stop-controlled approaches / influence area of the new beacons.		
General information			
Where to use:			
Flashing beacons can reinforce driver awareness of the Non-Signalized intersection control and can help mitigate patterns of right-angle crashes related to stop sign violations. Post-mounted advanced flashing beacons or overhead flashing beacons can be used at stop-controlled intersections to supplement and call driver attention to stop signs.			
Why it works:			
Flashing beacons provide a visible signal to the presence of an intersection and can be very effective in rural areas where there may be long stretches between intersections as well as locations where night-time visibility of intersections is an issue.			
General Qualities (Time, Cost and Effectiveness):			
Flashing beacons can be constructed with minimal design, environmental and right-of-way issues and have relatively low costs. Before choosing this CM, the agency needs to confirm the ability to provide power to the site (solar may be an option). In general, This CM can be very effective and can be considered on a systematic approach.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	Angle, Rear-End	CRF: 5-34%

NS11, Install flashing beacons as advance warning (NS.I.)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		30%	10 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new beacons placed in advance of the intersection.				
General information					
Where to use:					
Non-Signalized Intersections with patterns of crashes that could be related to lack of a driver's awareness of approaching intersection or controls at a downstream intersection.					
Why it works:					
Advance flashing beacons can be used to supplement and call driver attention to intersection control signs. Flashing beacons are intended to reinforce driver awareness of the stop or yield signs and to help mitigate patterns of crashes related to intersection regulatory sign violations. Most advance warning flashing beacons can be powered by solar, thus reducing the issues relating to power source.					
General Qualities (Time, Cost and Effectiveness):					
Use of flashing beacons requires minimal development process, allowing flashing beacons to be installed within a short time period. Before choosing this CM, the agency needs to confirm the ability to provide power to the site (solar may be an option). In general, This CM can be very effective and can be considered on a systematic approach.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Angle, Rear-End	CRF: 36 - 62%

NS12, Install transverse rumble strips on approaches

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		20%	10 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new rumble strips.				
General information					
Where to use:					
Transverse rumble strips are installed in the travel lane for the purposes of providing an auditory and tactile sensation for each motorist approaching the intersection. They can be used at any stop or yield approach intersection, often in combination with advance signing to warn of the intersection ahead. Due to the noise generated by vehicles driving over the rumble strips, care must be taken to minimize disruption to nearby residences and businesses.					
Why it works:					
When motorists are traveling along the roadway, they are sometimes unaware they are approaching an intersection. This is especially true on rural roads, as there may be fewer clues indicating an intersection ahead. Transverse rumble strips warn motorists that something unexpected is ahead that they need to pay attention to.					
General Qualities (Time, Cost and Effectiveness):					
Use of transverse rumble strips requires minimal development process, allowing transverse rumble strips to be installed within a short time period. In general, This CM can be very effective and can be considered on a systematic approach, although care should be taken to not over-use this CM. Note: When federal safety funding is used for these installations in high-wear-locations, the local agency is expected to maintain the improvement for a minimum of 10 years.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		All	CRF: 0 - 35%

NS13, Improve sight distance to intersection (Clear Sight Triangles)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	20%	10 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the significantly improved new sight distance. Minor/incidental improvements to sight distance would not likely result in the CRF shown below.			
General information				
Where to use:				
Unsignalized intersections with restricted sight distance and patterns of crashes related to lack of sight distance where sight distance can be improved by clearing roadside obstructions without major reconstruction of the roadway.				
Why it works:				
Adequate sight distance for drivers at stop or yield-controlled approaches to intersections has long been recognized as among the most important factors contributing to overall safety at unsignalized intersections. By removing sight distance restrictions (e.g., vegetation, parked vehicles, signs, buildings) from the sight triangles at stop or yield-controlled intersection approaches, drivers will be able see approaching vehicles on the main line, without obstruction and therefore make better decisions about entering the intersection safely.				
General Qualities (Time, Cost and Effectiveness):				
Projects involving clearing sight obstructions on the highway right-of-way can typically be accomplished quickly, assuming the objects are readily moveable. Clearing sight obstructions on private property requires more time for discussions with the property owner. Costs will generally be low, assuming that in most cases the objects to be removed are within the right-of-way. In general, this CMs can be very effective and can be implemented by agencies' maintenance staff and/or implemented on a systematic approach. Usually only high-cost removals would be good candidates for Caltrans Federal Safety Funding. Note: When federal safety funding is used to remove vegetation that has the potential to grow back, the local agency is expected to maintain the improvement for a minimum of 10 years.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	11 - 56%

NS14, Improve pavement friction (High Friction Surface Treatments)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	55%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the improved friction overlay. This CM is not intended to apply to standard chip-seal or open-graded maintenance projects for long segments of corridors or structure repaving projects intended to fix failed pavement.			
General information				
Where to use:				
Nationally, this countermeasure is referred to as "High Friction Surface Treatments" or HFST. Non-signalized Intersections noted as having crashes on wet pavements or under dry conditions when the pavement friction available is significantly less than needed for the actual roadway approach speeds. This treatment is intended to target locations where skidding and failure to stop is determined to be a problem in wet or dry conditions and the target vehicle is unable to stop due to insufficient skid resistance.				
Why it works:				
Improving the skid resistance at locations with high frequencies of wet-road crashes and/or failure to stop crashes can result in reductions of 50 percent for wet-road crashes and 20 percent for total crashes. Applying HFST can double friction numbers, e.g. low 40s to high 80s. This CM represents a special focus area for both FHWA and Caltrans, which means there are extra resources available for agencies interested in more details on High Friction Surface Treatment projects.				
General Qualities (Time, Cost and Effectiveness):				
This strategy can be relatively inexpensive and implemented in a short timeframe. The installation would be done by either agency personnel or contractors and can be done by hand or machine. In general, This CM can be very effective and can be considered on a systematic approach.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Wet, Night, ALL	CRF:	10 - 62 %

NS15, Install splitter-islands on the minor road approaches

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	40%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of <u>the new splitter island on the minor road approaches.</u>			
General information				
Where to use:				
Minor road approaches to unsignalized intersections where the presence of the intersection or the stop sign is not readily visible to approaching motorists. The strategy is particularly appropriate for intersections where the speeds on the minor road are high. In creation of a splitter island allows for an additional stop sign to be placed in the median for the minor approach.				
Why it works:				
The installation of splitter islands allows for the addition of a stop sign in the median to make the intersection more conspicuous. Additionally, the splitter island on the minor-road provides for a positive separation between turning vehicles on the through road and vehicles stopped on the minor road approach.				
General Qualities (Time, Cost and Effectiveness):				
Splitter islands at non-signalized intersections can usually be installed with minimal roadway reconstruction and relatively quickly. In general, This CM can be very effective and can be considered on a systematic approach.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Angle, Rear-End	CRF:	35 - 100 %

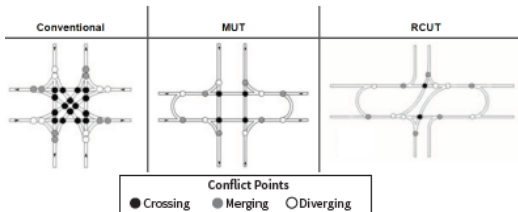
NS16, Install raised median on approaches (NS.I.)

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility		Crash Types Addressed	
90%		All	
Notes:		CRF	
This CM only applies to crashes occurring on the approaches / influence area of the new raised median. All new raised medians funded with federal HSIP funding should not include the removal of the existing roadway structural section and should be doweled into the existing roadway surface. This requirement is being implemented to maximize the safety-effectiveness of the limited HSIP funding and to minimize project impacts. Landscaping, if included in the project, is considered non-participating.		Expected Life	
		25%	
		20 years	
General information			
Where to use:			
Where related or nearby turning movements affect the safety and operation of an intersection. Effective access management is key to improving safety at, and adjacent to, intersections. The number of intersection access points coupled with the speed differential between vehicles traveling along the roadway often contributes to crashes. Any access points within 250 feet upstream and downstream of an intersection are generally undesirable.			
Why it works:			
Raised medians with left-turn lanes at intersections offer a cost-effective means for reducing crashes and improving operations at higher volume intersections. The raised medians also prohibit left turns into and out of driveways that may be located too close to the functional area of the intersection.			
General Qualities (Time, Cost and Effectiveness):			
Raised medians at intersections may be most effective in retrofit situations where high volumes of turning vehicles have degraded operations and safety, and where more extensive approaches would be too expensive because of limited right-of-way and the constraints of the built environment. Because raised medians limit property access to right turns only, the need for providing alternative access ways should be considered. In general, This CM can be very effective and can be considered on a systematic approach. When agencies opt to install landscaping in conjunction with new raised medians, the portion of the cost for landscaping and other non-safety related items that exceeds 10% of the project total cost is not federally participated and must be funded by the applicant.			
FHWA CMF Clearinghouse:		Crash Types Addressed:	
		All	
		CRF:	
		20 - 39 %	

NS17, Create directional median openings to allow (and restrict) left-turns and u-turns (NS.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	50%	20 years
Notes:	This CM only applies to crashes occurring in the intersection / influence area of the new directional openings.			
General information				
Where to use:				
Crashes related to turning maneuvers include angle, rear-end, pedestrian, and sideswipe (involving opposing left turns) type crashes. If any of these crash types are an issue at an intersection, restriction or elimination of the turning maneuver may be the best way to improve the safety of the intersection. Because raised medians limit property access to right turns only, they should be used in conjunction with efforts to provide alternative access ways and promote driveway spacing objectives.				
Why it works:				
Agencies are increasingly using access management techniques on urban and suburban arterials to manage the number of conflicts experienced at an intersection. A key element of access management is to restrict certain movements, create directional median openings, or close median openings that are deemed too close to an intersection.				
General Qualities (Time, Cost and Effectiveness):				
Turn prohibitions that are implemented by closing a median opening can usually be implemented quickly. Costs are highly variable but in many cases could be considered low. In some cases this strategy may involve acquiring access or constructing replacement access; those actions will significantly increase the cost of the project. Impacts to businesses and other land uses must be considered and controversy can delay the implementation. In general, This CM can be very effective and can be considered on a systematic approach.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	51%

NS18, Reduced Left-Turn Conflict Intersections (NS.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	50%	20 years
Notes:	This CM only applies to crashes occurring in the intersection / influence area of the new Reduced Left-Turn Conflict.			
General information				
Where to use and Why it works:				
Reduced left-turn conflict intersections are geometric designs that alter how left-turn movements occur in order to simplify decisions and minimize the potential for related crashes. Two highly effective designs that rely on U-turns to complete certain left-turn movements are known as the restricted crossing U-turn (RCUT) and the median U-turn (MUT). Restricted Crossing U-turn (RCUT): The RCUT intersection modifies the direct left-turn and through movements from cross-street approaches. Minor road traffic makes a right turn followed by a U-turn at a designated location (either signalized or unsignalized) to continue in the desired direction. The RCUT is suitable for a variety of circumstances, including along rural, high-speed, four-lane, divided highways or signalized routes. It also can be used as an alternative to signalization or constructing an interchange. RCUTs work well when consistently used along a corridor, but also can be used effectively at individual intersections. Median U-turn (MUT) The MUT intersection modifies direct left turns from the major approaches. Vehicles proceed through the main intersection, make a U-turn a short distance downstream, followed by a right turn at the main intersection. The U-turns can also be used for modifying the cross-street left turns. The MUT is an excellent choice for heavily traveled intersections with moderate left-turn volumes. When implemented at multiple intersections along a corridor, the efficient two-phase signal operation of the MUT can reduce delay, improve travel times, and create more crossing opportunities for pedestrians and bicyclists.				
<i>MUT and RCUT Can Reduce Conflict Points by 50%</i> 				
General Qualities (Time, Cost and Effectiveness):				
Implementing this strategy may take from months to years, depending on whether additional R/W is required. Such projects require a substantial time for development and construction. Costs are highly variable and range from very low to high. The expected effectiveness of this CM must be assessed for each individual location.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Angle/Left-turn/Rear-End/All	CRF:	34.8-100%

NS19, Install right-turn lane (NS.I.)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	20%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new right-turn lanes. This CM is not eligible for use at existing all-way stop intersections.			
General information				
Where to use:				
Many collisions at unsignalized intersections are related to right-turn maneuvers. A key strategy for minimizing such collisions is to provide exclusive right-turn lanes, particularly on high-volume and high-speed major-road approaches. When considering new right-turn lanes, potential impacts to non-motorized users should be considered and mitigated as appropriate. When considering new right-turn lanes, potential impacts to non-motorized users should be considered and mitigated as appropriate.				
Why it works:				
The strategy is targeted to reduce the frequency of rear-end collisions resulting from conflicts between vehicles turning right and following vehicles and vehicles turning right and through vehicles coming from the left on the cross street. Right-turn lanes also remove slow vehicles that are decelerating to turn right from the through-traffic stream, thus reducing the potential for rear-end collisions. Right-turn lanes can increase the length of the intersection crossing and create an additional potential conflict point for non-motorized users.				
General Qualities (Time, Cost and Effectiveness):				
Implementing this strategy may take from months to years. At some locations, right-turn lanes can be quickly and simply installed by restriping the roadway. At other locations, widening of the roadway, acquisition of additional right-of-way, and extensive environmental processes may be needed. Such projects require a substantial time for development and construction. Costs are highly variable and range from very low to high. The expected effectiveness of this CM must be assessed for each individual location.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	14 - 26 %

NS20, Install left-turn lane (where no left-turn lane exists)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	35%	20 years
Notes:	This CM only applies to crashes occurring on the approaches / influence area of the new left-turn lanes. This CM does NOT apply to converting a single-left into double-left turn. This CM is not eligible for use at existing all-way stop intersections.			
General information				
Where to use:				
Many collisions at unsignalized intersections are related to left-turn maneuvers. A key strategy for minimizing such collisions is to provide exclusive left-turn lanes, particularly on high-volume and high-speed major-road approaches. When considering new left-turn lanes, potential impacts to non-motorized users should be considered and mitigated as appropriate.				
Why it works:				
Adding left-turn lanes remove vehicles waiting to turn left from the through-traffic stream, thus reducing the potential for rear-end collisions. Because they provide a sheltered location for drivers to wait for a gap in opposing traffic, left-turn lanes may encourage drivers to be more selective in choosing a gap to complete the left-turn maneuver. This strategy may reduce the potential for collisions between left-turn and opposing through vehicles.				
General Qualities (Time, Cost and Effectiveness):				
Implementing this strategy may take from months to years. At some locations, left-turn lanes can be quickly and simply installed by restriping the roadway. At other locations, widening of the roadway, acquisition of additional right-of-way, and extensive environmental processes may be needed. Such projects require a substantial time for development and construction. Costs are highly variable and range from very low to high. The expected effectiveness of this CM must be assessed for each individual location.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	9 -55 %

NS21PB, Install raised medians (refuge islands)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Pedestrian and Bicycle		45%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the crossing with the new islands. All new raised medians funded with federal HSIP funding should not include the removal of the existing roadway structural section and should be doweled into the existing roadway surface. This requirement is being implemented to maximize the safety-effectiveness of the limited HSIP funding and to minimize project impacts. Landscaping, if included in the project, is considered non-participating.				
General information					
Where to use:					
Intersections that have a long pedestrian crossing distance, a higher number of pedestrians, or a crash history. Raised medians decrease the level of exposure for pedestrians and allow pedestrians to concentrate on (or cross) only one direction of traffic at a time.					
Why it works:					
Raised pedestrian refuge islands, or medians at crossing locations along roadways, are another strategy to reduce exposure between pedestrians and motor vehicles. Refuge islands and medians that are raised (i.e., not just painted) provide pedestrians more secure places of refuge during the street crossing. They can stop partway across the street and wait for an adequate gap in traffic before completing their crossing.					
General Qualities (Time, Cost and Effectiveness):					
Median and pedestrian refuge areas are a low-cost countermeasure to implement. This cost can be applied to retrofit improvements or if it is a new construction project, implementing this countermeasure is even more cost-effective. In general, This CM can be very effective and can be considered on a systematic approach. When agencies opt to install landscaping in conjunction with new raised medians, the portion of the cost for landscaping and other non-safety related items that exceeds 10% of the project total cost is not federally participated and must be funded by the applicant.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Pedestrian and Bicycle	CRF: 30 - 56 %

NS22PB, Install pedestrian crossing at uncontrolled locations (signs and markings only)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Pedestrian and Bicycle		25%	10 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the intersection/crossing with the new crossing. This CM is not intended to be used for high-cost aesthetic enhancements to intersection crosswalks (i.e. stamped concrete or stamped asphalt).				
General information					
Where to use:					
Non-signalized intersections without a marked crossing, where pedestrians are known to be crossing intersections that involve significant vehicular traffic. They are especially important at school crossings and intersections with right and/or left turns pockets. See Zegeer study (Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations) for additional guidance regarding when to install a marked crosswalk.					
Why it works:					
Adding pedestrian crossings has the opportunity to enhance pedestrian safety at locations noted as being problematic. Pavement markings delineate a portion of the roadway that is designated for pedestrian crossing. These markings will often be different for controlled verses uncontrolled locations. The use of "ladder", "zebra" or other enhanced markings at uncontrolled crossings can increase both pedestrian and driver awareness to the increased exposure at the crossing. Incorporating advanced "stop" or "yield" markings provides an extra safety buffer and can be effective in reducing the 'multiple-threat' danger to pedestrians. Nearly one-third of all pedestrian-related crashes occur at or within 50 feet of an intersection. Of these, 30 percent may involve a turning vehicle. There are several types of pedestrian crosswalks, including: continental, ladder, zebra, and standard. When agencies opt to install aesthetic enhancement to intersection crosswalks like stamped concrete/asphalt, the project design and construction costs can significantly increase. For HSIP applications, these costs must be accounted for in the B/C calculation, but these costs (over standard crosswalk markings) must be tracked separately and are not federally reimbursable and will increase the agency's local-funding share for the project costs.					
General Qualities (Time, Cost and Effectiveness):					
Costs associated with this strategy will vary widely, depending upon if curb ramps and sidewalk modifications are required with the crossing. 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 and Bicycle	CRF: 25 %

NS23PB, Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the new crossing (influence area) with enhanced safety features. This CM is not intended to be used for high-cost aesthetic enhancements to intersection crosswalks (i.e. stamped concrete or stamped asphalt).			
General information				
Where to use:				
Non-signalized intersections where pedestrians are known to be crossing intersections that involve significant vehicular traffic. They are especially important at school crossings and intersections with turn pockets. Based on the Zegeer study (Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations) at many locations, a marked crosswalk alone may not be sufficient to adequately protect non-motorized users. In these cases, flashing beacons, curb extensions, advanced "stop" or "yield" markings, and other safety features should be added to complement the standard crossing elements.				
Why it works:				
Adding pedestrian crossings that include enhances safety features has the opportunity to enhance pedestrian safety at locations noted as being especially problematic. The enhanced safety elements help delineate a portion of the roadway that is designated for pedestrian crossing. Incorporating advanced "yield" markings provide an extra safety buffer and can be effective in reducing the 'multiple-threat' danger to pedestrians. Nearly one-third of all pedestrian-related crashes occur at or within 50 feet of an intersection. When agencies opt to install aesthetic enhancement to intersection crosswalks like stamped concrete/asphalt, the project design and construction costs can significantly increase. For HSIP applications, these costs must be accounted for in the B/C calculation, but these costs (over standard crosswalk markings) must be tracked separately and are not federally reimbursable and will increase the agency's local-funding share for the project costs.				
General Qualities (Time, Cost and Effectiveness):				
Costs associated with this strategy will vary widely, depending upon the types of enhanced features that will be combined with the standard crossing improvements. The need for new curb ramps and sidewalk modifications will also be a factor. This CM may be effectively and efficiently implemented using a systematic approach with more than one location and can have relatively high B/C ratios based on past non-motorized crash history.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian and Bicycle	CRF:	37%

NS24PB, Install Rectangular Rapid Flashing Beacon (RRFB)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the influence area (expected to be a maximum of within 250') of the crossing which includes the RRFB.			
General information				
Where to use:				
Rectangular Rapid Flashing Beacon (RRFB) includes pedestrian-activated flashing lights and additional signage that enhance the visibility of marked crosswalks and alert motorists to pedestrian crossings. It uses an irregular flash pattern that is similar to emergency flashers on police vehicles. RRFBs are installed at unsignalized intersections and mid-block pedestrian crossings.				
Why it works:				
RRFBs can enhance safety by increasing driver awareness of potential pedestrian conflicts and reducing crashes between vehicles and pedestrians at unsignalized intersections and mid-block pedestrian crossings. The addition of RRFB may also increase the safety effectiveness of other treatments, such as crossing warning signs and markings.				
General Qualities (Time, Cost and Effectiveness):				
RRFBs are a lower cost alternative to traffic signals and hybrid signals. This CM can often be effectively and efficiently implemented using a systematic approach with numerous locations.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF:	7 – 47.4%

NS25PB, Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Pedestrian and Bicycle		55%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the intersection/crossing with the new signal. For HAWK or other pedestrian signals, 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. Please refer to Chapter 4F of CA MUTCD for more details				
General information					
Where to use:					
Intersections noted as having a history of pedestrian vs. vehicle crashes and in areas where the likelihood of the pedestrian presence is high. Corridors should also be assessed to determine if there are adequate safe opportunities for non-motorists to cross and if a pedestrian signal, or a Pedestrian Hybrid Beacon (PHB) (also called High-Intensity Activated crossWalk beacon (HAWK)) are needed to provide an active warning to motorists when a pedestrian is in the crosswalk.					
Why it works:					
Adding a pedestrian signal has the opportunity to greatly enhance pedestrian safety at locations noted as being problematic. Nearly one-third of all pedestrian-related crashes occur at or within 50 feet of an intersection. In combination with this CM, better guidance signs and markings for non-motorized and motorized roadway users should be considered, including: sign and markings directing pedestrians and cyclists on appropriate/legal travel paths and signs and markings warning motorists of non-motorized uses of the roadway that should be expected.					
General Qualities (Time, Cost and Effectiveness):					
The cost of improvements are generally high, but can vary dependent on the type of signal and overall scope of the project. In most cases the project duration can be short. The expected effectiveness of this CM must be assessed for each individual location.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Pedestrian and Bicycle	CRF: 15 - 69%

B.3 Roadway Countermeasures

R01NT, Add Segment Lighting

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Night		35%	20 years
Notes:	This CM only applies to "night" crashes (all types) occurring within limits of the proposed roadway lighting 'engineered' area.				
General information					
Where to use:					
Where to use: Noted substantial patterns of nighttime crashes. In particular, patterns of rear-end, right-angle, turning or roadway departure collisions on the roadways may indicate that night-time drivers can be unaware of the roadway characteristics.					
Why it works:					
Providing roadway lighting improves the safety during nighttime conditions by (1) making drivers more aware of the surroundings, which improves drivers' perception-reaction times, (2) enhancing drivers' available sight distances to perceive roadway characteristic in advance of the change, and (3) improving non-motorist's visibility and navigation.					
General Qualities (Time, Cost and Effectiveness):					
It expected that projects of this type may be constructed in a year or two and are relatively costly. There are several types of costs associated with providing lighting, including the cost of providing a permanent source of power to the location, the cost for the luminaire supports (i.e., poles), and the cost for routinely replacing the bulbs and maintenance of the luminaire supports. Some locations can result in high B/C ratios, but due to higher costs, these projects often result in medium to low B/C ratios.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		CRF:	18 - 69 %
		Night, All			

R02, Remove or relocate fixed objects outside of Clear Recovery Zone

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		35%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new clear recovery zone (per Caltrans' HDM).				
General information					
Where to use:					
Known locations or roadway segments prone to collisions with fixed objects such as utility poles, drainage structures, trees, and other fixed objects, such as the outside of a curve, end of lane drops, and in traffic islands. A clear recovery zone should be developed on every roadway, as space is available. In situations where public right-of-way is limited, steps should be taken to request assistance from property owners, as appropriate.					
Why it works:					
While this strategy does not prevent the vehicle leaving the roadway, it does provide a mechanism to reduce the severity of a resulting crash. A clear zone is an unobstructed, traversable roadside area that allows a driver to stop safely or regain control of a vehicle that has left the roadway. Removing or moving fixed objects, flattening slopes, or providing recovery areas reduces the likelihood of a crash.					
General Qualities (Time, Cost and Effectiveness):					
Projects involving removing fixed objects from highway right-of-way can typically be accomplished quickly, assuming the objects are readily moveable. Clearing objects on private property requires more time for discussions with the property owner. Costs will generally be low, assuming that in most cases the objects to be removed are within the right-of-way. This CMs can be very effective and can be implemented by agencies' maintenance staff and/or implemented on a systematic approach. High-cost removals or removals implemented using a systematic approach would be good candidates for Caltrans Federal Safety Funding.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Fixed Object	CRF: 17 - 100 %

R03, Install Median Barrier

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		25%	20 years
Notes:	Note: For Caltrans' statewide Calls-for-Projects, this CM only applies to crashes occurring within the limits of the new barrier.				
General information					
Where to use:					
Areas where crash history indicates drivers are unintentionally crossing the median and the cross-overs are resulting in high severity crashes. The installation of median barriers can increase the number of PDO and non-severe injuries. The net result in safety from this countermeasure is connected more to reducing the severity of crashes not the number of crashes. It is recommended to review the warrants as outlined in Chapter 7 of the Caltrans Traffic Manual when considering whether to install median barriers.					
Why it works:					
This strategy is designed to prevent head-on collisions by providing a barrier between opposing lanes of traffic. The variety of median barriers available makes it easier to choose a site-specific solution. The main advantage is the reduction of the severity of the crashes. The key to success would be in selecting an appropriate barrier based on the site, previous crash history, maintenance needs, and median width.					
General Qualities (Time, Cost and Effectiveness):					
This strategy would in many cases be possible to implement within a short period after site selection. Costs will vary depending on the type of median barrier selected and whether the strategy is implemented as a stand-alone project or incorporated as part of a reconstruction or resurfacing effort. Maintenance costs and worker exposure will also vary depending on the type of barrier selected. The expected effectiveness of this CM must be assessed for each individual location.					
FHWA CMF Clearinghouse:	Crash Types Addressed:	Head-on	CRF:	0 - 94 %	

R04, Install Guardrail

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		25%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new guardrail. This CM is not intended to be used for general maintenance activities (i.e. the replacement of existing damaged rail). For projects proposing to upgrade existing guardrail to current standards, this CM and corresponding CRF should only be applied to locations where past crash data or engineering judgment applied to the existing rail conditions suggests the upgraded guardrail may result in fewer or less severe crashes (justifying the use of the 25% CRF for this CM).				
General information					
Where to use:					
Guardrail is installed to reduce the severity of lane departure crashes. However, guardrail can reduce crash severity only for those conditions where striking the guardrail is less severe than going down an embankment or striking a fixed object. Guardrail should only be installed where it is clear that crash severity will be reduced, or there is a history of run-off-the-road crashes at a given location that have resulted in severe crashes. New and upgraded guardrail and end-treatments must meet current safety standards; see Method for Assessing Safety Hardware (MASH) for more information. Caltrans (or other national accepted guidance) slope/height criteria need to be considered and documented.					
Why it works:					
Guardrail redirects a vehicle away from embankment slopes or fixed objects and dissipates the energy of an errant vehicle.					
General Qualities (Time, Cost and Effectiveness):					
Strategies range from relatively inexpensive too costly. Costly projects may include those that upgrade existing guardrail applications to more semi-rigid and rigid barrier systems over extended distances. In general, this CMs can be effective and can be implemented by agencies' maintenance staff and/or implemented on a systematic approach.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Fixed Object, Run-off Road	CRF: 11 - 78 %

R05, Install impact attenuators

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		25%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the new attenuators. This CM is not intended to be used for general maintenance activities (i.e. the replacement of existing damaged attenuators). For projects proposing to upgrade existing attenuators to current standards, this CM and corresponding CRF should only be applied to locations where past crash data or engineering judgment applied to the existing attenuator conditions suggests the upgraded attenuators may result in fewer or less severe crashes (justifying the use of the 25% CRF for this CM).				
General information					
Where to use:					
Impact attenuators are typically used to shield rigid roadside objects such as concrete barrier ends, steel guardrail ends and bridge pillars from oncoming automobiles. Attenuators should only be installed where it is impractical for the objects to be removed. New and upgraded barrier end-treatments must meet current safety standards; see MASH for more information.					
Why it works:					
Attenuators bring an errant vehicle to a more-controlled stop or redirect the vehicle away from a rigid object. Attenuators are effective at absorbing impact energy and increasing occupant safety. They also tend to draw attention to the fixed object, which helps drivers steer clear of the fixed objects.					
General Qualities (Time, Cost and Effectiveness):					
Costs depending on the scope of the project, type(s) used, and associated ongoing maintenance costs. Time to install is fairly quick once site is identified.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Fixed Object, Run-off Road	CRF: 5 - 50 %

R06, Flatten side slopes

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		30%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new side slopes. Minor/incidental flattening of side slopes would not likely result in the CRF shown below and may not be appropriate for use in Caltrans B/C calculations.				
General information					
Where to use:					
Roadways experiencing frequent lane departure crashes that result in roll-over type crashes as a result of the roadway slope being so severe as to not accommodate a reasonable degree of driver correction. When there is a need to reduce the severity of lane departure crashes without installing a barrier system that could result in increased numbers of crashes.					
Why it works:					
Flattened slopes provide a greater area for a driver to regain control of a vehicle. Steep slopes, ditches or unprotected hazardous drops-offs adjacent to a travel lane offer little opportunities to correct an inappropriate action by a driver and can result in sever crashes.					
General Qualities (Time, Cost and Effectiveness):					
Roadside modifications range from relatively inexpensive to very costly. Strategies that include creating safer side slopes where none exists can be moderately expensive based on the scope of the project and the associated clearing, grading, etc. The potential for high environmental and right-of-way impacts is high which can take several years to clear. In other cases This CM can be effective and can be implemented by agencies' maintenance staff and/or implemented on a systematic approach.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Fixed Object, Run-off Road	CRF: 5 - 62 %

R07, Flatten side slopes and remove guardrail

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		40%	20 years
Notes:	This CM only applies to crashes occurring within the limits of both the removed guardrail and the new side slopes.				
General information					
Where to use:					
Locations where high number of crashes originate as a lane departure and result in collision with guardrail or a fixed object located on the side slope shielded by guardrail. The guardrail may or may not meet current standards. Even though guardrails are generally installed to reduce the severity of departure crashes, they still can result in severe crashes in some locations.					
Why it works:					
Flattened side slopes and an unobstructed clear zone provide a greater area for a driver to regain control of a vehicle. The existing guardrail may help protect the steep slopes, fixed objects, or unprotected hazardous drops-offs adjacent to a travel lane, but removing all of these obstacles generally improves safety.					
General Qualities (Time, Cost and Effectiveness):					
Roadside modifications range from relatively inexpensive to very costly. Strategies that include creating safer side slopes where none exists can be moderately expensive based on the scope of the project and the associated clearing, grading, etc. The potential for high environmental and right-of-way impacts is high which can take several years to clear.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Roll Over, Fixed Object	CRF: 42%

R08, Install raised median

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	25%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new raised median. All new raised medians funded with federal HSIP funding should not include the removal of the existing roadway structural section and should be doweled into the existing roadway surface. This requirement is being implemented to maximize the safety-effectiveness of the limited HSIP funding and to minimize project impacts. Landscaping, if included in the project, is considered non-participating.			
General information				
Where to use:				
Areas experiencing head-on collisions that may be affected by both the number of vehicles that cross the centerline and by the speed of oncoming vehicles. Installing a raised median is a more restrictive approach in that it represents a more rigid barrier between opposing traffic. Application of raised medians on roadways with higher speeds is not advised - instead a median barrier should be considered. Including landscaping in new raised medians can be counterproductive to the HSIP safety goals and should only be done in ways that do not increase drivers' exposure to fixed objects and that will maintain driver's sight distance needs throughout the life of the proposed landscaping. <u>Agencies need to consider and document impacts of additional turning movements at nearby intersections.</u>				
Why it works:				
Adding raised medians is a particularly effective strategy as it adds to or reallocates the existing cross section to incorporate a buffer between the opposing travel lanes and reinforces the limits of the travel lane. Raised median may also be used to limit unsafe turning movements along a roadway.				
General Qualities (Time, Cost and Effectiveness):				
In some cases this strategy may be a retrofit into the existing roadway by utilizing a portion of the existing paved shoulder. These raised medians can be installed directly over the existing pavement. Cost and time to implement could significantly increase if the paved area is not sufficient to include a median. The surface treatment of the raised median also significantly affects their cost-effectiveness: standard concrete or other hardscape surfaces are usually more cost effective than landscaped medians. When agencies opt to install landscaping in conjunction with new raised medians, the project design and construction costs can significantly increase due to excavation, backfill/top-soil, water-connection, irrigation, planting, maintenance needed for the landscaping. When agencies opt to install landscaping in conjunction with new raised medians, the portion of the cost for landscaping and other non-safety related items that exceeds 10% of the project total cost is not federally participated and must be funded by the applicant.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Head-on	CRF:	20 - 75 %

R09, Install median (flush)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	15%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new flush median. The new median must be a minimum of 4 feet wide (or "wider" if a narrow median exists before the proposed project).			
General information				
Where to use:				
Areas experiencing head-on collisions that may be affected by both the number of vehicles that cross the centerline and by the speed of oncoming vehicles. Roadways with oversized lanes offer an opportunity to restripe the roadway to reduce the lanes to standard widths and use the extra width for the median.				
Why it works:				
Adding medians is a particularly effective strategy as it adds to or reallocates the existing cross section to incorporate a narrow buffer median between opposing flows, thereby providing a greater opportunity to correct an errant maneuver and further reinforce the limits of the travel lane. Application widths can vary based on the available cross section and intended application. Additional safety can be provided by combining this CM with rumble strips.				
General Qualities (Time, Cost and Effectiveness):				
In some cases this strategy may be retrofitted into the existing roadway by utilizing a portion of the existing paved shoulder and can ultimately be as simple as restriping the roadway. Costs and time to implement could significantly increase if the paved area is not sufficient to include a median.				
FHWA CMF Clearinghouse:		Crash Types Addressed:	All	CRF: 15 - 78 %

R10PB, Install pedestrian median fencing

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring on the approaches/influence area of the new pedestrian median fencing.			
General information				
Where to use:				
Roadway segments with high pedestrian-generators and pedestrian-destinations nearby (e.g. transit stops) may experience a high volume of pedestrians J-walking across the travel lanes at mid-block locations instead of walking to the nearest intersection or designated mid-block crossing. When this safety issue cannot be mitigated with shoulder, sidewalk and/or crossing treatments, then installing a continuous pedestrian barrier in the median may be a viable solution.				
Why it works:				
Adding pedestrian median fencing has the opportunity to enhance pedestrian safety at locations noted as being problematic involving pedestrians running/darting across the roadway outside designated pedestrian crossings. Pedestrian median fencing can significantly reduce this safety issue by creating a positive barrier, forcing pedestrians to the designated pedestrian crossing.				
General Qualities (Time, Cost and Effectiveness):				
Costs associated with this strategy will vary widely depending on the type and placement of the median fencing. Impacts to transit and other land uses may need to be considered and controversy can delay the implementation. In general, this CM can be effective as a spot-location approach.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF:	25 - 40%

R11, Install acceleration/ deceleration lanes

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		25%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new accel/decel lanes on high speed roadways. Significant improvements to the merge length for lane-drop locations is also an acceptable use of this CM.				
General information					
Where to use:					
Areas proven to have crashes that are the result of drivers not being able to turn onto a high speed roadway to accelerate until the desired roadway speed is reached and areas that do not provide the opportunity to safely decelerate to negotiate a turning movement. This CM can also be used to improve the safety of merging vehicles at a lane-drop location.					
Why it works:					
A lane that does not provide enough deceleration length and storage space for turning traffic may cause the turn queue to back up into the adjacent through lane. This can contribute to rear-end and sideswipe crashes. An acceleration lane is an auxiliary or speed-change lane that allows vehicles to accelerate to highway speeds (high speed roadways) before entering the through-traffic lanes of a highway. Additionally, if acceleration by entering traffic takes place directly on the traveled way, it may disrupt the flow of through-traffic and cause rear-end and sideswipe collisions.					
General Qualities (Time, Cost and Effectiveness):					
Costs are highly variable. Where sufficient median or shoulder space exists it may be possible to provide acceleration/deceleration lanes at a moderate cost. Where the roadway must be widened and additional right-of-way must be acquired, higher costs and a lengthy time-to-construct are likely. The expected effectiveness of this CM must be assessed for each individual location.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Sideswipe, Rear-End	CRF: 10 - 75 %

R12, Widen lane (initially less than 10 ft)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	25%	20 years
Notes:	Note: For Caltrans' statewide Calls-for-Projects, this CM only applies to crashes occurring within the limits of the widened lanes. Widening must a minimum of 1 foot.			
General information				
Where to use:				
Horizontal curves or tangents and low speed or high speed roadways identified as having lane departure crashes, sideswipe or head-on crashes that can be attributed to an existing pavement width less than 10 feet.				
Why it works:				
Increasing pavement width can affect almost all crash types. A common practice is to widen the traveled way on horizontal curves to make operating conditions on curves comparable to those on tangents. Speed is a primary consideration when evaluating potential adverse impacts of lane width on safety. On high-speed, rural two-lane highways, an increased risk of cross-centerline head-on or cross-centerline sideswipe crashes is a concern because drivers may have more difficulty staying within the travel lane.				
General Qualities (Time, Cost and Effectiveness):				
Costs will depend on the amount of reconstruction necessary and on whether additional right-of-way is required. In general, this is one of the higher-cost strategies recommended, but it can also be very beneficial. Since this is a relatively expensive treatment, one of the keys to creating a cost effective project with at least a medium B/C ratio is targeting higher-hazard roadways.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	5 - 70 %

R13, Add two-way left-turn lane

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	30%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new lane, where an existing median did not already exist.			
General information				
Where to use:				
Roadways having a high frequency of drivers being rear-ended while attempting to make a left turn across oncoming traffic. Also can be effective for drivers crossing the centerline of an undivided multilane roadway inadvertently.				
Why it works:				
Two-way left-turn lanes provide a buffer between opposing directions of travel and separate left turning traffic from through traffic. They can also help to allow vehicles to begin to accelerate before entering the through-traffic lanes. They reduce the disruption of flow of through-traffic and reducing rear-end and sideswipe collisions. For some roadways the option of converting a four-lane undivided arterials to two-vehicle-lane roadways with a center left-turn lane and bike lanes should be considered (see "Road Diet" CM.)				
General Qualities (Time, Cost and Effectiveness):				
In some cases this strategy may be retrofitted into the existing roadway by utilizing a portion of the existing paved shoulder and can ultimately be as simple as restriping the roadway. Costs and time to implement could significantly increase if the paved area is not sufficient to include a median, requiring new right-of-way, and having significant environmental impacts. The expected effectiveness of this CM must be assessed for each individual location as the B/C ratios will vary from low to high.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	8 - 50 %

R14, Road Diet (Reduce travel lanes and add a two way left-turn and bike lanes)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	35%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new lane striping. "Intersection" crashes can only be applied when they resulted from turning movements that had no designated turn lanes/phases in the existing condition and the Road Diet will provide turn lanes/phases for these movements. This CM does not apply to roadway sections that already included left turn lanes or two way left turn lanes before the lane reductions. New bike lanes are also expected to be part of these projects. if any pavement is planned to be removed for the purpose of adding landscaping, planter-boxes, or other non-roadway user features, the cost should be non-participating.			
General information				
Where to use:				
Areas noted as having a higher frequency of head-on, left-turn, and rear-end crashes with traffic volumes that can be handled by only 2 free flowing lanes. Using this strategy in locations with traffic volumes that are too high could result in diversion of traffic to routes less safe than the original four-lane design. It may also result in congestion levels that contribute to other crashes.				
Why it works:				
The application of this strategy usually reduces the roadway segment speeds and serious head-on crashes. In many cases the extra pavement width can be used for the installation of bike lanes. In addition to increasing bicycle safety, these bike lanes can improve the safety of on-street parking.				
General Qualities (Time, Cost and Effectiveness):				
Implementation would require more time than in other low-cost treatments to complete environmental analyses, traffic studies and public input. Projects that only require new lane markings and minor signalization modifications will have relatively low cost and can be very effective and can be considered on a systematic approach. These striping and signal modification costs should be considered part of this CM and not an additional CM. (If additional signal hardware improvements are being made, over what is needed for the road diet, then the Improve Signal Hardware CM may also be used.) Often road diet projects need a seal-coat placed on the roadway to fully remove the old striping. These seal coats are considered part of the proper installation of this CM. In contrast, structural-overlays should not be considered part of this CM and are not considered eligible for funding in the California Local HSIP.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	26 - 43 %

R15, Widen shoulder

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		30%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new paved shoulder. A minimum of 2 feet width must be added and the new/resulting shoulders must be a minimum of 4 feet wide. This CM is not eligible unless it is done as the last step of an "incremental approach", for which the agency documents that: 1) they have already pursued and installed lower cost and lower impact CMs (i.e. signing/stripping upgrades to MUTCD standards/recommendations, rumble strips, etc.), 2) they have already monitored the crash occurrences after these improvements were installed, and 3) the 'after' crash rate is still unacceptably high. This 'incremental approach' (or a special exception from the HSIP program manager) must be documented in the Narrative Questions in the application and a summary of the 'before' and 'after' crash analysis must be attached to the application.				
General information					
Where to use:					
Roadways that have a frequent incidence of vehicles leaving the travel lane resulting in an unsuccessful attempt to reenter the roadway. The probability of a safe recovery is increased if an errant vehicle is provided with an increased paved area in which to initiate such a recovery.					
Why it works:					
Based on the best available research, adding shoulder or widening an existing shoulder provides a greater area to regain control of a vehicle, as well as lateral clearance to roadside objects such as guardrail, signs and poles. They may also provide space for disabled vehicles to stop or drive slowly, provide increased sight distance for through vehicles and for vehicles entering the roadway, and in some cases reduce passing conflicts between motor vehicles and bicyclists and pedestrians. The likely safety benefits for adding or widening an existing shoulder generally increase as the widening width increases - practitioners should refer to NCHRP Report 500 Series, the CMF Clearinghouse or other references for more details.					
General Qualities (Time, Cost and Effectiveness):					
Shoulder widening costs would depend on whether new right-of-way is required and whether extensive roadside modification is needed. Since shoulder widening can be a relatively expensive treatment, one of the keys to creating a cost effective project with at least a medium B/C ratio is targeting higher-hazard roadways.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Fixed Object, Run-off Road, Sideswipe	CRF: 15 - 75 %

R16, Curve Shoulder widening (Outside Only)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	45%	20 years
Notes:	This CM only applies to crashes occurring within the limits (or influence area) of the new shoulder widening at curves. A minimum of 2-4 feet width must be added to the outside of horizontal curves and the new traversable shoulder must be a minimum of 4 feet wide.			
General information				
Where to use:				
Roadway curves noted as having frequent lane departure crashes due to inadequate or no shoulders, resulting in an unsuccessful attempt to reenter the roadway.				
Why it works:				
Adding shoulders (outside only) creates a recovery area in which a driver can regain control of a vehicle, as well as lateral clearance to roadside objects.				
General Qualities (Time, Cost and Effectiveness):				
To minimize the R/W needs and the cost, only outside shoulder at curves is to be widened. This CM can be implemented in a relatively short timeframe.				
FHWA CMF Clearinghouse:	NA			

R17, Improve horizontal alignment (flatten curves)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		50%	20 years
Notes:	This CM only applies to crashes occurring within the limits (or influence area) of the improved alignment. This CM is not eligible unless it is done as the last step of an "incremental approach", including: the agency documents that: 1) they have already pursued and installed lower cost and lower impact CMs (i.e. signing/stripping upgrades to MUTCD standards/recommendations, rumble strips, etc.), 2) they have already monitored the crash occurrences after these improvements were installed, and 3) the 'after' crash rate is still unacceptably high. This 'incremental approach' (or a special exception from the HSIP program manager) must be documented in the Narrative Questions in the application and a summary of the agency's 'before' and 'after' crash analysis must be attached to the application.				
General information					
Where to use:					
Roadways with horizontal curves that have experienced lane departure crashes as a result of a roadway segment having compound curves or a severe radius. This strategy should generally be considered only when less expensive strategies involving clearing of specific sight obstructions or modifying traffic control devices have been tried and have failed to ameliorate the crash patterns.					
Why it works:					
Increasing the radius of a horizontal curve can be very effective in improving the safety performance of the curve. Curve modification reduces the likelihood of a vehicle leaving its lane, crossing the roadway centerline, or leaving the roadway at a horizontal curve; and minimizes the adverse consequences of leaving the roadway. Horizontal alignment improvement projects are expected to include standard/improved superelevation elements, which should be considered part of this CM and not an additional CM.					
General Qualities (Time, Cost and Effectiveness):					
This strategy is a long-term, higher-cost alternative for improving the safety of a horizontal curve because it usually involves total reconstruction of the roadway. It may also require acquisition of additional right-of-way and an environmental review. This strategy, albeit costly, has shown that increasing the radius of curvature can significantly reduce total curve-related crashes by up to 80 percent. The expected effectiveness of this CM must be assessed for each individual location.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		All	CRF: 24 - 90%

R18, Flatten crest vertical curve

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	25%	20 years
Notes:	This CM only applies to crashes occurring within the limits (or influence area) of the improved alignment. This CM is not eligible unless it is done as the last step of an "incremental approach", including: the agency documents that: 1) they have already pursued and installed lower cost and lower impact CMs (i.e. signing/stripping upgrades to MUTCD standards/recommendations, rumble strips, etc.), 2) they have already monitored the crash occurrences after these improvements were installed, and 3) the 'after' crash rate is still unacceptably high. This 'incremental approach' (or a special exception from the HSIP program manager) must be documented in the Narrative Questions in the application and a summary of the agency's 'before' and 'after' crash analysis must be attached to the application.			
General information				
Where to use:				
The target for this strategy is usually unsignalized intersections with restricted sight distance due to vertical geometry and with patterns of crashes related to that lack of sight distance that cannot be ameliorated by less expensive methods. This strategy should generally be considered only when less expensive strategies involving clearing of specific sight obstructions or modifying traffic control devices have been tried and have failed to ameliorate the crash patterns.				
Why it works:				
Adequate sight distance for drivers at stopped approaches to intersections has long been recognized as among the most important factors contributing to overall intersection safety. Vertical alignment improvement projects are expected to include standard/improved superelevation elements, which should be considered part of this CM and not an additional CM.				
General Qualities (Time, Cost and Effectiveness):				
Projects involving changing the horizontal and/or vertical alignment to provide more sight distance are quite extensive and usually take several years to accomplish. If additional right-of-way is required or environmental impacts are expected, these projects will require a substantial period of time. Since this is usually an expensive treatment, one of the keys to creating a cost effective project with at least a medium B/C ratio is targeting higher-hazard locations.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	20 - 51 %

R19, Improve curve superelevation

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		45%	20 years
Notes:	This CM only applies to crashes occurring within the limits (or influence area) of the improved superelevation. This CM does not apply to sections of roadways where the horizontal or vertical alignments are changing via another CM.				
General information					
Where to use:					
Roadways noted as having frequent lane departure crashes and inadequate or no superelevation. Safety can be enhanced when the superelevation is improved or restored along curves where the actual superelevation is less than the optimal.					
Why it works:					
Superelevation works with friction between the tires and pavement to counteract the forces on the vehicle associated with cornering. Many curves may have inadequate superelevation because of vehicles traveling at higher speeds than were originally designed for, because of loss of effective superelevation after resurfacing, or because of changes in design policy after the curve was originally constructed.					
General Qualities (Time, Cost and Effectiveness):					
This strategy can be a higher-cost alternative for improving the safety of a curve because it involves reconstruction to some degree. Other projects may be able to be constructed by simple overlays and minimal reconstruction of roadway features. When simple overlay fixes are pursued, a systematic installation approach may be appropriate. The expected effectiveness of this CM must be assessed for each individual location.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Run-off Road, All	CRF: 40 - 50 %

R20, Convert from two-way to one-way traffic

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	35%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the new one-way sections.			
General information				
Where to use:				
One-way streets can offer improved signal timing and accommodate odd-spaced signals. One-way streets can simplify crossings for pedestrians, who must look for traffic in only one direction. While studies have shown that conversion of two-way streets to one-way generally reduces pedestrian crashes and the number of conflict points, one-way streets tend to have higher speeds which creates new problems. Care must be taken not to create conditions that cause driver confusion and erratic maneuvers.				
Why it works:				
Studies have shown a 10 to 50-percent reduction in total crashes after conversion of a two-way street to one-way operation. While studies have shown that con-version of two-way streets to one-way generally reduces pedestrian crashes, one-way streets tend to have higher speeds which creates new problems. At the same time, this strategy (1) increases capacity significantly and (2) can have safety-related drawbacks including pedestrian confusion and minor sideswipe crashes.				
General Qualities (Time, Cost and Effectiveness):				
The costs will vary depending on length of treatment and if the conversion requires modification to signals. Conversion costs can be high to build "crossovers" where the one-way streets convert back to two-way streets and to rebuild traffic signals. It's also likely that these types of modifications will require public involvement and could significantly add to the time it takes to complete the project. The expected effectiveness of this CM must be assessed for each individual location.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF:	26 - 43 %

R21, Improve pavement friction (High Friction Surface Treatments)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	55%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the improved friction overlay. This CM is not intended to apply to standard chip-seal or open-graded maintenance projects for long segments of corridors or structure repaving projects intended to fix failed pavement.			
General information				
Where to use:				
Nationally, this countermeasure is referred to as "High Friction Surface Treatments" or HFST. Areas as noted having crashes on wet pavements or under dry conditions when the pavement friction available is significantly less than actual roadway speeds; including but not limited to curves, loop ramps, intersections, and areas with short stopping or weaving distances. This treatment is intended to target locations where skidding is determined to be a problem, in wet or dry conditions and the target vehicle is one that runs (skids) off the road or is unable to stop due to insufficient skid resistance.				
Why it works:				
Improving the skid resistance at locations with high frequencies of wet-road crashes and/or failure to stop crashes can result in a reduction of 50 percent for wet-road crashes and 20 percent for total crashes. Applying HFST can double friction numbers, e.g. low 40s to high 80s. This CM represents a special focus area for both FHWA and Caltrans, which means there are extra resources available for agencies interested in more details on High Friction Surface Treatment projects.				
General Qualities (Time, Cost and Effectiveness):				
This strategy can be relatively inexpensive and implemented in a short timeframe. The installation would be done by either agency personnel or contractors and can be done by hand or machine. In general, This CM can be very effective and can be considered on a systematic approach.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Wet, Rear-End, All	CRF:	17 - 68 %

R22, Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		15%	10 years
Notes:	This CM only applies to crashes occurring within the influence area of the new/upgraded signs. This CM is not intended for maintenance upgrades of street-name, parking, guide, or any other signs without a primary focus on roadway safety. <u>This CM is not eligible unless</u> it is done as part of a larger sign audit project, including the study of: 1) the existing signs' locations, sizes and information per MUTCD standards, 2) missing signs per MUTCD standards, and 3) sign retroreflectivity. The overall sign audit scope (or a special exception from the HSIP program manager) must be documented in the Narrative Questions in the application. Based on the scope of the project/audit, it may be appropriate to combine other CMs in the B/C calculation.				
General information					
Where to use:					
The target for this strategy should be on roadway segments with patterns of head on, nighttime, non-intersection, run-off road, and sideswipe crashes related to lack of driver awareness of the presence of a specific roadway feature or regulatory requirement. Ideally this type of safety CM would be combined with other sign evaluations and upgrades (install chevrons, warning signs, delineators, markers, beacons, and relocation of existing signs per MUTCD standards.)					
Why it works:					
This strategy primarily addresses crashes caused by lack of driver awareness (or compliance) roadway signing. It is intended to get the drivers attention and give them a visual warning by using fluorescent yellow sheeting (or other retroreflective material).					
General Qualities (Time, Cost and Effectiveness):					
Signing improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number of signs. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance 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. When considering any type of federally funded sign upgrade project, California local agencies are encouraged to consider "Roadway Safety Signing Audit (RSSA) and Upgrade Projects". Including RSSAs in the development phase of sign projects are expected to identify non-standard (per MUTCD) sign features and missing signs that may otherwise go unnoticed. More information on RSSA is available on the Local Assistance HSIP webpage.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Head on, Run-off road, Sideswipe, Night	CRF: 18 - 35%

R23, Install chevron signs on horizontal curves

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		40%	10 years
Notes:	This CM only applies to crashes occurring within the influence area of the new signs. (i.e. only through the curve).				
General information					
Where to use:					
Roadways that have an unacceptable level of crashes on relatively sharp curves during periods of light and darkness. Ideally this type of safety CM would be combined with other sign evaluations and upgrades (install warning signs, delineators, markers, beacons, and relocation of existing signs per MUTCD standards.)					
Why it works:					
Post-mounted chevrons are intended to warn drivers of an approaching curve and provide tracking information and guidance to the drivers. While they are intended to act as a warning, it should also be remembered that the posts, placed along the roadside, represent a possible object with which an errant vehicle can crash into. Design of posts to minimize damage and injury is an important part of the considerations to be made when selecting these treatments.					
General Qualities (Time, Cost and Effectiveness):					
Signing improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number of signs. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance 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. When considering any type of federally funded sign upgrade project, California local agencies are encouraged to consider "Roadway Safety Signing Audit (RSSA) and Upgrade Projects". Including RSSAs in the development phase of sign projects are expected to identify non-standard (per MUTCD) sign features and missing signs that may otherwise go unnoticed. More information on RSSA is available on the Local Assistance HSIP webpage.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Run-off Road, All	CRF: 6 - 64 %

R24, Install curve advance warning signs

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		25%	10 years
Notes:	This CM only applies to crashes occurring within the influence area of the new signs. (i.e. only through the curve)				
General information					
Where to use:					
Roadways that have an unacceptable level of crashes on relatively sharp curves during periods of light and darkness. This countermeasure may also include horizontal alignment and/or advisory speed warning signs. Ideally this type of safety CM would be combined with other sign evaluations and upgrades (install warning signs, chevrons, delineators, markers, beacons, and relocation of existing signs per MUTCD standards.)					
Why it works:					
This strategy primarily addresses problem curves, and serves as an advance warning of an unexpected or sharp curve. It provides advance information and gives drivers a visual warning that their added attention is needed.					
General Qualities (Time, Cost and Effectiveness):					
Signing improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number of signs. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance 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. When considering any type of federally funded sign upgrade project, California local agencies are encouraged to consider "Roadway Safety Signing Audit (RSSA) and Upgrade Projects". Including RSSAs in the development phase of sign projects are expected to identify non-standard (per MUTCD) sign features and missing signs that may otherwise go unnoticed. More information on RSSA is available on the Local Assistance HSIP webpage.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Run-off Road, All	CRF: 20 - 30 %

R25, Install curve advance warning signs (flashing beacon)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		30%	10 years
Notes:	This CM only applies to crashes occurring within the influence area of the new signs. (i.e. only through the curve)				
General information					
Where to use:					
Roadways that have an unacceptable level of crashes on relatively sharp curves. Flashing beacons in conjunction with warning signs should only be used on horizontal curves that have an established severe crash history to help maintain their effectiveness.					
Why it works:					
This strategy primarily addresses problem curves, and serves as an enhanced advance warning of an unexpected or sharp curve. It provides advance information and gives drivers a visual warning that their added attention is needed. Flashing beacons are an added indication that a curve may be particularly challenging.					
General Qualities (Time, Cost and Effectiveness):					
Use of flashing beacons requires minimal development process, allowing flashing beacons to be installed within a short time period. Before choosing this CM, the agency needs to confirm the ability to provide power to the site (solar may be an option). In general, This CM can be very effective and can be considered on a systematic approach.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		All	CRF: 30 %

R26, Install dynamic/variable speed warning signs

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	30%	10 years
Notes:	This CM only applies to crashes occurring within the influence area of the new signs. (i.e. through the curve) {This CM does not apply to dynamic regulatory speed warning signs. There are currently no nationally accepted CRFs for dynamic regulatory signs (also known as Radar Speed Feedback Signs). CRFs are being developed and Caltrans hopes to include these CMs and CRFs in future calls for projects.}		
General information			
Where to use:			
Curvilinear roadways that have an unacceptable level of crashes due to excessive speeds on relatively sharp curves.			
Why it works:			
This strategy primarily addresses crashes caused by motorists traveling too fast around sharp curves. It is intended to get the drivers attention and give them a visual warning that they may be traveling over the recommended speed for the approaching curve. Care should be taken to limit the placement of these signs to help maintain their effectiveness.			
General Qualities (Time, Cost and Effectiveness):			
Use of dynamic speed warning signs requires minimal development process, allowing them to be installed within a short time period. Before choosing this CM, the agency needs to confirm the ability to provide power to the site (solar may be an option). In general, This CM can be very effective and can be considered on a systematic approach.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	All	CRF: 0 - 41 %

R27, Install delineators, reflectors and/or object markers

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		15%	10 years
Notes:	This CM only applies to crashes occurring within the limits / influence area of the new features. {This is not a striping-related CM}				
General information					
Where to use:					
Roadways that have an unacceptable level of crashes on curves (relatively flat to sharp) during periods of light and darkness. Any road with a history of fixed object crashes is a candidate for this treatment, as are roadways with similar fixed objects along the roadside that have yet to experience crashes. If a fixed object cannot be relocated or made break-away, placing an object marker can provide additional information to motorists. Ideally this type of safety CM would be combined with other sign evaluations and upgrades (install warning signs, chevrons, beacons, and relocation of existing signs per MUTCD standards.)					
Why it works:					
Delineators, reflectors and/or object markers are intended to warn drivers of an approaching curve or fixed object that cannot easily be removed. They are intended to provide tracking information and guidance to the drivers. They are generally less costly than Chevron Signs as they don't require posts to place along the roadside, avoiding an additional object with which an errant vehicle can crash into.					
General Qualities (Time, Cost and Effectiveness):					
These improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number of locations. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance crews. However, This CM can be effectively and efficiently implemented using a systematic approach with numerous locations, resulting in low to moderate cost projects that are more appropriate to seek state or federal funding. When considering any type of federally funded sign upgrade project, California local agencies are encouraged to consider "Roadway Safety Signing Audit (RSSA) and Upgrade Projects". Including RSSAs in the development phase of sign projects are expected to identify non-standard (per MUTCD) sign features and missing signs that may otherwise go unnoticed. More information on RSSA is available on the Local Assistance HSIP webpage.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		All	CRF: 0 - 30 %

R28, Install edge-lines and centerlines

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		All	25%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the new centerlines and/or edge-lines. This CM is not intended to be used for general maintenance activities (i.e. the replacement of existing striping and RPMs in-kind) and must include upgraded safety features over the existing striping. For two lane roadways allowing passing, a striping audit must be done to ensure the passing limits meeting the MUTCD standards. Both the centerline and edge-lines are expected to be upgraded, unless prior approval is granted by Caltrans staff in writing and attached to application.			
General information				
Where to use:				
Any road with a history of run-off-road right, head-on, opposite-direction-sideswipe, or run-off-road-left crashes is a candidate for this treatment - install where the existing lane delineation is not sufficient to assist the motorist in understanding the existing limits of the roadway. Depending on the width of the roadway, various combinations of edge line and/or center line pavement markings may be the most appropriate. Incorporating raised/reflective pavement markers (RPMs) into centerlines (and edge-lines) should be considered as it has been shown to improve safety.				
Why it works:				
Installing edge-lines and centerlines where none exists or making significant upgrades to existing lines (paint to thermoplastic, adding audible disks/bumps in the thermoplastic stripes, or adding RPMs) are intended/designed to help drivers who might leave the roadway because of their inability to see the edge of the roadway along the horizontal edge of the pavement or cross-over the centerline of the roadway into oncoming traffic. New pavement marking products tend to be more durable, are all-weather, more visible, and have a higher retroreflectivity than traditional pavement markings.				
General Qualities (Time, Cost and Effectiveness):				
These improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number and length of locations. This CM can be effectively and efficiently implemented using a systematic approach with numerous and long locations, resulting in low to moderate cost projects that are more appropriate to seek state or federal funding. When considering any type of federally funded striping upgrade project, California local agencies are encouraged to consider "Roadway Safety Striping Audit and Upgrade Projects". Including wide-scale striping audits in the development phase of striping projects are expected to identify non-standard (per MUTCD) striping/markings features, no-passing zone limits needing adjustment, and missing striping/markings that may otherwise go unnoticed. More information on this concepts is available on the Local Assistance HSIP webpage under an RSSA example document. Note: When federal safety funding is used for these installations in high-wear-locations, the local agency is expected to maintain the improvement for a minimum of 10 years.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Head-on, Run-off Road, All	CRF:	0 - 44 %

R29, Install no-passing line

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		45%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the new or extended no-passing zones.				
General information					
Where to use:					
Roadways that have a high percentage of head-on crashes suggesting that many head-on crashes may relate to failed passing maneuvers. No-passing lines should be installed where drivers "passing sight distance" is not available due to horizontal or vertical obstructions. General restriping projects can be good opportunities to reevaluate and incorporate new no-passing zones limits. The incorporation 'No Passing Zone' pennants should also be considered when reevaluating the limits of no-passing zones. Installing no-passing limits in areas that are not warranted may reduce the overall safety of the corridor as drivers may become frustrated and attempt passing maneuvers at other locations without the necessary sight distance.					
Why it works:					
When the centerline markings do not differentiate between passing and no-passing areas, drivers may have difficulty determining where passing maneuvers can be completed safely. Providing clear and engineered passing and no-passing areas can encourage drivers to wait patiently for safe passing areas and avoid aggressively looking for passing opportunities.					
General Qualities (Time, Cost and Effectiveness):					
These improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number and length of locations. When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance crews. However, This CM can be effectively and efficiently implemented using a systematic approach with numerous and long locations, resulting in low to moderate cost projects that are more appropriate to seek state or federal funding.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Head-on, Side-swipe	CRF: 40 - 53%

R30, Install centerline rumble strips/stripes

For HSIP Cycle 12 Call-for-projects			
Funding Eligibility	Crash Types Addressed	CRF	Expected Life
90%	All	20%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the new rumble strips/stripes.		
General information			
Where to use:			
Center Line rumble strips/stripes can be used on virtually any roadway – especially those with a history of head-on crashes. It is recommended that rumble strips/stripes be applied systematically along an entire route instead of only at spot locations. For all rumble strips/stripes, pavement condition should be sufficient to accept milled rumble strips. Care should be taken when considering installing rumble strips in locations with residential land uses or in areas with high bicycle volumes.			
Why it works:			
Rumble strips provide an auditory indication and tactile rumble when driven on, alerting drivers that they are drifting out of their travel lane, giving them time to recover before they depart the roadway or cross the center line. Additionally, rumble stripes (pavement marking in the rumble itself) provide an enhanced marking, especially in wet dark conditions.			
General Qualities (Time, Cost and Effectiveness):			
These improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number and length of locations. This CM can be effectively and efficiently implemented using a systematic approach with numerous and long locations, resulting in moderate cost projects that are more appropriate to seek state or federal funding.			
FHWA CMF Clearinghouse:	Crash Types Addressed:	Head-on, Side-swipe, All	CRF: 15 - 68%

R31, Install edgeline rumble strips/stripes

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		15%	10 years
Notes:	This CM only applies to crashes occurring within the limits of the new rumble strips/stripes.				
General information					
Where to use:					
Shoulder and edge line milled rumble strips/stripes should be used on roads with a history of roadway departure crashes. It is recommended that rumble strips/stripes be applied systematically along an entire route instead of only at spot locations. For all rumble strips/stripes, pavement condition should be sufficient to accept milled rumble strips. Special requirements may apply and care should be taken when considering installing rumble strips in locations with residential land uses or in areas with high bicycle volumes.					
Why it works:					
Rumble strips provide an auditory indication and tactile rumble when driven on, alerting drivers that they are drifting out of their travel lane, giving them time to recover before they depart the roadway or cross the center line. Additionally, rumble stripes (pavement marking in the rumble itself) provide an enhanced marking, especially in wet dark conditions.					
General Qualities (Time, Cost and Effectiveness):					
These improvements do not require a long development process and can typically be implemented quickly. Costs for implementing this strategy are nominal and depend on the number and length of locations. This CM can be effectively and efficiently implemented using a systematic approach with numerous and long locations, resulting in moderate cost projects that are more appropriate to seek state or federal funding.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Run-off Road	CRF: 10 - 41%

R32, Speed Safety Cameras

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		All		20%	20 years
Notes:	This CM only applies to crashes occurring within the limits of the road sections that Speed Safety Cameras are newly installed. Agencies should conduct a legal and policy review to determine if Speed Safety Cameras (SSCs) are authorized within a jurisdiction and how the authorization and other traffic laws will affect an SSC program. Please refer to Speed Safety Camera Program Planning and Operations Guide. FHWA, (2023).				
General information					
Where to use:					
Agencies should conduct a network analysis of speeding-related crashes to identify locations to implement SSCs. The analysis can include scope (e.g., widespread, localized), location types (e.g., urban/suburban/rural, work zones, residential, school zones), roadway types (e.g., expressways, arterials, local streets), times of day, and road users most affected by speed-related crashes (e.g., pedestrians, bicyclists). SSCs can be deployed as: Fixed units—a single, stationary camera targeting one location. Point-to-Point (P2P) units—multiple cameras to capture average speed over a certain distance. Mobile units—a portable camera, generally in a vehicle or trailer.					
Why it works:					
Safe Speeds is a core principle of the Safe System Approach since humans are less likely to survive high-speed crashes. Enforcing safe speeds has been challenging; however, with more information and tools communities can make progress in reducing speeds. Agencies can use speed safety cameras (SSCs) as an effective and reliable technology to supplement more traditional methods of enforcement, engineering measures, and education to alter the social norms of speeding. SSCs use speed measurement devices to detect speeding and capture photographic or video evidence of vehicles that are violating a set speed threshold.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		All	CRF: -46 - 61 %

R33PB, Install bike lanes

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Pedestrian and Bicycle		35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring within the limits of the Class II (not Class III) bike lanes. When an off-street bike-path is proposed that is not adjacent to the roadway, the applicant must document the engineering judgment used to determine which "Ped & Bike" crashes to apply.				
General information					
Where to use:					
Roadway segments noted as having crashes between bicycles and vehicles or crashes that may be preventable with a buffer/shoulder. Most studies suggest that bicycle lanes may provide protection against bicycle/motor vehicle collisions. Striped bike lanes can be incorporated into a roadway when is desirable to delineate which available road space is for exclusive or preferential use by bicyclists.					
Why it works:					
Most studies present evidence that bicycle lanes provide protection against bicycle/motor vehicle collisions. Bicycle lanes provide marked areas for bicyclist to travel along the roadway and provide for more predictable movements for both bicyclist and motorist. Evidence also shows that riding with the flow of vehicular traffic reduces bicyclists’ chances of collision with a motor vehicle. Locations with bicycle lanes have lower rates of wrong-way riding. In combination with this CM, better guidance signs and markings for non-motorized and motorized roadway users should be considered, including: sign and markings directing cyclists on appropriate/legal travel paths and signs and markings warning motorists of non-motorized uses of the roadway that should be expected.					
General Qualities (Time, Cost and Effectiveness):					
Adding striped bicycle lanes can range from the simply restriping the roadway and minor signing to projects that require roadway widening, right-of-way, and environmental impacts. It is most cost efficient to create bike lanes during street reconstruction, street resurfacing, or at the time of original construction. The expected effectiveness of this CM must be assessed for each individual location. For simple installation scenarios, This CM can be very effective and can be considered on a systematic approach.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Pedestrian, Bicycle	CRF: 0 - 53 %

R34PB, Install Separated Bike Lanes

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Pedestrian and Bicycle		45%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring within the limits of the separated bike lanes. When an off-street bike-path is proposed that is not adjacent to the roadway, the applicant must document the engineering judgment used to determine which "Ped & Bike" crashes to apply.				
General information					
Where to use:					
Separated bikeways are most appropriate on streets with high volumes of bike traffic and/or high bike-vehicle collisions, presumably in an urban or suburban area. Separation types range from simple, painted buffers and flexible delineators, to more substantial separation measures including raised curbs, grade separation, bollards, planters, and parking lanes. These options range in feasibility due to roadway characteristics, available space, and cost. In some cases, it may be possible to provide additional space in areas where pedestrian and bicyclists may interact, such as the parking buffer, or loading zones, or extra bike lane width for cyclists to pass one another.					
Why it works:					
Separated bike lanes provide increased safety and comfort for bicyclists beyond conventional bicycle lanes. By separating bicyclists from motor traffic, “protected” or physically separated bike lanes can offer a higher level of comfort and are attractive to a wider spectrum of the public. Intersections and approaches must be carefully designed to promote safety and facilitate left-turns for bicyclists from the primary corridor to cross street. In combination with this CM, better guidance signs and markings for non-motorized and motorized roadway users should be considered, including: sign and markings directing cyclists on appropriate/legal travel paths and signs and markings warning motorists of non-motorized uses of the roadway that should be expected.					
General Qualities (Time, Cost and Effectiveness):					
The cost of installing separated bike lanes can be low to medium or high, depending on whether roadway widening, right-of-way and environmental impacts are involved. It is most cost efficient to create bike lanes during street reconstruction, street resurfacing, or at the time of original construction. The expected effectiveness of this CM must be assessed for each individual location.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Pedestrian, Bicycle	CRF: 3.7 - 100 %

R35PB, Install sidewalk/pathway (to avoid walking along roadway)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Pedestrian and Bicycle		80%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring within the limits of the new walkway. This CM is not intended to be used where an existing sidewalk is being replaced with a wider one, unless prior Caltrans approval is included in the application. When an off-street multi-use path is proposed that is not adjacent to the roadway, the applicant must document the engineering judgment used to determine which "Ped & Bike" crashes to apply.				
General information					
Where to use:					
Areas noted as not having adequate or no sidewalks and a history of walking along roadway pedestrian crashes. In rural areas asphalt curbs and/or separated walkways may be appropriate.					
Why it works:					
Sidewalks and walkways provide people with space to travel within the public right-of-way that is separated from roadway vehicles. The presence of sidewalks on both sides of the street has been found to be related to significant reductions in the “walking along roadway” pedestrian crash risk compared to locations where no sidewalks or walkways exist. Reductions of 50 to 90 percent of these types of pedestrian crashes. In combination with this CM, better guidance signs and markings for non-motorized and motorized roadway users should be considered, including: sign and markings directing pedestrians and cyclists on appropriate/legal travel paths and signs and markings warning motorists of non-motorized uses of the roadway that should be expected.					
General Qualities (Time, Cost and Effectiveness):					
Costs for sidewalks will vary, depending upon factors such as width, materials, and existing of curb, gutter and drainage. Asphalt curbs and walkways are less expensive, but require more maintenance. The expected effectiveness of this CM must be assessed for each individual location. These projects can be very effective in areas of high-pedestrian volumes with a past history of crashes involving pedestrians.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Pedestrian, Bicycle	CRF: 65 - 89 %

R36PB, Install/upgrade pedestrian crossing (with enhanced safety features)

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Pedestrian and Bicycle		35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the influence area (expected to be a maximum of within 250') of the new crossing which includes new enhanced safety features. Note: This CM is not intended to be combined with the "Install raised pedestrian crossing" when calculating the improvement's B/C ratio. This CM is not intended to be used for high-cost aesthetic enhancements (i.e. stamped concrete or stamped asphalt).				
General information					
Where to use:					
Roadway segments with no controlled crossing for a significant distance in high-use midblock crossing areas and/or multilane roads locations. Based on the Zegeer study (Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations) at many locations, a marked crosswalk alone may not be sufficient to adequately protect non-motorized users. In these cases, flashing beacons, curb extensions, medians and pedestrian crossing islands and/or other safety features should be added to complement the standard crossing elements. For multi-lane roadways, advance "yield" markings can be effective in reducing the 'multiple-threat' danger to pedestrians.					
Why it works:					
Adding pedestrian crossings has the opportunity to greatly enhance pedestrian safety at locations noted as being problematic. The enhanced safety elements, which may include curb extensions, medians and pedestrian crossing islands, beacons, and lighting, combined with pavement markings delineating a portion of the roadway that is designated for pedestrian crossing. Care must be taken to warn drivers of the potential for pedestrians crossing the roadway and enhanced improvements added to the crossing increase the likelihood of pedestrians crossing in a safe manner. In combination with this CM, better guidance signs and markings for non-motorized and motorized roadway users should be considered, including: sign and markings directing pedestrians and cyclists on appropriate/legal travel paths and signs. When agencies opt to install aesthetic enhancement to crossing like stamped concrete/asphalt, the project design and construction costs can significantly increase. For HSIP applications, these costs must be accounted for in the B/C calculation, but these costs (over standard crosswalk markings) must be tracked separately and are not federally reimbursable and will increase the agency's local-funding share for the project costs.					
General Qualities (Time, Cost and Effectiveness):					
Costs associated with this strategy will vary widely, depending on the extent of the curb extensions, raised medians, flashing beacons, and other pedestrian safety elements that are needed with the crossing. When considered at a single location, these improvements can sometimes be low cost and funded through local funding by local crews. This CM can often be effectively and efficiently implemented using a systematic approach with numerous locations, resulting in moderate to high cost projects that are appropriate to seek state or federal funding.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Pedestrian, Bicycle	CRF: 8 - 56%

R37PB, Install raised pedestrian crossing

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the area with the new raised crossing. Note: This CM is not intended to be combined with the "Install pedestrian crossing (with enhanced safety features)" when calculating the improvement's B/C ratio.			
General information				
Where to use:				
On lower-speed roadways, where pedestrians are known to be crossing roadways that involve significant vehicular traffic. Based on the Zegeer study (Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations) at many locations, a marked crosswalk alone, may not be sufficient to adequately protect non-motorized users. In these cases, raised crossings can be added to complement the standard crossing elements. Special requirements may apply and extra care should be taken when considering installing raised crossings to ensure unintended safety issues are not created, such as: emergency vehicle access or truck route issues.				
Why it works:				
Adding a raised pedestrian crossing has the opportunity to enhance pedestrian safety at locations noted as being especially problematic. The raised crossing encourages motorists to reduce their speed and provides improved delineation for the portion of the roadway that is designated for pedestrian crossing. In combination with this CM, better guidance signs and markings for non-motorized and motorized roadway users should be considered, including: sign and markings directing pedestrians and cyclists on appropriate/legal travel paths.				
General Qualities (Time, Cost and Effectiveness):				
Costs associated with this strategy will vary widely, depending upon the elements of the raised crossing and the need for new curb ramps and sidewalk modifications. This CM may be effectively and efficiently implemented using a systematic approach with more than one location and can have medium to high B/C ratios based on past non-motorized crash history.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF:	30 - 46%

R38PB, Install Rectangular Rapid Flashing Beacon (RRFB)

For HSIP Cycle 12 Call-for-projects				
Funding Eligibility		Crash Types Addressed	CRF	Expected Life
90%		Pedestrian and Bicycle	35%	20 years
Notes:	This CM only applies to "Ped & Bike" crashes occurring in the influence area (expected to be a maximum of within 250') of the crossing which includes the RRFB.			
General information				
Where to use:				
Rectangular Rapid Flashing Beacon (RRFB) includes pedestrian-activated flashing lights and additional signage that enhance the visibility of marked crosswalks and alert motorists to pedestrian crossings. It uses an irregular flash pattern that is similar to emergency flashers on police vehicles. RRFBs are installed at unsignalized intersections and mid-block pedestrian crossings.				
Why it works:				
RRFBs can enhance safety by increasing driver awareness of potential pedestrian conflicts and reducing crashes between vehicles and pedestrians at unsignalized intersections and mid-block pedestrian crossings. The addition of RRFB may also increase the safety effectiveness of other treatments, such as crossing warning signs and markings.				
General Qualities (Time, Cost and Effectiveness):				
RRFBs are a lower cost alternative to traffic signals and hybrid signals. This CM can often be effectively and efficiently implemented using a systematic approach with numerous locations.				
FHWA CMF Clearinghouse:	Crash Types Addressed:	Pedestrian, Bicycle	CRF:	7 – 47.4%

R39AL, Install Animal Fencing

For HSIP Cycle 12 Call-for-projects					
Funding Eligibility		Crash Types Addressed		CRF	Expected Life
90%		Animal		80%	20 years
Notes:	This CM only applies to "animal" crashes occurring within the limits of the new fencing.				
General information					
Where to use:					
At locations with high percent of vehicular/animal crashes (reactive) or where there is a known high percent of animals crossing due to migratory patterns (proactive).					
Why it works:					
Animal fencing helps to channelize the identified animals to a natural or man-made crossing, eliminating the conflict between vehicles and animals on the same place. Animal fencing is typically installed at a bridge location with its "run of need" dependent on the surrounding terrain.					
General Qualities (Time, Cost and Effectiveness):					
Time to install fencing can be moderate to lengthy depending on the environmental commitments and agreed upon solution to mitigating project impacts. Costs will be fairly low and depend on the "run of need" length. There will be minimal reoccurring maintenance costs on keeping the fence intact. The expected effectiveness of this CM must be assessed for each individual location.					
FHWA CMF Clearinghouse:		Crash Types Addressed:		Animal	CRF: 70 - 90 %

Appendix C: Summary of “Recommended Actions”

The information contained here represent a brief summary of each section of this manual as well as the Summary of “Recommended Actions” from Sections 2 through 7. This is intended to be a quick-reference for local agency practitioners working on a “proactive safety analysis” of their roadway network.

Introduction and Purpose

As safety practitioners consider implementing a ‘proactive safety analysis approach’ they should consider the overall context of the safety issues facing California local agencies and Caltrans primary goals for preparing this manual for California’s local roadway owners. Figure 1 provides a flowchart of the process and Appendices E and F provide examples and lessons learned from recent statewide calls-for-projects.

Identifying Safety Issues

This section provides an overview of the types of data to collect for the identification of roadway safety issues. It discusses sources of crash data and how they can be used. As practitioners gather information they are encouraged to develop one or more separate spreadsheets and/or pin-maps to help track and manage this data.

State and Local Crash Databases

Recommended Action: Obtain at least 3 years of network-wide crash data to identify local roads that have a history of roadway crashes. This will be used to identify predominant roadway crash locations, crash types and other common characteristics.

Transportation Injury Mapping System (TIMS)

Recommended Action: Consider augmenting your local agency’s data collection approach with information available using the suite of TIMS tools. The TIMS tools (and/or tools from private for-profit vendors) can help the safety practitioner access and manage their crash data.

Law Enforcement Crash Reports

Recommended Action: Develop a working relationship with law enforcement officials responsible for enforcement and crash investigations. This could foster a partnership where sharing crash reports and safety information on problem roadway segments becomes an everyday occurrence. Practitioners with limited access to crash data are encouraged to use TIMS to assess the local crash report data.

Observational Information

Recommended Action: Gather information received from law enforcement and road maintenance crew observations. Develop a system for maintenance crews to report and record observed roadway safety issues and a mechanism to address them.

Public Notifications

Recommended Action: Review and summarize information received from these sources, identifying segments or corridors with multiple notifications and record the locations, dates, and nature of the problem that are cited.

Roadway Data and Devices

Recommended Action: Identify and track roadway characteristics for the intersections, roadway segments, and corridors, including compliance with the minimum standards. At a minimum, this should be done for locations being considered for safety improvements, but ideally agencies would establish an extensive database of roadway data to help them proactively identify high risk roadway features.

Exposure Data

Recommended Action: Consider the availability of exposure data and track it along with the other crash data to help prioritize potential locations for safety improvements.

Field Assessments and Road Safety Audits

Recommended Action: Consider completing formal or informal field assessments and RSAs at certain locations to help ensure all relevant information is collected and available for the safety practitioners to complete their safety analysis and identification of the most appropriate countermeasures. Develop simple straightforward criteria on when one of these will be undertaken.

Safety Data Analysis

This section summarizes the types of analyses that can be conducted to determine what roadway countermeasures should be implemented. This section is the link between the data (Section 2) and the selection of appropriate countermeasures (Section 4). It provides definitions and examples of the qualitative and quantitative factors that should be considered when evaluating roadway safety issues.

Quantitative Analysis

Recommended Action: Complete a quantitative analysis of their roadway data using both Crash Frequency and Crash Rate methodologies, including:

Crash Frequency

Top 10 (or 20) lists of intersections and roadway segments.

For lower volume roadways, network wide pin-maps may be more effective.

Develop collision diagrams showing the direction of movement of vehicles and pedestrians.

Crash Rate

Top 10 (or 20) lists of roadway segments in relationship to length, volumes, and/or density.

Top 10 (or 20) lists of intersections, sorted by crash rate.

Top 10 (or 20) lists of the highest volume intersections, sorted by crash frequency or rate.

Qualitative Analysis

Recommended Action: Consider completing field assessments and RSAs to identify roadway infrastructure characteristics relating to both locations with compliance issues and locations with high crash frequencies/rates. As part the field assessments, common roadway and crash characteristics should be identified for the potential systemic deployment of countermeasures.

Caltrans recommends all agencies complete both quantitative and qualitative analyses before starting their applications for HSIP program funding. The findings from these analyses should be documented in spreadsheets and/or pin-maps similar to the ones discussed in Section 2.

Countermeasures

This Section provides a description of selected countermeasures that have been shown in this manual. It includes a basic set of strategies to implement at locations experiencing a history of crashes and their corresponding crash modification factors (CMF). NOTE: Crash Reduction Factors (CRFs) are directly connected to the CMFs and are another indication of the effectiveness of a particular treatment. The CRF for a countermeasure is defined mathematically as $1 - \text{CMF}$. The terms CMFs and CRFs are used interchangeably throughout this document.

Selecting Countermeasures and Crash Modification Factors / Crash Reduction Factors

Countermeasure Details and Characteristics

Recommended Action: Agencies should use all information and results obtained through completing the actions in Sections 2, 3 and 4 to select the appropriate countermeasures for their HCCLs and systemic improvements. As novice safety practitioners select countermeasures, they must realize that a reasonable level of traffic ‘engineering judgment’ is required and that this manual and should not be used as a simple cheat-sheet for preparing and submitting applications for funding.

Calculating the B/C ratio and Comparing Projects

This section defines a methodology for calculating a benefit to cost (B/C) ratio for a potential safety project. It includes sources for estimating projected costs and benefits and the specific values/formulas Caltrans uses for its statewide evaluations of HSIP projects. This section also discusses the potential value in reevaluating projects’ overall cost effectiveness.

Estimating the Benefit of Implementing Proposed Improvements

Recommended Action: Prepare ‘Total Benefit’ estimates for the proposed projects being evaluated in the proactive safety analysis.

Estimating the Cost of Implementing Proposed Improvements

Recommended Action: Prepare ‘Total Project Cost’ estimates for the proposed projects being evaluated in the proactive safety analysis.

Calculating the B/C Ratio

Recommended Action: Calculate the B/C ratio for each of the proposed projects being evaluated in the proactive safety analysis.

Compare B/C Ratios and Consider the Need to Reevaluate Project Elements

Recommended Action: Compare, reevaluate, and prioritize the potential safety projects. Consider changing the project limits or utilizing lower cost countermeasures for projects with low initial B/C ratios.

Identifying Funding and Construct Improvements

This section identifies existing and new funding opportunities for safety projects that local agencies should be considering. This section also briefly discusses some unique project development issues and strategies for safety projects as they proceed through design and construction.

Existing Funding for Low-cost Countermeasures

Recommended Action: Survey planned maintenance, developer and capital projects to determine whether they overlap any of the proposed safety projects. Where projects overlap, leverage the existing funding sources to include safety countermeasures.

Other Funding Sources

Recommended Action: Consider all potential funding opportunities to incorporate the identified safety countermeasures including the HSIP and ATP Programs.

Project Development and Construction Considerations

Recommended Action: Safety practitioners should follow their safety projects all the way through the project delivery and construction process. In addition, they should establish a safety program delivery plan that brings awareness and support to the expedited delivery of safety projects. Where possible, safety practitioners should involve the media and even consider having their own program intended to “toot their own safety-horn.”

Evaluation Improvements

This section presents the process to complete an evaluation of installed treatments. After the countermeasures are installed, assessing their effectiveness will provide valuable information and can help determine which countermeasures should continue to be installed on other roadways to make them safer as well.

Recommended Action: Develop a spreadsheet to track future safety project installations and record 3+ years of “before” and “after” crash information at those locations. Once safety countermeasures are constructed, schedule and track assessment dates to ensure they happen.

Appendix D: Benefit Cost Ratio (BCR) Calculations

This appendix includes the Benefit Cost methodology used in the Caltrans Calls-for-projects in the HSIP programs. The HSM, Part B - Chapter 7, includes more details on conducting Economic Appraisal for roadway safety projects. Local agencies will be required to utilize the HSIP Analyzer to calculate the Benefit Cost Ratio (BCR) as part of their application for HSIP funding.

Starting in Cycle 7 call for projects, the fatality and severe injury costs have been combined for calculating the benefit. Because fatality figures are small and are a matter of randomness, this change is being made to reduce the possibility of selecting an improvement project on the basis of randomness.

- 1) Combined Crash Reduction Factor (CRF) of multiple countermeasures (CMs):
Assume there are 3 CMs with CRF_1 , CRF_2 and CRF_3 as their individual CRFs:

$$CRF_{combined} = 1 - (1 - CRF_1)(1 - CRF_2)(1 - CRF_3).$$

- 2) Annual benefit of project = $\sum_{s=0}^3 \frac{CRF_{combined} \times N_s \times CC_s}{Y}$
 - $CRF_{combined}$: Combined CRF of multiple CMs.
 - S: Crash severity (0/1/2/3. See the below table.
 - N_s : Number of crashes in each severity level.
 - CC_s : Crash cost of each severity level.
 - Y: Crash data time period (year).

Severity (S)	Crash Severity *	Location Type	Crash Cost ***
3	**Fatality and Severe Injury Combined (KA)	Signalized Intersection	\$2,162,000
3		Non-Signalized Intersection	\$3,440,000
3		Roadway	\$2,978,000
2	Evident Injury – Other Visible (B)		\$193,000
1	Possible Injury–Complaint of Pain (C)		\$110,000
0	Property Damage Only (O)		\$18,000

* The letters in parenthesis (K, A, B, C and O) refer to the KABCO scale; it is commonly used by law enforcement agencies in their crash reporting efforts and is further documented in the HSM.

** Figures were calculated based on an average Fatality (K) / Severe Injury (A) ratio for each area type. These costs are used in the HSIP Analyzer.

*** Based on Table 7-1, Highway Safety Manual (HSM), First Edition, 2010. Adjusted to 2024 Dollars.

- 3) Life benefit of project = Annual benefit of project x Service life of project (years)

- 4) Project BCR = $\frac{\text{Life benefit of project}}{\text{Total project cost}}$

Appendix E: Examples of Crash Data Collection and Analysis Techniques using TIMS

As demonstrated throughout the manual, SafeTREC's TIMS website <https://tims.berkeley.edu/> can be used to assist local agencies in completing a proactive safety analysis of their roadway network.

Note: This manual focuses on TIMS as a tool to access and map SWITRS data because TIMS is free to local agencies and the general public. Local agencies are encouraged to try TIMS, but they should not feel obligated to make a switch if they prefer using their vendor-supplied crash analysis software to complete their data collection and analysis process.



SWITRS Query & Map:

The SWITRS Query & Map application is a tool for accessing and mapping fatal and injury crash data from the California Statewide Integrated Traffic Records System (SWITRS).

SWITRS GIS Map:

The SWITRS GIS Map offers an interactive map-centric approach to viewing and querying SWITRS collision data with various tools including crash diagram, rank by intersection, etc.

Crash Diagram Tool:

The Crash Diagram tool allows users to generate an interactive crash diagram. The crash diagram is accessible through SWITRS GIS Map after a set of crashes is selected.

ATP Maps & Summary Data:

The ATP Maps & Summary Data tool utilizes interactive crash maps to allow users to track and document pedestrian and bicycle crashes and generate data summaries within specified project and/or community limits. Though it is designed to support the California Active Transportation Program (ATP), this tool may be useful in developing an HSIP project targeting pedestrian and bicycle safety issues.

Appendix F: List of Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
ATP	Active Transportation Program
B/C Ratio; BCR	Benefit Cost Ratio
Caltrans	California Department of Transportation (Division of Local Assistance)
CA-MUTCD	California - Manual on Uniform Traffic Control Devices
CM	Countermeasure
CMF	Crash Modification Factor
CRF	Crash Reduction Factor
“5 E’s of Safety”	Education, Enforcement, Engineering, Emergency Response and Emerging Technologies
EMS	Emergency Medical Services
FHWA	Federal Highway Administration
HCCL	High Crash Concentration Location
HR3, HRRR	High Risk Rural Roads Program
HSIP	Highway Safety Improvement Program
HSM	Highway Safety Manual
RSA	Roadway Safety Audit
SafeTREC	Safe Transportation Research and Education Center (SafeTREC) at the University of California, Berkeley
SHSP	Strategic Highway Safety Plan
SWITRS	Statewide Integrated Traffic Records System
TIMS	Transportation Injury Mapping System (a product of SafeTREC)

Appendix G: References

1. FHWA, Office of Safety website: Local and Rural Road Safety Program
 - https://safety.fhwa.dot.gov/local_rural/
2. Highway Safety Manual (HSM). Product of the American Association of State Highway and Transportation Officials.
 - <http://www.highwaysafetymanual.org/Pages/default.aspx>
3. National Highway Traffic Safety Administration (NHTSA): National Center for Statistics and Analysis (NCSA) Motor Vehicle Traffic Crash Data Resource
 - <https://crashstats.nhtsa.dot.gov/>
4. California - Manual on Uniform Traffic Control Devices (CA-MUTCD)
 - <https://dot.ca.gov/programs/safety-programs/camutcd>
5. Caltrans' website on the Highway Design Manual
 - <https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm>
6. FHWA, Research and Development website for pedestrian & bicyclist safety
 - https://safety.fhwa.dot.gov/ped_bike/tools_solve/
7. AASHTO - A Policy on Geometric Design of Highways and Streets ("Green Book")

AASHTO - the Roadside Design Guide
 - <https://store.transportation.org/>
8. FHWA – Public Roads Magazine:
 - <https://highways.dot.gov/public-roads/home>

APPENDIX F: HSIP ANALYZERS

APPENDIX G: PROJECT PRIORITIZATION CALCULATION

Project Prioritization

Priority	Project	Safety Benefits	Benefits to Vulnerable Road Users	School Safety Impact	Equity Impact	Public Engagement	Ease of Implementation	Score
1	Project 3	100	0	100	100	0	100	75
2	Project 1	100	0	100	100	0	100	75
3	Project 2	20	100	100	100	0	100	58
4	Project 4	20	100	100	100	0	50	53

Buckets	Value
Highest Value	95
Lowest Value	38
Group Range	19
Bucket 1 below	57
Bucket 2 below	76
Bucket 3 below	95



AGENDA SUMMARY REPORT

SUBJECT: Receive Presentation Regarding City of Ukiah Housing Trust Fund 2024 Notice of Funding Availability Process, Authorize City Manager to Negotiate and Execute an Exclusive Negotiating Agreement with PEP Housing, and Approve Corresponding Budget Amendments.

DEPARTMENT: Community
Development

PREPARED BY: Jim Robbins, Housing and Grants Manager

PRESENTER: Jim Robbins, Housing and Grants Manager

ATTACHMENTS:

1. UHTF-2024-NOFA
2. Addendum1_2024-HTF-NOFA
3. Response1_PEP_Housing_AppForm
4. Response2_RCHDC_AppForm

Summary: Staff will give a presentation regarding the 2024 Notice of Funding Availability issued under the Ukiah Housing Trust Fund. Council is then requested to authorize the City Manager to negotiate and execute an Exclusive Negotiating Agreement with PEP Housing and approve corresponding budget amendments.

Background: In 2017, the City Council directed Staff to pursue a housing strategy for Ukiah. The housing strategy deployed a two-pronged approach to facilitate new housing opportunities for Ukiah residents. One prong focused on the facilitation of affordable housing and the other on zoning code amendments to facilitate middle-income housing. With significant reductions at the federal level for affordable housing funding, a key component of the affordable housing strategy includes development of a locally-based housing trust fund, the Ukiah Housing Trust Fund, and the utilization of grant funds to help facilitate the development of affordable housing in Ukiah. The City's 2017 Housing Strategy was memorialized in the City's updated 2019-2027 Housing Element, adopted by Council on October 23, 2019, and certified by the State on December 5, 2019.

The purpose of the Ukiah Housing Trust Fund is to combine funding from multiple sources to help achieve the City's General Plan goals, including those in the Housing Element, to develop and preserve affordable housing in the City of Ukiah. The Ukiah Housing Trust Fund (UHTF) 2024 Notice of Funding Availability (NOFA) and application process seek to encourage applicants to propose projects, or project concepts, that would use grant funds from HCD to purchase land for the purpose of creating new affordable housing in the city. The principal funding sources for the UHTF 2024 NOFA are a competitive grant award from the Prohousing Incentive Pilot (PIP) Program Round 1 and Permanent Local Housing Allocation (PLHA) Program funds, which together total approximately \$1 million.

Housing Division Staff released the UHTF 2024 NOFA (Attachment 1) on June 10, 2024. Staff released an Addendum #1 to the NOFA (Attachment 2) on June 12 answering questions posed by applicants. The NOFA was designed to facilitate the creation of new housing units through the purchase of deed-restricted land, which would then be made available to an affordable housing developer to generate more housing. The NOFA included bonus points for projects that would provide very-low income housing, incorporate energy efficiency features, offer healthy community components, propose connectivity to bicycle/pedestrian paths, and be located in California Tax Credit Allocation Committee (TCAC) high or highest resource locations. The NOFA was also designed to encourage innovative infill project design concepts. Applications were due July 8.

Discussion: The City received two applications in response to the June 10 NOFA. Please see Attachment 3 for the application form received from PEP Housing and Attachment 4 for the application form received from Rural Communities Housing Development Corporation (RCHDC). Please note that Attachments 3 and 4 are City application forms only and do not include supporting documents. Complete applications are available for viewing at the Community Development Department.

The applications were ranked on criteria listed in the NOFA. Below is the ranking of the applications received with developer names, project names, and final scores out of a total possible of 260 points:

Application 1 – PEP Housing – Perkins Street Senior Apartments – Score: 155 points

Application 2 – Rural Communities Housing Development Corporation (RCHDC) – No project identified – Score: 145 points

Application 1, PEP Housing, scored higher in part due to identifying a project and funding commitments, as well as proposing units for special needs populations and very-low income persons. PEP Housing also proposed use of vacant or underutilized land and integration of healthy community components.

Staff Recommendation

To complete the UHTF 2024 NOFA process, Staff recommends that the City Council authorize the City Manager to negotiate and execute an Exclusive Negotiating Agreement (ENA) with PEP Housing. This will enable PEP Housing to continue to put together additional funding, such as for Low Income Housing Tax Credit funding through the California Tax Credit Allocation Committee (TCAC) and/or other funding sources for the purpose of developing affordable senior housing in Ukiah. Next steps would include the purchase and deed-restriction of land for a proposed project, making use of up to \$1,000,000 in grant funds.

Grant timelines, and the timelines of other potential funding sources, may require mixing and matching a variety of sources to complete a funding package. If the proposed project concept is successfully completed as envisioned, a number of units of new housing would be created.

Recommended Action: Receive presentation regarding City of Ukiah Housing Trust Fund 2024 Notice of Funding Availability process; authorize City Manager to negotiate and execute an Exclusive Negotiating Agreement with PEP Housing; and Approve Corresponding Budget Amendments.

BUDGET AMENDMENT REQUIRED: Yes

CURRENT BUDGET AMOUNT: \$0.00

PROPOSED BUDGET AMOUNT: Grant funding up to \$1,000,000

FINANCING SOURCE: HCD grants

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: Craig Schlatter, Community Development Director

DIVERSITY-EQUITY INITIATIVES (DEI): Goal 5 – Instill diversity, equity, and inclusion as essential core elements of policy-making, accountability, and delivery of City services.

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): GP-A8 - Housing Element (2019-2027): Goal H-2 Expand housing opportunities for all economic segments of the community, including special needs populations.

Approved: 
Sage Sangiacomo, City Manager



**City of Ukiah
Community Development Department**

Housing Services Division
300 Seminary Avenue
Ukiah CA 95482
Ph: 707-463-6708
Email: housing@cityofukiah.com

June 10, 2024

NOTICE OF FUNDING AVAILABILITY (NOFA) AND APPLICATION

**CITY OF UKIAH
June 2024 Housing Trust Fund NOFA**

Notice of Funding Availability (NOFA)
Housing Trust Fund Program
June 10, 2024

The City of Ukiah Housing Trust Fund Program is pleased to announce the availability of approximately \$1,000,000 in State funding awarded to the City of Ukiah to assist in the acquisition of infill parcel(s) for the predevelopment, development, acquisition, or preservation of affordable housing in the City of Ukiah.

STATEMENT OF INTENT

The Ukiah Housing Trust Fund (UHTF) wishes to make use of the available State funding to facilitate the acquisition of infill parcels in the city limits of Ukiah as part of our goal of expanding the City's housing stock, especially for low- and moderate-income residents, seniors, and those with special needs. The UHTF seeks to establish an exclusive relationship with a developer to purchase parcels for development of infill housing units in "High" and "Highest Resource Areas" as identified by the 2024 Tax Credit Allocation Committee (TCAC) Housing Resource Area Map, which can be found at:

<https://www.treasurer.ca.gov/ctcac/opportunity.asp>

Funding within the City's UHTF seeks to implement innovative ideas such as aggregated scattered site infill projects or similar non-traditional approaches to affordable housing. We encourage applicants to include innovative approaches as part of their application.

BACKGROUND

In April 2023 the City of Ukiah was awarded a Prohousing Designation by the State Department of Housing and Community Development (HCD) in recognition of the City's recent success adopting and implementing policies that accelerate housing production, promoting favorable zoning and land use policies, reducing construction and development costs, and providing financial subsidies for housing development in the City.

In October 2023 the City was awarded \$455,000 in financial assistance from the State Prohousing Incentive Pilot Program (PIP) to acquire infill parcels to facilitate the development of affordable housing in Ukiah. In deploying PIP funds through the UHTF within this 2024 NOFA, the City will match PIP funds with up to \$617,000 of the City's 2019-2022 Permanent Local Housing Allocation (PLHA) and possibly additional funds from the PIP and PLHA programs or other sources.

Affordable housing projects receiving funding from the Ukiah Housing Trust Fund must be affordable to those earning at or less than 60%, 80%, or 120% of the area median family income (AMI). Bonus points will be awarded for developers that commit to allocating a portion of the units to residents of extremely low-income and no income (0-30% AMI). Affordability must be provided by the imposition of rent or resale restrictions recorded with a 55-year affordability covenant. Certain funding sources may have additional restrictions.

Developers responding to this NOFA will be ranked based on scoring criteria provided in this NOFA. Working with a housing loan committee, staff will request the City Council approve the ranked list of projects and a total amount of funds to be awarded.

City loans are provided for the purchase of infill parcels that will lead to the construction of affordable rental and homeownership projects, redevelopment of underutilized land and buildings, and/or the construction of accessory dwelling units, principally for the benefit of lower income households. City loans are intended to partially fill the gap between development costs and financing available from private and other public sources. Applicants are expected to pursue funding from all available sources. Please note that upon approval from the City Council of an award of funding, the developer will be expected to deploy UHTF funding for the purchasing of parcels and initiation of the construction of the affordable housing project within two years of the formal date of award.

Interested applicants should complete the attached application. Completed applications are **due Monday, July 8 at 11:59 P.M.** and can be emailed, mailed, or hand-delivered to the following address:

**Housing Trust Fund Program
Community Development Department
City of Ukiah
300 Seminary Avenue
Ukiah CA 95482

housing@cityofukiah.com**

Questions regarding this NOFA should be addressed to Jim Robbins, Housing and Grants Manager, at housing@cityofukiah.com or 707-463-6708.

Please visit the City's Housing Services Division web site at <https://cityofukiah.com/housing-services/> for more information and updates on the Housing Trust Fund Program.

GENERAL LOAN TERMS

If loan terms other than those listed below are sought for a project, this must be explicitly stated in the cover letter and a separate explanation provided in the application. Such requests are granted at the sole discretion of the City.

Loan Terms

Loans for rental and homeownership projects are typically provided at a simple interest rate of zero to three percent (0-3%) per annum, for a term of fifty-five (55) years. Payments of interest and principal will be due from excess cash flow from operations after payment of operating costs, senior debt, reserves, and deferred developer fees. To the extent payments cannot be made, they may be deferred for the term of the loan. All loans are due on sale, refinancing, transfer (except to a related entity, such as a limited partnership, subject to City approval) or at the end of the fifty-five (55) year term.

City loans will be evidenced by a promissory note secured by a deed of trust on the project. A loan agreement will specify all development obligations. Post-occupancy use restrictions will be enforced through a regulatory agreement recorded against the project, including both the land and the improvements. The minimum term for affordability restrictions is 55 years.

Timeline of City Commitments

Funding for this NOFA is based on State commitments to the City's housing program, primarily through the Permanent Local Housing Application Program (PLHA) and the Prohousing Incentive Pilot Program (PIP). Loan agreements must be executed with selected developers within the timeframes required by the PLHA and PIP programs.

City financing commitments are made for up to 24 months from the date of City Council approval. All other sources of funds must be committed within that time frame. A one-year extension can be requested with sufficient justification, if such an extension is allowable under all of the project funding sources. If the extension period elapses without the commitment of full project financing, the City funding commitment will be revoked and the project must re-compete for funds through the NOFA. Further extensions will only be granted in extraordinary circumstances. The inability to meet a project schedule may also result in negative points for future NOFA applications.

Scoring – Bonus Points

Given the limited supply of affordable housing, the City will be prioritizing projects in this NOFA that produce additional housing units. Additional bonus points can be attained by the applicant for the following activities:

- Use energy efficiency, net-zero, or other “sustainable/green” features above Title 24
- Utilize other sources of funding in addition to housing trust funds
- Convert underutilized land to affordable housing
- Incorporate healthy community components into design – i.e. common areas, open space, community rooms, community gardens, etc.
- Connect the project with existing or proposed pedestrian/bicycle paths and trails
- Project application that includes novel, new, or innovative concepts
- Location of parcel(s) for new Affordable Housing in a TCAC high or highest resource area in Ukiah

SCORING CRITERIA

Complete applications will be scored in the following categories. Maximum points in each category are noted. Some categories are not applicable for certain types of projects.

	Rental	Ownership	Self-Score
1. Financial Characteristics			
A. Leveraging	25	25	
B. Funding Commitments	30	30	
2. Target Population and Project Attributes*			
A. Income targeting	10	10	
B. Unit size	5	5	
C. Units for people with special needs	10	10	
D. Units for homeless	10	10	
3. Developer Experience and Capacity			
A. Overall affordable housing experience	20	20	
B. Experience developing housing in Ukiah	5	5	
C. Developer team experience	15	15	
4. Readiness			
A. Site Control	5	5	
B. Development entitlements secured	5	5	
C. Pre-development meeting held with City staff	10	10	
5. Bonus Points			
A. Construction of new affordable housing, 2/3 of which are affordable to households with incomes at or less than 30% AMI	15	15	
B. Use of energy efficiency, net-zero, or other sustainable/green features above Title 24	10	10	
C. Use of other funding sources in addition to the Housing Trust Fund	10	10	
D. Conversion of vacant or underutilized land to affordable housing	10	10	
E. Healthy community components	10	10	
F. Connectivity with existing or proposed pedestrian/ bicycle paths and trails	5	5	
G. Project application that includes innovative ideas	20	20	
H. Location of parcel(s) for new Affordable Housing in a TCAC high or highest resource area in the Ukiah city limits	30	30	
TOTAL POSSIBLE POINTS	260	260	

*For Scoring Criterion #2- Target Populations and Project Attributes, applicants are encouraged to review the City of Ukiah's General Plan Housing Element, located on the City's website at:
<https://cityofukiah.com/housing-element-update-2019-2027/>

APPLICATION FOR FUNDING
2024 Ukiah Housing Trust Fund

Project Name: _____

Project Location (if known): _____

Amount of Loan Requested: _____

Please check the programs and incentives your organization is applying for:

☐

Low and Moderate Income Housing Asset Fund (LMIHAF)

☐

Prohousing Incentive Pilot (PIP) Program

☐

Permanent Local Housing Allocation (PLHA) Program

APPLICANT INFORMATION

Organization: _____

Address: _____

Contact Person: _____

Email: _____

Phone: _____

PROPOSED PROJECT

Project Name or Concept: _____

Proposed Location Information (if known): _____

Proposed APN(s) (if known): _____

Target Population:

Elderly ☐ Disabled ☐ Family ☐ Other (specify) ☐

Type of Project:

New Construction ☐ Acquisition/Conversion ☐

Proposed estimated date of project completion:

Number of Stories: _____ Elevator? _____

Number of units by bedroom size and square footage:

_____ SRO at _____ SF each	_____ 0 BR at _____ SF each
_____ 1 BR at _____ SF each	_____ 2 BR at _____ SF each
_____ 3 BR at _____ SF each	_____ 4 BR at _____ SF each

Total number of units: _____

Other features or amenities:

Please feel free to attached additional pages to describe the proposed project.

BONUS POINTS

Please check all of the following the project will incorporate:

- ☐ Construction of new affordable housing units, 2/3 of which are affordable to households with incomes at or less than 30% Area Median Income
- ☐ Use of energy efficiency, net-zero, or other “sustainable/green” features
- ☐ Utilization of funding sources in addition to the City of Ukiah HTF
- ☐ Conversion of underutilized land and/or buildings to affordable housing
- ☐ Healthy community components – common areas, open spaces, etc.
- ☐ Project connectivity with existing pedestrian/bicycle paths and trails
- ☐ Project application proposes innovative ideas
- ☐ Location of parcel(s) in a TCAC high or highest resource area in the City of Ukiah

ADDITIONAL REQUESTED DOCUMENTATION

Please attached the following documents to the application, as applicable:

- Narrative Description of the Proposed Development
- Developer Experience and Capacity
- Articles of Incorporation, Bylaws, Tax Exempt Determination from IRS, List of Board Members, Corporate Borrowing Resolution
- Financial Statements
- Community Acceptance Plan
- Any relevant planning and zoning information
- Appraisal
- Rent Role
- Budget (sources and uses)
- Developer Pro Forma, showing developer fees

BORROWER'S CERTIFICATION

Applicant hereby certifies that it has read and understands the regulations governing the Ukiah Housing Trust Fund Loan Program, that it agrees to abide by such regulations, and that violations of these regulations shall constitute grounds for cancellation of any commitment or loan. Applicant hereby certifies that the information submitted in the Loan Application and any supporting materials is true, accurate, and complete to the best of its knowledge. Applicant acknowledges and understands that if facts or information herein are found to be misrepresented, it shall constitute grounds for the default of the Ukiah Housing Trust Fund Loan for which application is being made.

Signature

Date

Signature

Date



**City of Ukiah
Community Development Department**

Housing Services Division
300 Seminary Avenue
Ukiah CA 95482
Ph: 707-463-6708
Email: housing@cityofukiah.com

June 12, 2024

Notice of Funding Availability And Application

Addendum #1

CITY OF UKIAH
June 2024 Housing Trust Fund NOFA



CITY OF UKIAH
Notice of Funding Availability (NOFA) – Addendum #1
Housing Trust Fund Program
June 12, 2024

This Addendum #1 is being issued to provide clarification regarding questions received during the application period for the City of Ukiah's Affordable Housing NOFA, released June 10, 2024. Please see below for these updates.

1. In addition to accepting applications by mail and by direct delivery, the City of Ukiah will also accept applications by **email**. Please address your email to housing@cityofukiah.com and insert "2024 City of Ukiah UHTF Application Submittal" in the subject line. **Please remember applications are due by Monday, July 8, 2024 at 11:59 p.m.**
2. Question: Does the City or County have access to Project Based Vouchers or can one propose the availability of the same?

Answer: The Community Development Commission of Mendocino County (CDC) is Mendocino County's public housing authority and administers all federal rental assistance programs within each of the four incorporated cities of Mendocino County and including all unincorporated areas of Mendocino County. This includes Project Based Vouchers and Housing Choice Vouchers. Questions regarding CDC's programs and/or the availability of other forms of project based assistance can be directed to info@cdchousing.org or 707-463-5462.

Responders to this Ukiah Housing Trust Fund NOFA should propose the financing formula that will enable their project to be built within the timelines and requirements of the NOFA. As noted on page 4, "City financing commitments are made for up to 24 months from the date of City Council approval. All other sources of funds must be committed within that time frame."

APPLICATION FOR FUNDING

2024 Ukiah Housing Trust Fund

Project Name: Perkin Senior Apartments
Project Location (if known): 700 E, 705 E & 730 E Perkins Street
Amount of Loan Requested: 1,000,000.00

Please check the programs and incentives your organization is applying for:

- ☒ Low and Moderate Income Housing Asset Fund (LMIHAF)
☒ Prohousing Incentive Pilot (PIP) Program
☒ Permanent Local Housing Allocation (PLHA) Program

APPLICANT INFORMATION

Organization: PEP Housing
Address: 625 Acacia Street
Santa Rosa, Ca 95409

Contact Person: Jim Wallen
Email: jimw@pephousing.org
Phone: (707)762-2336 ext. 107

PROPOSED PROJECT

Project Name or Concept: Perkin Street Senior Apartments
Proposed Location Information (if known): During a meeting with city officials, the aforementioned surplus parcels were identified as a potential sites to annex to the NOFA within this RFP. The parcels are apart of the City's surplus land inventory and could be used to meet the City's RHNA requirements.

Proposed APN(s) (if known): 7903025, 7903028, 7906104

Target Population:

Elderly ☒ Disabled ☒ Family ☐ Other (specify) ☐

Type of Project:

100 % Affordable Housing

New Construction ☒ Acquisition/Conversion ☐

Proposed estimated date of project completion:

2027

Number of Stories: 2-3 Elevator? YES

Number of units by bedroom size and square footage:

_____ SRO at _____ SF each	_____ 0 BR at _____ SF each
_____ 1 BR at <u>656</u> SF each	_____ 2 BR at _____ SF each
_____ 3 BR at _____ SF each	_____ 4 BR at _____ SF each

Total number of units: 50+

Other features or amenities:

Onsite Property Manager. Resident Service Coordinator

Please feel free to attached additional pages to describe the proposed project.

BONUS POINTS

Please check all of the following the project will incorporate:

- ☒ Construction of new affordable housing units, 2/3 of which are affordable to households with incomes at or less than 30% Area Median Income
- ☒ Use of energy efficiency, net-zero, or other "sustainable/green" features
- ☒ Utilization of funding sources in addition to the City of Ukiah HTF
- ☒ Conversion of underutilized land and/or buildings to affordable housing
- ☒ Healthy community components – common areas, open spaces, etc.
- ☒ Project connectivity with existing pedestrian/bicycle paths and trails
- ☒ Project application proposes innovative ideas
- ☒ Location of parcel(s) in a TCAC high or highest resource area in the City of Ukiah

ADDITIONAL REQUESTED DOCUMENTATION

Please attached the following documents to the application, as applicable:

- Narrative Description of the Proposed Development
- Developer Experience and Capacity
- Articles of Incorporation, Bylaws, Tax Exempt Determination from IRS, List of Board Members, Corporate Borrowing Resolution
- Financial Statements
- Community Acceptance Plan
- Any relevant planning and zoning information
- Appraisal
- Rent Role
- Budget (sources and uses)
- Developer Pro Forma, showing developer fees

BORROWER'S CERTIFICATION

Applicant hereby certifies that it has read and understands the regulations governing the Ukiah Housing Trust Fund Loan Program, that it agrees to abide by such regulations, and that violations of these regulations shall constitute grounds for cancellation of any commitment or loan. Applicant hereby certifies that the information submitted in the Loan Application and any supporting materials is true, accurate, and complete to the best of its knowledge. Applicant acknowledges and understands that if facts or information herein are found to be misrepresented, it shall constitute grounds for the default of the Ukiah Housing Trust Fund Loan for which application is being made.

 _____ Signature	<u>7/8/2024</u> _____ Date
---	----------------------------------

_____ Signature	_____ Date
--------------------	---------------

APPLICATION FOR FUNDING
2024 Ukiah Housing Trust Fund

Project Name: TBD

Project Location (if known): City of Ukiah - High/Highest Resource Area

Amount of Loan Requested: \$1,072,000

Please check the programs and incentives your organization is applying for:

- ☐ Low and Moderate Income Housing Asset Fund (LMIHAF)
- ☒ Prohousing Incentive Pilot (PIP) Program
- ☒ Permanent Local Housing Allocation (PLHA) Program

APPLICANT INFORMATION

Organization: Rural Communities Housing Development Corporation

Address: 499 Leslie St
Ukiah, CA 95482

Contact Person: Ryan LaRue

Email: rlarue@rchdc.org

Phone: 707-463-1975

PROPOSED PROJECT

Project Name or Concept: Scattered site new construction/conversion

Proposed Location Information (if known): Within the 2024 TCAC High/Highest Resource Area

Proposed APN(s) (if known): _____

Target Population:

Elderly ☐ Disabled ☐ Family ☒ Other (specify) ☒ Special Needs

Type of Project:

Scattered Site - New Construction/Conversion

New Construction ☒ Acquisition/Conversion ☒

Proposed estimated date of project completion:

Spring 2028

Number of Stories: 2 Elevator? N/A

Number of units by bedroom size and square footage:

<u>15-20</u> SRO at <u>440</u> SF each	<u>0</u> BR at <u> </u> SF each
<u>10-15</u> 1 BR at <u>620</u> SF each	<u>2</u> BR at <u> </u> SF each
<u> </u> 3 BR at <u> </u> SF each	<u>4</u> BR at <u> </u> SF each

Total number of units: 25-35

Other features or amenities:

Please see attached files with a detailed project description.

Please feel free to attached additional pages to describe the proposed project.

BONUS POINTS

Please check all of the following the project will incorporate:

- ☐ Construction of new affordable housing units, 2/3 of which are affordable to households with incomes at or less than 30% Area Median Income
- ☒ Use of energy efficiency, net-zero, or other "sustainable/green" features
- ☒ Utilization of funding sources in addition to the City of Ukiah HTF
- ☒ Conversion of underutilized land and/or buildings to affordable housing
- ☒ Healthy community components – common areas, open spaces, etc.
- ☒ Project connectivity with existing pedestrian/bicycle paths and trails
- ☒ Project application proposes innovative ideas
- ☒ Location of parcel(s) in a TCAC high or highest resource area in the City of Ukiah

ADDITIONAL REQUESTED DOCUMENTATION

Please attached the following documents to the application, as applicable:

- Narrative Description of the Proposed Development
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- Financial Statements
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- Any relevant planning and zoning information
- Appraisal
- Rent Role
- Budget (sources and uses)
- Developer Pro Forma, showing developer fees

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DocuSigned by: <i>Ryan LaRue</i> E5E08ADD47EA41F... Signature	7/8/2024 Date
Signature	Date



AGENDA SUMMARY REPORT

SUBJECT: Discussion and Possible Action to Determine the City's Position on the 2024 Resolution being Considered by the League of California Cities, and Provide Corresponding Voting Instructions to the City of Ukiah's Voting Delegate.

DEPARTMENT: City Manager /
Admin

PREPARED BY: Kristine Lawler, City Clerk

PRESENTER: Sage Sangiacomo, City Manager

ATTACHMENTS:

1. 2024 Annual League Resolution Packet

Summary: Council will discuss and provide direction to the City's voting delegate regarding the 2021 League of California Cities Conference Resolutions to be considered at the League's Annual Conference.

Background: At the City Council Meeting of August 7, 2024, the Council designated Mayor Duenas as the City's voting delegate to represent the City of Ukiah at the League's 2024 Annual Conference October 16-18, to be held in Long Beach. At the General Assembly meeting, the League membership considers and takes action on resolutions that establish League policy and positions.

There is one resolution up for consideration this year:

1. A RESOLUTION OF THE GENERAL ASSEMBLY OF THE LEAGUE OF CALIFORNIA CITIES CALLING FOR THE CALIFORNIA LEGISLATURE TO ENACT LAWS THAT ENSURE THAT "WHAT APPLIES TO ONE, APPLIES TO ALL" IN THE FAIR AND EQUAL TREATMENT OF ALL GOVERNMENTAL OFFICIALS AT ALL LEVELS IN THE STATE OF CALIFORNIA

Summary provided in the League's packet:

This Resolution states that the League of California Cities shall call upon the Governor of the State of California and the elected members of the California Legislature, including all members of the Senate and Assembly to adopt the following policy: "The California State Legislature shall not enact, and the Governor shall not sign into law, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

Background provided in the League's packet:

This resolution states that examples of the California Legislature imposing rules limiting authority or regulating the conduct of local municipal officials that do not also apply to elected officials of the State of California include, but are not limited to:

- California's open meeting rules, codified in the Ralph M. Brown Act, Government Code, Chapter 9, §§ 54950 et seq.;

- “One-off” exemptions, in the form of Senate Bill No. 174, from the California Environmental Quality Act (“CEQA”);
- Rules, in the form of Senate Bill No. 1439, amending the Political Reform Act (the “Act”); and
- Rules, in the form of Assembly Bill No. 571, that apply to city and county candidates for local elected office, but not to candidates for state-wide office.

Ralph M. Brown Act

The California Attorney General’s (AG) Office defines The Ralph M. Brown Act (Brown Act) as what governs meetings conducted by local legislative bodies, such as boards of supervisors, city councils and school boards. The AG’s office states the Act represents the Legislature’s determination of how the balance should be struck between public access to meetings of multi-member public bodies on the one hand and the need for confidential candor, debate, and information gathering on the other.

The Ralph M. Brown Act governs local agencies, the Bagley-Keene Open Meeting Act covers all state boards and commissions, and Government code 9027 governs the state Legislature. The California Constitution also mandates open meetings for state agencies, boards, and commissions. Specifically, the Constitution requires that each local agency comply with the Brown Act (Article I, section 3(b)(7)): and that the proceedings of each house of the Legislature be open and public (with exceptions for employment matters; matters affecting security; confer with legal counsel; and to meet as a caucus (Article IV, section 7).

Although fairly detailed requirements apply to state agencies and other state bodies, they do not apply to the Legislature. The Legislature has Constitutional authority to adopt rules for its proceedings that are consistent with the requirement that the proceedings of each house and the committees be open and public.

Another notable difference between the Legislature and a city council is the ability for Legislators to have a caucus to discuss a bill, express how they will vote, and to count votes. This is not allowed under the Brown Act. One other difference is that the laws governing teleconferencing for members of the state Legislature is far less flexible than it is for local bodies. However, state agencies have more flexibility than locals in that regard.

California Environmental Quality Act (“CEQA”)

The Resolution cites the Legislature’s action in exempting from CEQA the reconstruction of the State Capitol Annex building. The State Legislature enacted the California Environmental Quality Act (CEQA) in 1970, establishing it as a public disclosure law for the environmental review of discretionary projects and a process for mitigating or avoiding potential environmental impacts.

SB 174 (Committee on Budget and Fiscal Review) Chaptered by Secretary of State. Chapter 74, Statutes of 2024 was signed into law July 2, 2024. This bill exempts the work performed under the State Capitol Building Annex Act of 2016 from the California Environmental Quality Act (CEQA). In this example the Legislature exempted themselves as not being considered a “public agency,” “state agency,” or “lead agency” under CEQA. A lead agency under CEQA is the public agency that has the principal responsibility for carrying out or approving a project that is subject to CEQA.

Over the years, the Legislature has also created many CEQA exceptions and exemptions for local projects involving local agencies as well.

The Political Reform Act (PRA) - Senate Bill No. 1439

SB 1439 (Glazer) Chaptered by Secretary of State. Chapter 848, Statutes of 2022 amends section 84308 and is aimed at preventing “pay-to-play” practices, in part by prohibiting parties, participants, and their respective agents in a 18 proceeding involving a license, permit, or other entitlement for use from contributing more than \$250 to an officer of an agency during a 12 month period. When the Levine Act was first enacted in 1982, Section 84308 applied to appointed members of boards and commissions who were running for elective office. SB 1439 expended this law to now apply to local elected officials. Since it is focused on permits and licenses,

it now applies to State agencies and local agencies that approve permits and licenses. Section 84308 does not apply to the Legislature or the Courts. It is important to note that unlike local governments, neither issue permits and licenses.

The Political Reform Act (PRA) - Assembly Bill No. 571

AB 571 (Mullin) Chaptered by Secretary of State. Chapter 556, Statutes of 2019 established default campaign contribution limits for county and city office at the same level as the limit on contributions from individuals to candidates for Senate and Assembly, effective January 1, 2021. This bill permitted a county or city to establish its own contribution limits, which would prevail over these default limits.

The Resolution cites AB 571 as an example of treating cities differently than the State. The Fair Political Practices Commission clarifies in their AB 571 fact sheet that under AB 571 a city may elect to have "no" contribution limit in which case the state contribution limit will not apply as a default for that jurisdiction. A city or county can set contribution limits higher than the default state limit, AB 571 sets a default in line with contributions Assembly Members and Senators if a city or county is silent on contribution limits.

Discussion: Staff recommends that the Council provide direction to the voting delegate on the League of California Cities Resolution (See Attachment 1 for full League Resolution Packet). The City can choose to support, oppose, or abstain.

Recommended Action: Staff recommends that the Council provide direction to the voting delegate on the attached League of California Cities Resolution. The City can choose to support, oppose or abstain.

BUDGET AMENDMENT REQUIRED: N/A

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: N/A

DIVERSITY-EQUITY INITIATIVES (DEI): N/A

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): N/A

☒ Approved: 
Sage Sangiacomo, City Manager

**2023-2024
CAL CITIES OFFICERS**

President

Daniel T. Parra
Mayor
Fowler

First Vice President

Lynne Kennedy
Mayor Pro Tem,
Rancho Cucamonga

Second Vice President

Gabe Quinto
Council Member,
El Cerrito

Immediate Past President

Ali Sajjad Taj
Mayor Pro Tem,
Artesia

**Executive Director
and CEO**

Carolyn M. Coleman

August 28, 2024

TO: Mayors, Council Members, City Managers, and City Clerks

RE: Cal Cities 2024 Resolution Packet

Sixty days before the Cal Cities [Annual Conference and Expo](#), Cal Cities members may submit resolutions on issues of importance to cities. This year, Cal Cities received one resolution by the Aug. 17 deadline.

The attached packet contains the proposed resolution, supporting letters from city officials, and an analysis of the resolution by Cal Cities. The packet includes detailed information on the resolution process.

We encourage each city council to consider the resolution and determine a city position so your voting delegate can represent your city's position on the resolution.

Voting Delegates: City councils must appoint a voting delegate to vote during the General Assembly. Each city may also appoint up to two alternate delegates. If your city has not already done so, please appoint your voting delegate by Sept. 25. [The voting delegate packet](#) contains more information.

The Cal Cities 2024 General Assembly will be held Oct. 18 at 8:30 a.m. in the Long Beach Convention Center during the [Annual Conference and Expo](#).

For questions about resolutions, voting delegates, or the General Assembly, please contact [Zach Seals](#).



LEAGUE OF
**CALIFORNIA
CITIES**

2024 **Resolutions Packet**

Information on 2024 Resolutions Process

Consideration by Policy Committee (pre-conference)

Per the Cal Cities bylaws, the Cal Cities President has referred the submitted resolution to the [Governance, Transparency, and Labor Relations Policy Committee](#). The committee will meet on Oct. 3 at 10 a.m. via Zoom to review the resolution and make a recommendation that will be sent to the Resolutions Committee. A public comment period will be held during the meeting. Register for the meeting [here](#).

A list of recommendations the policy committee may make during its meeting are on page three of this packet.

Consideration by Resolutions Committee (during conference)

On Oct. 17 at 1:30 p.m. the Resolutions Committee will meet to review the resolution and the recommendation of the policy committee.

The Resolutions Committee consists of one representative from each of Cal Cities caucuses, departments, divisions, and policy committees, as well as up to ten additional appointments made by the Cal Cities President. A public comment period will be held during the meeting. Refer to the onsite conference program for the location.

A list of recommendations the Resolutions Committee may make during its meeting are on page three of this packet.

Consideration by the General Assembly (during conference)

The General Assembly will convene on Oct. 18 at 8:30 a.m. to consider any qualified resolutions. To vote during the General Assembly, voting delegates must have checked-in at the voting delegate booth.

Conference attendees will receive materials for the General Assembly on the evening of Oct. 17. For more information on voting and discussion procedures during the General Assembly, see page four of this packet.

Petitioned Resolutions (during conference)

The petitioned resolution is an alternate method to introduce policy proposals during the annual conference. To initiate a petitioned resolution, voting delegates from 10% of member cities must sign the petition. The resolution and signatures are due at least 24 hours before the beginning of the General Assembly. Voting delegates who have checked-in at the voting delegate booth can receive more information on petitioned resolutions at the booth onsite.

How it works: Cal Cities Resolutions and the General Assembly

Developing League of California Cities policy is a dynamic process that engages a wide range of members to ensure Cal Cities represents cities with one voice. These policies directly guide Cal Cities' advocacy to promote local decision-making, and lobby against statewide policies that erode local control.

The resolutions process and General Assembly is one way that city officials can directly participate in the development of Cal Cities policy. If a resolution is approved at the General Assembly, it becomes official Cal Cities policy. Here's how resolutions and the General Assembly work.

Prior to the Annual Conference and Expo

General Resolutions



Sixty days before the Annual Conference and Expo, Cal Cities members may submit policy proposals on issues of importance

to cities. The resolution must have the concurrence of at least five additional member cities or individual members.

Policy Committees



The Cal Cities President assigns general resolutions to policy committees where members

review, debate, and recommend positions for each policy proposal. Recommendations are forwarded to the Resolutions Committee.

During the Annual Conference and Expo

Petitioned Resolutions



The petitioned resolution is an alternate method to introduce policy proposals during

the annual conference. The petition must be signed by voting delegates from 10% of member cities, and submitted to the Cal Cities President at least 24 hours before the beginning of the General Assembly.

Resolutions Committee



The Resolutions Committee considers all resolutions. General Resolutions approved¹ by either a policy committee

or the Resolutions Committee are next considered by the General Assembly. General resolutions not approved, or referred for further study by both a policy committee and the Resolutions Committee do not go to the General Assembly. All Petitioned Resolutions are considered by the General Assembly, unless disqualified.²

General Assembly



During the General Assembly, voting delegates debate and consider general and petitioned resolutions forwarded by the Resolutions Committee. Potential Cal Cities bylaws amendments are also considered at this meeting.

Who's who

Cal Cities policy development is a member-informed process, grounded in the voices and experiences of city officials throughout the state.

The **Resolutions Committee** includes representatives from each Cal Cities diversity caucus, regional division, municipal department, and policy committee, as well as individuals appointed by the Cal Cities president.

Voting delegates are appointed by each member city; every city has one voting delegate.

The **General Assembly** is a meeting of the collective body of all voting delegates—one from every member city.

Seven **policy committees** meet throughout the year to review and recommend positions to take on bills and regulatory proposals. Policy committees include members from each Cal Cities diversity caucus, regional division, and municipal department, as well as individuals appointed by the Cal Cities president.

¹ The Resolution Committee can amend a general resolution prior to sending it to the General Assembly.

² Petitioned Resolutions may be disqualified by the Resolutions Committee according to Cal Cities Bylaws Article VI. Sec. 5(f).

Policy Committee and Resolutions Committee Actions

The submitted resolution will be heard by the policy committee to which it was assigned, and the Resolutions Committee. The below table shows what recommendations these bodies may make on the resolution.

Policy Committee Actions	Resolutions Committee Actions
Approve	Approve
Disapprove*	Disapprove*
No Action	No Action
Amend and approve	Amend and approve
Refer to appropriate policy committee for further study*	Approve as amended
Refer as amended to appropriate policy committee for further study*	Refer to appropriate policy committee for further study*
	Refer as amended to appropriate policy committee for further study*
	Approve with additional amendment(s)
	Additional amendments and refer to appropriate policy committee for further study*

**If a resolution is disapproved or referred for further study by all policy committees to which it is assigned and the Resolutions Committee, it will not proceed to the General Assembly.*

General Assembly Voting and Discussion Procedures

Discussion Procedures:

Discussion procedures during the General Assembly are guided by two calendars: the Consent Calendar and the Regular Calendar. As seen below, resolutions are calendared by the recommendations they receive from policy committees and the Resolutions Committee.

For General Resolutions:

Policy Committee Recommendation	Resolutions Committee Recommendation	Calendar
Approve	Approve	Consent Calendar
Approve	Disapprove or refer	Regular Calendar
Disapprove or refer	Approve	Regular Calendar
Disapprove or refer	Disapprove or refer	Does not proceed to General Assembly

For Petitioned Resolutions:

Policy Committee Recommendation	Resolutions Committee Action	Calendar
N/A	Approve	Regular Calendar
	Disapprove or Refer	Regular Calendar
	Disqualified	Does not proceed to General Assembly

Items on the Consent Calendar will be presented as one motion during the General Assembly from the Resolutions Committee chair. Unless an item on the Consent Calendar is set aside by the majority of the General Assembly, a vote will be taken on the whole calendar. If an item is set aside, it will be opened for discussion, followed by a vote.

Items on the Regular Calendar will be presented individually by the Resolutions Committee chair. After a recommendation is presented by the Resolutions Committee chair, the resolution will be opened for discussion by the General Assembly. A vote will take place following discussion.

Voting Procedures:

Per Cal Cities Bylaws Article XII, Sec. 2, all votes will be conducted by voice vote first. If the presiding official cannot determine the outcome a vote will be taken by an alternative method, typically a raise of voting cards by voting delegates. A roll call vote may be called for by delegates of ten percent or more of the General Assembly.

2024 Resolution

1. Resolution on Fair and Equal Treatment of All Governmental Officials at All Levels submitted by City of Glendora
 - Letters of concurrence submitted by:
 - i. April A. Verlato, Mayor, City of Arcadia
 - ii. Robert Gonzales, Mayor, City of Azusa
 - iii. Tim Hepburn, Mayor, City of La Verne
 - iv. Bill Uphoff, Mayor, City of Lomita
 - v. John M. Cruikshank, Mayor, City of Rancho Palos Verdes
 - Referred to Governance, Transparency, and Labor Relations Policy Committee
 - Policy Committee Recommendation:
 - Resolutions Committee Recommendation:

**Resolution No. 1: Fair and Equal
Treatment of All Governmental
Officials at All Levels submitted by
City of Glendora**

1. A RESOLUTION OF THE GENERAL ASSEMBLY OF THE LEAGUE OF CALIFORNIA CITIES CALLING FOR THE CALIFORNIA LEGISLATURE TO ENACT LAWS THAT ENSURE THAT “WHAT APPLIES TO ONE, APPLIES TO ALL” IN THE FAIR AND EQUAL TREATMENT OF ALL GOVERNMENTAL OFFICIALS AT ALL LEVELS IN THE STATE OF CALIFORNIA

Source: City of Glendora

Concurrence of five or more cities/city officials

City Officials: April A. Verlato, Mayor, City of Arcadia; Robert Gonzales, Mayor, City of Azusa; Tim Hepburn, Mayor, City of La Verne; Bill Uphoff, Mayor, City of Lomita; John M. Cruikshank, Mayor, City of Rancho Palos Verdes

Referred to: Governance, Transparency and Labor Relations Policy Committee

WHEREAS, the General Assembly of the League of California Cities objects to the practice of the California Legislature of imposing rules limiting authority or regulating the conduct of local municipal officials that do not also apply to elected officials of the State of California; and

WHEREAS, examples of such rules or regulations that apply to local city elected officials that do not otherwise apply to the elected officials of the State of California include, but are not limited to:

California's open meeting rules, codified in the Ralph M. Brown Act, Government Code, Chapter 9, §§ 54950 *et seq.*, which purport to “declare[] that the public commissions, boards and councils and the other public agencies in this State exist to aid in the conduct of the people’s business. It is the intent of the law that their actions be taken openly and that their deliberations be conducted openly,” but which limits its application to “local agencies,” but not including elected officials of the State of California;

Creating “one-off” exemptions, in the form of Senate Bill No. 174, from the California Environmental Quality Act (“CEQA”) which purportedly requires all government agencies to consider the environmental consequences of their actions before approving plans and policies or committing to a course of action on a project in order to demolish and then rebuild State offices for the Governor and other State officials;

Adopting rules, in the form of Senate Bill No. 1439, amending the Political Reform Act (the "Act"), by removing the exception for local elected officers from contribution limits requiring disqualification on development project decisions," but not including elected officials of the State of California;

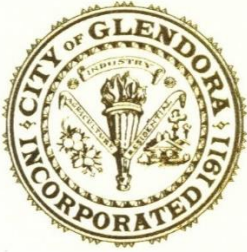
Adopting rules, in the form of Assembly Bill No. 571, that apply to city and county candidates for local elected office, but not to candidates for state-wide office, including, but not limited to: prohibiting the making a contribution over the AB 571 limit to another candidate in jurisdictions subject to the AB 571; requiring a candidate that has qualified as a committee to establish a separate controlled committee and campaign bank account for each specific office; prohibiting a candidate from redesignating a committee for one election for another election.

WHEREAS, the General Assembly of the League of California Cities now calls upon the Governor and the California Legislature to adopt a policy, practice, and procedure requiring, in their legislative activities, that "what applies to one applies to all."

NOW, THEREFORE, BE IT RESOLVED at the League General Assembly, assembled at the League Annual Conference on October 18, 2024 in Long Beach, California, that the League calls upon the Governor of the State of California and the elected members of the California Legislature, including all members of the Senate and Assembly to adopt the following policy:

"The California State Legislature shall not enact, and the Governor shall not sign into law, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

Resolution No. 1: Letters of Concurrence



July 10, 2024

The City Council of Glendora
is proposing the following resolution for consideration at the
California League of Cities annual conference
on
October 18, 2024

Proposed Resolution: ("To ensure fairness and equal treatment for all government officials in
California")

"The California State Legislature shall not enact, and the Governor shall not approve, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

The following five city council members are in concurrence with their letters of support (attached):

- ✓ Mayor John Cruikshank, City of Rancho Palos Verdes
- ✓ Mayor Bill Uphoff, City of Lomita
- ✓ Mayor Robert Gonzales, City of Azusa
- ✓ Mayor April Verlato, City of Arcadia
- ✓ Mayor Tim Hepburn, City of La Verne

Please confirm receipt of this request.

Sincerely,

Michael Allawos
Council Member
City of Glendora



April A. Verlato
Mayor

July 9, 2024

Honorary Mike Allawos
Glendora City Councilmember
116 E. Foothill Blvd.
Glendora, CA 91741

RE: Support for "Glendora CalCities Resolution"

Dear Councilmember Allawos:

I would like to be a voice of support for Glendora's timely and needed resolution below for the upcoming CalCities annual conference this coming October 18, 2024.

"The California State Legislature shall not enact, and the Governor shall not approve, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

I am an elected representative for our respective city, county, and state governance to do the people's work and be their collective voices. We should all have the same rules to be governed by.

Sincerely,

April A. Verlato
City of Arcadia Mayor

240 West Huntington Drive
Post Office Box 60021
Arcadia, CA 91066-6021
(626) 574-5403 City Hall
averlato@ArcadiaCA.gov
www.ArcadiaCA.gov

July 8, 2024

Hon. Michael Allawos
Glendora City Councilmember
116 E. Foothill Blvd.
Glendora, CA 91741

Re: Support for "Glendora's CalCities Resolution"

Councilmember Allawos:

I would like to support Glendora's timely and needed resolution below for the upcoming CalCities annual conference this coming October 18, 2024:

"The California State Legislature shall not enact, and the Governor shall not approve, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution "

I am an elected representative for the City of Azusa . We should all have the same rules to be governed by.

Sincerely,



Mayor Robert Gonzales

*The views or opinions expressed in this letter are intended to be interpreted as the individual work product of the author They do not necessarily reflect an official position of the City Council, staff or other entities



CITY OF LA VERNE CITY HALL

3660 "D" Street, La Verne, California 91750-3599

www.cityoflaverne.org

July 8, 2024

Ms. Kathleen Sessman
Glendora City Clerk
116 E. Foothill Blvd.
Glendora, California 91741

Re: Item 14 – Cal Cities Annual Conference Resolution

Dear Ms. Sessman:

As the Mayor of the City of La Verne, I would like to voice support for Glendora's timely and needed resolution, within agenda item #14, for the upcoming League of California Cities (Cal Cities) annual conference this coming October 18, 2024.

In its simplistic form, the proposed Resolution states what we all believe should be true for each and every elected official: We should all have the same rules to be governed by. No matter what level of government an official is elected to, we are here to do the people's work and be their collective voices. The Resolution simply states:

"The California State Legislature shall not enact, and the Governor shall not approve, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

Whether the State Legislature or Governor heed our collective voices, we at the local level, through our Cal Cities membership, will have demonstrated our resolve that the basic leadership characteristic of leadership by example is the best approach to holding elective office.

Sincerely,

Tim Hepburn
Mayor

General Administration 909/596-8726 • Water Customer Service 909/596-8744 • Community Services 909/596-8700
Public Works 909/596-8741 • Finance 909/596-8716 • Community Development 909/596-8706 • Building 909/596-8713
Police Department 909/596-1913 • Fire Department 909/596-5991 • General Fax 909/596-8737

Bill Uphoff
Lomita, CA

July 8, 2024

Hon. Mike Allawos
Glendora City Councilmember
116 E. Foothill Blvd.
Glendora, CA 91741

Re: Support for "Glendora's CalCities Resolution"

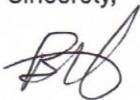
Dear Councilmember Allawos:

I would like to be a voice of support for Glendora's timely and needed resolution below for the upcoming CalCities annual conference this coming October 18, 2024.

"The California State Legislature shall not enact, and the Governor shall not approve, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

I am an elected representative for our respective city, county, and state governance to do the people's work and be their collective voices. We should all have the same rules to be governed by.

Sincerely,



Bill Uphoff, Mayor
City of Lomita

The views or opinions expressed in this letter are intended to be interpreted as the individual work product of the author. They do not necessarily reflect an official position of the City Council, staff or other entities.

John M. Cruikshank
Rancho Palos Verdes, CA

July 6, 2024

Hon. Mike Allawos
Glendora City Councilmember
116 E. Foothill Blvd.
Glendora, CA 91741

Re: Support for "Glendora's CalCities Resolution"

Dear Councilmember Allawos:

I would like to be a voice of support for Glendora's timely and needed resolution below for the upcoming CalCities annual conference this coming October 18, 2024.

"The California State Legislature shall not enact, and the Governor shall not approve, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

I am an elected representative for our respective city, county, and state governance to do the people's work and be their collective voices. We should all have the same rules to be governed by.

Sincerely,



John M. Cruikshank, Mayor
City of Rancho Palos Verdes

The views or opinions expressed in this letter are intended to be interpreted as the individual work product of the author. They do not necessarily reflect an official position of the City Council, staff or other entities.

Resolution No. 1: Staff Analysis

League of California Cities Staff Analysis on Resolution No. 1

Staff: Johnnie Pina, Legislative Affairs, Lobbyist
Committee: Governance, Transparency, and Labor Relations

Summary:

This Resolution states that the League of California Cities shall call upon the Governor of the State of California and the elected members of the California Legislature, including all members of the Senate and Assembly to adopt the following policy:

"The California State Legislature shall not enact, and the Governor shall not sign into law, any law or regulation that applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate. This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

Background:

This resolution states that examples of the California Legislature imposing rules limiting authority or regulating the conduct of local municipal officials that do not also apply to elected officials of the State of California include, but are not limited to:

- California's open meeting rules, codified in the **Ralph M. Brown Act**, Government Code, Chapter 9, §§ 54950 *et seq.*;
- "One-off" exemptions, in the form of Senate Bill No. 174, from the **California Environmental Quality Act ("CEQA")**;
- Rules, in the form of **Senate Bill No. 1439**, amending the **Political Reform Act** (the "Act"); and
- Rules, in the form of **Assembly Bill No. 571**, that apply to city and county candidates for local elected office, but not to candidates for state-wide office.

Ralph M. Brown Act

[The California Attorney General's \(AG\) Office](#) defines [The Ralph M. Brown Act](#) (Brown Act) as what governs meetings conducted by local legislative bodies, such as boards of supervisors, city councils and school boards. The AG's office states the Act represents the Legislature's determination of how the balance should be struck between public access to meetings of multi-member public bodies on the one hand and the need for confidential candor, debate, and information gathering on the other.

[The Ralph M. Brown Act](#) governs local agencies, the [Bagley-Keene Open Meeting Act](#) covers all state boards and commissions, and [Government code](#)

[9027](#) governs the state Legislature. The California Constitution also mandates open meetings for state agencies, boards, and commissions. Specifically, the Constitution requires that each local agency comply with the Brown Act (Article I, section 3(b)(7)): and that the proceedings of each house of the Legislature be open and public (with exceptions for employment matters; matters affecting security; confer with legal counsel; and to meet as a caucus (Article IV, section 7)).

Although fairly detailed requirements apply to state agencies and other state bodies, they do not apply to the Legislature. The Legislature has Constitutional authority to adopt rules for its proceedings that are consistent with the requirement that the proceedings of each house and the committees be open and public.

Another notable difference between the Legislature and a city council is the ability for Legislators to have a caucus to discuss a bill, express how they will vote, and to count votes. This is not allowed under the Brown Act. One other difference is that the laws governing teleconferencing for members of the state Legislature is far less flexible than it is for local bodies. However, state agencies have more flexibility than locals in that regard.

California Environmental Quality Act (“CEQA”)

The Resolution cites the Legislature's action in exempting from CEQA the reconstruction of the State Capitol Annex building. The State Legislature enacted the [California Environmental Quality Act \(CEQA\)](#) in 1970, establishing it as a public disclosure law for the environmental review of discretionary projects and a process for mitigating or avoiding potential environmental impacts.

[SB 174 \(Committee on Budget and Fiscal Review\)](#) Chaptered by Secretary of State. Chapter 74, Statutes of 2024 was signed into law July 2, 2024. This bill exempts the work performed under the State Capitol Building Annex Act of 2016 from the California Environmental Quality Act (CEQA). In this example the Legislature exempted themselves as not being considered a “public agency,” “state agency,” or “lead agency” under CEQA. A lead agency under CEQA is the public agency that has the principal responsibility for carrying out or approving a project that is subject to CEQA.

Over the years, the Legislature has also created many CEQA exceptions and exemptions for local projects involving local agencies as well.

The Political Reform Act (PRA) - Senate Bill No. 1439

[SB 1439 \(Glazer\)](#) Chaptered by Secretary of State. Chapter 848, Statutes of 2022 amends section 84308 and is aimed at preventing "pay-to-play" practices, in part by prohibiting parties, participants, and their respective agents in a

proceeding involving a license, permit, or other entitlement for use from contributing more than \$250 to an officer of an agency during a 12 month period. When the Levine Act was first enacted in 1982, Section 84308 applied to appointed members of boards and commissions who were running for elective office. SB 1439 expended this law to now apply to local elected officials. Since it is focused on permits and licenses, it now applies to State agencies and local agencies that approve permits and licenses. Section 84308 does not apply to the Legislature or the Courts. It is important to note that unlike local governments, neither issue permits and licenses.

The Political Reform Act (PRA) - Assembly Bill No. 571

[AB 571 \(Mullin\)](#) Chaptered by Secretary of State. Chapter 556, Statutes of 2019 established default campaign contribution limits for county and city office at the same level as the limit on contributions from individuals to candidates for Senate and Assembly, effective January 1, 2021. This bill permitted a county or city to establish its own contribution limits, which would prevail over these default limits.

The Resolution cites AB 571 as an example of treating cities differently than the State. The Fair Political Practices Commission clarifies in their [AB 571 fact sheet](#) that under AB 571 a city may elect to have "no" contribution limit in which case the state contribution limit will not apply as a default for that jurisdiction. A city or county can set contribution limits higher than the default state limit, AB 571 sets a default in line with contributions Assembly Members and Senators if a city or county is silent on contribution limits.

Fiscal Impact:

Unknown.

Existing Cal Cities Policy:

Mission Statement

To expand and protect local control for cities through education and advocacy to enhance the quality of life for all Californians.

We Believe:

- Local self-governance is the cornerstone of democracy.
- In the involvement of all stakeholders in establishing goals and in solving problems.
- In conducting the business of government with transparency, openness, respect, and civility. The spirit of honest public service is what builds communities.
- Open decision-making that is of the highest ethical standards honors the public trust.
- The vitality of cities is dependent upon their fiscal stability and local autonomy. The active participation of all city officials increases Cal Cities' effectiveness.

- Partnerships and collaborations are essential elements of focused advocacy and lobbying.
- Ethical and well-informed city officials are essential for responsive, visionary leadership and effective and efficient city operations.

Comments:

Additional Examples

The Legislature has passed and the Governor has signed many laws that apply to local governments and do not apply to the state or the state Legislature. This year [AB 2561 \(McKinnor\)](#) was introduced, which requires local governments to present in a public meeting a detailed report about their vacancy rates and detailed information about their hiring practices. This is an attempt to address public sector vacancy rates. This bill does not apply to the state in a time when they are also dealing with high vacancy rates.

Additionally, there were several bills that aim to amend the Levine Act, which now applies to local elected officials, to make changes to SB 1439, referenced previously in the analysis. None of the bills would amend the law to be applicable to Assembly Members or Senators.

[AB 817 \(Pacheco\)](#), co-sponsored by Cal Cities tried to bring parity to the Brown Act by making the teleconference rules for state advisory bodies the same for local advisory bodies but the Legislature struck the bill down.

Applying to elected officials or to the legislative body? Legislature or the State?

The resolution also states, "... applies solely to elected officials of California cities and counties, unless such law or regulation also applies equally to members of the California State Assembly and Senate."

This portion of the resolve clause is specifically speaking to local elected officials and State Assembly Members and Senators. However, many of the "where as" clauses are in reference to laws that apply to cities, the state and the Legislature as government agencies and not specifically to the elected officials on the governing bodies. For example, the Brown Act applies rules to the Legislative body and not the individual council member. Additionally, the city council as a whole is the lead agency under CEQA and not the individual council members.

Inherent Powers of the Legislative Branch

The resolution also states, "This prohibition shall not apply to laws or regulations affecting the inherent powers of the legislative branch under the California Constitution."

It is unclear what inherent powers of the legislative branch under the California Constitution means in this context. The legislative branch does have the power

of preemption over cities and can state that a change in law is a matter of state wide concern. This allows the legislative branch to apply new laws or amend existing laws to apply to general law and charter cities. It seems like the last sentence of the resolve clause could negate the rest of the resolve clause if not clarified.

Support:

The following letters of concurrence were received:

April A. Verlato, Mayor, City of Arcadia

Robert Gonzales, Mayor, City of Azusa

Tim Hepburn, Mayor, City of La Verne

Bill Uphoff, Mayor, City of Lomita

John M. Cruikshank, Mayor, City of Rancho Palos Verdes



AGENDA SUMMARY REPORT

SUBJECT: Receive Updates on City Council Committee and Ad Hoc Assignments, and, if Necessary, Consider Modifications to Assignments and/or the Creation/Elimination of Ad Hoc(s).

DEPARTMENT: City Clerk

PREPARED BY: Kristine Lawler, City Clerk

PRESENTER: Mayor Dueñas and Various Councilmembers

ATTACHMENTS:

1. 2024 City Council Special Assignments and Ad Hocs

Summary: City Council members will provide reports and updates on their committee and ad hoc assignments. If necessary, the Council may consider modifications.

Background: City Council members are assigned to a number of committees and ad hoc activities. These assignments are included as Attachment 1.

Discussion: Previously, the City Council discussed having more time allocated to reporting on committee and ad hoc activities. Often, the Council Reports section of the regular agenda is rushed due to impending business (i.e., public hearings), and not enough time is afforded for reports beyond community activities.

In an effort to foster regular updates on committee and ad hoc assignments, this item is being placed on the agenda to provide the City Council members an expanded opportunity to report on assignments and modify assignments as necessary.

Recommended Action: Receive report(s). The Council will consider modifications to committee and ad hoc assignments along with the creation/elimination ad hoc(s).

BUDGET AMENDMENT REQUIRED: No

CURRENT BUDGET AMOUNT: N/A

PROPOSED BUDGET AMOUNT: N/A

FINANCING SOURCE: N/A

PREVIOUS CONTRACT/PURCHASE ORDER NO.: N/A

COORDINATED WITH: N/A

DIVERSITY-EQUITY INITIATIVES (DEI): N/A

CLIMATE INITIATIVES (CI): N/A

GENERAL PLAN ELEMENTS (GP): N/A

Approved:


Sage Sangiacomo, City Manager

2024 CITY COUNCIL SPECIAL ASSIGNMENT LIST

LOCAL / UKIAH VALLEY		MTG DATE/TIME	MEETING LOCATION		MAILING ADDRESS/CONTACT	COMMITTEE FUNCTION	ASSIGNED TO	PRINCIPAL STAFF SUPPORT
City Broadband Project		TBD	TBD		Civic Center 300 Seminary Ave. Ukiah, CA 95482	to evaluate the Request for Proposal (RFP) for the Internet Service Provider (ISP) for the California's Public Utilities Commission (CPUC) Last Mile Broadband	Orozco	Jim Robbins, Grants Manager, 463-6708; jrobbins@cityofukiah.com
Investment Oversight Committee		Varies	Civic Center 300 Seminary Ave. Ukiah, CA 95482		Civic Center 300 Seminary Ave. Ukiah, CA 95482	Reviews City investments, policies, and strategies	Crane Orozco - Alternate Alan Carter, Treasurer	Dan Buffalo, Director of Finance; 463-6220 dbuffalo@cityofukiah.com
Disaster Council		Shall meet a minimum of once a year at a time and place designated upon call of the chair	Place designated upon call of the chair or, if she/he is unavailable or unable to call such meeting, the first vice chair and then the City Manager or her/his designee.		Office of Emergency Management 300 Seminary Ave. Ukiah, CA 95482 467-5720 - Traci Boyl	Develop any necessary emergency and mutual aid plans, agreements, ordinances, resolutions, rules, and regulations.	Orozco Duenas- Alternate	Traci Boyl, City Manager's Office Management Analyst; 467-5720; tboyl@cityofukiah.com
Greater Ukiah Business & Tourism Alliance (GUPTA)		4th Monday of month, 10 a.m.	200 S School St. Ukiah, CA 95482		200 S School St. Ukiah, CA 95482	Promotes tourism and works to strengthen and promote the historic downtown and businesses within the greater Ukiah area	Marianne Davison - <i>Community Services Department Staff</i> Duenas - Alternate	Shannon Riley, Deputy City Manager; 467-5793 sriley@cityofukiah.com
Mendocino County Inland Water and Power Commission (IWPC)		2nd Thursday of month, 6:00 p.m.	Civic Center 300 Seminary Avenue conference room 5		IWPC Staff P.O. Box 1247 Ukiah, CA 95482 391-7574 - Candace Horsley	Develops coordination for water resources and current water rights: Potter Valley project - Eel River Diversion	Rodin Orozco - Alternate	Sean White, Director of Water Resources; 463-5712 swhite@cityofukiah.com
North Coast Opportunities (NCO)		4th Wednesday of month, 2 p.m.	Alternating locations - Ukiah and Lakeport		Governing Board Chair North Coast Opportunities 413 North State Street Ukiah, CA 95482	Assist low income and disadvantaged people to become self reliant	Burgess	Jake Burgess, Community Services Supervisor; 463-6201 jburgess@cityofukiah.com
Sun House Guild ex officio		2nd Tuesday of month, 4:30 p.m.	Sun House 431 S. Main St. Ukiah, CA		431 S. Main Street Ukiah, CA 95482 467-2836	Support and expand Grace Hudson Museum	Duenas Neil Davis - Alternate	David Burton, Museum Director; 467-2836 dburton@cityofukiah.com
Ukiah Valley Basin Groundwater Sustainability Agency (GSA)		2nd Thursday of month, 1:30 p.m.	Board of Supervisors Chambers; 501 Low Gap Road Ukiah, CA		County Executive Office 501 Low Gap Rd., Rm. 1010 Ukiah, CA 95482 463-4441	GSA serves as the Groundwater Sustainability Agency in the Ukiah Valley basin	Crane Duenas- Alternate	Sean White, Director of Water Resources; 463-5712 swhite@cityofukiah.com
MENDOCINO COUNTY		MTG DATE/TIME	MEETING	LOCATION	MAILING ADDRESS/CONTACT	COMMITTEE FUNCTION	ASSIGNED TO	PRINCIPAL STAFF SUPPORT
City Selection Committee		Called as required by the Clerk of the Board	BOS Conference Room 501 Low Gap Rd. Rm. 1090 Ukiah, CA		C/O: BOS 501 Low Gap Rd., Rm 1090 Ukiah, CA 95482 463-4441	Makes appointments to LAFCO and Airport Land Use Commission <i>(Mayor - Primary; Vice Mayor - Alternate)</i>	Mayor Duenas Vice Mayor Crane - Alternate	Kristine Lawler, City Clerk; 463-6217 klawler@cityofukiah.com
Economic Development & Financing Corporation (EDFC)		2nd Thursday of month, 2:00 p.m.	Primarily 631 S. Orchard Street (location varies)		Executive Director 631 South Orchard Avenue Ukiah, CA 95482 467-5953	Multi-agency co-op for economic development and business loan program	Riley (appointed 12/19/18)	Shannon Riley, Deputy City Manager; 467-5793 sriley@cityofukiah.com
Library Advisory Board		3rd Wednesdays of alternate months; 1:00 p.m.	Various Mendocino County Libraries		Ukiah County Library 463-4491	Review library policy and activities	Sher Rodin - Alternate	Kristine Lawler, City Clerk; 463-6217; klawler@cityofukiah.com
Mendocino County 1st District Liaison		Monthly; TBD	Civic Center Annex conference room #5 411 West Clay St. Ukiah, CA 95482		Civic Center 300 Seminary Ave. Ukiah, CA 95482	To coordinate activities and policy development with the City's 1st District Supervisor	Rodin Crane- Alternate	Sage Sangiacomo, City Manager; 463-6221; ssangiacomo@cityofukiah.com
Mendocino County 2nd District Liaison		1st Wednesdays of month, 8:00 a.m.	Civic Center Annex conference room #5 411 West Clay St. Ukiah, CA 95482		Civic Center 300 Seminary Ave. Ukiah, CA 95482	To coordinate activities and policy development with the County's 2nd District Supervisor	Rodin Duenas - Alternate	Shannon Riley, Deputy City Manager; 467-5793 sriley@cityofukiah.com
Mendocino Council of Governments (MCOG)		1st Monday of month, 1:30 p.m.	Board of Supervisors Chambers 501 Low Gap Road Ukiah, CA		Executive Director 367 N. State Street, Ste. 206 Ukiah, CA 95482 463-1859	Plan and allocate State funding, transportation, infrastructure and project County wide	Duenas Sher - Alternate	Tim Eriksen, Public Works Director/City Engineer; 463-6280 teriksen@cityofukiah.com
Mendocino County Airport Land Use Commission		As needed	BOS Conference Room 501 Low Gap Rd., Rm. 1090, Ukiah, CA		Mendocino County Executive Office 501 Low Gap Rd. Rm. 1010 Ukiah, CA 95482	To formulate a land use compatibility plan, provide for the orderly growth of the airport and the surrounding area, and safeguard the general welfare of the inhabitants within the vicinity	Liaisons: Owen/Schlatter	Greg Owen, Airport Manager; 467-2855; gowen@cityofukiah.com Craig Schlatter, Director of Community Development; 463-6219; cschlatter@cityofukiah.com
Mendocino County Local Area Formation Commission (LAFCO)		1st Monday of month, 9:00 a.m.	Board of Supervisors Chambers		Executive Director 200 S. School Street, Ste. 2 Ukiah, CA 95482 463-4470	Required by legislation - planning spheres of influence, annexation, service areas, and special districts	Rodin Crane - Alternate for both city seat members on Commission	Craig Schlatter, Director of Community Development; 463-6219; cschlatter@cityofukiah.com

Mendocino County Continued	MTG DATE/TIME	MEETING	LOCATION	MAILING ADDRESS/CONTACT	COMMITTEE FUNCTION	ASSIGNED TO	PRINCIPAL STAFF SUPPORT
Mendocino Solid Waste Management Authority (MSWMA)	3rd Thursday of every other month (varies), 10:00 a.m.	Willits Council Chambers		Solid Waste Director 3200 Taylor Drive Ukiah, CA 95482 468-9710	County-wide Solid Waste JPA	Crane Sher - Alternate	Tim Eriksen, Public Works Director/City Engineer; 463-6280 teriksen@cityofukiah.com
Mendocino Transit Authority (MTA) Board of Directors	Last Wednesday of month, 1:30 p.m.	Alternating locations - Ukiah Conference Center or Fort Bragg, or Point Arena		Executive Director 241 Plant Road Ukiah, CA 95482 462-1422	County-wide bus transportation issues and funding	Sher Duenas - Alternate	Tim Eriksen, Public Works Director/City Engineer; 463-6280 teriksen@cityofukiah.com
Mendocino Youth Project JPA Board of Directors	3rd Wednesday of month, 7:45 a.m.	776 S. State Street Conference Room		Mendocino Co. Youth Project 776 S. State Street, Ste. 107 Ukiah, CA 95482 707-463-4915	Targets all youth with a focus on drug and alcohol prevention, healthy alternatives and empowering youth to make healthy choices	Cedric Crook, Police Chief Duenas - Alternate	Cedric Crook, Police Chief; 463-6771; ccrook@cityofukiah.com
Russian River Flood Control District (RRFCD) Liaison	1st Monday of month, 5:30 p.m.	151 Laws Ave., Suite D Ukiah, CA		151 Laws Ave., Ukiah, CA 95482; rrfc@pacific.net; 462-5278	Proactively manage the water resources of the upper Russian River for the benefit of the people and environment of Mendocino County	White/Orozco	Sean White, Director of Water Resources; 463-5712 swhite@cityofukiah.com
Ukiah Players Theater Board of Directors	3rd Tuesday of month, 6:00 p.m	1041 Low Gap Rd Ukiah, CA 95482 462-1210		1041 Low Gap Rd Ukiah, CA 95482 462-1210	To oversee the activities, organization and purpose of the Ukiah Players Theater	Greg Owen, Airport Manager (appointed 12/19/18)	Kristine Lawler, City Clerk; 463-6217 klawler@cityofukiah.com
Ukiah Unified School District (UUSD) Committee	Quarterly	511 S. Orchard, Ste. D Ukiah, CA 95482		511 S. Orchard Ukiah, CA 95482	Information exchange with UUSD Board Chair, Mayor, Superintendent, and City Manager	Duenas Rodin - Alternate Sage Sangiacomo, City Manager Cedric Crook, Police Chief	Sage Sangiacomo, City Manager; 463-6221 ssangiacomo@cityofukiah.com
REGIONAL	MTG DATE/TIME	LOCATION		MAILING ADDRESS/CONTACT	COMMITTEE FUNCTION	ASSIGNED TO	PRINCIPAL STAFF SUPPORT
Great Redwood Trail Agency	Bi-monthly, 3rd Thursdays, 10:30 a.m.	Various Locations - announced		419 Talmage Road, Suite M Ukiah, CA 95482 463-3280	Provides a unified and revitalized rail infrastructure meeting the freight and passenger needs of the region	Rodin Duenas - Alternate	Neil Davis, Community Services Director 467-5764 ndavis@cityofukiah.com
League of California Cities Redwood Empire Legislative Committee	Prior to Division Meetings, meets 3x in person and then via conference call	Various locations that are announced		Redwood Empire League President; Public Affairs Program Manager (916) 658-8243	Elected city officials and professional city staff attend division meetings throughout the year to share what they are doing and advocate for their interests in Sacramento	Duenas Orozco - Alternate	Sage Sangiacomo, City Manager; 463-6221 ssangiacomo@cityofukiah.com
Russian River Watershed Association (RRWA)	4th Thursday of month, 9:00 a.m. (only 5 times a year)	Windsor Town Hall		Russian River Watershed Association 2235 Mercury Way, Suite 105 Santa Rose, CA 95407 info@rrwatershed.org 707-508-3670 (message only)	Consider issues related to Russian river - plans projects and funding requests	Rodin Sher - Alternate	Tim Eriksen, Public Works Director/City Engineer; 463-6280 teriksen@cityofukiah.com
Northern California Power Agency (NCPA) - Commission	4th Thursday of month, 9:00 a.m. (see NCPA calendar)	Roseville, CA and other locations		651 Commerce Drive Roseville, CA 95678 916-781-4202	Pool of State and local power utilities developing and operating power generation, providing scheduling and related energy services and providing regulatory and legislative support.	Crane - Commissioner Sher - City Council Alternate Sauers - Alternate and Commissioner in absence of Commissioner Crane	Cindi Sauers - Electric Utility Director; 463-6286 csauers@cityofukiah.com
Northern California Power Agency (NCPA) – Lodi Energy Center (LEC) Appointment	2nd Monday of month, 10:00 AM	Lodi, CA and other locations		651 Commerce Drive Roseville, CA 95678 916-781-4299	Committee oversees the operation, maintenance and expenditures of the LEC 300 MW generating project.	Sauers – Project Participate Appointee	Cindy Sauers, Electric Utility Director, 463-6286, csauers@cityofukiah.com
Transmission Agency of Northern California (TANC)	4th Wednesday of month, 10 a.m.	35 Iron Point Circle Suite 225 Folsom, CA		35 Iron Point Cir #225 Folsom, CA 95630 916-852-1673; info@tanc.us	Provide electric transmission to its Member utilities through transmission line ownership or contract arrangements.	Crane Sauers - Alternate	Cindi Sauers - Electric Utility Director; 463-6286 csauers@cityofukiah.com
STANDING COMMITTEES	MTG DATE/TIME	LOCATION		MAILING ADDRESS/CONTACT	COMMITTEE FUNCTION	ASSIGNED TO	PRINCIPAL STAFF SUPPORT
Diversity and Equity	TBD	Virtual Meeting Room (link to be created)		Civic Center 300 Seminary Ave. Ukiah, CA 95482	Improve diversity and equity in the City’s workforce and municipal services	Orozco/Duenas	Traci Boyl, City Manager's Office Management Analyst; 467-5720; tboyl@cityofukiah.com
Fire Executive Committee	2nd Tue, every other month beginning in January; 5:00 p.m.	Ukiah Valley Conference Center, 200 S. School Street Ukiah, CA		Civic Center 300 Seminary Ave. Ukiah, CA 95482 sabba@cityofukiah.com	Per the recently adopted agreement between the City of Ukiah and the Ukiah Valley Fire Protection District	Orozco/Sher	Doug Hutchison, Fire Chief; 463-6263; dhutchison@cityofukiah.com
Countywide Oversight Board to the RDA Successor Agencies	4th Thursday of January, 4:00 p.m.; meets annually	Ukiah Valley Conference Center, 200 S. School Street Ukiah, CA		City of Ukiah ATTN: City Clerk 300 Seminary Ave. Ukiah, CA 95482	Oversee and direct the Successor Agencies of the former redevelopment agencies	Crane	Dan Buffalo, Director of Finance; 463-6220 dbuffalo@cityofukiah.com Kristine Lawler, City Clerk; 463-6217, klawler@cityofukiah.com
Water Executive Committee (Ukiah Valley Water Authority)	1st Tue of each month at 6:00 p.m.	Ukiah Valley Conference Center, 200 S. School Street Ukiah, CA		City of Ukiah ATTN: Sean White 300 Seminary Ave. Ukiah, CA 95482	Oversight of UVWA; set annual budget for the combined water system; Manage rates and collect levies; modify existing water rights for the provision of water service; mediation and dispute resolution;	Crane/Orozco	Sean White, Director of Water Resources; 463-5712 swhite@cityofukiah.com

2024 AD HOC COMMITTEES		
COMMITTEE	ASSIGNED TO	PRINCIPAL STAFF SUPPORT
Electric Grid Operational Improvements	Crane/Orozco	Cindy Sauers, Electric Utility Director; 463-629586 csauers@cityofukiah.com
Trench Cut Policy Development	Crane	Tim Eriksen, Public Works Director/City Engineer; 463-6280 teriksen@cityofukiah.com
Advance Planning & Policy for Sphere of Influence (SOI), Municipal Service Review (MSR), Annexation, Tax Sharing, Detachment, and Out of Area Service Agreements	Crane/Rodin	Craig Schlatter, Community Development Director 463-6219 cschlatter@cityofukiah.com
UVSD/ City Relations <i>Ad hoc committee to address specific issues with the Ukiah Valley Sanitation District, including discussion of overall sewer system service delivery policies, operating policy revisions, potential revisions to the current Operating Agreement, and cost sharing</i>	Crane/Orozco	Dan Buffalo, Director of Finance; 463-6220 dbuffalo@cityofukiah.com Sean White, Water Resources Director 463-5712 swhite@cityofukiah.com
Orr Street Bridge Corridor	Rodin/Sher	Tim Eriksen, Public Works Director/City Engineer; 463-6280 teriksen@cityofukiah.com
Complete Streets	Rodin/Crane	Tim Eriksen, Public Works Director/City Engineer; 463-6280 teriksen@cityofukiah.com Shannon Riley, Deputy City Manager 467-5793 sriley@cityofukiah.com Neil Davis, Community Services Director 467-5764 ndavis@cityofukiah.com
Special Districts (Water District Consolidation)	Orozco/Crane	Shannon Riley, Deputy City Manager 467-5793 sriley@cityofukiah.com
Corp Yard Planning	Crane/Orozco	Jason Benson, Senior Civil Engineer 463-6284 jbenenson@cityofukiah.com
Mendocino County Courthouse Project and Reuse	Sher/Orozco	Shannon Riley, Deputy City Manager 467-5793 sriley@cityofukiah.com
Climate Action Plan <i>Will coordinate with the Community Development Director to identify and assign representation to each of the identified categories, and also coordinate with the Community Development Director and the Climate Action Plan Working Group related to other outreach efforts during the development of the draft municipal Climate Action Plan related to the 2040 General Plan</i>	Sher/Duenas	Craig Schlatter, Community Development Director 463-6219 cschlatter@cityofukiah.com
City's 150-Year Anniversary Planning	Orozco/Rodin	Shannon Riley, Deputy City Manager 467-5793 sriley@cityofukiah.com
Zoning Reform <i>(previously was the Community Development Fee Review ad hoc)</i> <i>function is to explore creation of a new ministerial zoning permit and identify additional zoning streamlining and reform efforts to provide better and more consistent development outcomes</i>	Crane/Orozco	Craig Schlatter, Community Development Director 463-6219 cschlatter@cityofukiah.com
Community Health Needs Assessment (CHNA) Steering Committee <i>assist in the creation of the 2025 CHNA Report for the communities served by the three Adventist Health hospitals in Mendocino County. providing insight, identifying, gathering and analyzing the health needs of our community. Additionally</i>	Rodin/Sher	Jeremy Malin, NP Director of Community Health Analytics Adventist Health Howard Memorial Adventist Health Ukiah Valley Adventist Health Mendocino Coast 978-289-3330; malinj@ah.org
Parks & Recreation Special District Exploration	Rodin/Orozco	Neil Davis, Community Services Director 467-5764 ndavis@cityofukiah.com
Downtown Zoning code	Crane/Rodin	Craig Schlatter, Community Development Director 463-6219 cschlatter@cityofukiah.com
TOT 3% Tax Measure Material Development	Rodin/Sher	Shannon Riley, Deputy City Manager 467-5793 sriley@cityofukiah.com
City Council Handbook Review and Update	Sher	Kristine Lawler, City Clerk 463-6217; klawler@cityofukiah.com