



Orleans Community Center Connectivity Project

May 10, 2018

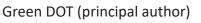


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- Jason Price, Caltrans District 1
- Karuk Department of Transportation
- Karuk Tribal Council
- Karuk Resources Advisory Board
- Orleans Community Advisory Group

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TABLE OF CONTENTS

1	Intro	oduction	1
	1.1	Background	1
	1.2	Coordinated Approach	3
	1.3	Purpose and Need	3
	1.4	Complete Streets	3
	1.5	Future Growth	4
	1.6	Regional Goals	5
	1.7	Orleans Economic Conditions	5
		1.7.1 Median Household Income	5
		1.7.2 National School Lunch Program	5
	1.8	Project Benefits	6
2	Exis	ting Conditions	7
	2.1	Existing Roadway Conditions	7
	2.2	Non-Motorized Traffic Volumes	8
	2.3	Traffic Speeds	9
	2.4	Existing Traffic Hazards and Accident Locations	9
	2.5	Existing Park Property Conditions	10
3	Com	munity Involvement	13
	3.1	Outreach Overview	13
	3.2	Core Project Team	13
	3.2 3.3	Core Project Team Advisory Group	13 13
	3.3	Advisory Group	13
	3.3	Advisory Group Outreach Events	13 15
	3.3	Advisory GroupOutreach Events3.4.1 Orleans Design Fair	13 15 <i>15</i>
	3.3	Advisory GroupOutreach Events3.4.1 Orleans Design Fair3.4.2 Student Design Exercises	13 15 <i>15</i> <i>18</i>
	3.3 3.4	Advisory GroupOutreach Events3.4.1Orleans Design Fair3.4.2Student Design Exercises3.4.3Landowner Meetings	13 15 <i>15</i> <i>18</i> <i>20</i>
4	3.33.43.53.6	Advisory GroupOutreach Events3.4.1Orleans Design Fair3.4.2Student Design Exercises3.4.3Landowner MeetingsCommunity Feedback	 13 15 15 18 20 20 20
4	3.33.43.53.6	Advisory GroupOutreach Events3.4.1Orleans Design Fair3.4.2Student Design Exercises3.4.3Landowner MeetingsCommunity FeedbackWeb-Based Outreach	 13 15 15 18 20 20 20 21
4	 3.3 3.4 3.5 3.6 Desi 	Advisory GroupOutreach Events3.4.1Orleans Design Fair3.4.2Student Design Exercises3.4.3Landowner MeetingsCommunity FeedbackWeb-Based Outreachgn Concepts	13 15 15 18 20 20 20 21 23
4	 3.3 3.4 3.5 3.6 Desi 	Advisory GroupOutreach Events3.4.1Orleans Design Fair3.4.2Student Design Exercises3.4.3Landowner MeetingsCommunity FeedbackWeb-Based Outreachgn ConceptsRoadway Design Options	13 15 15 18 20 20 20 21 23 23
4	 3.3 3.4 3.5 3.6 Desi 	Advisory GroupOutreach Events3.4.1Orleans Design Fair3.4.2Student Design Exercises3.4.3Landowner MeetingsCommunity FeedbackWeb-Based Outreachgn ConceptsRoadway Design Options4.1.1Overview – Roadway Design Option 'A'	 13 15 18 20 20 20 21 23 23 23
4	 3.3 3.4 3.5 3.6 Desi 	Advisory GroupOutreach Events3.4.1Orleans Design Fair3.4.2Student Design Exercises3.4.3Landowner MeetingsCommunity FeedbackWeb-Based Outreachgn ConceptsRoadway Design Options4.1.1Overview – Roadway Design Option 'A'4.1.2Overview – Roadway Design Option 'B'	 13 15 15 18 20 20 20 21 23 23 23 25

TABLE OF CONTENTS, CONTINUED

		4.2.2	Community Park Option 'B' 29				
5	Selee	cted D	Design Alternatives	31			
	5.1	Roadway Improvements					
		5.1.1	Final Concept Design Option A	31			
		5.1.2	Comprehensive Access Improvements	39			
		5.1.3	Increasing Walking and Biking Opportunities	39			
		5.1.4	Improving Safety	39			
		5.1.5	Speed Reduction through Concept Design	39			
		5.1.6	Anticipated sight distance and/or visibility improvements	39			
	5.2	Selec	ted Community Park Design	40			
6	Funding and Implementation Strategy						
	6.1	Estin	nate of Costs	45			
	6.2	Poter	ntial Funding Sources	45			
		6.2.1	State Transportation Improvement Program	45			
		6.2.2	State Highway Operation and Protection Program	45			
		6.2.3	Active Transportation Program	45			
		6.2.4	Tribal Transportation Safety Program	46			
		6.2.5	Potential Funding Resources for Parks	46			
	6.3	Imple	ementation	46			

LIST OF ATTACHMENTS

Attachment A ·	Bicycle	and	Pedestrian	Counts
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Attachment B - Public Outreach Summary

Attachment C - Design Alternatives

Attachment D - Cost Estimates

LIST OF TABLES

Table 1: Historic and Projected Population Growth in Humboldt County,	
1980 - 2040	4
Table 2: Summary of Existing Conditions, Project Area	7
Table 3: Bicycle and Pedestrian Counts	8
Table 4: Orleans Community Center Connectivity Project Outreach Meetings	15
Table 5: Design Concept Alternative Voting Summary	16
Table 6: Student Design Summary	19
Table 7: Design Fair Comment Summary	21

LIST OF FIGURES

Figure 1: Location of the Orleans 3C Project Site	1
Figure 2: Highway 96 Lacks Adequate Shoulders	7
Figure 3: Bicyclists Travel on Roadway	7
Figure 4: Accident locations within community of Orleans from 2006-2016	9
Figure 5: Park Property, looking southeast from SR 96 in Orleans.	10
Figure 6: Design Fair Set-Up	17
Figure 7: Design Fair Banner	17
Figure 8: Design Fair Activities	17
Figure 9: Community Members Interact with Experts	17
Figures 10: Selected streetscape designs created by 4th-8th grade students at Orleans Elementary (1)	18
Figure 11: Selected streetscape designs created by 4th-8th grade students at Orleans Elementary (2)	18
Figure 12: Orleans Elementary students work as a group to design streetscape improvements	19
Figure 13: Roadway Design A at intersection with Orleans Elementary	23
Figure 14: Roadway Design A, Section 1 Cross-Section	24
Figure 15: Roadway Design B at intersection with Orleans Elementary	25
Figure 16: Roadway Design B Cross-Section	25
Figure 17: Roadway Design C, at intersection with Orleans Elementary	26
Figure 18: Roadway Design C, Section 1 Cross-Section	26
Figure 19: Community Park Concept 'A'	28
Figure 20: Community Park Concept 'B'	30
Figure 21: Final Concept Design, Segment 1	33
Figure 22: Final Concept Design, Segment 2	35
Figure 23: Final Concept Design, Segment 3	37
Figure 24: Final Community Park Design	41

LIST OF ACRONYMS

- AADT Annual Average Daily Traffic
- ATP Active Transportation Program or Plan
- **BMPs Best Management Practices**
- CTC California Transportation Commission
- HCAOG Humboldt County Association of Governments
- LGC Local Government Commission
- LGR Local Government Review
- **RTP Regional Transportation Plan**
- SHOPP State Highway Operation and Protection Program
- SR State Route
- STIP State Transportation Improvement Program
- TIMS Transportation Injury Mapping System
- TSM Transportation System Management
- TTSP Tribal Transportation Safety Program
- 3C Community Center Connectivity

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1 INTRODUCTION

1.1 Background

Orleans is an unincorporated community located in the temperate forest of Humboldt County, approximately 85 miles northeast of Eureka and 136 miles northwest from Redding (Figure 1). The Orleans Community Center Connectivity (Orleans 3C) Project is designed to serve this community.

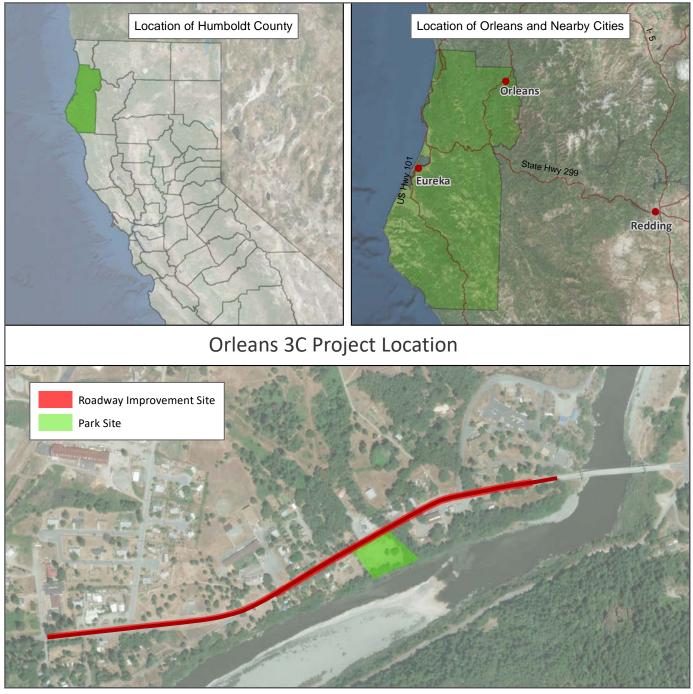


Figure 1: Location of the Orleans 3C Project Site

According to the U.S. Census, the Block Group that includes the Orleans community has approximately 612 residents . The main road serving Orleans through the downtown core area is State Route (SR) 96, also known as the Klamath River Highway. Orleans has a rich natural and cultural history that is everpresent in the community and the region. This history is rooted in the natural systems of the earth, air, fire and water. The community and culture in Orleans has also been influenced by the presence of Native Americans, trappers, miners, loggers, farmers, recreationists and other resource-oriented populations. Each of these elements continues today in collectively shaping the story of the Klamath region, the culture of the Karuk Tribe, and particularly the Orleans community.

The unique character of Orleans is suffering from neglect, however. The lack of planning and financial investment in the community core has resulted in safety hazards, public health problems, blight, and poor economic conditions. Planning and subsequent public and private investment is necessary to improve pedestrian, bicyclist, and motorist safety, as well as improve health and economic conditions in Orleans.

The Karuk Tribe, the lead for the Orleans 3C Project, has spearheaded several community improvement projects including this project. In 2011, the Tribe prepared the Mid Klamath River Community Transportation Plan which identified a need for improvements in Orleans, as well as streetscape concept design for the community core. Since that time, the project has been identified in the Humboldt County Bike Plan and the Humboldt County Regional Transportation Plan (RTP) as a priority project. This report on the results of community involvement and focused planning for the village core was funded through a Caltrans Sustainable Transportation Planning Grant award and consolidates community input, data collection, information analysis, and context sensitive design concepts. It is intended to catalyze safety improvements, positive community transformation, and a safe, walkable and bikeable community core.

The Orleans 3C project area extends approximately 0.72 mile (3,797 feet) along Highway 96, beginning at the west end of the bridge over the Klamath River to Asip Road (between Post Mile Markers HUM R 38.602 and HUM 38.034). (The initial project ended at Dredge Road, however, repeated community input recommended that the project terminate at Asip Road, including some discussion of carrying the project all the way to Eyesee Road.) The Project includes circulation and access improvements for all modes of travel, site concepts for a new community park, and sustainable enhancements to existing development and public spaces. The Orleans community has voiced strong support to change the project area into a safer and friendlier place for pedestrians and bicyclists.

The Orleans 3C Project offers a timely opportunity for positive changes in the community. Throughout California and the United States, transportation planning and infrastructure projects are revitalizing communities by improving mobility options, safety, and community cohesion. These types of improvements are proven to positively influence community values, public health, and economic conditions. The Project provides an ideal opportunity for Orleans to realize similar results.

¹US Census Bureau: https://www.census.gov/2010census/popmap, Census Tract 101.02 – Block Group 3

1.2 Coordinated Approach

Implementation will be carried out through a cooperative relationship between the Karuk Tribe and the State of California Department of Transportation. The Tribe has experience developing projects, soliciting grant funding, and managing projects through environmental, design and construction. Previous project experience includes:

- Red Cap Road Bicycle and Pedestrian Improvement Project.
- Anavkam Project.
- Itroop Road Project
- Orleans Wellness Center project
- KCDC/KTHA project
- Tishawnik Roads project
- ADA Head Start project

1.3 Purpose and Need

The town center of Orleans currently lacks safe, pedestrian-oriented design along SR 96 which serves as its central roadway, providing direct access to a variety of land uses and multiple modes of traffic. From 2006 through 2016, 12 traffic collisions (some with fatalities) occurred in the Orleans community, of which 3 occurred in the project area (see also Section 2.4 Existing Traffic Hazards and Accident Locations). A variety of land uses within the project area, including Karuk Tribal Housing, the Orleans Elementary School, and Orleans Market, generate different modes and volumes of traffic (pedestrian, bicyclist, and motorist) that compete for direct access to SR 96. Speeding vehicles, outdated design features of SR 96, including vertical roadway alignment ("the dip"), poor lighting, and competing modes of traffic, all create the potential for increased traffic conflicts. As a result, many parents and students refuse to travel to the school on foot or allow children to use bicycles. Over years of experiencing traffic dangers due to a lack of pedestrian-oriented design, the downtown core has suffered from a lack of vibrancy and sense of place.

The primary purpose of the Project is to improve safety and comfort for pedestrians and bicyclists in Orleans. Recommended traffic improvements are intended to slow traffic generated by the traveling public and by Orleans residents. As motorist speeds slow down and safety improves, a secondary objective is to create a greater sense of community and ownership by offering sustainable design concepts for new and existing development of private and public properties. These design concepts include a new community park on the Klamath River with design features that highlight the Karuk culture.

1.4 Complete Streets

The Complete Streets Act of 2008 (California Assembly Bill 1358) outlines the requirement for local agencies to plan for complete multi-modal transportation networks that meet the needs of all users including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, and users of public transportation. The Act requires the legislative body of a city or county to incorporate complete street philosophies in any substantive revision to the circulation element of their General Plan. The Circulation Element of the Humboldt County General Plan Update (adopted October 2017) includes goals that specifically reference the Complete Streets Act "by considering the needs of all users in a context

sensitive manner that is appropriate to urban, suburban, rural, or remote community character". The goal of the Complete Streets Act is to change the State's mode share from single passenger cars to more active forms of transportation including public transit, bicycling, and walking with the intent to decrease vehicle miles traveled, reduce greenhouse gas emissions, and improve public health.

The community of Orleans, Karuk Tribe, and Caltrans have been working to incorporate complete street and active transportation elements in their planning efforts following the Complete Streets Act. The Karuk Tribe will apply for Active Transportation Project (ATP) funding to implement this project as envisioned by the community.

1.5 Future Growth

Orleans is an unincorporated community, and therefore, U.S. Census growth estimates that are specific to Orleans are unavailable. However, the Land Use Element of the Humboldt County General Plan projects a county-wide population growth of 0.72 percent between 2016 and 2020, and a 2.90 percent growth in unincorporated Humboldt County over the same period. Based on the population estimate of 612 residents for the Orleans community (previously noted under Section 1.1 - Background), Orleans can anticipate a slight increase in residents by 2020. As with most communities, the population growth of Orleans is dependent on the availability of housing, which is in turn dependent on the availability of private land landowners willing to develop housing. Since the vast majority of land in the region surrounding Orleans is managed by the USFS and not available for new housing development, the population of Orleans is unlikely to significantly increase in the foreseeable future.

However, according to the State of California Department of Finance and Humboldt County, the County's total and unincorporated population have grown since 2010 and are expected to continue rising. Unincorporated population composes approximately one-half of Humboldt County's population.

Additionally, The Karuk Tribe Housing Authority has plans to build approximately 20 housing units in Orleans in the near future. This includes 3-5 houses between Orleans Elementary School and Amayav, 7-10 houses on Red Cap Road, and 5-7 houses on Tishawnik Hill.

Table 1:	Table 1: Historic and Projected Population Growth in Humboldt County, 1980-2040								
Year	Total County Population	Population of Unincorporated Areas	Percent of Total Population in Unincorporated Areas	Average Annual Increase (Countywide Total)	Total Percent Change Over Period (Countywide Total)				
1980	108,525	59,046	54.4%						
1990	119,118	62,169	52.2%	0.94%	9.76%				
2000	126,518	67,236	53.1%	0.60%	6.21%				
2010	134,623	71,916	53.4%	0.62%	6.41%				
2016	135,116	71,830	53.2%	0.06%	0.37%				
2020	139,033	73,912	53.2%	0.72%	2.90%				
2030	140,608	74,750	53.2%	0.11%	1.13%				
2040	138,307	73,526	53.2%	-0.16%	-1.64%				
Source: H	lumboldt County Ge	neral Plan, Chapter 4:	Land Use Element						

1.6 Regional Goals

The Humboldt County Regional Transportation Plan (RTP) was adopted in 2017. The RTP serves as the guide to the development of a coordinated and balanced multi-modal regional transportation system that is financially constrained to the local, State, and Federal revenues anticipated over the twenty-year life of the plan. The RTP outlines five policies for the county transportation system as follows:

- Policy I-1: Support efforts to preserve the existing state, county, city, and reservation road system from further deterioration.
- Policy I-2: Encourage interconnectivity of the transportation network.
- Policy I-3: Link inter-county transportation systems to those in other areas of the state, and coordinate and integrate interregional travel patterns.
- Policy I-4: Promote a balanced multimodal transportation system that provides equitable levels of access for all travel.
- Policy I-5: Promote Transportation System Management (TSM) measures.

1.7 Orleans Economic Conditions

The Orleans community is located in an area with very limited employment opportunities and is remote from other population centers. It qualifies as a disadvantaged community in two ways: 1) Median Household Income, and 2) National School Lunch Program eligibility.

1.7.1 MEDIAN HOUSEHOLD INCOME

Orleans is represented in Census group 101.02 as Block Group 3. The American Community Survey reported that the 2016 median household income for Orleans was 56% of the statewide average².

1.7.2 NATIONAL SCHOOL LUNCH PROGRAM

According to the National School Lunch Program, in 2016-2017 Orleans Elementary School had 77 students enrolled, including 74 students (96.13%) that are eligible for free or reduced-price meals³. These statistics indicate that a significant portion of students are from lower income families and in need of safe, economical routes to school.

² US Census Bureau American Fact Finder, "MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2016 INFLATION-ADJUSTED DOLLARS)" https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_B19013&prodType=table, last accessed 1/29/2018

³California Department of Education, "Unduplicated Student Poverty – Free or Reduced Price Meals Data 2016-17" https://www.cde.ca.gov/ds/ sd/sd/filessp.asp

1.8 Project Benefits

The Orleans 3C Project intends to catalyze economic improvement by providing a safe, walkable, and bikeable community core. Additional benefits to the Orleans community include decreased vehicle miles traveled, reduced particulate and greenhouse gas emissions, and improved public health.

The Orleans 3C Project will benefit students of Orleans Elementary by providing a safer environment for walking and biking to school, home, and elsewhere in Orleans. The Project also includes an active community park on a vacant lot adjacent to the scenic Klamath River, which the students helped design through an in-class exercise. The park will allow the students to have a new, safe area for recreational activities. Students were also involved in a similar street design activity. Direct participation in the Project added value by promoting an increased sense of pride shared between their peers and the greater community.

2 EXISTING CONDITIONS

0.72 mile (3,797 feet) from west end of Klamath Bridge to Asip Road
Two-lane State Route with asphalt pavement and no shoulders
12 feet per lane, 24 feet total roadway width
30 MPH, 25 MPH in vicinity of Orleans Elementary, 35 MPH from Dredge Rd. to Asip Rd.
900
Approximately 13 bicyclists and 96 pedestrians use the project area daily. (see Table 3, below)
High motorized vehicle speeds; Lack of the following elements: shoulder, lighting, sidewalks, and bike lanes.

2.1 Existing Roadway Conditions

State Route 96 extends through the downtown core of Orleans where reduced speeds are posted due to higher volumes of local cross-traffic, including pedestrian and bicycle modes. State Route 96 serves as the "backbone" roadway for travelling throughout the Orleans community with connections to local feeder streets and direct access to many driveways that serve various uses. In addition to serving local traffic, SR 96 serves as an important link to many other regional communities, and connections to Interstate 5 and U.S. Highway 101. However, the existing infrastructure of SR 96 is in poor condition and does not meet current Caltrans design standards. Noticeably absent within the project area are lighting, roadway shoulders, sidewalks, and bicycle lanes. The one crosswalk that exists within the Project area is in deteriorated condition, crossing SR 96 near the Orleans Elementary School. Much improvement is needed along SR 96 to mitigate dangerous conditions impacting pedestrians and bicyclists.



Figure 2: Highway 96 Lacks Adequate Shoulders

Figure 3: Bicyclists Travel on Roadway

2.2 Non-Motorized Traffic Volumes

Caltrans installed two cameras to record video footage of pedestrians, bicyclists, and other users in the project area. One camera was installed at the entrance to Orleans Elementary School from SR 96, and the other recorded SR 96 in front of the Post Office. These cameras recorded the roadway from Thursday, September 28 to Sunday October 1, 2017, from 7 AM until 7 PM each day. On Monday, October 2, the cameras recorded 9 hours at Orleans Elementary and 4 hours at the Post Office, and though noted in Attachment A, are not used in the summary in Table 3, below. More detailed information regarding the Bicycle and Daily pedestrian counts can be found in Attachment A.

The intersection of Orleans Elementary School and SR 96 saw an average of 60 persons walking or biking each day. An average of 36 persons were observed walking or biking each day on SR 96 in front of the Post Office.

Table 3 Bicycle and Pedestrian Counts									
Orleans Elementary Bicycle and Pedestrian Summary									
Peds Bi- Bikes Bi-									
Day	Date	directional	Peds N	Peds S	directional	Bikes EB	Bikes WB		
Thursday	2017 09 28	43	35	8	10	4	6		
Friday	2017 09 29	35	28	7	11	3	8		
Saturday	2017 09 30	39	13	2	5	3	2		
Sunday	2017 10 01	39	37	2	1	1	0		
Monday*	2017 10 02*	17	12	5	0	0	0		
	Total	173	125	24	27	11	16		
	Average	35	25	5	5	2	3		
	Orle	ans Elementar	y Crosswalk E	icycle and Pe	destrian Summ	ary			
		Peds Bi-			Bikes Bi-				
Day	Date	directional	Peds NB	Peds SB	directional	Bikes NB	Bikes SB		
Thursday	2017 09 28	1	1	0	0				
Friday	2017 09 29	1	0	1	0				
Saturday	2017 09 30	0	0	0	0				
Sunday	2017 10 01	0	0	0	0				
Monday*	2017 10 02*	1	1	0	0				
	Total	3	2	1	0	0	0		
	Average	1	0	0	0	0	0		
		Orleans Post	Office Bicycle	and Pedestri	an Summary				
		Peds Bi-			Bikes Bi-				
Day	Date	directional	Peds N	Peds S	directional	Bikes WB	Bikes EB		
Thursday	2017 09 28	36	15	21	4	2	2		
Friday	2017 09 29	31	11	20	7	4	3		
Saturday	2017 09 30	18	6	12	5	3	2		
Sunday	2017 10 01	33	11	21	2	1	1		
	Total	118	43	74	18	10	8		
	Average	30	11	19	5	3	2		
1	* Note: This day	y only contains a	about 8 hours	of data rather	than the 12 hou	urs usually coll	ected.		

Table 3: Bicycle and Pedestrian Counts

2.3 Traffic Speeds

Heading west into Downtown Orleans on SR 96, the speed limit is 30 miles per hour (mph) from the Klamath River Bridge to Dredge Road, and 35 MPH from Dredge Road to Asip Road. The speed limit decreases to 25 mph in the vicinity of Orleans Elementary School where yellow advisory speed limit signs are posted.

Signage along the project area is limited with a total of eleven signs (seven traveling eastbound and four traveling westbound). The signs each indicate an intersection, speed limit, or distance to other towns and cities.

2.4 Existing Traffic Hazards and Accident Locations

Using the Transportation Injury Mapping System (TIMS), collision data was analyzed from 1/01/2006 to 12/31/2016. In Humboldt County, the unincorporated areas had a total of 4,397 collisions involving 3.7% (164) pedestrian collisions and 3.7% (164) bicycle collisions. In unincorporated Humboldt County, 2,568 (58.4%) of collisions occurred on state routes. However, the TIMS system only spatially represents 85% of total collisions in unincorporated Humboldt County, and 83.5% of collisions involving pedestrians. Therefore, there may have been collisions in Orleans that are not shown in Figure 4. Although some pedestrian collisions have been reported and therefore are recorded in the TIMS database, many accidents are not reported due to limited law enforcement presence in the community. Local residents reported at least double the official count.

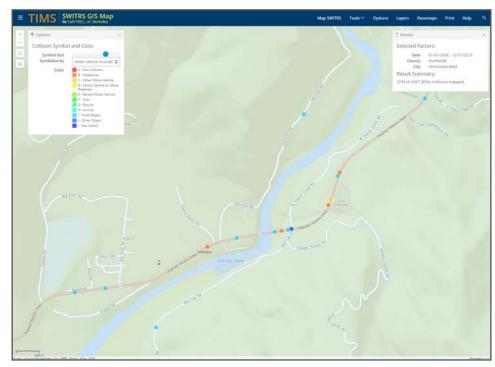


Figure 4: Accident locations within community of Orleans from 2006-2016. (Source: Transportation Injury Mapping System). Collisions involving Pedestrians shown in orange.

From 2006 through 2016, fifteen traffic collisions were recorded in the Orleans community, 3 of which were directly within the Project Area. One of these three collisions involved a pedestrian fatality, while the other two only involved automobiles. Three more pedestrians were killed or injured by automobiles in Orleans outside of the project area, along SR 96 east of the bridge. Lack of law enforcement availability in the community has led to insufficient reporting of accidents, and therefore actual collision counts may be higher.

These collisions indicate a serious safety hazard for motorists, bicyclists and pedestrians. Exacerbating the issue is the volume of bicyclists and pedestrians utilizing the community core for school, business, commerce, and recreation. Although the number of actual collisions involving pedestrians and bicyclists in the project area may appear small, it reflects the community's size and reluctance to walk or bike within the town center. The highest community concern is safety for the citizens and visitors of Orleans, as described in Section 3: Community Involvement.



2.5 Existing Park Property Conditions

Figure 5: Park Property, looking southeast from SR 96 in Orleans.

In 2016, the Karuk Tribe acquired the "old hotel site" property on SR 96 in the community core of Orleans. The vacant riverfront property has been identified as an ideal site for community improvements that will revitalize the community and provide a public gathering place. Comprised of two parcels, 0.80 and 1.03 acres each, this site is being evaluated for use as a community park. The property is served by direct access to SR 96, adjacent electrical power, contains grade (elevation) changes, suitable shade trees, and frontage on the Klamath River. Humboldt County zoning of the site is U-Unclassified, with a use code description of Vacant Rural Residential.

Potential environmental constraints to development of the park include a high sensitivity of cultural resources, sensitive aquatic species and habitat, expansive soils, flooding, nesting raptors, and contaminated soils attributed to prior uses during the past century. The park property is bordered by

the Klamath River on the south side, and Wilder Gulch on the east. Orleans has incurred historic record level flooding during the past century which remains a significant design constraint. An ancestral Karuk footpath follows the river, and must be considered when designing and constructing park improvements to avoid desecrating historic cultural resources. Without appropriate mitigation or implementation of Best Management Practices (BMPs), grading, removing vegetation, and construction activities also have the potential to create siltation in the Klamath River which could impact sensitive aquatic species and habitat, as well as disturb nesting raptors. While former uses of the property are known to have included a hotel dating back to the 19th century, a Phase I Assessment would be appropriate to determine whether intervening uses may have contributed to any contaminated soils.

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3 Community Involvement

3.1 Outreach Overview

The Orleans 3C Project involved a robust community outreach program to first understand the opportunities and constraints of community improvements, and then listen to the people of Orleans. Only a project developed from community input will be accepted, respected and embraced as a positive change that will transform Orleans into a safe, comfortable and productive place to live and visit. It is the collective community vision that will succeed when implemented.

The Karuk Tribe contracted with a local project coordinator to foster integration between the local stakeholders and community members and the project consulting team. This individual engaged people on a personal level and acted as a conduit between the consultants and the local community. Because of this team structure, the community was engaged, informed, and participated in the entire planning process.

A citizens advisory group made up of local business owners, Tribal representatives, non-profits, public health officials, State agency representatives, landowners and citizens was created to help guide the project process. This group proved invaluable and solidified community buy-in to the project.

The community outreach included all levels of citizenry throughout the process and included meetings, workshops, site visits, student engagement, and critical one-on-one engagement with stakeholders. Advertising with a project website, newsletters, direct mailers, public postings, and social media created community-wide enthusiasm for the planning process. The entire community in and surrounding Orleans was involved in the final outcome of this project.

3.2 Core Project Team

Community involvement in the Orleans 3C Project was guided by the Core Project Team. This team consisted of the Tribal Transportation Director, Karuk Tribe Project Coordinator, transportation planners, landscape architects, community engagement specialists, designers, and Caltrans representatives. This team was responsible for engaging the community through the advisory group, community meetings, electronic media, and printed media. Additionally, the core team collected and analyzed data, developed conceptual design options, prepared the project report, and communicated the project progress to the community.

3.3 Advisory Group

The project Advisory Group was formed to directly involve stakeholders from the community in the entire project process. Members representing a wide range of interests including property owners, agency staff, Tribal representatives, business owners, nonprofit organizations, and prominent community members were asked to participate. The Advisory Group met 3 times prior to the Design Fair and discussed the goals of the project, rules of involvement, community event format, effective outreach strategies, community theming, streetscape best practices, community issues, community opportunities, and community event

logistics. These meetings were well attended by an engaged group of 15-25 advisory group members and the general public (Advisory Group members, meeting materials and attendee lists can be found in Attachment B).

Following the Design Fair, the Advisory Group met to review the results of the conceptual design exercises and met again on April 23, 2018 to review the draft project report. These meetings provided opportunities to give feedback and to make any adjustments before the project moves to the implementation phase.

In general, the Advisory Group approved the revised design that resulted from comments from Caltrans regarding safety and operability of some of the initial proposals. They had the following concerns:

- The water main for the town runs on the north side of Highway 96 through the project area. It is known to be old and may break. Consideration needs to be given to whether the project could damage the water line or make it more difficult to fix the waterline if paved over.
- Realistically, the only access point for the Post Office and MKWC is from the west. Parking will need to be
 angled (permissible for ADA parking as well), and the flow will have to be one way towards the east, with the
 exit between MKWC and the gas station. There was some discussion if people could or would still back over
 the bike/ped path to get out of parking and back on the road. MKWC staff expressed some concern about the
 new parking restrictions.
- Another suggestion was made the day after the meeting, that Caltrans might consider moving the road to the north between Ishi Pishi Road and across from the Post Office. The area is currently an unvegetated, dirt shoulder about 20-feet wide. That would expand the area available on the south side of the road while still leaving room for a parking area to the north of the bike/ped trail to the north of the road.
- Rather than a painted 4' buffer with a small mix berm in the middle, one recommendation was to consider a Type E dike (berm) that is not a "wheel catcher" and slopes from 2" near traffic to 6" away from traffic and is about 14" wide. It could be painted with tribal designs and would leave 3 feet that could be planted with grass. It would be easy for the local Caltrans maintenance group to keep the grass mowed, and the grass strip might be strategically placed over the waterline to avoid digging up new pavement if it needs repair or replacement, and it would provide for better pervious surfaces to manage runoff during rain events.
- If the tribe is going to buy and maintain the pedestrian scale lights, it is recommended to install solar-powered lights. Some people were concerned about vandalism. Light poles could be painted with tribal designs to discourage vandalism.

3.4 Outreach Events

The following is a summary of important community outreach efforts:

Table 4								
Orleans Community Center Connectivity Project Outreach Meetings								
Advisory Group Meeting #1	Tuesday, April 25, 2017							
Advisory Group Meeting #2	Thursday, July 27, 2017							
Advisory Group Meeting #3	Monday, August 28, 2017							
Community Design Workshop (Opening)	Tuesday, September 12, 2017							
Community Design Workshop (Open House)	Thursday, September 14, 2017							
Community Design Workshop (Final Event)	Friday, September 15, 2017							
Landowner Meetings	August 25 through September 11, 2017							
Junction School Student Engagement	Wednesday, September 13, 2017							
Orleans Elementary School Student Engagement	Monday, December 4, 2017							
Advisory Group Meeting #4	Monday, December 4, 2017							
Advisory Group Meeting #5	Monday, April 23, 2018							

3.4.1 ORLEANS DESIGN FAIR

The core team and the project Advisory Group hosted a 4-day-long design fair. The event had numerous activities with the goal of understanding what the community vision for Orleans is, what design options would work, and finally, which design options people wanted built.

Advertising for the design fair included a banner across Highway 96, notices on the post office door, a community-wide mailer, phone calls, and personal contacts. The community of Orleans does not have cell phone service, and thus advertising relied heavily on physical media. The post office door provides important information in Orleans, receiving 100% readership, and therefore was an integral part of spreading awareness of the design fair.

The design fair began with a Tuesday night workshop that included a presentation by the consultant team on existing conditions and best practices. The participants were asked to write and draw their comments and ideas for improvements on large maps of the roadway and park property. The outcome included community comments and context sensitive design ideas.

Through the next days of the design fair the design team set out to explore the existing conditions and constraints through a series of walking audits, behavior observance and community interaction. The team prepared design concepts based on community input and practical application over these days. Additionally, open house times were utilized by interested community members to drop by and discuss the progress with the consultant team. This allowed for flexible designs to be developed to fit community desires.

On the last day of the Design Fair, a Review of Concepts Celebration was held. Once again, the community showed support for the Project by giving their final comments and voting by posting sticker dots with the numbers 1, 2, or 3 on the three roadway and two park design options. The numbers ranked designs, with 1 being the top choice and 3 as the last choice. This exercise received over 160 community votes for a

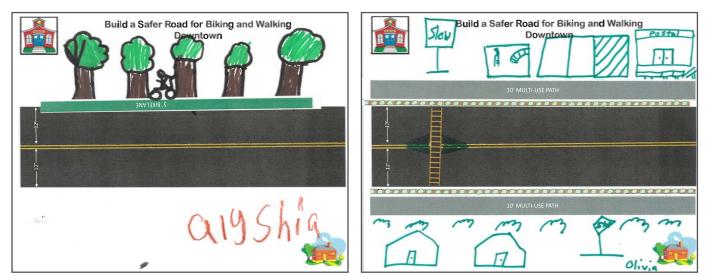
preferred option. Option A was the most popular with a total of 66 stickers (39 number ones, 21 number twos and 6 number threes), followed by Option B and then Option C (see tally below).

Table 5 Design Concept Alternative Voting Summary						
Ontion		Rank		Total		
Option	1	2	3	Totai		
Option A	39	21	6	66		
Option B	10	15	25	50		
Option C	17	11	16	44		
Total	66	47	47	160		



Figure 9: Community Members Interact with Consultants

3.4.2 STUDENT DESIGN EXERCISES



Figures 10 and 11: Selected streetscape designs created by 4th-8th grade students at Orleans Elementary

Members of the project team went to Orleans Elementary and Junction Elementary schools to engage students in the design process. The intent was to explore the student perspective on the present and future of Orleans and extract creative ideas from the students. Bringing youth into the planning process ensures that their voices are heard and promotes a sense of connection between the youth population and their built environment. This exercise was incredibly valuable to the design team and the students were well engaged.

Junction Elementary School is located 8 miles from the project area in Siskiyou County, and was chosen for outreach efforts because approximately half of the school's students live in the Orleans area. Junction students in fourth through eighth grade participated in an exercise in creative thinking and design. Groups of 4-6 students with one facilitator each were provided with base templates and cut outs of potential improvements and developed their own designs. After the exercise, students elected a spokesperson to present their group design to the class.

Orleans Elementary School students in fourth through eighth grade were also given the opportunity to provide input in the form of an in-class street and park design exercise. Green DOT staff led an exercise in which each student glued or drew design elements including bike lanes, crosswalks, and buffers onto a sheet of paper with an illustrated roadway. Students were then separated into small groups and instructed to draw their ideal improvements on a poster-size aerial image of a project roadway segment. The park exercise entailed a similar poster-size aerial photograph of the proposed park site, with paper park elements for students to cut out and glue onto the aerial photo. Students provided valuable and highly creative responses to the design exercises.

Table 6 Student Design Summary						
Design Element	Total elei	ments used	Total students who used each element			
	4th, 5th	6th, 7th, 8th	4th, 5th	6th, 7th, 8th		
Bike Lane	9	15	7	11		
Buffer for bike lane	4	8	3	6		
Tree buffer	13	22	6	13		
Multi Use Path	7	12	5	9		
Sidewalk	9	17	6	11		
Crosswalk	19	22	12	16		
Splitter Island	1	0	1	0		
Stop sign	5	3	5	3		
Speed limit sign	1	1	1	1		
Slow sign	1	2	1	2		
Kid at play sign	1	0	1	0		
Welcome Sign	0	4	0	4		
Other Signs	2	1	1	1		
Speed Bump	0	6	0	5		
Lamps	0	21	0	6		
Traffic Light	0	1	0	1		
Total Designs	14	19	14	19		



Figure 12: Orleans Elementary students work as a group to design streetscape improvements

3.4.3 LANDOWNER MEETINGS

SR 96 occupies a prescriptive right-of-way through much of the project area. Landowners on either side of the road are therefore important components of the community and its buy-in for the proposed project. The Karuk Tribe's local project coordinator contacted a list of landowners derived from Humboldt County records, and with two exceptions, communicated with either the landowners or their local tenants between August 23 and September 5, 2017. Ongoing conversations occurred during the various public events before and after those dates. See Attachment B for information on landowner interactions.

One landowner was concerned about the legal limits of the Caltrans right-of-way. The Mid-Klamath Watershed Council was concerned about preserving parking options. Others mostly expressed concerns about the current unsafe conditions and some provided suggestions. The common theme among all landowners and tenants adjacent to the highway was enthusiastic support for the project and for any efforts that would slow traffic and make the road safer for pedestrians and bicyclists.

3.5 Community Feedback

The Community provided significant feedback about this project through the Community Design Fair, Advisory Group meetings, landowner outreach, and walking audits.

During the design fair, the community was able to vote on what they would like to see within the project. Design fair feedback included comments and votes on roadway design, project themes, and proposed park elements. The Review of Concepts and Celebration on the final day of the design fair was an opportunity for the community to see their votes and ideas come together in the form of poster-size roadway designs. A comment section was made available on the design posters, allowing the community to write any further comments about the project. Design Option A was voted the community's favorite design. The comments varied based on personal opinion and the content of the designs. Table 7 shows the community form the Community Design Workshop and the Review of Concepts and Celebration.

Initially, the project area ended at Dredge Road to the West. Community members recommended that the project should terminate farther west at Asip Road instead, while some requested that the project continue all the way to Eyesee Road. Due to design constraints between Asip and Eyesee Roads, the project area was only extended to Asip Road.

		Table 7 Design Fair Comment Sumn	0000				
Roadway Comments	Roadway Comments Project Themes Proposed Park Elements						
Crosswalks	14	Community Events	6	Restrooms	10		
Lighting	14	Historic River Footpath	5	Footbridge	9		
Walkable Community	10	River is Home	5	Group Picnic	7		
Park	8	Tribal	4	Visitor's Center	4		
Tribal Museum/Info Kiosk	7	Forest	4	Basketball	2		
Slow Traffic	5	River is Home	4	Skate Park	2		
Park	5	Salmon	4	Wayfinding Monument	2		
Bikeable Community	4	Fire	3	Playground	1		
Trees/Landscaping/Flowers	4	Flooding	3	Reconstruct Hotel	1		
Safety Improvements	4	Center of the Work	2	RV Pullout/Dump Station	0		
Gateway Monument	3	Recreation (general)	2	Water Park	-1		
Sidewalks	3	Logging	2				
Recycle and Trash Cans	3	Mining	0				
Bilingual signs	3	Legalized Cannabis	-1				
Maintenance/Feasibility/Funding	3	Bigfoot	-7				
Salmon Theme	2						
Bridge over Wilder/Pihneefich Gulch	2						
Walking Path	2						
Signage/wayfinding	2						
Wheelchair/Scooter Access	2						
No Street Lights	1						
More Trees	1						
Parking	1						
Median Island through town	1						
Bike Racks	1						
Family/Kid Friendly	1						
Tishawnik Path	1						

3.6 Web-Based Outreach

Web-based outreach was used as an outlet to connect with the community before, during and after the Downtown Orleans Streetscape Design Fair. The project's website, Orleans Community Center Connectivity Project, can be found at www.go-orleans.com. The website was used throughout the project to distribute information and solicit input. After the meetings were held, the website was updated with results of the Design Fair so community members and interested parties could review the concept designs.

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4 DESIGN CONCEPTS

4.1 Roadway Design Options

Three conceptual design options were prepared utilizing the existing data, community input, desired outcomes, and understanding of the physical roadway conditions. Each of the concept designs incorporated bicycle and pedestrian mobility and safety as a primary improvement.

4.1.1 OVERVIEW - ROADWAY DESIGN OPTION 'A'

Design Option 'A' incorporates an eight-foot-wide multimodal use path located on both sides of SR 96, with a 4-foot-wide bioswale or striped buffer as a physical separation between vehicle traffic and pedestrians and bikers. Like each of the design options, it includes strategically located pedestrian crossings, splitter islands for traffic calming effects, appropriate sign package and pedestrian level lighting.

Community Feedback

Three community comments provided at the Design Fair's Review of Concepts and Celebration mention adding trees and plants along the road, and two comments request more signage. One comment questioned the need for 16 feet of total shared path width. More information on design alternatives can be found in Attachment C.

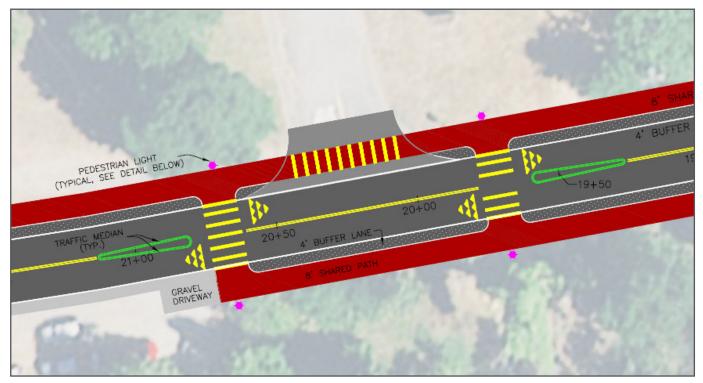


Figure 13: Roadway Design A at intersection with Orleans Elementary



Figure 14: Roadway Design A, Section 1 Cross-Section

4.1.2 OVERVIEW - ROADWAY DESIGN OPTION 'B'

Design Option 'B' includes the addition of 5-foot-wide sidewalks and 5-foot-wide bike lanes. The concept includes a gutter pan and curb as well as a 2-foot striped buffer between the roadway and bike lane. This concept also includes strategically located pedestrian crossings, splitter islands for traffic calming effects, appropriate sign package and pedestrian level lighting.

<u>Community Feedback</u>

The design received comments in support of adding pedestrian signage, a roundabout to slow traffic, and a gateway sign. One comment stated that Option 'B' appears safest for bike riders, especially beginners. However, the design received multiple comments strongly against installing sidewalks as it would change the rural character of Orleans. More information on design alternatives can be found in Attachment C.

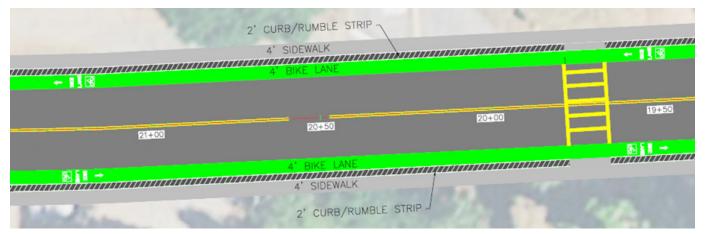


Figure 15:Roadway Design B at intersection with Orleans Elementary

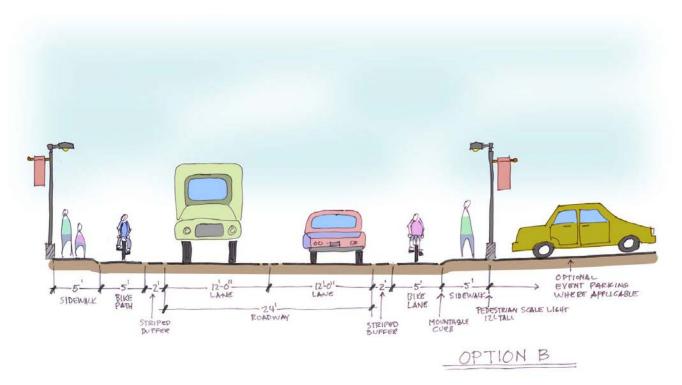


Figure 16: Roadway Design B Cross-Section

4.1.3 OVERVIEW - ROADWAY DESIGN OPTION 'C'

Design Option 'C' proposes a 10-foot-wide multimodal use path on one side of the roadway and striped buffer between the vehicle traffic and bicycle and pedestrian traffic. Unlike Option 'A', it is located on only one side of SR 96 and is increased in width to 10 feet. This concept also includes strategically located pedestrian crossings, splitter islands for traffic calming effects, appropriate sign package and pedestrian level lighting.

Community Feedback

Community members commented in support of adding trees along the road, improving drainage for rain runoff, and having the path on one side of the roadway. However, commenters stated that the path should follow one side of the road instead of crossing from north to south, and that the diverters will hinder turning movements into the park and gas station. More information on design alternatives can be found in Attachment C.

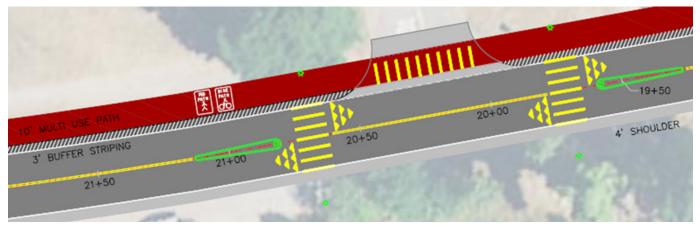


Figure 17: Roadway Design Option C at intersection with Orleans Elementary

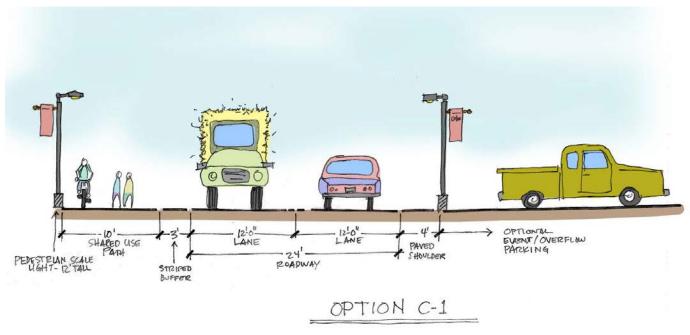


Figure 18: Roadway Design C, Section 1 Cross-Section

4.2 Community Park Design Options

Two community park design options were generated from the initial Advisory Group and Public Workshop. The main difference between the designs is that Option 'A' features a visitor center, while Option 'B' features a basketball court instead. These two options were presented at the community design fair, where community members commented about their favorite design elements and expressed their desired changes. The most important features identified were later combined into a final park design, which was approved unanimously by the Advisory Group.

4.2.1 COMMUNITY PARK OPTION 'A'

Option 'A' features a visitor center located adjacent to a historic stone fireplace that is a relic from a 19th century hotel. This option also favors ample passive open space in the form of turf grass and open fields.

Both options share the ability for travelers to pull off the rural highway and park. They can take advantage of the picnic facilities, as well as contemplate the rich cultural history of the Karuk Tribe through an interpretive kiosk. Restrooms have also been planned for both options.

Options 'A' and 'B' both allow locals to meet at a group picnic pavilion with space for cooking and serving food. There are also individual picnic tables and benches scattered throughout the park, most of which are placed to take advantage of either the view to the river or the shade adjacent to a creek that forms the eastern boundary.

Local residents, as well as travelers, can take advantage of childrens' playgrounds with play structures for both school age and pre-school. Both options accommodate multi-modal forms of transportation, with connections to the planned multi-use path and on-site bike parking.



Figure 19: Community Park Concept 'A'

4.2.2 COMMUNITY PARK OPTION 'B'

Park Option 'B' features a basketball court and no visitor center. To make room for the court, the size of the open-space field was reduced. As expected, there is more paving in this option.

Option 'B' locates the group picnic pavilion closer to the river to take advantage of the riverside view. There are stand-alone bathrooms located on the west side of the park.



Figure 20: Community Park Concept 'B'

5 Selected Design Alternatives

5.1 Roadway Improvements

The three conceptual design options developed during the course of this project were presented to the community at the final Design Fair celebration on September 15, 2017. Over 100 participants were asked to vote for their preferred concept roadway designs. Roadway design option A which included a multi-use path on both sides of the road separated by a bioswale was awarded the most votes. This option was presented to the California Department of Transportation (Caltrans) who is the owner and operator of State Route 96 for a feasibility and compliance review. The Caltrans District 1 technical staff considered the bioswale to not be the best option for separating vehicles and non-motorized users. Additionally, light standards on the splitter islands and the easternmost pedestrian crossing were rejected as not compliant with design standards and/or not necessary. Through cooperative discussion between Caltrans, the project team and the project Advisory Group, an alternative Concept Design Option A was developed. The project extents were modified from the original concept designs to end at Dredge Road on the west end of the project.

The associated cost estimate for roadway design improvements is a planning level cost estimate. As the project moves forward, the implementing agency will work closely with Caltrans District 1 staff to ensure constructability and approval of the project design. The project is expected to be extended to Asip Road in Phase 2.

5.1.1 FINAL CONCEPT DESIGN OPTION A

Most of the concept design in Option A was acceptable to Caltrans including, reduced travel lane widths to 11 feet, pedestrian crossings at all of the recommended locations except the easternmost crossing, and a multi-use path on both sides of the road separated by a buffer. A Type E asphalt/ concrete dike and natural turf or grass as a bufferwas ultimately chosen for this conceptual design. The Final Concept Design Option A incorporates these recommendations. It includes a 4 foot buffer made up a the recommended Type E A/C dike and natural turf between the multi-use path and the vehicle travel lane. Additionally, the final design eliminated the easternmost pedestrian crossing at Ishi Pishi Road and light standards on the splitter islands. The splitter islands will be designed with mountable curb to accommodate oversized vehicles.

The Final Concept Design Option A is defined in the following graphics.

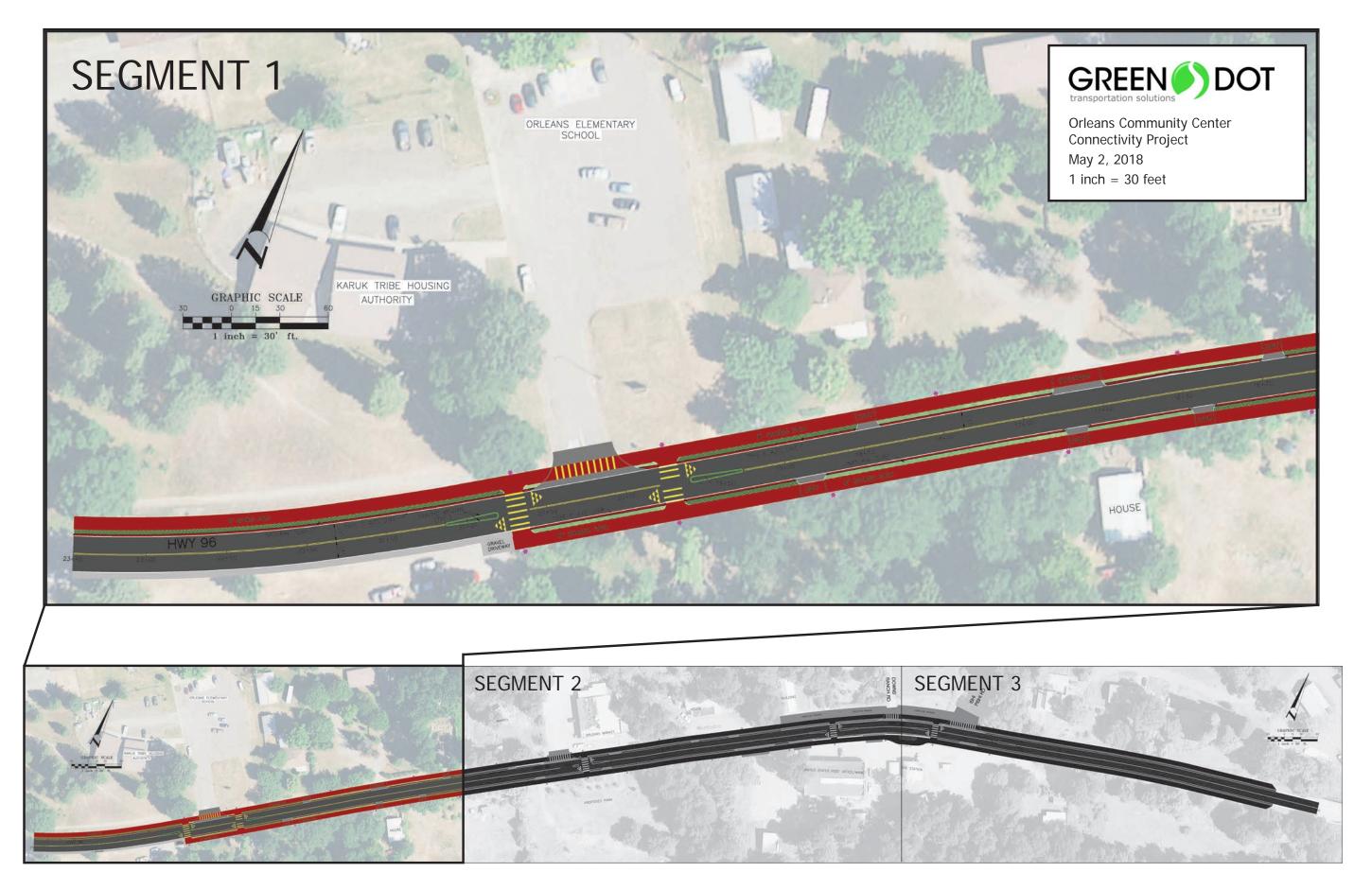


Figure 21: Final Concept Design, Segment 1

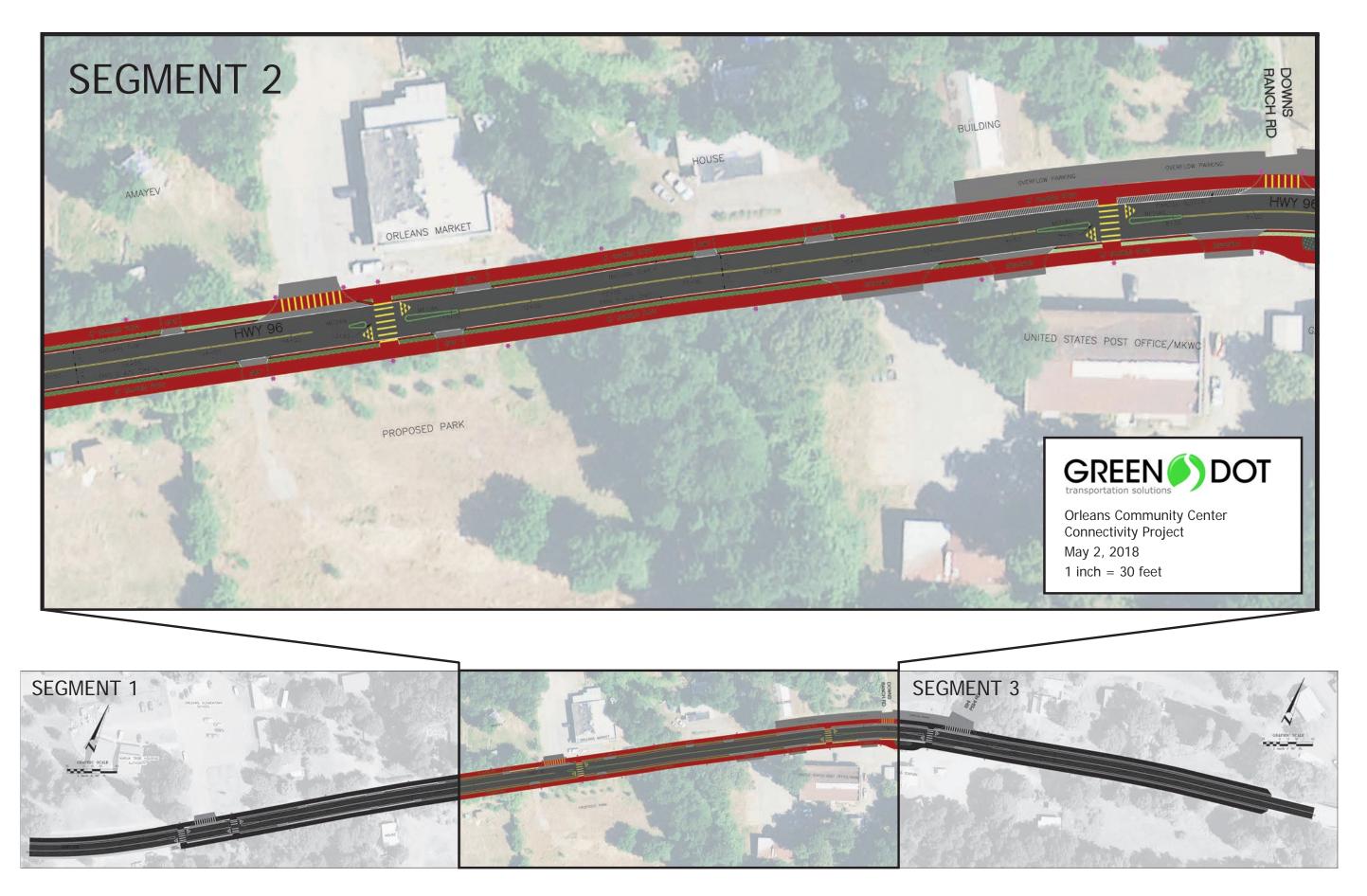


Figure 22: Final Concept Design, Segment 2

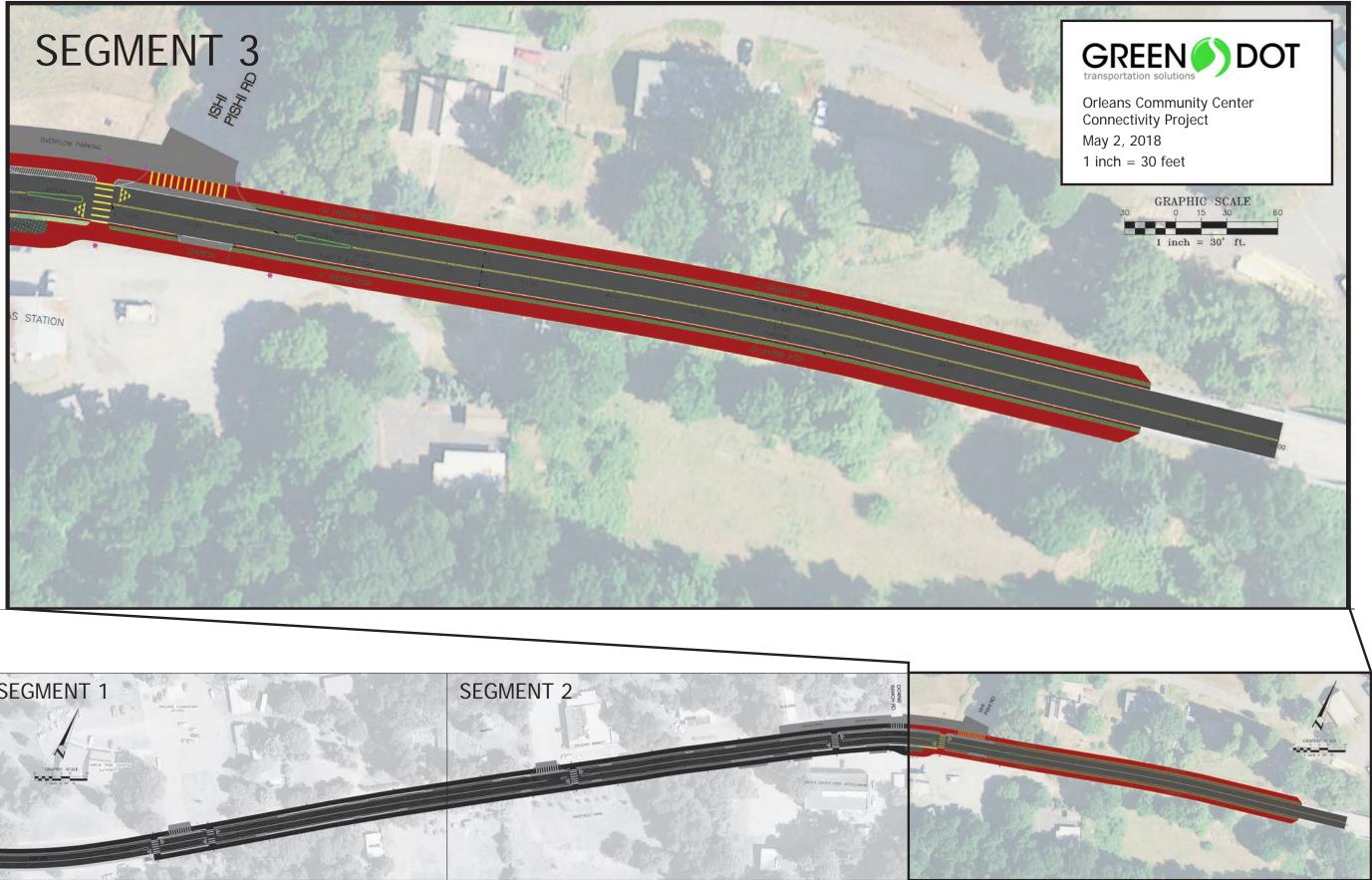




Figure 23: Final Concept Design, Segment 3

5.1.2 COMPREHENSIVE ACCESS IMPROVEMENTS

The Project is focused on active transportation in Downtown Orleans to increase safety for pedestrians and non-motorized users. The Project will add walking and biking opportunities throughout the project area and allow community members to safely travel through Orleans community core without driving a car. Figures 21, 22, and 23 illustrate the prospective changes along SR 96 including improvements to the intersections between Orleans Elementary School, Orleans Market, the Post Office and Ishi Pishi Road. The designs will slow down traffic by reducing travel lane width and adding splitter islands at crosswalk locations. In addition, an 8-foot-wide multi-use path on both sides of the roadway will be shared by pedestrians and bicyclists. Access points to commercial and residential parcels will be improved through defining the ingress and egress of the parcel. A roadway sign package is recommended to ensure travelers understand the potential for walkers and bicyclists in the community core of Orleans.

5.1.3 INCREASING WALKING AND BIKING OPPORTUNITIES

Currently, Orleans has no sidewalks or bike lanes which creates dangerous conditions for residents and visitors that walk or bike in the area. The Project will increase walking and biking opportunities by adding over 1 mile of multi-use path that protects bicyclists and walkers from vehicle traffic. The path is separated from the roadway by a 4-foot buffer which will reduce chances of vehicles from interacting with bicyclists and pedestrians.

5.1.4 IMPROVING SAFETY

The Project goal of improving safety along SR 96 will be achieved by adding intersection and pedestrian lighting, crosswalks, traffic calming medians, and a multi-use use path with a buffer along the project roadway segment and related intersections. The concept is designed to instinctively slow traffic and communicate to drivers that people are active and present along the road and in the adjacent community.

5.1.5 Speed Reduction through Concept Design

The concept design will reduce speeds by adding traffic calming medians placed strategically at intersections, pedestrian crossings and entrances into the community core. Travel lanes in the project area will be narrowed from 12 and 13 feet to 11 feet, and a buffer will be constructed adjacent to the travel lanes in both directions. Additionally, pedestrian warning signs and high visibility crosswalks will alert drivers to pedestrian crossing locations along the roadway. These changes will communicate to drivers that they are entering a community and effectively influence them to slow down to a comfortable and safe speed.

5.1.6 ANTICIPATED SIGHT DISTANCE AND/OR VISIBILITY IMPROVEMENTS

The Project will mitigate visibility concerns by adding street lights and warning signs at intersections and pedestrian crossings. New crosswalk locations were selected to maximize sight distance of oncoming traffic to ensure pedestrians are visible when crossing the street.

5.2 Selected Community Park Design

Please reference the Preliminary Landscape Plan on the following page. Much of the concept was developed utilizing the Design Development Images on Page 33.

The majority of the public preferred to have both a basketball court and a visitor center. The location of the visitor center remains as located in park Option 'A', next to the historic fireplace. Restrooms are placed on the other side of the fireplace, creating a pleasant community gathering area. Parking lot size is reduced to accommodate two buildings that front onto the rural highway, visitor center, and bathrooms.

The preferred location for the group picnic pavilion is next to the river. The playgrounds are located adjacent to the pavilion, allowing adults to supervise children while pavilion activities occur. This allows the basketball court to be located behind the visitor center and to the east of the playgrounds and pavilion.

One important existing feature of the site is a relic stone retaining wall, presumably part of the old hotel. This wall divides the park into an upper and lower terrace adjacent to the river. Overwhelmingly, the public wished that the wall remain. All of the structural park features are located on the upper terrace to stay above the flood plain as much as possible. The lower terrace is then used for the more passive areas of the park, with open fields, individual picnic areas, and benches for quiet contemplation of the riverside scene.

The historic river footpath is an important aspect of the project area. During the public review of design options it was suggested that the footpath feature commissioned art and interpretive panels describing the story of the Karuk Tribe and their long-standing relationship with the river. Visitors can learn and understand firsthand the major role the river plays in the tribe's continuing culture and history by walking along a restored segment of the path, which has served as the Karuk Tribe's connectivity up and down the river for centuries. A footbridge is proposed to connect to the private parcel to the east. Owners of this parcel have indicated their willingness to extend footpath access along their property.

In summary, the Advisory Group and public steered the design of the Community Park to serve both locals and visitors, with a resulting design that functions as a gathering place to interact, socialize, play, interpret and enjoy a beautiful natural setting.

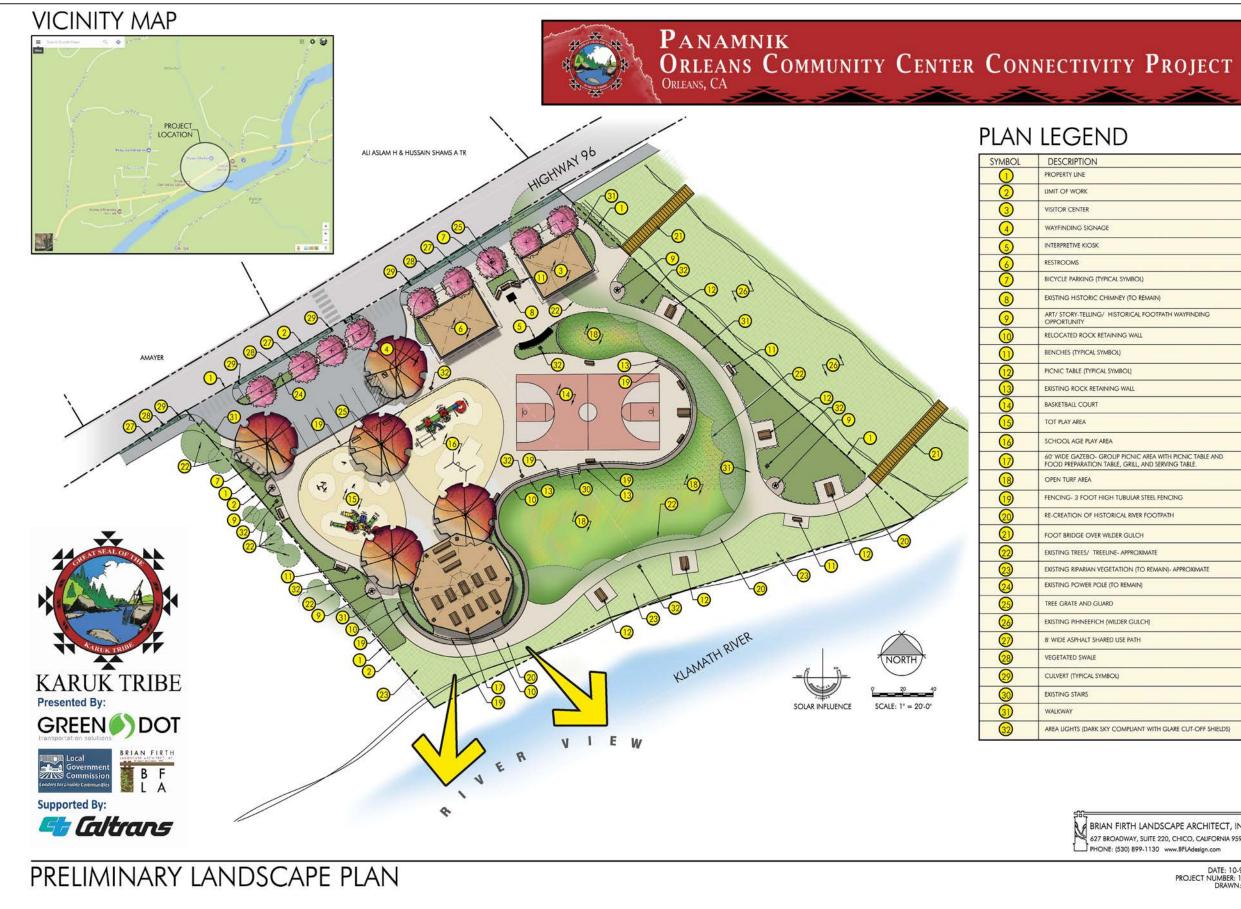


Figure 24: Final Community Park Design

PLAN LEGEND

-	
1000	DESCRIPTION
PR	OPERTY LINE
LIN	IT OF WORK
VIS	ITOR CENTER
W	AYFINDING SIGNAGE
IN	TERPRETIVE KIOSK
RE	STROOMS
BIC	CYCLE PARKING (TYPICAL SYMBOL)
EXI	STING HISTORIC CHIMNEY (TO REMAIN)
	T/ STORY-TELLING/ HISTORICAL FOOTPATH WAYFINDING
REI	OCATED ROCK RETAINING WALL
BEI	NCHES (TYPICAL SYMBOL)
PIC	NIC TABLE (TYPICAL SYMBOL)
EXI	STING ROCK RETAINING WALL
BA	SKETBALL COURT
TC	AT PLAY AREA
SC	HOOL AGE PLAY AREA
	WIDE GAZEBO- GROUP PICNIC AREA WITH PICNIC TABLE AND OD PREPARATION TABLE, GRILL, AND SERVING TABLE.
OF	YEN TURF AREA
FEI	NCING- 3 FOOT HIGH TUBULAR STEEL FENCING
RE	CREATION OF HISTORICAL RIVER FOOTPATH
FC	OT BRIDGE OVER WILDER GULCH
EXI	STING TREES/ TREELINE- APPROXIMATE
EXI	STING RIPARIAN VEGETATION (TO REMAIN)- APPROXIMATE
EXI	STING POWER POLE (TO REMAIN)
TR	EE GRATE AND GUARD
EXI	STING PIHNEEFICH (WILDER GULCH)
8	WIDE ASPHALT SHARED USE PATH
VE	GETATED SWALE
CL	ILVERT (TYPICAL SYMBOL)
EXI	STING STAIRS
W	ALKWAY
AR	EA LIGHTS (DARK SKY COMPLIANT WITH GLARE CUT-OFF SHIELDS)



BRIAN FIRTH LANDSCAPE ARCHITECT, INC. 627 BROADWAY, SUITE 220, CHICO, CALIFORNIA 95928 PHONE: (530) 899-1130 www.BFLAdesign.com

DATE: 10-9-17 PROJECT NUMBER: 1965 DRAWN: JBE





EXISTING HISTORIC CHIMNEY



DESIGN DEVELOPMENT IMAGES

PLAY AREA



BASKETBALL COURT



VISITORS CENTER



GAZEBO- GROUP PICNIC AREA



INTERPRETIVE KIOSK

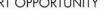


OPEN TURF AREA





ART OPPORTUNITY











BENCH















6 FUNDING AND IMPLEMENTATION STRATEGY

6.1 Estimate of Costs

The preliminary estimated cost totals for the roadway complete streets components total approximately \$1,115,000. The proposed park development cost totals \$1,633,000. Total project cost for both components equals \$2,748,000. The detailed preliminary cost estimates can be found in Attachment D.

6.2 Potential Funding Sources

The roadway project components of this project are eligible for funding from State and Federal transportation funding programs including the following:

- State Transportation Improvement Program (STIP)
- State Highway Operation and Protection Program (SHOPP)
- Active Transportation Program
- Tribal Transportation Safety Program

The programs are described in more detail below.

6.2.1 STATE TRANSPORTATION IMPROVEMENT PROGRAM

The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway system, funded with revenues from the Transportation Investment Fund and other sources. Orleans falls under the Humboldt County region for STIP funding allocations and formula share targets. The regional STIP is largely developed through discussions at the Technical Advisory Committee group which is facilitated by the Humboldt County Association of Governments. The next programming cycle for the STIP will begin in August 2019 with the adoption of the STIP fund estimate, with regional program recommendations due to the California Transportation Commission on December 15, 2019.

6.2.2 STATE HIGHWAY OPERATION AND PROTECTION PROGRAM

This program is the State's program of projects for maintaining the State's highways in efficient and safe working order. The SHOPP is broken down into sub-sets of funding depending on project type. Most notable for the Orleans project is the SHOPP Minor program. This program affords the potential for collaboration with other funding programs for the improvements recommended in this report.

6.2.3 ACTIVE TRANSPORTATION PROGRAM

California received an average of \$123 million a year over the three-year period from 2013-2016 for ATP projects. The ATP cycle 4 is expected to include \$40 million in available funding, which includes an infusion of additional funding from the recently passed Senate Bill 1. The distribution of funds is highly competitive and is managed with the guidance of the latest ATP Program Guidelines developed by the California Transportation Commission (CTC). Funds are distributed using a percentage basis and eligible recipients submit applications to Caltrans based on the following categories:

40% to Metropolitan Planning Organizations in urban areas with populations greater than 200,000.

10% to small urban and rural areas with populations of 200,000 or less.

50% to any applicant based on a statewide competitive basis.

Entities eligible for ATP funds:

- Local, Regional or State Agencies
- Caltrans
- Transit Agencies
- Natural Resource or Public Land Agencies
- Public Schools or School Districts
- Tribal Governments-Federally Recognized
- Private Non-Profit Organizations
- Other entities that the CTC determines to be eligible

The ATP goals:

- To increase the proportion of trips accomplished by biking and walking.
- Increase the safety and mobility of non-motorized users.
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals as established pursuant to Senate Bill 375 and Senate Bill 391.
- Enhance public health, including reduction of childhood obesity using programs including, but not limited to, projects eligible for Safe Routes to School Program funding.
- Ensure that disadvantaged communities fully share in the benefits of the program.
- Provide a broad spectrum of projects to benefit many types of active transportation users.

6.2.4 TRIBAL TRANSPORTATION SAFETY PROGRAM

The Tribal Transportation Safety Program (TTSP) is a Fixing America's Surface Transportation Act set aside (2%) to address transportation safety issues in Native America. Funds are available through a discretionary program and awarded to projects that address prevention of fatal and injury accidents that severely impact the life of Native American Tribal populations. The Orleans project is a good candidate project for this program.

6.2.5 Potential Funding Resources for Parks

The California State Department of Parks and Recreation offers funding opportunities through the Recreational Trails Program and Habitat Conservation Program. The Community Park developed for this project has qualifying components for both of these funding resources. Grant opportunities will be available in 2019/2020 at the earliest for the Recreational Trails Program and the upcoming deadline for 1, the Habitat Conservation Fund applications is October 2018. Additionally, the Outdoor Recreation Legacy Partnership Program offers funding to develop land to create new outdoor recreation opportunities for health and wellness of Californians. The Notice of Funding Opportunity was made available on April 18, 2018 (P18AS00153).

6.3 Implementation

It is recommended that the Orleans Community Connectivity Project move forward with ambition which is supported by the overwhelming community support. The 2018 call for projects in the Active Transportation Program is expected to take place in the spring of 2018 with the projects awarded in 2019. It is recommended that the Tribe coordinate with Caltrans and the County of Humboldt to develop a competitive application for ATP funds utilizing the foundation built in this and previous reports for this project. It is also recommended that the Tribe coordination with Caltrans), and the STIP (through coordination with Humboldt County Association of Governments and the Technical Advisory Committee).

A preliminary schedule is provided below:

- 2018-Spring-Prepare Active Transportation Program application
- 2018-Coordinate with Caltrans, HCAOG, and other potential match funding partners.
- 2018-Prepare Tribal Transportation Safety Program grant application.
- 2019/20-Request allocations from funding programs.
- 2020-Project Approval and Environmental Document.
- 2021-Project Design.
- 2021/2022-Project Construction.

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ATTACHMENT A

Bicycle and Pedestrian Counts

						Table A	A-1							
Bicycle & Pedestrian Counts - Orleans Elementary														
7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00											Total:			
Thursday	Bicycles	Х	Х	Х	Х	Х	1	2	Х	1	4	3	3	14
Thursday 9/28/17	Pedestrians	2	8	9	4	8	3	3	5	5	2	2	13	64
9/28/1/	Others	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0
	Bicycles	Х	Х	Х	Х	Х	Х	4	2	Х	4	3	Х	13
Friday	Pedestrians	Х	7	5	6	8	7	4	8	4	5	5	12	79
9/29/17	Others	Х	х	х	х	х	Х	х	Scooter	Skate board	х	х	х	2
Caturday	Bicycles	Х	Х	Х	Х	2	4	1	1	Х	Х	Х	1	9
Saturday 9/30/17	Pedestrians	х	2	3	4	6	х	1	8	2	Х	1	3	30
3/30/17	Others	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	х	Х	0
Sunday	Bicycles	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0
Sunday 10/1/17	Pedestrians	1	5	8	5	Х	8	5	7	3	9	10	3	64
10/1/1/	Others	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0
Monday	Bicycles	Х	Х	Х	Х	Х	Х	Х	1	Х				1
10/2/17	Pedestrians	1	10	6	1	4	6	7	Х	Х				35
	Others	Х	Х	Х	Х	Х	Х	Х	Х	Х				0

Table A-2														
Bicycle & Pedestrian Counts - Post Office														
		7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	Total:
Thursday	Bicycles	Х	Х	Х	Х	Х	Х	2	Х	Х	Х	Х	2	4
Thursday 9/28/17	Pedestrians	Х	2	8	2	7	3	1	1	5	8	3	6	49
	Others	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	0
Friday	Bicycles	Х	Х	Х	Х	Х	Х	6	Х	Х	1	Х	Х	7
Friday 9/29/17	Pedestrians	1	3	2	1	2	3	8	4	13	3	3	2	45
3/23/17	Others	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	0
Caturday	Bicycles	Х	Х	Х	Х	1	1	2	Х	1	Х	1	Х	6
Saturday 9/30/17	Pedestrians	1	Х	1	2	3	6	Х	6	Х	2	1	1	23
3/30/17	Others	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0
Course dama	Bicycles	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	0
Sunday 10/1/17	Pedestrians	1	Х	4	1	10	2	1	3	Х	2	1	5	28
10/1/1/	Others	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	0
Mandau	Bicycles	1	Х	Х	Х									1
Monday 10/2/17	Pedestrians	2	4	10	3									19
	Others	Х	Х	Х	Х									0

ATTACHMENT B

Public Outreach Summary

Outreach Overview

The community outreach process for the Orleans Community Center Connectivity Project was led by the Karuk Tribe with assistance from a contracted project manager and project team, and the project Advisory Group. A citizens advisory group was organized to steer the project process made up of local business owners, Tribal representatives, non-profits, public health officials, State agency representatives, landowners and citizens.

The community outreach included all levels of citizenry throughout the process and included meetings, workshops, site visits, student engagement, and critical one-on-one engagement with stakeholders. Advertising with a project website, newsletters, direct mailers, public postings, and social media created community-wide enthusiasm for being involved in the planning process. The entire community in and surrounding Orleans was involved in the final outcome of this project.

Outreach Events

The Advisory Group met 4 times prior to the Design Fair and discussed the goals of the project, rules of involvement, community event format, effective outreach strategies, community theming, streetscape best practices, community issues, community opportunities, and community event logistics. These meetings were well attended by an engaged group of 15-25 advisory group and the general public (see Table 4 for a summary of all outreach meetings held.

Community design workshops and other outreach events took place during September 2017, with some additional engagement taking place in early December. The culminating events were the Community Design Workshop, held from September 12-15, 2017. In addition to the community-wide design fair, targeted outreach took place soliciting design and safety feedback from elementary- and middle-schoolers in Orleans.



Design Fair banner



Opening presentation to community



Activities prepped for community feedback



Community activities

Help create a welcoming and walkable town core for Orleans residents and visitors.

Downtown Orleans Streetscape Design Fair

Tuesday, September 12

Community Design Workshop 6-8:30 PM

This is when we tell the designers what we want to see. Participate for a chance to win prizes. Light supper included!

Karuk Department of Natural Resources (DNR) 39051 Highway 96

Friday, September 15

Review of Concepts and Celebration 6-8 PM

BBQ, great food, and music! Announcements of design workshop prize winners! Old Orleans Hotel Site (across from the Orleans Market)

Food and Entertainment will be provided.

Families and Children Welcome!

Caltrans

Help design a safer downtown for pedestrians and bicyclists while highlighting our rich cultural heritage. Participate in fun activities with your neighbors to develop your ideas.

Other design fair activities will happen during the week, so look out for those!



For more information: Penny Eckert, (530) 605-8964, pjeckert@gmail.com

http://go-orleans.com

Design Fair Flyer – Fliers were posted around the community and well as mailed directly to community members.

STUDENT DESIGN EXERCISES

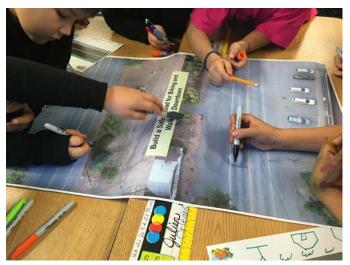
Members of the project team went to Orleans Elementary and Junction Elementary schools to engage students in the design process, as shown in the following photos.



Junction Elementary school activities



Sample design from Junction Elementary



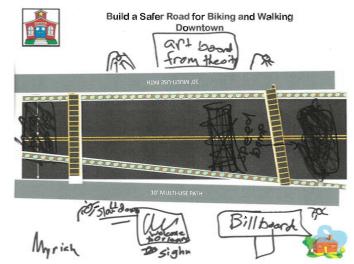
Orleans Elementary students in small groups



Junction Elementary students in small groups



Orleans Elementary school activities



Sample design from Orleans Elementary

LANDOWNER MEETINGS

SR 96 occupies a prescriptive right-of-way through much of the project area. Landowners on either side of the road are therefore important components of the community and its buy-in for the proposed project. The Karuk Tribe's local project coordinator contacted a list of landowners derived from Humboldt County records, and with two exceptions, communicated with either the landowners or their local tenants between August 23 and September 5, 2017. Ongoing conversations occurred during the various public events before and after those dates.

One landowner was concerned about the legal limits of the Caltrans right-of-way. The Mid-Klamath Watershed Council was concerned about preserving parking options. Others mostly expressed concerns about the current unsafe conditions and some provided suggestions. The common theme among all landowners and tenants adjacent to the highway was enthusiastic support for the project and for any efforts that would slow traffic and make the road safer for pedestrians and bicyclists.

Table B-1 Orleans 3C Planning Landowner Contact List								
APN	Notes	Dates of Contact						
	Tribal Housing	N/A						
529-111-005	Tribal Housing	N/A						
529-111-007	Pines Trailer Park; possible sale to Tribe; Willow Creek good example; street lights; control late night behavior at Amayev; maintain driveway width; sidewalks or paved paths good idea	8/25/2017						
529-111-012 529-121-002	Small ROW; see below for notes	8/23/2017 N/A						
529-121-003	no response, house vacant, recently vandalized	Called 8/26/17						
529-122-001	Birdsall Lot/store; 38110 Hwy 96; Gary Singh, manager, main concern is excess speed of people on highway, dangerous to turn in and out of store. Open to any improvements.	9/5/2017						
529-122-002	Amayev; (Loma Hurwitz); some parents don't want their kids near Amayev; maybe sidewalk on other side of road; future plans for low fence/wall; maintain driveway & access; people will drive on sidewalks; open to pedestrian improvements. Suggest "your speed" flashing signs for the 25 mph school zone; recommend community garden for Tribal parcel.	8/26/2017						
529-122-003	40x100' parcel N of 960.09 ac; Eric King is tenant, discussed parking and pedestrian access.	8/26/2017						
529-123-001	Old hotel; site of proposed park	N/A						
529-123-002		N/A						
529-123-003	main concern is Amayev and managing noise, drunks. Thinks tribal park adjacent a great idea. The more people stopping in Orleans, the better. Is open to streetscape ideas but does not want to have shrubs removed in front of his property because they help with noise.	8/27/2017						
529-123-004	38041 Hwy 96; happy for any changes; frequent pedestrian; locusts and retaining wall between her property and highway a problem; remove locusts, fix wall	9/5/2017						
529-123-005	driveways need to be maintained;	8/26/2017						
529-123-006	open to suggestion for pedestrian,	8/26/2017						
529-123-007								
529-101-026	USFS admin site for RD	N/A						
529-101-027	6RNF, sewage treatment	N/A						
529-101-015	parking is critical issue; access to building; planned upgrades for building; work on reducing invasives and adding natives to landscaping; consider planting strip; open to suggestion for pedestrian improvements; parking across the street important during events	8/23/2017						
529-101-016	38228 Hwy 96; (Jimmy) open to suggestions and supportive of pedestrian ideas; recommend "rumble strips" across road coming off the bridge or before crosswalk at Ishi Pishi Rd; supportive of crosswalk at Ishi Pishi Rd, supportive of formal planter kerbing and recognition for front of business; future plans to pave more of own property (drainage concerns);	8/26/2017						
529-101-019	Next to Wilder Gulch; low spot in road; anything to slow speeders; drainage a problem in front yard; very interested in project	9/11/2017						
529-101-020	Wolfe (ex-husband) is resident; recent fire							
529-101-021	67 Downs Ranch Rd; oncerned for legal limits of Caltrans ROW; be aware of	8/23/2017						
529-101-031	water main, meter boxes on this side of road; open to any ideas for traffic	8/23/2017						

Vision Statements

During the opening Design Fair workshop, the community was asked to write down their vision for the future of the community of Orleans. The facilitator prompted the group to focus on the subject roadway and community park improvements, but largely let them be creative in their responses. Many of the responses, listed below, were read out loud to associate the group with the project team and establish a baseline for the discussion.

1. It's safe for kids to walk to school on Hwy 96. We have a welcoming space for visitors. We have a public restroom that isn't abused and serves everyone.

2. I would like to see a green tree and flower lined town with a public park space (including river access), public bathrooms, visitor center, small businesses such as market, cafes (coffee shop), and art center (state park), farmer's market, local history museum, place for teen activities. A town where people driving through slow down craning their necks checking out the richness of Orleans downtown! A planted median strip section in downtown would be good and an overhanging arch or banner announcing town would be great. Enhanced shoulder or sidewalks would encourage safer foot and bike traffic. Benches and places to sit are important. Lighting near bathrooms and crosswalks is desired. Bicycle racks near public spaces is needed. More and better street signs.

3. I would like to see Orleans as a town with real services. A restaurant, a coffee shop, a gift shop, a farmer's market, a craft fair – once a week. It should be a nice place to walk, run, bike, or wheelchair through. A children's play area.

4. Healthy Productive Safe Community

5. In 10 years I'd like Orleans to be a clean, safe, family-friendly area along the Hwy 96 corridor.

6. Orleans in 20 years: kid friendly, safe, peaceful, coffee shop, trading village, walkable.

7. -Community walking paths – Grocery store – Coffee shop – Restaurant – Farmer's market – River kayak rentals – Parks for families

8. paved 10 feet on both sides past the fogline. Paved parking on the other side of the road from the P.O. The tree in front of the old Gen Store taken out.

9. Coffee shop – Fresh vegetable stand/Famer's Market – Tribal museum – Pizza house – Public bathrooms –walking trail-paved

10. Hotel reconstructed – play area for children and youth – with restrooms – picnic area – Farmer's market

11. No more drunks in downtown. More lights and no more tweaker places.

12. Coffee shop, Cafe, Bike path through town, museum, tribal info.

13. Coffee shop – Indian Info Center (Karuk) – Restrooms – large park area – play area for children to play – Grow a lot of plants

14. No traffic fatalities, or major collisions. A roadway engineered to minimize the conflict between through-traffic pedestrians and cross-traffic.

15. Twenty years from now, I's like to see Orleans back to the bustling town it used to be. Restaurants, bathrooms, hotel, safe... Coffees shop, better store. Nicer looking town.

16. A healthy productive safe community. Safe for people and bicyclists to travel. Tourist accessibility.

17. Sidewalks – Tourist Friendly (Fishermen, Hunters) – flowers

18. Safe & shady road/walkway – Local folks on the street walking from here to there.

19. A vibrant, diverse community respecting native culture and building self-sustainability and ecological awareness.

20. Clean, well-lit, inviting, family-safe, new business, bike and walking path park.

21. Real grocery store – Restaurant – Car wash – Hardware store

22. Hotel, restaurant, bathrooms

23. Slowdown traffic especially commercial trucks, coming through town. Even out the dip at Wilder Creek in town between the post office and Orleans market.

24. Clean along Highway 96 – Paint Water District Office – Bigfoot theme? – safe, clean, park-like area at Old Hotel site – native flower (less work) – Don't plan too big, then abandon work in stages.

25. What amount of park facilities can we manage? We need yearly funds to manage improvements. Protect and keep useable for all the citizens. What about Quad motorbikes.

Comment Cards

OPENING WORKSHOP

1. I'd prefer to see a cultural/heritage center, which includes more culture-traditional aspects, such as a plank house, dug out canoe, culturally appropriate workspace signage and design elements that include language and cultural component, such as basket designs, round doorways, etc. Also, collaboration with language and cultural specialists.

2. To recover a remembrance for our heritage we must have a museum soon! Could be housed in reconstructed hotel.

3. Tree-lined street with bike path. Park w/ kid play area and skatepark for teens. Light to slow down through traffic. Public info center/Karuk museum.

4. Museum/visitor's center/coffee shop? Could be a part of the picnic/rental area for flea market. Owned by Tribe – Not a single individual.

- Crosswalk @ Lower Camp Creek to Tishawnik – a walk path on that shoulder.

- Lower speed limit.
- Signs on bridge for pedestrians. All bilingual signs in Karuk

5. Street signs & lights. - Bilingual street signs in Karuk. - Bilingual welcome sign. - Youth create sign of encouragement with local baskets/animals with Karuk language i.e., "Treat out Karuk lands with respect, don't litter." "Someday you will be an elder, act like it now." - Signs could be youth designed. - Signs with tribal designs. - Recycle/trash bins. - Stick fields (traditional sticks/volleyball sand area). - No smoking/No drinking/No Drugs signs. - Rental picnic area/sale area/farmer's market controlled by the Tribe, NOT private individual!]

6. Develop a plan that is feasible. Who maintains? Develop infrastructure people need places to eat, stop for rest. Local information - history. No street lights!! Walkways – yes.

- 7. Skate park/basketball.
- 8. Culturally inappropriate to advertise Bigfoot hunting. No bigfoot statues.
- 9. Quads need their own path. No quads on roadways.
- 10. Put salmon on the bridge. Like the bears.

CLOSING CELEBRATION

1. Thank you so much for putting this on and allowing us to participate. Our families have had a great time. We are excited about the improvements, no matter which plan is chosen.

2. An avenue to explore: Biogas as energy conservation. - Europe and India for tech inspiration, also Penny seems to know a lot! - Thanks for doing this!

3. Park B we need a place for teams to play basketball. I like park B with the basketball court. The older kids need it. A skate park would be nice too!

4. Leave the chimney but add visitor center.

5. I like the visitor center and bathroom with the chimney with the bball courts. I don't think we need both playgrounds. Still like skatepark idea.

6. I would like to see a skate park the teenagers need that and the basketball court.

7. Giant Pavilion with a snack bar on one end.

8. I know Orleans kids would like a skatepark or elements/options added to basketball court to allow skating and skateboarding. I propose a survey for Orleans elementary and Orleans kids be one.

9. Park Option B. Leave chimney in with bball court \rightarrow visitor center and bathroom together.

10. Lighting for basketball court and river path multiple picnic tables.

- 11. Like Option B but want basketball and visitor center.
- 12. Drinking fountains next to restrooms and around park. Visitors center is a ++! Keep chimney.

13. Would like both a visitor center and a basketball court at the park.

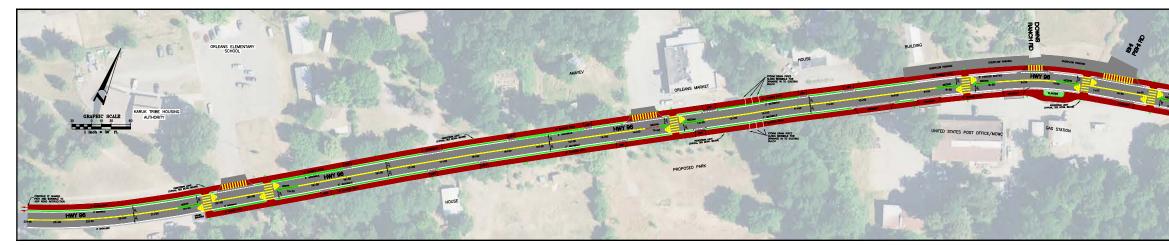
14. The plans should include a volleyball court.

15. Like to see gas lights - like to see a pier built above high water, where people could dip in fish from - a bike and skate park for children. - This area was not Panamnik it is Paynafich house.

16. Concrete ping pong table, Hugh Telly and Quinton. - Would bring out own net if need be, and paddles, balls, etc. - Concrete tables for ping pong

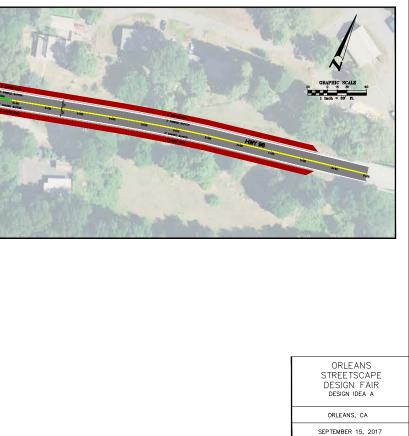
ATTACHMENT C

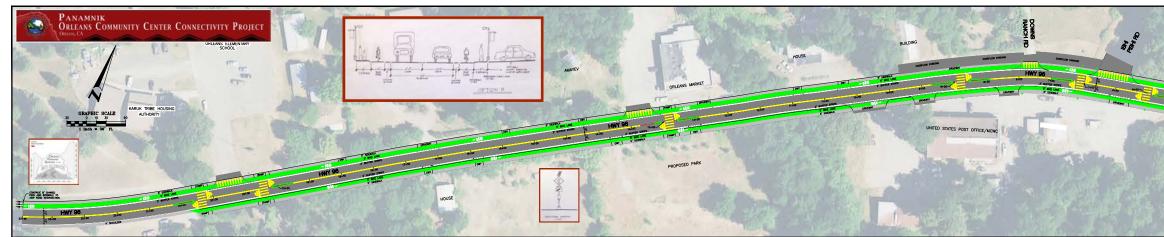
Design Alternatives



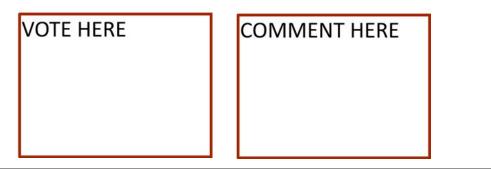
PEDESTRIAN LIGHT DETAIL

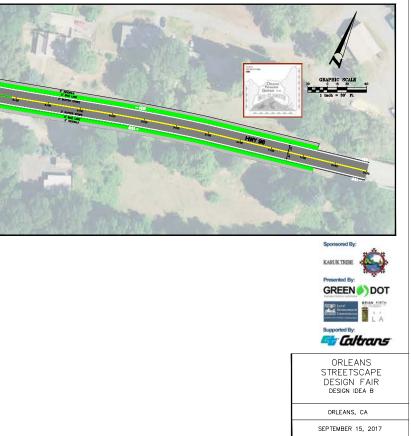


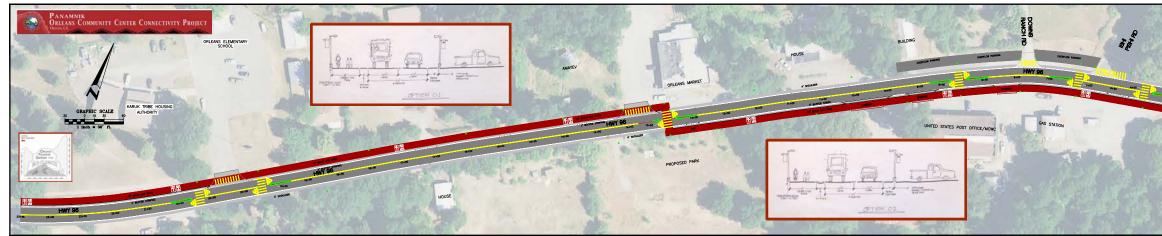




DESIGN OPTION B

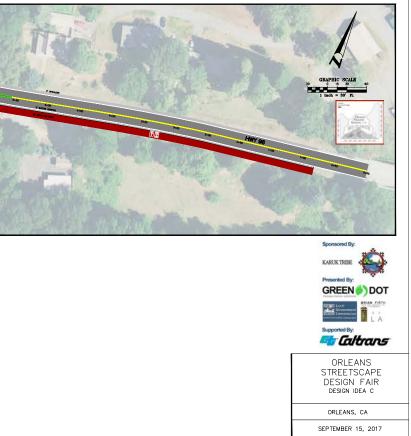




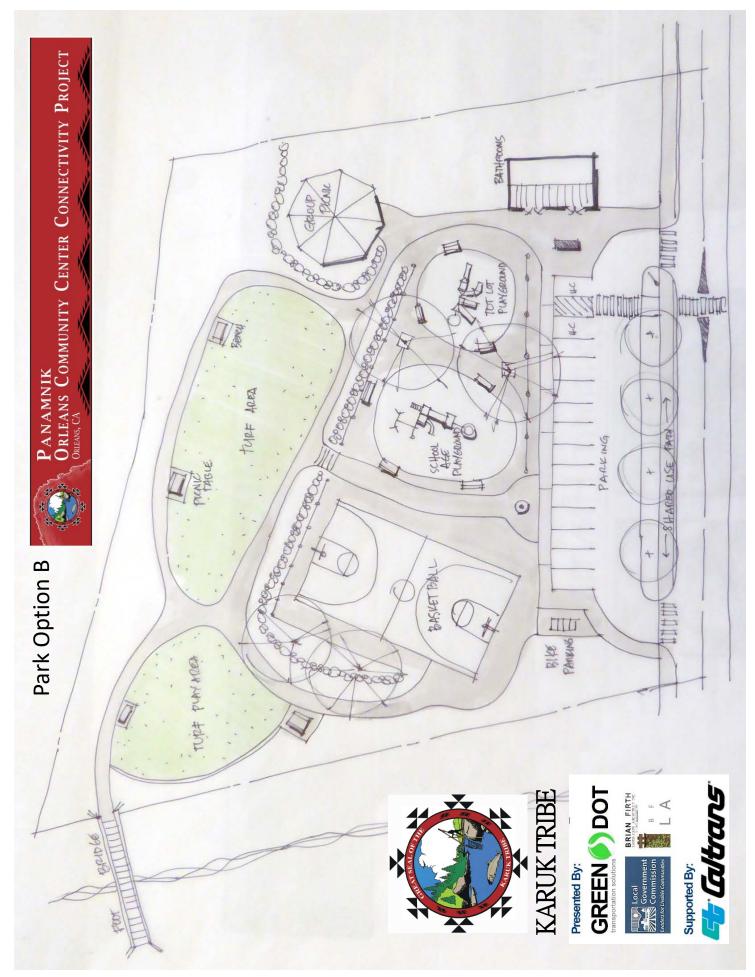


DESIGN OPTION C

VOTE HERE	COMMENT HERE







Attachment C

ATTACHMENT D

Cost Estimates

Item	Unit	Price	Length in Project area	Width	Total Striping	Quantity	Sides of street	Total	Option A
Crosswalks									
Crosswalks - HWY 96 (High Visn 10'X24')	LF	\$7.00		10	128	5		4480 \$	31,360.00
Crosswalks - Side Roads	LF	\$7.00	24	8	128	4		3584 \$	25,088.00
Multi-Use Paths									
8' shared use path - North	SF	\$6.50	2393	8		1	1	\$	124,436.00
8' shared use path - South	SF	\$6.50	2193	8		1	1	\$	114,036.00
Tree Root Barrier (10')	LF	\$10.00	4586					\$	45,860.00
Buffer									
2.5' Natural Turf Buffer	SF	\$0.00	3575	2.5			2	\$	-
Type E A/C Dike (18" wide)	SF	\$10.00	3863	1.5		1	1	\$	57,945.00
Thermo Striping for Buffer	LF	\$6.00	1100				1	\$	6,600.00
A/C Driveways and Buffer (Parking)	SF	\$6.50	350	4			1	\$	9,100.00
Tree Root Barrier (5')	LF	\$5.00	4586					\$	22,930.00
Other									
Splitter Islands - Large	SF	\$10.00	20	3		7		\$	4,200.00
Splitter Islands - Small	SF	\$8.00	10	3		1		\$	240.00
Streetlights	EA	\$5,000.00				31		\$	155,000.00
Conduit/Wiring	EA	\$20,000.00							\$20,000.00
Overflow Parking	SF	\$5.00	300	12		1		\$	18,000.00
Grading	SF	\$0.20	4586	8				\$	7,337.60
Storm Water Pollution Plan	EA	\$15,000.00							\$15,000.00
Signs	EA	\$1,800.00				15		\$	27,000.00
Grading	SF	\$0.50	4586					\$	2,293.00
Traffic Control	EA	\$10,000.00							\$10,000.00
Total Construction Item Cost								Ş	696,425.60
PA&ED	EA	\$25,000.00							\$25,000.00
PS&E	EA	\$45,000.00							\$45,000.00
R/W		N/A						Ś	
Construction Labor	EA	, 15%						\$ \$	104,463.84
Contingency		35%						Ş	243,748.96
-									

(1) Colored Pavement Cost Calculation Source:

 $https://web.archive.org/web/20150226200430/http://wiki.coe.neu.edu/groups/nl2011transpo/wiki/794d3/14_Red_Asphalt_Pavement.html$

(2) Streetlight Cost Source:

Costs for Pedestrian and Bicyclist Infrastructure Improvements, UNC Highway Safety Research Center, 2013

http://www.pedbikeinfo.org/planning/facilities_streetscape_lighting.cfm

(3) Buffer is recommended as 18' Type E A/C Dike as defined by Caltrans Standard Plan RSP A87B. The remaining 2.5' buffer between the dike and multi-use path will be natural turf.

5/2/2018

Schematic Level Statement of Probable Cost

Project: Orleans Community Center Connectivity Project Orleans, California

Date: December 7, 2017

BRIAN FIRTH LANDSCAPE ARCHITECT, INC. 627 BROADWAY, SUITE 220, CHICO, CALIFORNIA 95928 PHONE: (530) 899-1130 www.BFLAdesign.com

BFLA Project Number: 1965

ENERAL WOR	RK DESCRIPTION	QUANTITY		UNIT PRICE	TOTAL
EMOLITION					
1	Clear and Grub	77,000	SF	\$0.15	\$11,550.
2	Remove Existing Trees (including Roots).	2	EA	\$800.00	
3	Remove and Stockpile Existing Rock Retaining Wall for Re-use	200	LF	\$10.00	
4	Storm Water Pollution Prevention Plan (SWPPP)	1	LS	\$500.00	\$500.
				Subtotal	\$15,650.
RADING ANI	D DRAINAGE				<i></i>
1	Rough Grade	77000	SF	0.20	\$15,400.
2	Drainage Pipe- 12" CMP	105	LF	25.00	
3	Culvert Abutments	6	EA	1,000.00	\$6,000
4	Play Area Drainage	2	EA	1,000.00	\$2,000
5	Park Drainage	1	Allow	15,000.00	\$15,000
6	Finish Grading	77,000	SF	0.10	\$7,700
				Subtotal	\$48,725.0
ANDSCAPE C	CONSTRUCTION				
1	Concrete Paving	33,950	SF	\$8.00	\$271,600
2	Asphalt Parking Area	5,980	SF	\$5.00	\$29,900
3	Rock Retaining Wall (Re-use Stockpiled Rock)	200	LF	\$15.00	\$3,000
4	Stairs	70	LF	\$20.00	\$1,400
5	Fencing- 3' High Tube Steel	140	LF	\$10.00	\$1,400
6	Interpretive Kiosk	1	Allow	\$15,000.00	\$15,000
7	Bench	14	EA	\$1,000.00	\$14,000
8	Picnic Table	15	EA	\$2,000.00	\$30,000
9	Trash Receptacle	10	EA	\$600.00	\$6,000
10	Bicycle Rack	11	EA	\$800.00	\$8,800
11	Art/ Story Telling/ Historical Footpath Wayfinding Opportunity	4	Allow	\$5,000.00	\$20,000
12	Parking Lot Striping	1	Allow	\$1,000.00	\$1,000
13	HC Signage	1	Allow	\$500.00	\$500
14	Tree Root Barrier	140	LF	\$8.00	\$1,120
15	Concrete Band	30	LF	\$20.00	\$600
16	Temporary Construction Fencing	1,200	LF	\$2.00	\$2,400
17	Tree Grate and Guard	4	EA	\$2,000.00	\$8,000
18	Basketball Hoops and Striping	1	Allow	\$4,000.00	\$4,000
19	60 foot Gazebo	3,600	SF	\$40.00	\$144,000
20	Tot Play Area	1	Allow	\$20,000.00	\$20,000
21	School Age Play Area	1	Allow	\$30,000.00	\$30,000
22	Wayfinding Signage	1	EA	\$5,000.00	\$5,000
23	Footbridge	2	EA	\$50,000.00	\$100,000
				Subtotal	\$717,720.
ANDSCAPE				I	
1	Soil Preparation	22,345	SF	\$0.30	\$6,703
2	Finish Grading	22,345	SF	\$0.30	\$6,703
3	Bark Mulch	81	CY	\$75.00	\$6,075
4	Tree Plantings (15 gallon)	14	EA	\$300.00	\$4,200
5	Shrub and Groundcover Area	8,810	SF	\$1.50	
6	Turf Sod (RTF)	12,775	SF	\$1.00	
7	Weed Control	22,345	SF	\$0.02 Subtotal	
RIGATION				Subtotal	\$50,118.
	Landscape Irrigation	22,345	SF	\$1.30	\$29,048
•		22,543	5	Subtotal	
					<i>+=3</i> /0101

				Subtotal	\$2,234.50
LIGHTING					
1	Miscellaneous Electric/ Utility Hookups	1	LS	\$10,000.00	\$10,000.0
2	Area Light	8	EA	\$3,000.00	\$24,000.0
				Subtotal	\$34,000.00
					\$007.40/ 00

LANDSCA	\$897,496.90	
	10% Contingency	\$89,749.69
15% Contractor	\$134,624.54	
LANDSCA	APE TOTAL	\$1,121,871.13

ARCHITECTURAL CONSTRUCTION					
1	Visitor Center	1,386	SF	\$150.00	\$207,900.00
2	Restrooms	1,050	SF	\$200.00	\$210,000.00

ARCHITECTUR	AL SUBTOTAL	\$417,900.00
	10% Contingency	\$41,790.00
15% Contractor	Overhead and Profit	\$62,685.00
ARCHITECTUR	RAL TOTAL	\$522,375.00

NOTE: It is recognized that neither the Landscape Architect nor the Client has control over the cost of labor, materials or equipment, over the Contractor's methods of determining bid or competitive bidding, market or negotiating conditions. Accordingly, the Landscape Architect cannot warrant or represent that bids or negotiated prices will vary from any statement of probable construction cost.