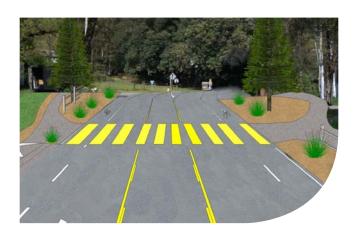




Middle Klamath River Community Transportation Plan





Prepared for: The Karuk Tribe

Prepared by:



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Contact:
Jeff Schwein
jschwein@lumosengineering.com
530.899.9503

JN: 7785.000

EXECUTIVE SUMMARY

This planning project was funded through an environmental justice grant, the purpose of which is to assist historically disadvantaged communities to address issues having a disproportionate impact on the community. The Karuk Tribe and the small, rural communities of Happy Camp, Somes Bar and Orleans are disproportionately impacted by the lack of transportation options as compared to urban communities. These options include roadway networks, bicycle and pedestrian facilities, and access to transit services. The lack of transportation options in rural communities dramatically affects the quality of life for the residents. It affects employment and educational opportunities, access to health care, cultural activities, physical fitness, recreational opportunities, social welfare, and safety.

The goal of the project was a true assessment of the transportation needs of the local communities, identify projects important to the communities, and provide recommendations for implementation and funding of those projects.

The Transportation Plan findings are based on public outreach conducted by Lumos in cooperation with representatives from the Karuk Tribe. Outreach efforts included:

- · Community meetings,
- Meetings with Caltrans Districts 1 & 2,
- · Meetings with U.S. Forest Service,
- Meetings with Humboldt and Siskiyou counties, and
- Informal discussions with business owners, property owners and community members.

The community outreach efforts are defined in Chapter 3.

FINDINGS

- Safe non-motorized transportation is an important mode of transportation within individual communities.
- The terrain and remoteness of the individual communities in relation to each other and urban services, places a reliance on the automobile and transit services for regional transportation make transportation difficult.
- Pedestrian and bicycle facilities are lacking throughout the individual communities and the region.
- Transit services are lacking throughout the individual communities and the region
- The communities embrace the complete streets design philosophy.
- Project recommendations must be built upon in order to reach the future vision of the Plan
- In order to fully implement the Plan, projects must be completed in both the public and private rights of way.

PROJECTS

Projects identified through the outreach efforts were explored for preliminary feasibility. The projects were then mapped and descriptive project sheets were prepared. Projects were categorized into 6 areas and were ranked for safety and feasibility:

- Roadway projects
- Intersection projects
- Complete Streets projects
- Bridge projects
- Bicycle and pedestrian projects
- Transit projects

PROJECT IMPLEMENTATION

A planning level implementation strategy was developed based on cooperative efforts and available funding resources. Implementation of the Plan recommendations will:

- Improve safety, access and mobility for pedestrians,
- Improve safety, access and mobility for bicyclists,
- Promote the use of public transportation by providing efficient, accessible transit facilities and links to commercial businesses,
- Improve safety and efficiency for automobiles through infrastructure improvements, and
- Promote access to jobs, health care, shops and schools.

Implementation of the Middle Klamath River Community Transportation Plan will require a detailed look at specific projects to determine cost estimates and seek funding. Preliminary cost estimates were developed for four of the identified projects.

CONCLUSION

The Middle Klamath River Community Transportation Plan identifies community derived transportation needs and projects to create a foundation for safe and efficient travel to schools, jobs, health care, recreational destinations and residences.

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CHAPTER 1: INTRODUCTION

This planning project was funded through a California Department of Transportation Environmental Justice Transportation Planning Grant, the purpose of which is to assist historically disadvantaged communities to address transportation issues that have disproportionate impact on the community. Karuk Tribe and the small, rural communities of Orleans Happy Camp, Somes Bar and disproportionately impacted by the lack transportation alternatives as compared to urban communities. The lack of transportation options in rural communities dramatically affects the quality of life for the residents. It affects safety, employment, educational opportunities, physical and mental health, and family relationships.

The goal of the Middle Klamath River Community Transportation Plan (MKRCTP) is to provide solid planning in the development of transportation improvement projects that will improve mobility, access, and safety on the state, tribal and local roads while promoting environmental justice and economic opportunities. A prioritization of transportation project alternatives has been developed to help implement community's transportation development goals and aspirations as well as the economic issues as they relate to transportation. The MKRCTP has been developed to help guide public policy decisions that will lead to construction and enhancement projects designed to most efficiently address the community issues identified in the plan.

To develop an accurate representation of the communities' transportation needs for safer more efficient modes of transportation, the following goals were developed:

- Determine where there are transportation mobility and accessibility constraints affecting the Orleans, Somes Bar, and Happy Camp communities.
- Outline available opportunities to improve those transportation, mobility, and accessibility constraints.
- Determine where there are transportation constraints which are affecting the economies in Orleans, Somes Bar, and Happy Camp areas.
- 4) Outline available opportunities to improve those identified transportation constraints affecting the Orleans, Somes Bar, and Happy Camp area economies.
- Indentify one priority transportation project for the Orleans, Somes Bar, and Happy Camp communities.
- 6) Develop information necessary to prioritize transportation projects, provide project information sheets and create initial cost estimates for the priority projects.
- 7) Develop written and anecdotal accident data through research and interviews with the public to determine areas where accidents are occurring at unusually high rates. This information will assist decision makers in prioritizing safety, construction, and education projects to make our transportation system safer.

1.1 Grant Program

The California Department of Transportation (Caltrans) provided support for this effort through its Environmental Justice: Transportation Planning Grant Program, which focuses on addressing the interests and concerns of low-income and minority populations in transportation planning and project development. The effort include reaching out to low income and minority communities, identifying and engaging underrepresented communities early in the planning process, and developing information, data, analytic tools, and educational workshops. The goal of the program is to promote a balanced, comprehensive, multi-modal transportation system with a robust public engagement element in the planning process.

1.2 Core Principles of Environmental Justice

To achieve environmental justice, the transportation decision making process must:

- Invite the full and fair participation of all potentially affected communities,
- Minimize unfair and negative impacts caused by transportation projects, and
- Fairly distribute the benefits of transportation projects and policy decisions.

The participation of potentially affected communities was fulfilled through the public outreach processes which assisted in the formulation of projects to reverse, minimize or mitigate the unfair and negative impacts caused by previous transportation projects.

Minimizing unfair and negative impacts caused by transportation projects is addressed through developing projects that provide safe, convenient, and economical travel choices to the residents. Major

roadways are beneficial to isolated communities such as the ones in the middle Klamath River region in that they provide access, but often those roadways are developed with a focus on 'regional' or 'through' automobile traffic without proper consideration of the people or communities the roadways pass through. Developing projects that modify the existing major roadways into transportation corridors that accommodate all modes of transportation will minimize the unfair and negative impacts caused by past transportation projects.

The efforts to fairly distribute the benefits of transportation projects and policy decisions are enhanced by this planning effort in a number of ways. Through the public outreach process, which took place in three communities, transportation

What is "Environmental Justice"

Environmental Justice is a complex-sounding term for a straightforward goal—seeing that the benefits and adverse impacts of transportation investments are shared fairly and equitably among all affected communities. Meeting this goal requires that public agencies reach out to everyone, including low-income communities, minority communities, and other groups that typically have not participated in public decisions.

- Community Primer on Environmental Justice & Transportation Planning

issues were identified and projects were developed in an equitable manner. At the administrative and policy level, the MKRCTP planning process has promoted communication and partnerships between the Karuk Tribe, Caltrans, Humboldt County, and Siskiyou County.

1.3 Planning Area

There are approximately 3,000 residents who reside in the western Siskiyou and northeastern Humboldt County portion of the Karuk Tribe's Service Area. The service area includes both Tribal members and nonTribal. The service area of the Karuk Tribe is vast, encompassing approximately 6,561 square miles. The Karuk have a small 11 acre designated reservation, and have a number of small land tracts held in trust by the federal government as well as tracts owned by the tribe in fee-simple status. These groups of noncontiguous parcels of land are primarily located along the Klamath River in Siskiyou County, northeastern Humboldt County, and to the northeast in Yreka, California.

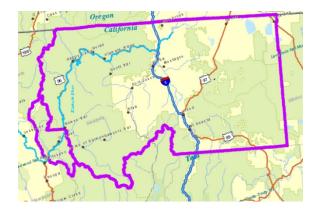


Figure 1 - Karuk Tribe Service Area

The focus area for the Karuk Tribe's Middle Klamath River Transportation Plan Community approximately 3,388 square miles, encompassing western Siskiyou and northeastern Humboldt counties. The communities of Somes Bar, Orleans, and Happy Camp range in population from 157 to just over 1,200, respectively. The U.S. Census Bureau reported 333 people living on the Karuk trust lands. The service area consists of rugged, mountainous terrain that is bisected by the Klamath River and its many tributaries. State Route 96, a narrow two-lane California State Highway, winds along the Klamath River corridor and is the only route that connects the geographically isolated communities of Orleans, Somes Bar, and Happy Camp. Certain roads are not maintained for winter travel which functionally isolates certain areas, such as Greyback Road

1.4 Planning Process

The following planning approaches and techniques were developed to fulfill the principles of Environmental Justice and the intent of the Community Based Transportation Planning process.

1.4.1 Public Outreach

Public outreach was performed through the use of two methods; community meetings and questionnaires.

Community meetings were held in Orleans, Happy Camp, and Somes Bar on October 4th, 5th and 6th, 2010, respectively. The meetings provided attendees with an overview of the purpose of Community Based Transportation Plans and an opportunity to identify and discuss the strengths, weaknesses, opportunities, and challenges through a series of brainstorming and collaboration activities. The meetings were advertised through community flyers and advertisement in the tribal newsletter.

The outreach process also included a questionnaire component where the project team and a local community member solicited responses from citizens at the Somes Bar Store, U.S. Post Office in Orleans, and Parry's Market in Happy Camp. An expanded discussion of the public outreach process, information obtained, and analysis is found in Chapter 3. The questionnaire results can be found in Appendix A and the summary of information gathered at the meetings can be found in Appendix B.

1.4.2 **Project Identification**

Site visits by the consultant team were conducted to observe specific issues identified during the public outreach process, identify any additional design, and facility shortcomings and conceptualize solutions in the form of proposed projects.

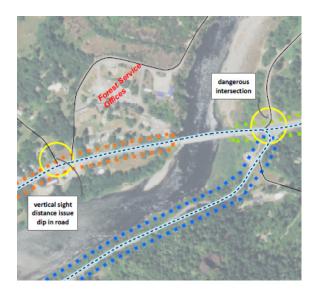


Figure 2 - Map Sample Used in Outreach Efforts

The combined information from public outreach and site investigations assisted in the development of mapping and graphic products.

1.4.3 **Project Development**

Potential projects for this planning process were developed through a combination of the information received at the public meetings, community questionnaire, site visits, community leaders, and Caltrans. Projects were categorized into the following groups:

- Roadway
- Intersections
- Complete Streets
- Bridge
- Bike/Ped Specific
- Transit

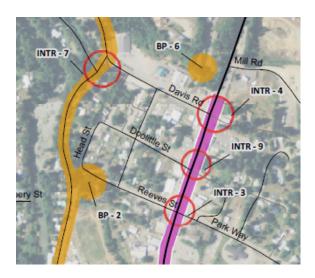


Figure 3 - Map Sample Used in Project Identification

1.4.4 Prioritization and Cost Estimations

Potential projects in the plan were given prioritization values from several categories including community desires identified during the public meetings, the results and trends from the questionnaire, value added to the community, estimated cost, existing funding, and potential challenges such as right-of-way and environmental constraints.

CHAPTER 2: EXISTING CONDITIONS

The project team performed a series of inventories, data gathering, and planning level physical surveys of the transportation infrastructure to establish a baseline condition for the planning area. Local transportation agencies and public input added to the existing conditions assessment and provided input and verification that anecdotally supported the baseline condition. From this baseline condition, the project team developed strategies to meet the goals of the grant and the transportation needs of the residents.

2.1 Orleans

The town of Orleans is an unincorporated community in Humboldt County and is situated along State Route 96 and the Klamath River. The majority of the businesses, government facilities, and residences are accessed via the State Route 96 corridor. The Karuk Tribe Department of Natural Resources, senior center, and health clinic are located in Orleans. State Route 96 is two lanes with gravel shoulders and several segments that allow for passing. The gravel shoulders serve many functions; as places for automobiles to pull over, pedestrians and bicyclists to travel as well as ingress/egress from businesses.

There is a general lack of defined pedestrian and bicycle facilities in the town. There are the occasional user defined paths and trails that exist sporadically along the State Route 96 corridor.

Through the core of the town center the posted speed limit is 30 mph with school zone signage requiring 25 mph when children are present.

2.2 Happy Camp

Happy Camp is a census designated place located in Siskiyou County and is situated along State Route 96 and the Klamath River. Happy Camp is located approximately 45 miles north of Orleans and 75 miles west of Yreka. Happy Camp contains several small businesses, an elementary school, a high school, clinic, pharmacy, local airport, the Karuk Tribe Administration Office, health clinic, Karuk Tribe Housing Authority and senior center.

State Route 96 through the core of town is two lanes with paved shoulders ranging from 0-12 feet between Mill Road and Hillside Road. South and north of the core area shoulders are approximately 0-3 feet in width. The wide shoulders in the core of Happy Camp provide access to many businesses' parking lots, some of which have defined ingress/egress. These wide shoulders function as unofficial travel lanes, turning lanes, pedestrian and bicycle paths, and parking allowing for undefined use by travel modes that should be controlled.

The core area of town has a posted speed limit of 40 mph. School zone signage and pavement markings are present; however there is no reduced speed requirements posted. Collector roadways that branch off from State Route 96 provide access to other businesses, services, educational facilities, and residential areas. These roadways are often narrow with no shoulder and poor pavement conditions. Due to physical barriers, paved design, and roadway layout, access to residential areas may be limited to one road, such as Elk Creek Road and Indian Creek Road.



Figure 4 - Transit Stop in Happy Camp

Transit service is available in Happy Camp and provided by Transit Unlimited's STAGE Happy Camp route on Monday and Friday. There are no shelter facilities or designated transit locations beyond what is identified in the STAGE schedule.

Several developed and user defined paths exist in Happy Camp which provide connectivity between residential areas, schools, and commercial/service zones. These paths make connections between Indian Creek Road/Reeves Street and Jacobs Way/Davis Road.



Figure 5 - Happy Camp Pathways

2.3 Somes Bar

Somes Bar is the smallest unincorporated community investigated in this assessment and is located near the mouth of the Salmon River in Siskiyou County.

Situated along State Route 96 and Salmon River Road, Somes Bar contains several Karuk Tribe facilities including the watershed and water quality offices and fire center. Additionally the Somes Bar Store, several campgrounds, and river based recreational facilities exist in the area.



Figure 6 - Somes Bar School Zone

State Route 96 and the other roads in the area are two lanes with intermittent paved or gravel shoulders ranging from 0-12 feet. Ishi-Pishi Road serves as an alternative access route between Somes Bar and Orleans.

The roadway shoulders function as jogging/walking paths for the middle school students. A school zone is well marked with signage as well as a 25 mph reduced speed zone when children are present.

2.4 Middle Klamath River Region

2.4.1 Highway and Roadway

The region is accessed mainly via State Route 96, from Interstate 5 (Yreka) to the west. Access to the Oregon border is achieved via Happy Camp's Indian Creek Road to the town of Cave Junction, along U.S.

Highway 199 in Oregon. In addition to these major highways, the roadway transportation system includes arterial streets, local paved access roads, unpaved rural roads, and public resource land roads.

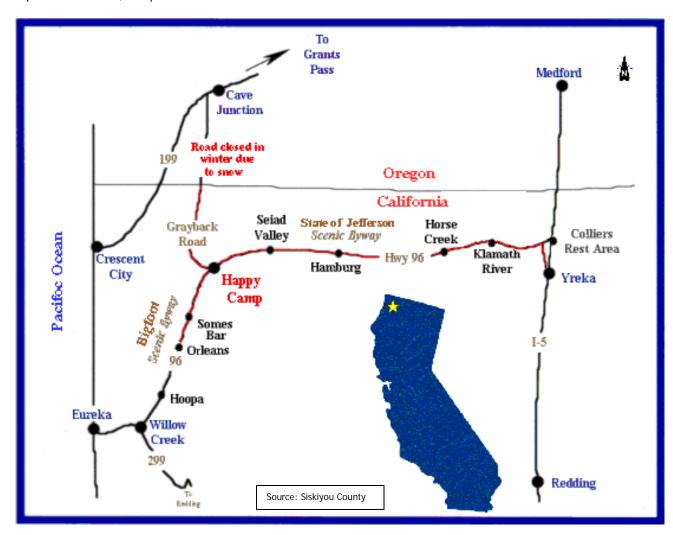


Figure 7 - Middle Klamath Region

The existing roadway transportation system accommodates motor vehicle traffic, goods movement, transit, and bicycle and pedestrian travel. Several roads provide the only vehicle and pedestrian access to residential areas from major town centers – Red Cap Road in Orleans would be one example of this type of road.

The winter climate can cause road closures due to mud and rock slides onto or beneath the roadway.

Development of alternative routes is not financially feasible due to the region's difficult and mountainous terrain. State Route 96, for example, experiences regular slides above the roadway south of the intersection at Ishi-Pishi Road. The only possible route for transportation through this area then becomes Ishi-Pishi Road.

Roadway maintenance is a multi-agency responsibility, including but not limited to the

following agencies: Karuk Tribe, California Department of Transportation (Caltrans), Humboldt County, Siskiyou County, The U.S. Forest Service, National Park Service, Bureau of Indian Affairs, cities, and private property owners.

2.4.2 Transit

The need for transit in regards to regional mobility is emphasized by a number of contributing factors. The rural character of the region, coupled with high percentages of low income and unemployed residents suggest a need for transit to access destinations outside of the area, as well as local public services. Additionally, the lack of transportation services within the area, combined with the vastly different mobility needs, requires unique programs, and solutions for the northern and southern parts of the area

Several publicly-funded transit operators currently serve the region, including:

- Siskiyou Transit and General Express (STAGE), operated by Siskiyou County, offering weekly fixed-route service on Monday and Friday along State Routey 96 from Happy Camp to Yreka.
- Redwood Transit System (RTS), operated by the Humboldt Transit Authority, connects the communities of Arcata and Willow Creek. Four westbound trips and three eastbound trips are provided daily.
- Klamath/Trinity Non-Emergency
 Transportation (K/T NET) provides fixedroute service between Orleans, Weitchpec,
 Hoopa, and Willow Creek. The service
 operates three to four times daily
 (dependent on demand) Monday through
 Friday, with connections timed to RTS
 service twice daily. A February 2010 Transit

Planning and Feasibility Report by Moore and Associates cites future K/T NET plans for expansion to Orleans and Somes Bar.

 The Karuk Tribal Health Program offers demand-response service to tribal members for transportation to its clinic in Happy Camp.

Existing programs address the issue of out of the area transportation, but (as in the case of STAGE) do so on a fixed schedule that may not meet the needs of riders.

Fixed route transit at the northern and southern extents of the region are not a feasible alternative for expansion due to an undesirable increase in travel times and costs associated with longer trips. The existing paratransit provided by K/T NET does not adequately meet regional transit needs due to its lack of consistent schedule.

Aside from the Karuk Department of Transportation provided shelter in front of the Karuk Headstart Administration office in Happy Camp there are no shelters exist at transit stops. There are no existing paved pullouts at transit stops. Instead, transit vehicles tend to pull onto an unpaved shoulder, or temporarily stop in the travel lane in order to pick up or drop off passengers.

No ridesharing facilities, including transit parking, exist in the area. Numerous pullouts do exist, but vehicle safety and proximity to transit stops are concerns that may prohibit their use for transit parking.

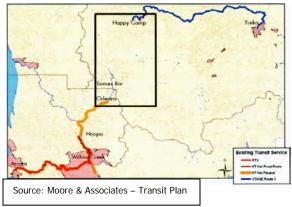


Figure 8 - Transit Service Gaps

2.4.3 **Bicycle and Pedestrian Facilities**

While there are some bicycle and pedestrian facilities throughout the region, there is a general lack of continuity and consistency throughout communities, and the area as a whole. Many intersections do not have any crosswalk signage, striping, or ADA compliant ramps. There are no designated bike lanes, multi-use paths, sidewalks, or bicycle parking facilities in the area. In addition, the lack of sidewalks and existing conditions of walkable areas create an unsafe pedestrian network that does not meet current ADA design recommendations. Given that many businesses and properties front major highways and arterial roadways, concerns for individuals making inter-community trips via nonmotorized transportation are escalated. This is especially important in Happy Camp, where residents are more likely to live within walking and biking distance to regular destinations. Popular destinations in each community include:

Happy Camp

- Post Office
- Store
- Tribal Clinic
- Tribal Headquarters
- Tribal Council Chambers
- Schools
- Various Restaurants and Shops along Hwy 96

Somes Bar

- Store
- Elementary School
- Tribal Work Center

Orleans

- Store
- Post Office
- Schools
- Tribal Clinic
- Tribal Offices

In many cases, roadways commonly used by pedestrians and cyclists have wide shoulders that allow for users to be off of the roadway. However, these shoulders are not paved and are not maintained. In some cases, the shoulder lies adjacent to a drainage ditch; a factor that must be considered when constructing new facilities.

Existing bridges do not currently have pedestrian or bicycle facilities that meet current design standards. In some cases, this causes pedestrians and cyclists to use the main roadway deck, presenting a major safety issue. Bridges that have existing facilities, such as the 2nd Avenue and Elk Creek Road bridges in Happy Camp do not meet current ADA design recommendations.

CHAPTER 3: PUBLIC OUTREACH

The planning team initiated and hosted a series of community meetings and administered questionnaire program to gain insight on the transportation needs of the residents in the middle Klamath region. The meetings River questionnaire were set up in a manner to elicit responses on the topics of mobility, accessibility, hazards, and economics. The following discussion reviews the techniques, methods of the outreach process, and summarizes the results to provide a foundation for the development of recommended projects in Chapter 4.

3.1 Community Meetings

Community meetings were held in Orleans, Happy Camp and Somes Bar on October 4th, 5th, and 6th respectively. The meetings were advertised through community flyers and advertisement in the Tribal Newsletter. The meetings provided attendees with an overview of the purpose of Community Based Transportation Plans and an opportunity to identify weaknesses, and discuss the strengths, opportunities, and challenges through a series of brainstorming and collaboration activities. One of the activities involved reviewing an aerial photo labeled with roadways and major destinations and marking or describing the locations where they know access issues, hazardous conditions, or opportunities exist. The results of this particular exercise where summarized on a map and list format with an "A" for access issues, "E" for economic issues and a "H" for hazardous issues. See Figure 9 - Access, Hazards, and Economic Opportunities Mapping for an example of the mapping exercise. This exercise in identifying locations and types of projects that are desired by the communities provided a visual representation of the locations in which specific projects could be developed to provide solutions to transportation issues.

The outreach process also included a questionnaire component where the project team and a local community member solicited responses from citizens at the Somes Bar Store, U.S. Post Office in Orleans and the community center in Happy Camp.



Figure 9 - Access, Hazards, and Economic Opportunities Mapping

The general purpose of the questionnaire was to obtain specific information about the communities travel patterns, modes of travel, demographic information as well as general concerns and needs assessment to augment the information obtained during the community meetings.

3.1.1 Public Outreach Results

Through the strengths, weaknesses, opportunities and challenges brainstorming session at the community meetings, trends and commonalities in the issues identified by citizens were made. Some of the trending issues identified included:

- The need for continuous pedestrian facilities,
- Location specific safety issues,

- The need for street lighting,
- The need for defined parking vs. travel lanes,
- Links to recreational facilities,
- Multi-modal links between residential areas and community centers,
- The need for more consistent snow removal in winter months, and
- The need for secondary access for when roadways are closed.

The entire list of issues identified during the meetings can be found in Appendix A:

The compiled results of the questionnaires also provide insight as to the demographics, travel patterns, preferences, and challenges to mobility in the middle Klamath River Region. Approximately 100 questionnaires were returned. Survey questions included the following items:

- Where do you live?
- What is your primary mode of transportation?
- How far do you commute to work or school?
- What is your age group?
- What are your top five regular travel destinations?
- How often do you leave the middle Klamath River area?
- Do you have a driver's license?
- Number of people in household?
- Do you have safety concerns with your community roadways?
- Other concerns? (specific categories offered)
- What would you like to see more of (specific categories offered)
- What areas (by mode) need more bicycle and pedestrian facilities?

 What areas (service, shelter, other) need better transit facilities?

Some of the more notable results of the questionnaire are as follows:

Primary Mode of Transportation?	Percentage
Personal Auto	67%
Walk	14%
Relative or Friend's Auto	10%
Bike	6%
Bus	3%
Other	1%

Table 1 - Survey Result: Primary mode of Transportation

Table 1 indicates a heavy reliance on the personal automobile for mobility and access to work, school, recreation, health, and other destinations. It also portrays a relatively high percentage of walking as a primary mode.

How far do you commute to work or school?	Percentage	
No commute	34%	
1-5 miles	24%	
5-30 miles	23%	
30-100 miles	16%	
100+	3%	

Table 2 - Survey Result: Distance Traveled to Destinations

Table 2 shows that approximately 58% travel less than 5 miles to work or school (with the understanding that many do not travel to work or school). The respondents in this "short distance" category represent a population that would benefit from pedestrian, bicycle, and localized transit options.

The population that represents the 5-100 mile commuters have a potential to benefit from transit or ride share programs.

What would you like to see more of?	Percentage
Transit Service	24%
Bike Lanes	17%
Pedestrian Paths	17%
Bike Paths	13%
Transit Stops	13%
Sidewalks	8%
Bike Racks	5%
Bike/Ped Connections	4%
Other	0%

Table 3 - Survey Result: New Preferred Multimodal Facilities

The results shown in Table 3 identify a preference for new bicycle and pedestrian facilities and a strong desire for additional transit service.

Other Concerns	Percentage	
Potholes/road condition	28%	
Reckless/inattentive driving	20%	
Lack of bicycle and ped facilities	19%	
Speeding	17%	
Warning signs, guard rails, markings, etc.	15%	
Other	2%	

Table 4 - Survey Result: Other Transportation
Concerns

Table 4 identifies other concerns that questionnaire respondents had with the transportation system. While roadway conditions were identified as the primary concern, it should be noted that reckless/inattentive driving and speeding are similar issues and garnered a combined 37% of the responses.

3.1.2 Conclusion

Reviewing the information obtained during the community meetings and the results of the questionnaire show a trend in the desire for safe roadways with transit and bicycle and pedestrian

facilities that link residential areas to community centers, recreation, and other common destinations.

CHAPTER 4:

PROJECT IDENTIFICATION

Site visits by the consultant team were conducted to observe specific issues identified during the public outreach process, identify any additional design and facility shortcomings and conceptualize solutions in the form of proposed projects. The combined information from public outreach and site investigations assisted in the development of recommended projects, conceptual designs, and mapping products.

The recommended projects are described by facility type and location on the project table (Appendix C), in the project sheets (Appendix D), and the project maps (Appendix E).

The following information in Chapter 4 is intended to show the progression from project need to project identification by location and type of recommended project.

4.1 Orleans

4.1.1 Roadway

- State Route 96 in front of the Orleans Post office has a vertical sight distance issue due to an at grade swale to accommodate the water from Wilder Gulch.
- Red Cap Road has horizontal curve alignment issues and a Preliminary Study Report (PSR) and design have been completed.

4.1.2 Intersections

 State Route 96 at the Orleans Elementary School would benefit from pedestrian facilities and cross walk enhancements. State Route 96 at Red Cap Road would benefit from pedestrian facilities and cross walk enhancements.

4.1.3 Complete Streets

• There is a general lack of defined pedestrian and bicycle facilities in the town. The core area of Orleans along State Route 96 could benefit from the development of a 'Complete Streets' project that includes consistent and functional design for the roadway and includes facilities for trucks, automobiles, pedestrians, bicyclists, and public transportation, including enhanced school zone safety devices.

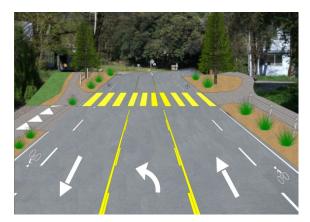


Figure 10 - Orleans Complete Streets Concept

4.1.4 Bridges

 Red Cap Road at Rough & Ready Creek is slated for a Highway Bridge Program replacement project.

4.1.5 **Pedestrian and Bicycle**

 There is a user defined pathway on the north side of State Route 96 that may be a good candidate for a multiuse path between the Elementary School/Karuk Tribe Housing Authority west to Eyeese Road.

- Access and safety could be enhanced for the residents along Red Cap Road through the establishment of a pedestrian/bikeway between State Route 96 and Shivshaneen Road. A Class II style facility is recommended.
- People traveling to and from the Headstart
 Program building on the east side of the Klamath
 Bridge over State Route 96 would benefit from
 the establishment of a bicycle and pedestrian
 route along State Route 96 to provide better
 access and safety when traveling to the Orleans
 town center.
- People traveling west of the Orleans town center would experience safety and access benefits through the establishment of bicycle and pedestrian facilities on State Route 96 between Asip Road and Camp Creek Road.

4.2 Happy Camp

4.2.1 Intersections

- State Route 96 at the intersection of Park Way would benefit from pedestrian facilities and cross walk enhancements.
- State Route 96 at the intersection of Davis Road would benefit from pedestrian facilities and cross walk enhancements.
- State Route 96 at the intersection of 2nd Avenue would benefit from pedestrian facilities and cross walk enhancements.
- State Route 96 at the intersection of 1st Avenue would benefit from pedestrian facilities and cross walk enhancements.
- Indian Creek Road at the intersection with Davis Road would benefit from pedestrian facilities and cross walk enhancements.
- State Route 96 at the intersection of Doolittle Road would benefit from pedestrian facilities and cross walk enhancements.

 Indian Creek Road at the intersection with Jacobs Way would benefit from pedestrian facilities and cross walk enhancements.

4.2.2 Complete Streets

 There is a general lack of defined pedestrian and bicycle facilities in the town. The core area of Happy Camp along State Route 96 could benefit from the development of a 'Complete Streets' project that includes consistent and functional design for the roadway and includes facilities for trucks, automobiles, pedestrians, bicyclists, and public transportation, including enhanced school zone safety devices.



Figure 11 - Happy Camp Complete Streets Concept

What are "Complete Streets"

"They are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work...... By planning, designing, and constructing Complete Streets, communities of all sizes - whether rural hamlets, small towns, or booming metropolises - are able to provide the quality access to jobs, health care, shops, and schools their residents deserve, while also achieving greater economic, environmental, and public health benefits

- National Complete Streets Coalition

4.2.3 Bridges

 The bridge on 2nd Street over Indian Creek could be improved with pedestrian facilities to foster access on the south side of the bridge.

4.2.4 Pedestrian and Bicycle

- There is a user defined path between Park Way and Elk Creek Road that could be improved and defined to provide recreational access and scenic viewing along the Klamath River.
- There are two user defined paths; 1) between Parry's Market and Jacobs Way, and; 2) between Indian Creek Road and Head Street, that could be formalized with stairs and connected to the adjacent surface streets to create a pathway that extends from Jacobs Way to Happy Camp High School.



Figure 12 - Happy Camp Pathways

- There is an existing user defined path on Indian Creek Road from Indian Meadows Road south along the edge of the trailer park that is used by a wide variety of modes that could benefit from the establishment of a formalized multi-use path.
- Indian Creek Road could be redesigned to include Class II style facilities between Davis Road to Indian Meadows Road.

- State Route 96 between 1st Avenue and Druey Road would benefit from Class II style facilities.
- Curly Jack Road and Elk Creek Road would benefit from Class II style facilities between the campground and the bridge over the Klamath River.

4.3 Somes Bar

4.3.1 Intersections

 State Route 96 at the Ishi-Pishi Road would benefit from pedestrian facilities and cross walk enhancements.

4.3.2 Pedestrian and Bicycle

 Students at the Somes Bar School and the community in general would benefit from the establishment of a widened shoulder that could be used for physical education or traveling to and from school.



Figure 13 - Somes Bar School Zone

4.3.3 Transit

 An area north of the intersection of State Route 96 and Ishi-Pishi Road functions as a school bus stop and an informal park & ride facility.
 Providing improvements such as signage, striping, and improving the turnout could provide opportunities for improved transit operations, safety, and ride sharing.

4.4 Middle Klamath River Region

4.4.1 Transit

 Providing options and improving transit service throughout the middle Klamath River region could improve accessibility, mobility, and economic opportunities for the citizens of the area.

CHAPTER 5:

PROJECT IMPLEMENTATION

Implementing the projects identified in this report will entail three efforts. 1) Project prioritization, 2) continuously coordinate with regional partners to foster projects through planning stages, and 3) pursue all potential funding opportunities.

It should be noted that the prioritization, funding, and implementation of individual projects listed in this document or other transportation plans should not occur in a vacuum. When the opportunity presents itself, the projects can, and should be, combined or conversely phased so that the highest value projects can move forward.

5.1 Project Prioritization

Projects identified in Chapter 4 were evaluated in terms of the goals of the grant, the principles of environmental justice and feasibility in order to establish a prioritization ranking. Categories and ranking attributes are as follows:

Safety – The ability or likelihood that implementation of the project will improve safety conditions for the community over current conditions.

Mobility/Access – The ability or likelihood that implementation of the project will create a beneficial environment to mobility and access for the community over current conditions.

Economic –The ability or likelihood that the project would create improved commercial, industrial, or retail economic conditions over current conditions. This category has a close relationship to improving access in proximity to existing businesses or commercial areas.

Environmental Justice – The ability of the project to minimize negative impacts caused by existing transportation facilities and fairly distribute the benefits of transportation projects to historically underserved populations.

Feasibility – A preliminary assessment of challenges and opportunities in the development, design, construction and cost associated with the proposed project.

Each project was evaluated per the aforementioned categories and assigned a quantitative based value ranging from 1 through 4, with 4 being the most favorable and 1 maintain the status quo. Projects proposed on the project list received priority values ranging from 8 through 17 out of a possible 20.

Notable projects that scored high in the evaluation are the complete streets projects in Orleans and Happy Camp (CS1 and CS2), the pedestrian pathway between Indian Creek Road and Jacobs Way (BP2), and the Red Cap Road bike and pedestrian enhancements in Orleans (BP6).

5.2 Regional Coordination

Most of the projects identified and defined in Chapter 4 will require multiple funding resources and interjurisdictional coordination to move forward. The partners that will likely be involved include:

- Caltrans
- Karuk Tribe
- Siskiyou County
- Humboldt County
- Schools
- Transit Providers

5.3 Financing Opportunities

The state and national financial crisis is limiting traditional funding sources for capital programs such as the State Transportation Improvement Program (STIP). Funding for projects that lead to a reduction in greenhouse gas emissions is proving to be more secure. Federal resources for capital projects as identified in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) such as the Transportation Enhancement (TE) program and Safe Routes to Schools (SR2S/SRTS) are maintaining stability. In California, groundbreaking legislation passed that supports greenhouse gas reduction in the Global Warming Solutions Act of 2006 (AB 32) and subsequent legislation (SB 375). Additionally, the State's initiative adopting Complete Streets and the Smart Mobility Framework are indications that multimodal transportation projects will be financially supported at the state and federal levels.

Most of the projects identified in the MKRCTP involve bicycle and pedestrian improvements. The federal and state government funding programs support projects that encourage transportation alternatives to the automobile for environmental and health reasons.

5.3.1 Federal Sources for Roadways and Bridges

The following federal revenue programs and sources are assumed to be available for purposes of this transportation plan:

Roads, Bridges and Non-motorized use Facilities

 Federal local assistance programs under SAFETEA-LU administered by Caltrans,

- Federally-funded projects under the State
 Transportation Improvement Program
 (STIP), and
- Federal Transportation Enhancement activities (TE) program under the STIP.

SAFETEA-LU

The SAFETEA-LU was signed into law on August 10, 2005. The bill authorized \$286.5 billion in spending in Federal Fiscal Years (FFY) 2004-2009. Funding for the bill has been extended several times since 2009 and as of September 2011, the bill will continue to fund surface transportation programs through March 31, 2012. The total national funding in SAFETEA-LU provides an inflation adjusted increase approximately five percent for highways for most of the programs in SAFETEA-LU. The Highway Trust Fund is composed of the Highway Account, which funds highway and intermodal programs and the Mass Transit Account, federal motor fuel taxes are the major source of income into the Highway Trust Fund.

In California, federal motor fuel tax money is used primarily for state highway projects and interstate projects. The state administers federally funded Local Assistance Programs that allow counties and cities to surface apply for grants for transportation improvements. The programs are extremely competitive due to the lack of adequate state funding for transportation in California and has caused a backlog of deferred projects statewide.

Highway Bridge Program (HBP)

This local assistance program provides funding for the design and construction, reconstruction and rehabilitation of existing bridges that are on the local road systems. Currently, the HBP has 100% project financing capability due to the "toll credit" program.

Transportation Enhancement

Transportation Enhancement (TE) funds can be used for transportation-related capital improvement projects that enhance quality-of-life, in or around transportation facilities. Projects must be over and above required mitigation of normal transportation projects, and the project must be directly related to the transportation system. Humboldt County currently has approximately \$1.9 million in TE funding programmed in the STIP through Fiscal Year (FY) 12/13. Siskiyou County currently has approximately \$264,000 programmed in the STIP through (FY) 11/12. It is expected that the 2012 STIP will have some new TE programming capacity.

Highway Safety Improvement Program

This program replaces the previous Hazard Elimination Safety program (HES). This new program allows states to target funds to their most critical safety needs. A total of \$5.1 billion was provided nationally for FFY 2006 – 2009.

Forest Highway Program

The Forest Highways Program provides funding to resurface, restore, rehabilitate, or reconstruct designated public roads that provide access to or are within a national forest or grassland. The program is administered by the Federal Highway Administration's (FHWA) Federals Lands Highway Office, in partnership with the USDA Forest Service (FS) and 41 State Departments of Transportation, in accordance with tri-agency agreements in each state.

Funding is provided for the planning, design, construction, reconstruction, or improvement of designated Forest Highways, including bridges that provide access to or are within a unit of the national forest system. Funds can also be used to purchase

transit vehicles and design, operate, and maintain public transit facilities on public lands. Additionally, funds can be used to pay for any transportation project authorized in Title 23. SAFETEA-LU added three new eligible activities for forest highway funds: maintenance, hunting and fishing access signs, and aquatic organism passage projects. Funding amounts to approximately \$160 million annually depending on eligibility and matching fund capacity.

5.3.2 Federal Sources for Transit

Federal Transit Administration Section 5311

Under this section, funds are provided to non-urbanized transit systems on a formula basis for capital and operating expenses. FTA 5311 funding for Siskiyou and Humboldt counties is expected to remain stable.

Other Potential Funding Sources Federal Transit Administration (FTA) Funding Programs under SAFETEA-LU

The following FTA funding programs may provide an additional source of funding for transportation improvements in the middle Klamath River region:

- Formula Program for Elderly and Persons with Disabilities (FTA Section 5310)
- Rural Formulas Grants (FTA Section 5311 and 5340)
- Public Transportation on Indian Reservations (FTA Sections 5311(c))
- Job Access and Reverse Commute (FTA Section 5316)
- New Freedom Program (FTA Section 5317)

5.3.3 State Sources for Roadways and Bridges

The following state revenue programs and sources are assumed to be available and projected for purposes of the Middle Klamath River Community Transportation Plan. These resources require cooperative efforts between county governments, the Karuk Tribe, Caltrans and others. The programs include:

- State Transportation Improvement Program (STIP) which is divided into two fund sources:
- Regional Improvement Program (RIP)
- Interregional Improvement Program (IIP)
- Highway Users Tax Account (HUTA)
- State Highway Operation and Protection Program (SHOPP)
- Transportation Development Act (TDA) Local Transportation Fund (LTF)
- Bicycle Transportation Account (BTA)

State Transportation Improvement Program (STIP)

The STIP identifies all major capital transportation improvements for state highways, local agencies, and regional agencies. Seventy-five percent of STIP funding goes to the Regional Improvement Program (RIP) and twenty-five percent goes to the state discretionary account (Interregional Improvement Program (IIP).

Under the RIP, the Siskiyou and Humboldt counties (represented by the Siskiyou County Transportation Commission and the Humboldt County Association of Governments) has the discretion to select and program transportation improvement projects on state highways, local roads, and transit and bike facilities. Projects for RIP funding are identified in the Regional Transportation Improvement Program (RTIP). The RTIP is then adopted into the STIP.

Humboldt County currently has approximately \$20 million programmed in the 2010 STIP for highway projects through 2015. Siskiyou County has approximately \$13 million programmed in the 2010 STIP for highway projects through 2015. The 2012 fund estimate identifies approximately \$13 million

and \$7 million respectively available for projects through 2017.

State Highway Operations and Protection Program (SHOPP)

Biennially, Caltrans is required to prepare a SHOPP for expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the State highway system. Projects included in the SHOPP are limited to capital improvements relative to maintenance, safety, and bridges that do not increase capacity. Projects can also include bridge replacement and seismic retrofitting. RTPAs are encouraged to coordinate with Caltrans on the SHOPP prior to its submission to the CTC.

Highway Users Tax Account (HUTA-State Gas Tax)

State fuel tax funds are used primarily for the maintenance of county roads. The level of maintenance is determined by the amount of discretionary funding available to the county road department. Available funding determines the size of the maintenance work force, the purchase and upkeep of equipment, and the amount and types of materials purchased for road repair. The 2010 STIP fund estimate identified a 1% reduction in the HUTA revenue from 2009 to 2010, but it builds back up to \$1.9 billion statewide by 2015.

Bicycle Transportation ACT (BTA)

The BTA provides funding for projects that serve and encourage bicycle commuting. The account is supported by a portion of the state gasoline tax. Statewide, approximately 5-7 million is made available each year for bicycle projects throughout the state. Because these funds are very limited,

comparatively less-costly projects, such as bike parking facilities, are more likely to receive funding than high-cost projects. Public agencies that have an approved bicycle transportation plan in place are eligible to apply for funding. Local agencies must fund at least 10% of the cost of BTA projects. Projects are measured in terms of how many commuters could be induced to use the bicycle versus automotive mode and how many vehicles might be removed from congested roadways. Consequently, the county has very little opportunity to access BTA funding.

5.3.4 State Sources for Transit

Transportation Development Act (TDA)

The TDA provides two funding programs - Local Transportation Fund (LTF) and State Transit Assistance (STA). TDA funds may be used for street and road projects only after the region has confirmed on behalf of Caltrans, using the "unmet transit needs" public hearing process, that local needs warrant use of the funds.

The LTF uses 1/4 percent of statewide sales tax money for transit projects and programs. The LTF also provides limited funds for the construction and maintenance of pedestrian or bicycle facilities. The CTC must designate 2% of the regional fund total to any eligible entity for such purposes. Each local claimant may use any portion of its respective apportionment for non-motorized facilities. The TDA also allows local agencies to use LTF funds on local streets and roads, provided that all unmet transit needs that are found "reasonable to meet" are funded.

State Transit Assistance (STA)

State Transit Assistance funds are derived from the Public Transportation Account (PTA). Half of the funds (50%) are allocated to Caltrans, and the other half (50%) to RTPAs. Of the RTPA allocation, half is allocated to mass-transit projects for such needs as vehicles, equipment, and facilities, and the remaining half is allocated to transit operators, based on fare revenues and allocations from the previous year.



		Totals	%
Where do you live?			
	Happy Camp	38	38%
	Orleans	43	43%
	Somes Bar	14	14%
	Other	6	6%
What is your primary mode of transportation?			
, , , , , , , , , , , , , , , , , , , ,	Personal Auto	78	67%
Relative	or Friend Auto	12	10%
	Bike	7	6%
	Bus	3	3%
	Walk	16	14%
	Other	1	1%
How far do you commute to work or school?			
Tiow fail do you commute to work or sensor:	No commute	33	34%
	1-5 miles	23	24%
	5-30 miles	22	23%
	30-100 miles	15	16%
	100+	3	3%
What is your age group?			
what is your age group:	Under 20	3	
	20-60	71	
	60+	23	
N/hot are a star Constant land and a star 2			
What are your top five regular travel destinations?	Hanny Camp	4 E	120/
	Happy Camp Orleans	45 46	13% 13%
	Somes Bar	40	12%
	Yreka	46	13%
Weitchpec/Happy Cam		47	14%
	ata/Eureka Area	63	18%
Aice	Oregon	46	13%
	Other	11	3%
How often do you leave the Middle Klamath area?	D - 11	6	60/
	Daily	6	6%
-	Once a week	26	27%
EV	very Two Weeks	44 19	46% 10%
	Once a month	18	19%
	Other	2	2%

	Totals	%
Do you have a drivers license?		
Yes	81	
No	15	
Number of poorlo in household?	260	
Number of people in household? (Sum of all household members indicated by respondents)	200	
(Sain of all Household Members maleated by respondents)		
Do you have safety concerns with your community roadways?		
Yes	68	69%
No	21	21%
Other Concerns?		
potholes/road condition	52	28%
reckless/inattentive driving	38	20%
speeding	33	17%
warning signs, guard rails, markings, etc	28	15%
lack of bicycle and ped facilities	35	19%
other	3	2%
What is the Blatana in 19		
What would you like to see more of? bike lanes	27	17%
	37 20	
bike paths bike racks	28 12	13% 5%
pedestrian paths	37	5% 17%
bike/ped connections	10	17% 4%
sidewalks	18	8%
transit stops	28	13%
transit service	54	24%
other	0	2470
What areas need more bicycle and pedestrian facilities?		
(Areas indicated for each mode type)		
bicycle	43	
ped	22	
What areas need better transit service facilities?		
(Facilities indicated as less than satisfactory by respondents)	4.5	
service	45	
shelters	10	
other		

Additional Comments

9



COMMUNITY MEETING SUMMARY

Summary of comments from community outreach meetings in Orleans, Happy Camp, and Somes Bar, which occurred on October 4, 5, and 6 respectively.

Orleans

- Pedestrian facilities needed from Lower Camp Creek all the way through town to the Health Center.
- Swale in roadway right in town creates a dangerous dip.
- Safety issues entering Orleans from the west:
- Too many signs are a distraction.
- Crosswalk is faded and cannot be seen, vegetation overgrown on side of roadway near crosswalk.
- No street lighting in town. Feels dangerous to residents.
- Red Cap Road has realignment project in development stage, with PSR complete.
- Need a crosswalk near Forest Service at Ishi Pishi Rd.

Happy Camp

- Indian Creek Rd. is a dangerous (and popular) place to walk.
- Many high school students who live in the Meadows walk to and/or from school. There
 is no easy way to get in and out of the subdivision while walking without taking the
 roadway which is a long walk. Many cut through Shannon's trailer park and the
 Meadows resident's yards.
- The river trail down by the park connects to the bridge by Indian Creek and could be improved to provide an access and recreation trail.
- Curly Jack Road, needs pedestrian facilities to houses and campground.
- Elk Creek could use pedestrian facilities to residential area.
- Crosswalks and sidewalks in downtown. Define parking vs travel lanes.
- Transit driver would like consistent communication tools when in remote areas.
- Airport Road is really narrow and dangerous.
- Emergency access routes were discussed. Various escape routes through the mountains should be recognized and identified. Possibly publically advertised in case of emergency.
- Snow plowing does not occur early enough for kids to get to school.
- Snow plowing does not occur at night for emergency services.
- Senior residents in the communities need an option for doing errands.
- Not enough crosswalks in Happy Camp on 96.

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Somes Bar

- Lots of cyclists on 96 doing organized rides at certain times of year. Experienced cyclists
 can deal with riding on the roadway and not sure if anything can be implemented to
 improve the safety/experience.
- Ishi Pishi Road is used as a bypass during emergencies that shut down the main highway. Last year this happened. Ishi Pish could use some improvements (narrow in places).

Other comments received from personal meetings on October 5, 2010, or not associated with a specific community.

- There is a turn east of the Halverson Bridge that is off camber and has a swale in it that throws vehicles toward a cliff without a guardrail.
- Generally, the dividing line for outside trips is that Orleans and Somes Bar residents go
 to the coast for larger area services, and Happy Camp, Saied Valley residents go to
 Yreka, Medford, and Grants Pass.
- Grayback Road is heavily used to access services in Oregon (Grants Pass). It is closed in
 the winter and plowed by the Tribe in spring. Forest Service and Tribe along with other
 interests will be meeting in October to discuss options for continued plowing and
 possibly year round plowing.
- USFS has road surveys completed recently and they are organized by watershed.
- 1200 miles of roadway in the Orleans served district.
 - o 60% of road maintenance is level 5 on FS scale system, Jeep clearance with some maintenance and surfacing needed.

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^{*} Maps with comments were developed at the community meetings and will be available at the Karuk Department of Transportation.



Middle Klamath River Community Transportation Plan - Recommended Project Table

		Title	Description	Community	Location		
Roadway Projects	R1	Red Cap Road Realignment *	PSR and Design complete	Orleans	Red Cap Road		
	R2	SR 96 Orleans Dip Improvements	Vertical sight distance in Orleans dip	Orleans	SR 96		
Intersesctions	INTR1	SR 96 @ Orleans Elementary School	Pedestrian facilities xwalk enhancements	Orleans	SR 96 in Orleans		
	INTR2	SR 96 @ Red Cap Rd	Pedestrian facilities xwalk enhancements	Orleans	SR 96 in Orleans		
	INTR3	SR 96 @ Park Way Happy Camp	Pedestrian facilities xwalk enhancements	Happy Camp	SR 96 in Happy Camp		
	INTR4	SR 96 @ Davis Rd Happy Camp	Pedestrian facilities xwalk enhancements	Happy Camp	SR 96 in Happy Camp		
	INTR5	SR 96 @ 2nd Ave Happy Camp	Pedestrian facilities xwalk enhancements	Happy Camp	SR 96 in Happy Camp		
	INTR6	SR 96 @ 1st Ave Happy Camp	Pedestrian facilities xwalk enhancements	Happy Camp	SR 96 in Happy Camp		
	INTR7	Indian Creek Road @ Davis Road	Safety, Bike/Ped Facilities	Happy Camp	Indian Creek Road near store		
	INTR8	SR 96 @ Somes Bar Store	Ingress/Egress changes	Somes Bar	SR 96 in Somes Bar		
	INTR9	SR 96 @ Dolittle Rd	Pedestrian facilities xwalk enhancements	Happy Camp	SR 96 in Happy Camp		
	INTR10	Jacobs Way Crosswalk	Pedestrian facilities xwalk enhancements	Happy Camp	Jacobs Way East of School		
omplete Street	CS1	SR 96 Orleans Streetscape Project	Complete Streets concept	Orleans	Downtown Orleans		
rojects	CS2	SR 96 Happy Camp Streetscape Project	Complete Streets concept	Happy Camp	SR 96 Davis Rd to 1st Ave		
Bridge Projects	B1	Red Cap Road Rough n Ready Creek *	Bridge Replacement HBP	Orleans	Red Cap Road beginning		
	B2	2nd St. Bridge Pedestrian Improvements	Improve pedestrian access on South side of bridge	Happy Camp	Indian Creek @ 2nd to Buckhorn @ 2nd		
ike/Ped Projects	BP1	Riverfront Multi-use Path	Class I multi use	Нарру Сатр	From community park to Curly Jack Bridge		
	BP2	High School to Jacobs Way Ped. Corridor	Two pedestrian paths with stairs, surface street treatment and seperated path	Happy Camp	From high school to Jacobs Way (ped paths)		
	BP3	Indian Creek Meadows Off-Road Path	Ped facilities/OHV use path with access to Indian Meadows Neighborhood	Happy Camp	From Indian Meadows Rd. south to trailer park		
	BP4	SR 96 Multiuse path	Possible Class I multi use	Orleans	From elementary school west to Eyeese Road		
	BP5	Indian Creek / Jacobs Way **	Pedestrian Path with Stairs	Happy Camp	From Parry's Market to Jacobs Rd		
	BP6	Red Cap Road Bike/Ped Enhancements	Class II bikeway along Red Cap Road	Orleans	Red Cap Road to Shivshaneen		
	BP7	Indian Creek Road Bike/Ped Enhancements	Class II	Happy Camp	Indian Creek Road		
	BP8	SR 96 Head Start to Klamath Bridge	Class I	Orleans	SR 96 East side of Klamath Bridge		
	BP9	SR 96 Orleans Asip to Camp Creek	Class I	Orleans	SR 96 west of Orleans		
	BP10	SR 96 1st Ave to Druey Rd	Class II	Happy Camp	SR 96 in Happy Camp		
	BP11	SR 96 Somes Bar	Class III	Somes Bar	North of school		
	BP12	Curly Jack Road Bike/Ped Enhancements	Class II	Happy Camp	From Curly Jack Bridge to campground		
ransit projects	T1	Park and Ride / Rideshare Somes Bar	Turnout revamp to support park & ride transit or ridesharing	Somes Bar	500' N of Somes Bar Store		
	T2	SR 96 Corridor Transit	Transit improvements throughout the Middle Klamath region	Region	Region		



Description and Existing Conditions

Red Cap road is south of State Route 96, southeast of Orleans. Humboldt County project plans dated July 24, 2010 detail roadway realignment between mile post .9 and 1.2 of Red Cap Road to improve sight distance and provide margin for accident avoidance while ensuring pedestrian and bicycle safety.

Solution

Straighten road alignment and widen shoulders as detailed in Humboldt County project plans (Humboldt contract number 321606).

This project is also suggested as a second phase in Red Cap Road construction, following Rough and Ready Creek bridge replacement, and preceding Red Cap Road pedestrian and bicycle enhancements.

Work Effort Impact Rating: 1 (Intensive)

Associated Projects

• Rough and Ready Creek Bridge – Bridge replacement under highway bridge program.



Figure 1 – Red Cap Road curvature, looking toward SR 96

Red Cap Road Pedestrian and Bicycle Enhancements – Class II bikeway along Red Cap Road

Goals Achieved

 Improved safety for users of all modes of transportation. Improved bicycle and pedestrian safety across bridge.



Figure 2 - Red Cap Road curvature, looking away from SR 96



Figure 3 - Red Cap Road curvature, looking away from SR 96

State Route 96 Orleans Dip Improvement

Orleans - Roadway Project

Orleans R2

Description and Existing Conditions

A vertical sight distance issue is created by an approximately 30 foot long by 11 foot high "dip" in the roadway at the west end of downtown Orleans. This creates a safety issue for any pedestrian or bicycle activity on the low side of the dip, as vertical sight distance is severely diminished at distances greater than 20 feet.

Solution

Option A: This is the recommended option, which includes full streetscape improvements, including class I bicycle facilities, allowing for pedestrian and bicycle traffic to be off the roadway. This option may include removal of the current roadway to allow for reconstruction of the grade.

Option B: This option would include a class II bikeway through downtown, with signage to indicate dip and warning signs for speed reduction.

Work Effort Impact Rating: 1 (Intensive) or 2 (Moderate), depending on option.

Associated Projects

- State Route 96 at Orleans Elementary School Crosswalk enhancements at intersection.
- State Route 96 Roadway Improvements Streetscape project along SR 96 through Orleans.

Goals Achieved

Improved safety for all transportation modes on SR 96 in Orleans.





Figure 2 – Roadway dip, approaching from west

State Route 96 at Orleans Elementary School

Orleans – Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

Orleans elementary school lies adjacent to State Route 96 in Orleans. A crosswalk in fair to poor condition exists for pedestrians who are crossing the highway. Current pavement conditions reduce driver visibility of the crosswalk, thus posing a safety risk to pedestrians.

Additionally, the crosswalk does not meet current design standards.

Solution

Restripe crosswalk to meet current standards, and ensure that existing signage meets current standards.

Construct sidewalk and/or pathway adjacent to crosswalk to ensure pedestrian safety. This aspect of intersection improvement is achieved via full streetscape improvement as part of the "State Route 96 Multiuse Path" and "Orleans Streetscape" projects.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

- State Route 96 Multiuse Path Bicycle and Pedestrian
- Orleans Streetscape Complete streets concept.

Figure 1 - Pathway on west side of SR96 looking south.

Responsible Agencies

- Humboldt County
- CalTrans

- Improved safety for pedestrians in Orleans.
- With construction of sidewalk, improved mobility of residents via non-motorized modes.



Figure 2 - Crosswalk visibility from east



Figure 3 - Crosswalk visibility from west

State Route 96 at Red Cap Road

Orleans – Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

Red Cap Road is an arterial roadway connecting SR 96 and the community of Orleans with residential homes and Tribal housing. The intersection of SR 96 and the eastern terminus of Red Cap Road does not meet current pedestrian and bicycle standards.

Solution

Redesign of intersection striping to include crosswalks, in a way that will allow for safe crossing from suggested pedestrian facilities to be constructed (via separate projects) on Red Cap Rd. and SR 96.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

- Red Cap Road Bicycle and Pedestrian Enhancements Class II Bikeway along Red Cap Road.
- State Route 96 Head Start to Klamath Bridge Bicycle and Pedestrian pathway east of bridge.

- Improved pedestrian and bicycle access for residents of Orleans.
- Improved roadway safety for pedestrians.



Figure 1 - Intersection westbound



Figure 2 - Intersection northbound

State Route 96 at Park Way

Happy Camp - Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

Park way is the furthest south cross street in the main business or downtown area of Happy Camp – along Highway 96. There are currently crosswalks in place on the south and east legs of the intersection. However, the current striping is in "fair" condition. While there is ample space – as large as 20 feet in some spots – along the shoulder of both highway 96 and Park Way, no specific pedestrian or bicycle facilities exist – with the exception of a four foot wide sidewalk on the south side of the east leg.

Solution

Redesign of the intersection to include curb, sidewalk, and gutter at corners, as well as striping for crosswalks, in a way that will allow for safe crossing from pedestrian facilities, which are to be constructed (via separate projects) on SR 96.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

Happy Camp Streetscape Project – Complete streets concept with pedestrian and bicycle improvements.

Responsible Agencies

- CalTrans
- Siskiyou County

- Improved pedestrian and bicycle access for residents of Happy Camp.
- Improved roadway safety for pedestrians and bicyclists.





Figure 1 – Intersection looking north

Figure 2 – Intersection looking southwest

State Route 96 at Davis Road

Happy Camp – Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

Davis Road is the furthest north cross street in the main business or downtown area of Happy Camp – along Highway 96. There are currently no crosswalks, sidewalks, or curbing at the intersection, presenting a safety risk to pedestrians and cyclists. While there is ample space – as much as 20 feet in some spots – along the shoulder of both Highway 96 and Davis Road, no specific pedestrian or bicycle facilities exist.

Solution

Redesign of intersection to include curb, sidewalk, and gutter at corners, as well as striping for crosswalks, in a way that will allow for safe crossing from suggested pedestrian facilities to be constructed (via separate projects) on SR 96.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

Happy Camp Streetscape Project – Complete streets concept with pedestrian and bicycle improvements.

- Improved pedestrian and bicycle access for residents of Happy Camp.
- Improved roadway safety for pedestrians and bicyclists.





Figure 1 - Intersection looking south

Figure 2 - Intersection looking east

State Route 96 at 2nd Avenue

Happy Camp – Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

2nd Avenue in Happy Camp is the main access road for the Council Chambers. There are currently no crosswalks, sidewalk, or curbing at the intersection, presenting a safety risk to pedestrians and cyclists. Sight distance for southbound drivers is slightly impaired, making turns onto 2nd Avenue a danger to pedestrians. While there is ample space – as much as 20 feet in some spots – along the shoulder of both Highway 96 and 2nd Avenue, no specific pedestrian or bicycle facilities exist.

Solution

Redesign of intersection to include curb, sidewalk, and gutter at corners, as well as striping for crosswalks, in a way that will allow for safe crossing from suggested pedestrian facilities to be constructed (via separate projects) on SR 96.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

• Happy Camp Streetscape Project – Complete streets concept with pedestrian and bicycle improvements.

- Improved pedestrian and bicycle access for residents of Happy Camp.
- Improved roadway safety for pedestrians and bicyclists.
- Improved access to tribal services and public programs.





Figure 1 - Intersection looking east

Figure 2 - Intersection looking south

State Route 96 at 1st Avenue

Happy Camp - Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

1st Avenue in Happy Camp is the main access road for the Tribal Headquarters. Adjacent to this intersection is the SR 96 at Elk Creek Road intersection. There are currently no crosswalks, sidewalk, or curbing at any part of the intersection, presenting a safety risk to pedestrians and cyclists. Current striping may be confusing to pedestrians and cyclists northbound of SR 96, or drivers entering from Elk Creek Road. While there is ample space – as much as 20 feet in some spots – along the shoulder of all legs of the intersection, no specific pedestrian or bicycle facilities exist.

Solution

Redesign of intersection to include curb, sidewalk, and gutter at corners, as well as striping for crosswalks, in a way that will allow for safe crossing from suggested pedestrian facilities to be constructed (via separate projects) on SR

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

Happy Camp Streetscape Project – Complete streets concept with pedestrian and bicycle improvements.

- Improved pedestrian and bicycle access for residents of Happy Camp.
- Improved roadway safety for motorists, pedestrians, and bicyclists.



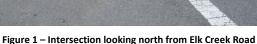




Figure 2 - Intersection looking south

Indian Creek Road at Davis Road

Happy Camp - Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

Indian Creek Road at Davis Road is an intersection between two heavily used collector streets. Additionally, the presence of Happy Camp's main store makes this intersection popular for vehicular and pedestrian traffic alike. A sight distance to the intersection of only 300 feet for southbound traffic presents another problem for pedestrians accessing the intersection from the south leg.

Solution

Redesign of intersection to include curb, sidewalk, and gutter at corners, as well as striping for crosswalks, in a way that will allow for safe crossing from suggested pedestrian facilities to be constructed (via separate projects) on Indian Creek Road. Safety measures (signage, flashing beacons, etc.) should also be implemented to warn southbound drivers of approaching pedestrians.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

Indian Creek Road Pedestrian and Bicycle Enhancements – Complete streets concept with class II
pedestrian and bicycle lane.

- Improved pedestrian and bicycle access for residents of Happy Camp.
- Improved roadway safety for motorists, pedestrians, and bicyclists.
- Improved access to community services for residents.





Figure 1 – Sight distance issue, southbound.

Figure 2 – Intersection looking north.

State Route 96 at Somes Bar Store / Ishi-Pishi Road

Somes Bar - Pedestrian Facility Enhancements at Intersection

Orleans INTR8

Description and Existing Conditions

The "Salmon River Outpost," located at the intersection of State Highway 96 and Ishi-Pishi Road in Somes Bar, is one of the only stores in the region. The facilities and surrounding roadway must be able to accommodate regular tips by patrons gathering mail, buying supplies, or simply stopping on a trip through the region,.

Existing facilities do not allow for a controlled ingress and egress of motorists into the parking area. The nature of the parking lot, coupled with poor vertical sight distance due to the superelevation of the roadway creates a safety issue for those motorists using the parking lot, as well as Ishi-Pishi Road.

Additionally, the local school bus service uses a gravel pullout just north of the store as a bus stop, and many of the students cross Ishi-Pishi Road to enter the store. However, the intersection does not meet design standards for safety, as no crosswalk currently exists across Ishi-Pishi Road.

Solution

Redesign of intersection striping to include crosswalk across Ishi Pishi Road. Redesign of intersection striping, including striping within 150 feet of intersection, to allow for safe ingress and egress from store parking lot.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

None

Goals Achieved

• Improved roadway safety for pedestrians and motorists.



Figure 1 – Current striping, viewed from SR 96 south of intersection



Figure 2 – Existing conditions, viewed from north of intersection

State Route 96 at Doolittle Street

Happy Camp - Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

Doolittle Street is the second or "middle" cross street in the main business or downtown area of Happy Camp – along Highway 96. There are currently no crosswalks, sidewalk, or curbing at the intersection, presenting a safety risk to pedestrians and cyclists. While there is ample space – as much as 20 feet in some spots – along the shoulder of both highway 96 and Doolittle Street, no specific pedestrian or bicycle facilities exist.

Solution

Redesign of intersection to include curb, sidewalk, and gutter at corners, as well as striping for crosswalks, in a way that will allow for safe crossing from suggested pedestrian facilities to be constructed (via separate projects) on SR 96.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

Happy Camp Streetscape Project – Complete streets concept with pedestrian and bicycle improvements.

- Improved pedestrian and bicycle access for residents of Happy Camp.
- Improved roadway safety for pedestrians and bicyclists.





Figure 1 – Intersection looking southeast

Figure 2 – Intersection looking southwest

Jacobs Way Crosswalk

Happy Camp – Pedestrian Facility Enhancements at Intersection

Description and Existing Conditions

Jacobs Way in Happy Camp is a residential collector leading to much of Happy Camp's Karuk Tribal housing. Several tribal buildings also exist along Jacobs Way, including the Karuk Housing Authority and a small elementary/preschool.

The Indian Creek Road/Jacobs Way pedestrian pathway project is closely associated with this project, as the pathway discussed in that project leads directly to Jacobs Way. The pathway is regularly used by residents of the Jacobs Way neighborhood to access the local store, post office, and other locations. In addition, students cross from the existing sidewalk on the north side of the road to reach the trail entrance on the south.

The existing crossing, although defined by warning signs, is not striped, and does not meet current design standards. Signage, while existing, does not meet minimum distance standards for school crossing warning signs (MUTCD, 7B.08).

Solution

Construct crosswalk to meet current design standards. Install signage to meet current standards.

Work Effort Impact Rating: 3 (Low)

Associated Projects

• Indian Creek Road / Jacobs Way Pedestrian Pathway – Pathway with stairs.

- Improved accessibility to services and Tribal programs for the residents of Happy Camp.
- Improved safety for residents, especially students.



Figure 1 - Existing crossing facilities



Figure 2 – Existing signage

Orleans - Complete Streets Project SR 96 Bridge to Asip Road

Description and Existing Conditions

State Route 96 between Asip Road and the bridge over the Klamath River is two lanes with wide, undefined gravel shoulders. Many of the community services exist along this portion of the roadway including the Orleans Market, Karuk Tribe Authority and the U.S. Post Office.

Solution

Redesign of roadway to include a context sensitive complete streets design including pedestrian facilities, intersection treatments and curb, sidewalk, and gutter at corners when appropriate, as well as striping for crosswalks, in a way that will allow for safe crossing. The goal to create a streetscape that includes a place for everyone, motorists and pedestrians alike, that enables access and safety for all users

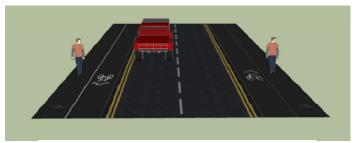


Figure 1 - Concept Rendering

Work Effort Impact Rating: 1 (Intensive)

Associated Projects

• Intersection Improvements on SR 96 and the Bike/Ped project from Asip Road to Camp Creek Road.

- Improved mobility along the main service corridor of Orleans for all modes of transportation.
- Improved safety of motorists, pedestrians, and bicyclists.

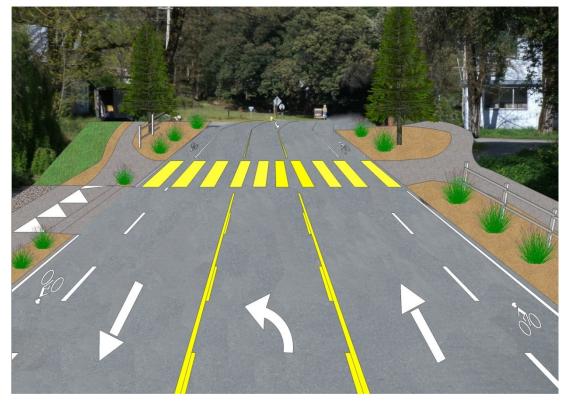


Figure 2 – Concept rendering of Orleans Post Office / Downtown Area

Happy Camp – Complete Streets Project SR 96 between 1st Ave and Davis

Description and Existing Conditions

State Route 96 between 1st Avenue and David Road is two lanes with wide, undefined paved and gravel shoulders. Many of the community services exist along this portion of the roadway including educational facilities, commercial services and community destinations

Solution

- Reconstruction of roadway and intersections to complete streets style facilities, see figure 4. Approximately 900 feet.
- Reconstruction of roadway and driveways to complete streets rural concept style facilities, see figure 2.
 Approximately 900 feet.
- 3. Reconstruction of roadway and driveways to complete streets rural concept style facilities or Class II style, see figure 2. Approximately 700 feet.
- 4. Reconstruction of roadway and intersections to complete streets style facilities, see figure 4. Approximately 300 feet.



Figure 1 – Existing conditions – no defined pedestrian or transit facilities

Work Effort Impact Rating: 1 (Intensive) Potential for this work to be implemented in phases with sections 1 and 4 as the priority.

Associated Projects

- Intersection Improvements on SR 96 at Davis Road, Doolittle Street, Reeves Street, 1st Ave and 2nd Avenue
- Bicycle and pedestrian facilities on SR 96 between Druey Rd and 1st Ave.

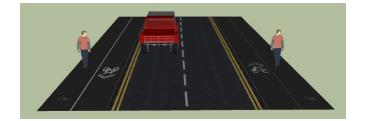


Figure 2 – Rural concept

Goals Achieved

- Improved mobility along the main service corridor of Happy Camp for all modes of transportation.
- Improved safety of motorists, pedestrians, and bicyclists.

Preliminary Cost Estimate

Item	Quantity	Unit	(Cost/Unit	Item Cost		
5' Sidewalks	5,400	SF	\$	10.00	\$	54,000.00	
Bicycle Lane Striping	5,400	LF	\$	1.00	\$	5,400.00	
Curb Ramps (corner)	15	EA	\$	3,500.00	\$	52,500.00	
Curb Ramps (midblock)	4	EA	\$	3,500.00	\$	14,000.00	
Curb and Gutter	5,400	LF	\$	30.00	\$	162,000.00	
International Style Crosswalk	15	EA	\$	200.00	\$	3,000.00	
4" Centerline Stripe	10,800	LF	\$	1.00	\$	10,800.00	
Stop Sign Installation (including striping)	9	EA	\$	225.00	\$	2,025.00	
Signage	1	LS	\$	1,000.00	\$	1,000.00	
Landscaping	40,000	SF	\$	12.00	\$	480,000.00	
Transit Shelters	2	EA	\$	1,200.00	\$	2,400.00	
Drainage Improvements	5	EA	\$	25,000.00	\$	125,000.00	
Pavement Reconstruction	162,000	SF	\$	2.00	\$	324,000.00	
Egress Points	25	EA	\$	1,000.00	\$	25,000.00	
				Sub Total:	\$	1,261,125.00	
Contingency (10%)	1	EA	\$	126,112.50	\$	126,112.50	
PA&ED/PS&E/C.E. (27%)	1	EA	\$	340,503.75	\$	340,503.75	

Total: \$ 1,727,741.25





Figure 3 – Existing conditions

Figure 4 – Streetscape concept

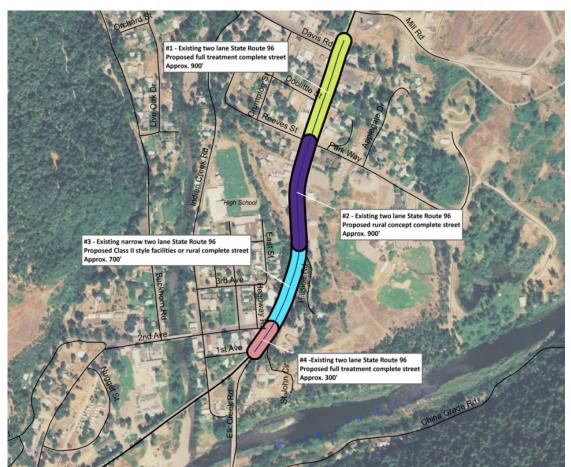


Figure 5 – Proposed treatment areas

Rough and Ready Creek Bridge

Red Cap Road, Orleans – Bridge Project

Orleans B1

Description and Existing Conditions

Rough and Ready Creek bridge is approximately 750 feet west of the intersection of state route 96 and Red Cap Rd. The bridge itself is less than 20 feet long, with 10 foot lanes. The narrow lane configuration, coupled with the low barriers on either side of the bridge, is cause for the safety concerns of motorists, pedestrians, and cyclists.

Solution

Phased development of Red Cap Road is recommended as follows:

Phase I: Bridge replacement through Highway Bridge Program, construct wider bridge to allow for pedestrian and bicycle use.

Phase II: Red Cap Rd. realignment project, including rural streetscape improvements.

Phase III: Rural streetscape improvements beyond extents of Phase II, to Mace Rd. and SR 96.

Work Effort Impact Rating: 1(Intensive)

Associated Projects

- State Route 96 at Red Cap
 Road Pedestrian facility and crosswalk
 enhancements.
- Red Cap Road
 Bicycle and Pedestrian
 Enhancements Class II Bikeway along Red Cap Road.
- Red Cap Road Realignment Realignment project from mile post .9 to 1.2. PSR and design complete.

- Improved pedestrian and bicyclist safety and access to residences in Red Cap Road area.
- Improved motorist safety on bridge.



Figure 1 - Rough and Ready Bridge project location



Figure 2 - Rough and Ready Bridge on Red Cap Rd.



Figure 3 - Rough and Ready Bridge, south side.

Riverfront Multi-use Path

Happy Camp – Bicycle and Pedestrian Project

Description and Existing Conditions

The current "community river walk" in Happy Camp's River Park is a dirt trail that follows the river. Access is made easy only at the park end of the trail, while the other end is accessed only by a steep, unsafe slope alongside Curly Jack Bridge.

Solution

Construction of a class I multi-use trail along the current path is suggested. Improvements should be made to access at both ends of the trail to improve user safety .

Work Effort Impact Rating: 1 (Intensive)

Associated Projects

 Curly Jack Bridge Pedestrian Improvements – ADA compliant access on Curly Jack Bridge.

Goals Achieved

Improved access to recreation – park facilities and river access.



Figure 1 – Pedestrian access to trail near Curly Jack Bridge



Figure 2 - Park trail entrance



Figure 3 - Park trail conditions

2nd Avenue Bridge Pedestrian Improvements

Happy Camp – Bridge Project

Happy Camp B2

Description and Existing Conditions

The 2nd Avenue Bridge in Happy Camp currently non-ADA compliant pedestrian access along 2nd Ave. east of the Tribal headquarters. Pedestrians observed during the field study were seen using the bridge deck for access, presumably because of difficult access to the established pedestrian facilities.

Solution

Construct ADA complaint pedestrian access ramps at ends of bridge. Improve pedestrian facilities at intersections adjacent to bridge, allowing for safe crossing to south side.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

 SR 96 at 2nd Ave. could be associated if sidewalk or pathway was extended to meet pedestrian facilities at that intersection.



Figure 1 – Intersection with pedestrian facilities at west end of bridge

- Improved pedestrian and bicycle access to community and tribal services for residents of Happy Camp.
- Hazardous facilities removed, improving safe access for disabled members of the Happy Camp community.



Figure 2 – Non-ADA compliant pedestrian access, east end



Figure 3 – Non-ADA compliant pedestrian access at west end

Happy Camp High School to Jacobs Way Pedestrian Access

Happy Camp – Bicycle and Pedestrian Project

Description and Existing Conditions

Pedestrians are using two undeveloped trails, unofficial paths and surface streets to connect residential, commercial, and education destinations. The two main unsafe connections include trails between Happy Camp High School and Head Street to Parry's Market and continuing behind Parry's Market up the hill to Jacobs Way. Unsafe trail conditions, trail deterioration, and grade create a need for stairways in two locations and connecting pedestrian infrastructure from the High School to Parry's Market and from Parry's Market to Jacobs Way.

Solution (See Figure 6 for Sections)

- 1. Construction of stairway/pedestrian pathway from Jacob's Way at top and bottom access points, as well is improvements to pedestrian facilities (signage, crosswalks, etc.) at access points. This section is approximately 400 feet.
- 2. Construct pedestrian lateral walkway or sidewalk in front of Parry's Market connecting Section 1 to the crosswalk facilties described in Section 3. This section is approximately 450 feet.
- 3. Construct international style crosswalk from the terminus of Section 2 to the north end of Section 4. This section is approximately 60 feet.
- 4. Construct a sidewalk or other suitable rural pedestrian pathway surface along the driveway/alley (northern extension of Head Street) from the crosswalk in Section 3 to Section 5. This section is approximately 400 feet.
- Construct rural concept pedestrian shoulders along Head Street and connect to the stairway/pedestrian pathway in Section 6. This section is approximately 375 feet.
- Construct approximately 200 feet of stairway/pedestrian pathway from the southern end of Head Street to Indian Creek Road. This section is approximately 200 feet.
- Construct sidewalk or rural concept pedestrian should along the east side of Indian Creek Road from the bottom of the facilities in Section 6 to the southern end of the Happy Camp High School Campus. This section is approximately 1,000 feet.



Figure 1 - Example stairway type

Work Effort Impact Rating: 2 (Medium)

Potential for this work to be implemented in phases with sections 6 and 7 as the priority.

Associated Projects

Intersection improvements at the intersection of Davis Raod amd Indian Creek Road

Goals Achieved

Improved pedestrian safety & access to local services and schools for residents of Happy Camp

Preliminary Cost Estimate

Item	Quantity	Quantity Unit		Cost/Unit			Item Cost		
5' Sidewalks	1,900	SF		\$	50.00	\$	95,000.00		
Stair Pathway	600	LF		\$	275.00	\$	165,000.00		
Shoulder Improvements	400	SF		\$	4.00	\$	1,600.00		
Pedestrian Lane Striping	1,000	LF		\$	1.00	\$	1,000.00		
Curb Ramps	4	EA		\$	3,500.00	\$	14,000.00		
Curb and Gutter	1,900	LF		\$	30.00	\$	57,000.00		
International Style Crosswalk	1	EA		\$	300.00	\$	300.00		
Signage	10	LS		\$	1,000.00	\$	10,000.00		
Pavement Reconstruction	9,600	SF		\$	2.00	\$	19,200.00		
Drainage Improvements	2	EA		\$	25,000.00	\$	50,000.00		
					Sub Total:	\$	413,100.00		
Contingency (10%)	1	EA	\$	4	1,310.00	\$	41,310.00		
PA&ED/PS&E/C.E. (27%)	1	EA	\$	111,537.00		\$	111,537.00		

Total: \$ 565,947.00



Figure 2 – Trail conditions from bottom, behind store



Figure 3 – Trail conditions at top



Figure 4 – Hill and trail conditions



Figure 5 – Hill and trail conditions

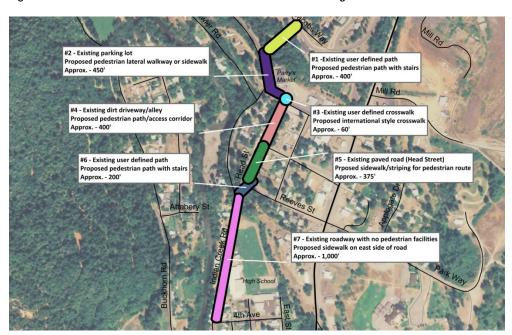


Figure 6 – Proposed treatment areas

Indian Creek Meadows Off-Road Path

Happy Camp - Bicycle, Pedestrian, and OHV Path

Happy Camp BP3

Description and Existing Conditions

An established dirt path parallel to Indian Creek Road exists west of Indian Creek Road. Currently used for pedestrian, bicycle, and OHV access, the pathway also provides access to the Indian Meadows neighborhood and the neighboring mobile home park. Access points at the ends of the pathway are not clearly defined, and not easily accessible.

Solution

Construct access points to pathway at the following locations:

- Indian Creek Road at Indian Meadows Drive
- At end of trail approximately 400 feet north of Jacobs Way
- Northeast loop of Indian Meadows Drive

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

Happy Camp Streetscape Project – Complete streets concept with pedestrian and bicycle improvements.

- Improved bicycle, pedestrian, and OHV access for residents of Happy Camp.
- Improved non-motorized transportation mode choice for residents of Indian Meadows neighborhood in North Happy Camp.





Figure 1 – Trail conditions at southern end

Figure 2 – Current trail conditions

Orleans - Bicycle and Pedestrian Project

Description and Existing Conditions

Orleans elementary school lies adjacent to State Route 96 in Orleans. Pedestrian pathways leading north and south exist on the west side of the highway, but are inconsistent in condition (Figure 1). These pathways terminate just west of downtown and just east of the SR96 @ Dredge Rd. intersection.

Solution

Class I pathway, from west end of Klamath bridge to Asip Rd. Class II pathway, from Asip Rd. to Eyesee Rd. Class II pathway from Eyesee Rd. to Forest Road 12N01/Placer Dr.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

- State Route 96 at Orleans Elementary School Crosswalk enhancements at intersection.
- State Route 96 Roadway Improvements Streetscape projects along SR96 through Orleans.
- State Route 96 Orleans Sight Distance Improvement Vertical sight distance issue downtown Orleans.

- Improved pedestrian and bicycle access for residents of Orleans.
- Improved roadway safety for motorists, pedestrians, and bicyclists.



Figure 2 - West end bridge existing conditions.



Figure 3 - West end bridge existing conditions.

Indian Creek/Jacobs Way Pedestrian Pathway

Happy Camp – Bicycle and Pedestrian Project

Happy Camp BP5

Description and Existing Conditions

Pedestrians are using a hillside to gain access to Jacobs way, the adjoining neighborhood, and the store on Davis Road. Unsafe trail conditions, trail deterioration, and grade create a need for a stairway.

Solution

Construction of approximately 175 foot stairway, pedestrian pathway at top and bottom access points, as well is improvements to pedestrian facilities (signage, crosswalks, etc.) at access points.

Work Effort Impact Rating: 3 (Low)

Associated Projects

 Indian Creek Road Pedestrian and Bicycle Enhancements – Class II bike lane/pathway along Indian Creek Road.

Goals Achieved

 Improved pedestrian safety & access to local services for residents of Happy Camp.



Figure 1 - Example stairway type



Figure 2 – Trail conditions from bottom, behind store



Figure 3 - Trail conditions at top

Red Cap Road Pedestrian and Bicycle Enhancements

Orleans - Bicycle and Pedestrian Project

Orleans BP6

Description and Existing Conditions

No pedestrian or bicycle facilities currently exist on Red Cap Road, and current lane configurations and roadway widths are not capable of supporting such enhancements. The current road geometrics, coupled with the lack of dedicated pedestrian/bicycle lanes, present safety concerns for non-auto traffic on Red Cap Road.

Solution (See Figure 2 for Sections)

- 1. Reconstruction of roadway to include Class II style bike facilities that may function as multi-use path for pedestrians. Approximately 1,900 feet.
- Bridge is proposed to be replaced under the FHWA Highway Bridge Program (project # 5904(113)).
 Approximately 60 feet.
- 3. Reconstruction of roadway to include Class II style bike facilities that may function as multi-use path for pedestrians. Approximately 1,800 feet.
- Project Study Report Complete (ID# 01-HUM-0-CR, and 8Q100, PM 0.95 to 1.25) approximately 1,600 feet.
- Reconstruction of roadway to include Class II style bike facilities that may function as multi-use path for pedestrians to Shivshaneen Road and Karuk Tribal Housing. Approximately 1,900 feet.



Figure 1 - Red Cap Road existing conditions

Work Effort Impact Rating: 1 (Intensive) to 2 (Moderate)

Associated Projects

- State Route 96 @ Red Cap Road Pedestrian facilities and crosswalk enhancements.
- Rough and Ready Creek Bridge Bridge replacement project # 5904(113).
- Red Cap Road realignment project (ID# 01-HUM-0-CR, and 8Q100, PM 0.95 to 1.25).

Goals Achieved

• Improved pedestrian and bicycle access and safety for all mode choices.

Preliminary Cost Estimate

Cost estimates do not include the bridge (section 2) or the horizontal realignment (Section 4)

Item	Quantity	Unit	Cost/Unit	Item Cost		
Shoulder Improvements	44,000	SF	\$ 5.00	\$	220,000.00	
4" Thermo Stripe	28,000	LF	\$ 1.00	\$	28,000.00	
Signage	10	LS	\$ 1,000.00	\$	10,000.00	
Clearing & Grubbing	5,600	LF	\$ 2.00	\$	11,200.00	
Roadway Excavation	5,600	LF	\$ 10.00	\$	56,000.00	
Traffic Control	1	LS	\$ 20,000.00	\$	20,000.00	
Pavement Reconstruction	187,000	SF	\$ 2.00	\$	374,000.00	
Drainage Improvements	2	EA	\$ 25,000.00	\$	50,000.00	
			Sub Total:	\$	769,200.00	
Contingency (10%)	1	EA	\$ 76,920.00	\$	76,920.00	
PA&ED/PS&E/C.E. (27%)	1	EA	\$ 207,684.00	\$	207,684.00	

Total: \$ 1,053,804.00

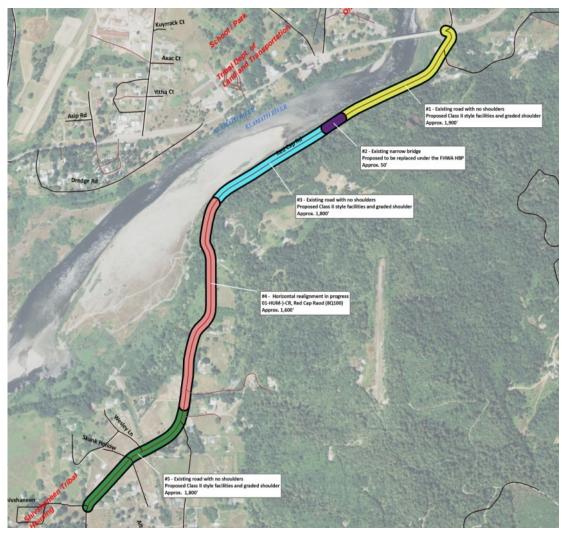


Figure 2 – Proposed treatment areas

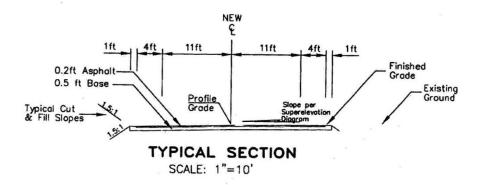


Figure 3 – Sample cross section from the Red Cap Road horizontal realignment Project Study Report

Orleans - Bicycle and Pedestrian Project

Description and Existing Conditions

No pedestrian or bicycle facilities currently exist on Indian Creek Road, and current lane configurations and roadway widths are not capable of supporting such enhancements. The current road geometrics, coupled with the lack of dedicated pedestrian/bicycle lanes, present safety concerns for non-auto traffic.

Solution

Construct class II bikeway along Indian Creek Road to Davis Road

Work Effort Impact Rating: 1 (Intensive) to 2 (Moderate)

Associated Projects

- Indian Creek Road at Davis Road Pedestrian facilities and crosswalk enhancements at intersection.
- Indian Creek Road High School Pedestrian Pathway
 pedestrian facilities with stairway to High School.

Figure 1 – Indian Creek Rd. at Jacobs Way looking south

Goals Achieved

 Improved pedestrian and bicycle access for residents of Happy Camp.

Improved roadway safety for motorists, pedestrians, and bicyclists.



Figure 2 – Indian Creek Rd. at Jacobs Way looking north



Figure 3 – Indian Creek Road near Indian Meadows

State Route 96 Headstart to Klamath Bridge

Orleans - Pedestrian and Bicycle Facility Enhancement

Orleans BP8

Description and Existing Conditions

The .6 mile stretch of State Route 96 from the Klamath bridge east to the Orleans Headstart Program (38016 California 96) currently has no pedestrian or bicycle facilities. The geometrics of the roadway makes this relatively busy stretch of road unsafe for pedestrians and cyclists, many of whom may use the roadway for trips related to the school.

Solution

Class II bikeway on south side of roadway, where an approximately eight to ten foot unpaved shoulder currently exists.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

• State Route 96 at Red Cap Road – Pedestrian facility and crosswalk enhancements.

- Improved pedestrian and bicycle access for residents of Orleans.
- Improved roadway safety for motorists, pedestrians, and bicyclists.



Figure 1 – State Route 96 looking east



Figure 2 – Bicyclist on south side of SR 96 east of Klamath Bridge

Orleans - Bicycle and Pedestrian Project

Description and Existing Conditions

An unimproved OHV pathway exists adjacent to the north side of SR 96, with terminus at Asip Road and west of Eyesee Road at Camp Creek. This path is also used by pedestrians for trips to downtown Orleans. No pedestrian or bicycle facilities currently exist from Asip Rd. to Forest Road 12N01/Placer Dr.

Additionally, a bridge lies within the extents of this project that currently has no capacity for safe on-road pedestrian and bicycle facilities.

Solution

Construct class II bikeway from Asip Road to Forest Road 12N01/Placer Drive, including dedicated pedestrian/bicycle bridge adjacent to the existing bridge.

<u>Work Effort Impact Rating:</u> 1 (Intensive) – with pedestrian bridge construction.

Associated Projects

- State Route 96 Roadway Improvements Streetscape projects along SR96 through Orleans.
- State Route 96 Multiuse Path Pathway project along SR 96 through Orleans.

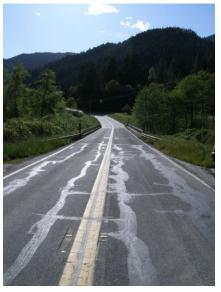


Figure 1 – Existing bridge west of Lower Camp Creek Road

- Improved pedestrian and bicycle access to local services and recreation for residents of Orleans.
- Improved roadway safety for motorists, pedestrians, and bicyclists.



Figure 2 - Existing trail looking south



Figure 3 – West end bridge existing conditions, potential pedestrian bridge location

State Route 96 1st Avenue to Druey Road

Happy Camp - Bicycle and Pedestrian Project

Happy Camp BP10

Description and Existing Conditions

Druey Road, located in east Happy Camp, is accessed via Highway 96. Many of the residents of neighborhoods surrounding Druey Road can easily access the downtown area of the community by traveling east on the Highway.

No pedestrian or bicycle facilities currently exist on the highway to allow for mode choice and safe use for individuals accessing the community services via non-motorized transportation.

Solution

Construct class II bikeway from Druey Road east to 1st Avenue.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

• Happy Camp complete streets project.

- Improved pedestrian and bicycle access to local services and recreation for residents of Happy Camp.
- Improved roadway safety for motorists, pedestrians, and bicyclists.



Figure 1 – Existing conditions

State Route 96 Somes Bar - North of School

Somes Bar – Bicycle and Pedestrian Project

Happy Camp BP11

Description and Existing Conditions

Junction Elementary School lies adjacent to Highway 96 just north of Ishi-Pishi Road in Somes Bar. The school currently uses the highway shoulder approximately .5 miles north of the school for the running portion of physical education classes. The lack of pedestrian facilities on the road presents a safety issue not only to these students, but to other pedestrians using the roadway.

Solution

Construct class III facilities north of the school to accommodate for pedestrian use.

Work Effort Impact Rating: 2 (Moderate)

Associated Projects

• None.

Goals Achieved

• Improved roadway safety for motorists, pedestrians, and bicyclists, especially students.





Figure 1 – Existing school zone sign with "Kids Jogging" sign below

Figure 2 – Existing conditions north of school

Description and Existing Conditions

No pedestrian or bicycle facilities currently exist on Curly Jack Road, and current lane configurations and roadway widths are not capable of supporting such enhancements. The current road geometrics, coupled with the lack of dedicated pedestrian/bicycle lanes, present safety concerns for non-auto traffic on Curly Jack Road.

Additionally, the bridge at the north end of Curly Jack Road currently has pedestrian facilities. It should be noted, however, that these facilities do not meet current ADA design standards.

<u>Solution</u>

Widen roadway to allow for construction of class II bikeway from Curly Jack Bridge to campground.

Work Effort Impact Rating: 1 (Intensive) to 2 (Moderate)

Associated Projects

None

Goals Achieved

 Improved pedestrian and bicycle access and safety for all mode choices.



Figure 1 - Curly Jack Road existing conditions



Figure 2 - Curly Jack Road existing conditions



Figure 3 – Existing pedestrian facilities on bridge

Park and Ride / Rideshare Facility

Somes Bar - Transit Facility

Somes Bar T1

Description and Existing Conditions

No major regional transit currently exists in Somes Bar, creating mobility issues for transportation disadvantaged people living and working in the surrounding area. Access to regional transit connections in Happy Camp and Orleans are limited without reliable transit opportunities. Regular commuters to extents of the region (Arcata, Yreka) do not currently have a central area as a "base" for ridesharing or park and ride activities.

Solution

Construction of park and ride and ridesharing facility in existing turnout approximately 500 feet north of the intersection of State Route 96 and Ishi-Pish Road.

Work Effort Impact Rating: 3 (Low)

Associated Projects

None

Goals Achieved

• Improved availability of transit parking, leading to increased transit use and mobility alternatives throughout the Middle Klamath region.





Figure 1 – Existing shoulder and pullout

Figure 2 – Construction alternative

State Route 96 Corridor Transit

Happy Camp to Orleans - Transit

Description and Existing Conditions

Transit opportunities currently existing along the state route 96 corridor between Orleans and Happy Camp are severely limited. County-based transit programs such as Siskiyou Transit and General Express (STAGE) or Klamath/Trinity Non-Emergency Transportation (K/T NET) do not extend past into the region, creating a significant lack of transportation modes between communities. Daily commuters as well as occasional users do not have the opportunities to access existing transit connections in Orleans (K/T Net) and Happy Camp (STAGE).

Solution

The solution must fulfill two needs of the affected communities:

- 1) Increased frequency of service to meet daily commuting needs, especially of students.
- 2) Regular connections to inter-regional transit

The suggested solution that meets these requirements is as follows:

- Obtain funding for contracting of existing transit programs (K/T NET, STAGE, Redwood Transit System) to increase service frequency to region an additional one to two days per week. In the case K/T NET/RTS, expansion to Orleans may be feasible.
- Establishment of transportation network between Orleans, Somes Bar, and Happy Camp:
 - Karuk tribe establishes transportation network with Karuk funding, timing connections with contracted K/T NET or STAGE service.
 - Contract with established shuttle service for daily transportation needs, especially two morning and evening trips for commuters and students. Include extended trips outside of the region at regular intervals (bi-weekly, for example) throughout the month.

Work Effort Impact Rating: 2 (Moderate) to 1 (High)

Associated Projects

Park and Ride / Rideshare Facilities – Somes Bar

- Increased mobility and access throughout the Middle Klamath region.
- Environmental impacts reduced as a result of more diverse mode choice.

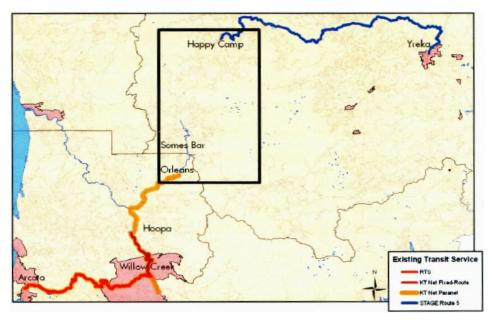
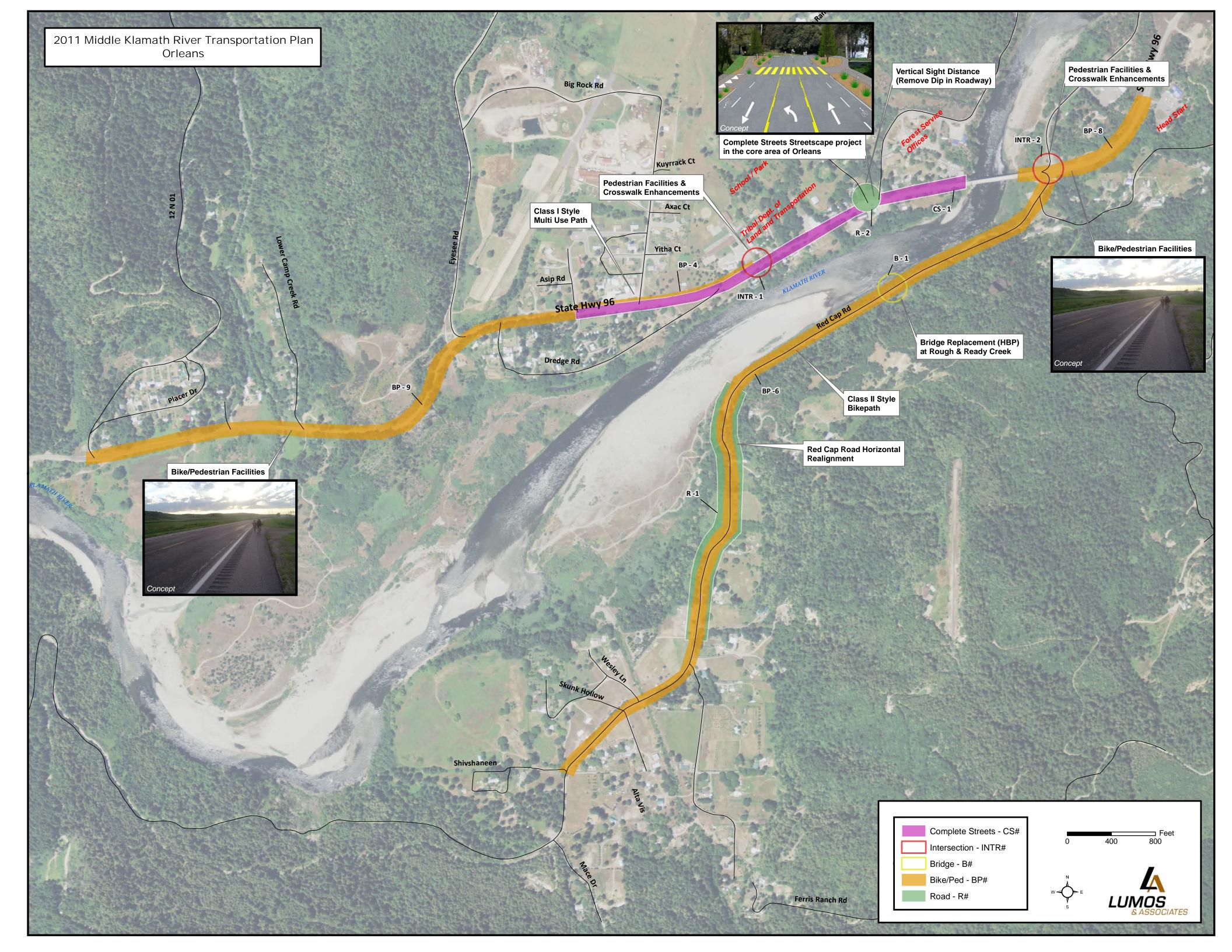
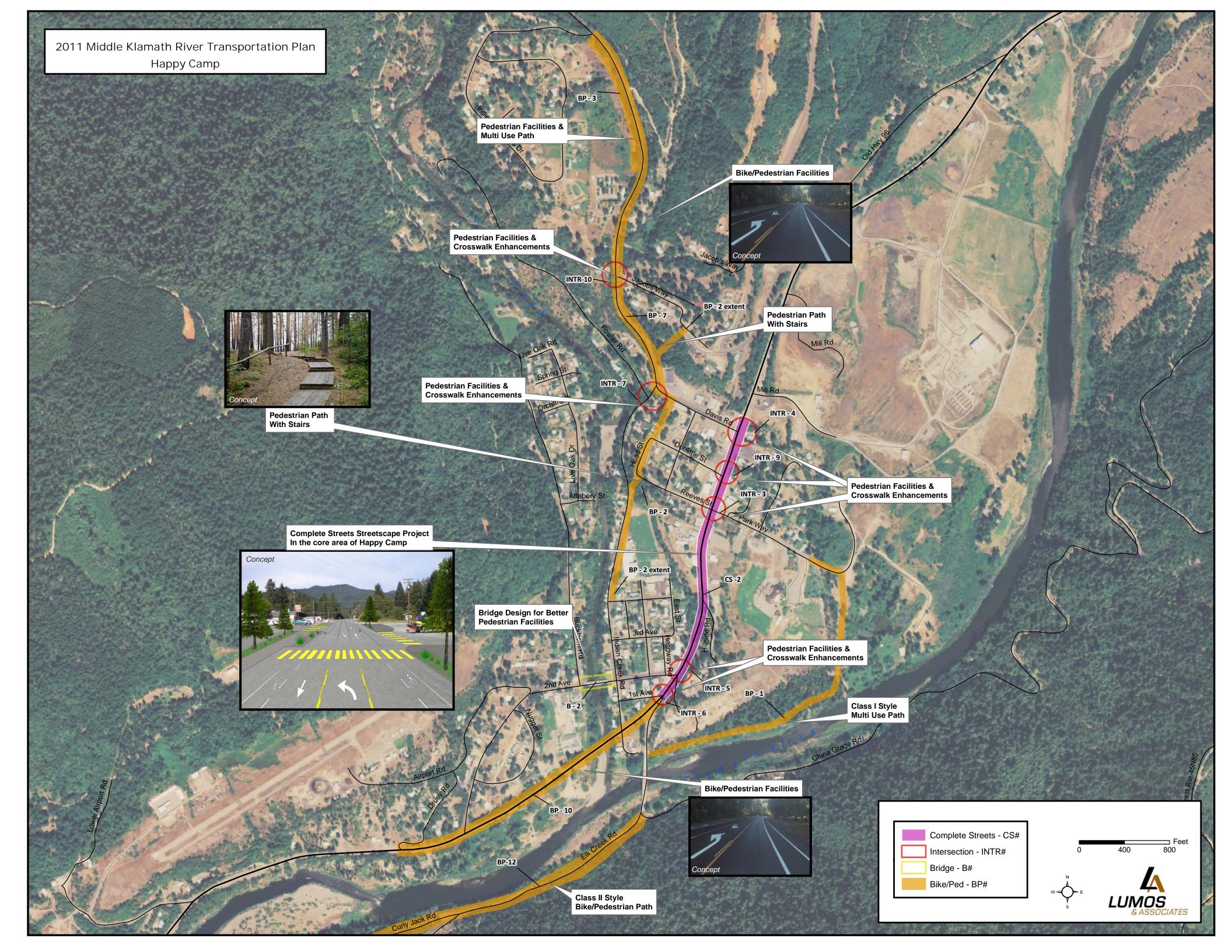
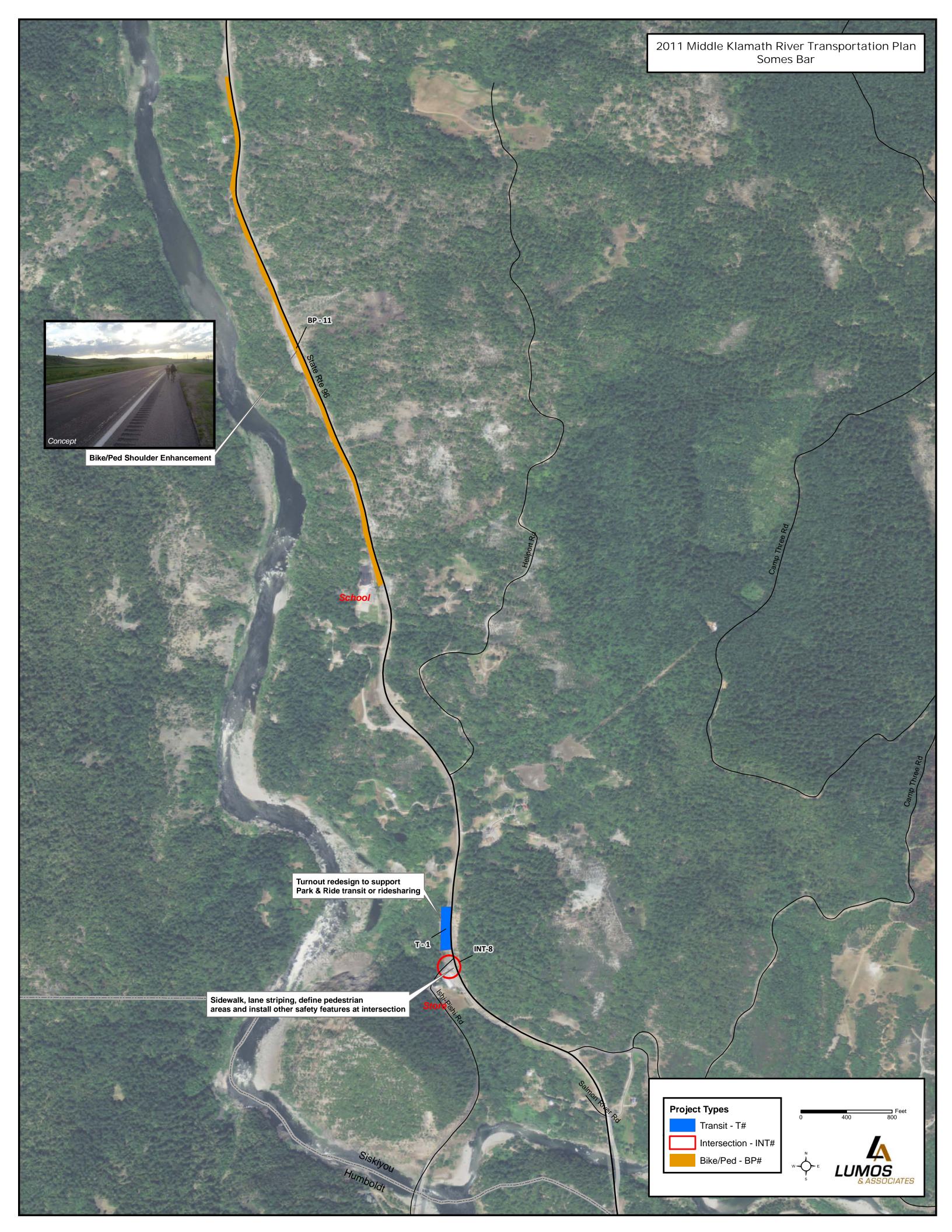


Figure 1 - Existing transit network in the Middle Klamath region Source: Moore and Associates Transit Study, 2010











Middle Klamath River Community Transportation Plan - Project Prioritization List

	Title				Priority						
			Community	Safety	Mobility/Access	Economic	Environmental Justice	Feasibility	Weight/20		
Roadway Projects	R1	Red Cap Road Realignment *	Orleans								
	R2	SR 96 Orleans Dip Improvements	Orleans	3	1	1	1	2	8		
Intersections	INTR1	SR 96 @ Orleans Elementary School	Orleans	4	3	2	4	3	16		
	INTR2	SR 96 @ Red Cap Rd	Orleans	4	2	1	4	3	14		
	INTR3	SR 96 @ Park Way Happy Camp	Happy Camp	3	2	1	3	3	12		
	INTR4	SR 96 @ Davis Rd Happy Camp	Happy Camp	3	2	1	3	3	12		
	INTR5	SR 96 @ 2nd Ave Happy Camp	Happy Camp	3	2	2	3	3	13		
	INTR6	SR 96 @ 1st Ave Happy Camp	Happy Camp	3	2	1	3	3	12		
	INTR7	Indian Creek Road @ Davis Road	Happy Camp	3	2	2	4	3	14		
	INTR8	SR 96 @ Somes Bar Store	Somes Bar	3	2	3	4	3	15		
	INTR9	SR 96 @ Doolittle Rd	Happy Camp	3	2	1	3	3	12		
	INTR10	Jacobs Way Crosswalk	Happy Camp	3	2	1	4	3	13		
Complete Street	CS1	SR 96 Orleans Streetscape Project	Orleans	4	4	4	4	1	17		
Projects	CS2	SR 96 Happy Camp Streetscape Project	Happy Camp	4	4	4	4	1	17		
Bridge Projects	B1	Red Cap Road Rough n Ready Creek*	Orleans								
	B2	2nd St. Bridge Pedestrian Improvements	Happy Camp	2	2	1	1	3	9		
Bike/Ped Projects	BP1	Riverfront Multi-use Path	Happy Camp	1	3	2	2	2	10		
	BP2	High School to Jacobs Way Ped. Corridor	Happy Camp	4	3	2	4	4	17		
	BP3	Indian Creek Meadows Off-Road Path	Happy Camp	3	3	2	3	2	13		
	BP4	SR 96 Multiuse path	Orleans	4	3	2	4	2	15		
	BP5	Indian Creek / Jacobs Way **	Happy Camp								
	BP6	Red Cap Road Bike/Ped Enhancements	Orleans	4	3	2	4	4	17		
	BP7	Indian Creek Road Bike/Ped Enhancements	Happy Camp	3	3	2	3	2	13		
	BP8	SR 96 Head Start to Klamath Bridge	Orleans	3	3	1	3	3	13		
	BP9	SR 96 Orleans Asip to Camp Creek	Orleans	3	3	2	3	2	13		
	BP10	SR 96 1st Ave to Druey Rd	Happy Camp	3	3	1	3	2	12		
	BP11	SR 96 Somes Bar	Somes Bar	4	2	1	4	4	15		
	BP12	Curly Jack Road Bike/Ped Enhancements	Happy Camp	3	3	1	3	2	12		
Transit projects	T1	Park and Ride / Rideshare Somes Bar	Somes Bar	2	3	3	3	3	14		
	T2	SR 96 Corridor Transit	Region	2	3	3	3	3	14		

Rankings are based on an assessment of qualitative improvements over existing conditions and on a 1-4 scale.

^{*} consolidated with BP6

^{**} consolidated with BP2





GOT TRANSPORTATION NEEDS?

We want to know what they are!



We need your input for the:

Middle Klamath River Community Transportation Plan

Please come to one of the 3 upcoming community meetings!

Orleans

Monday, October 4 5:30 pm Karuk Community Room (DNR Community Room)

Happy Camp

Tuesday, October 5
5:30 pm
Headway Building
Karuk Community Center

Somes Bar

Wednesday, October 6 6:00 pm Junction Elementary School

Healthy snacks will be served...

Sponsored by:

Karuk Department of Land and Transportation Questions?
Call Scott Quinn, Director 627-3016

