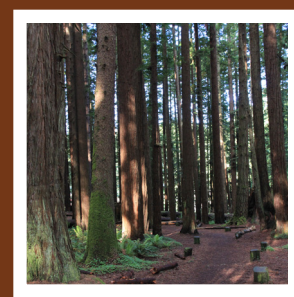
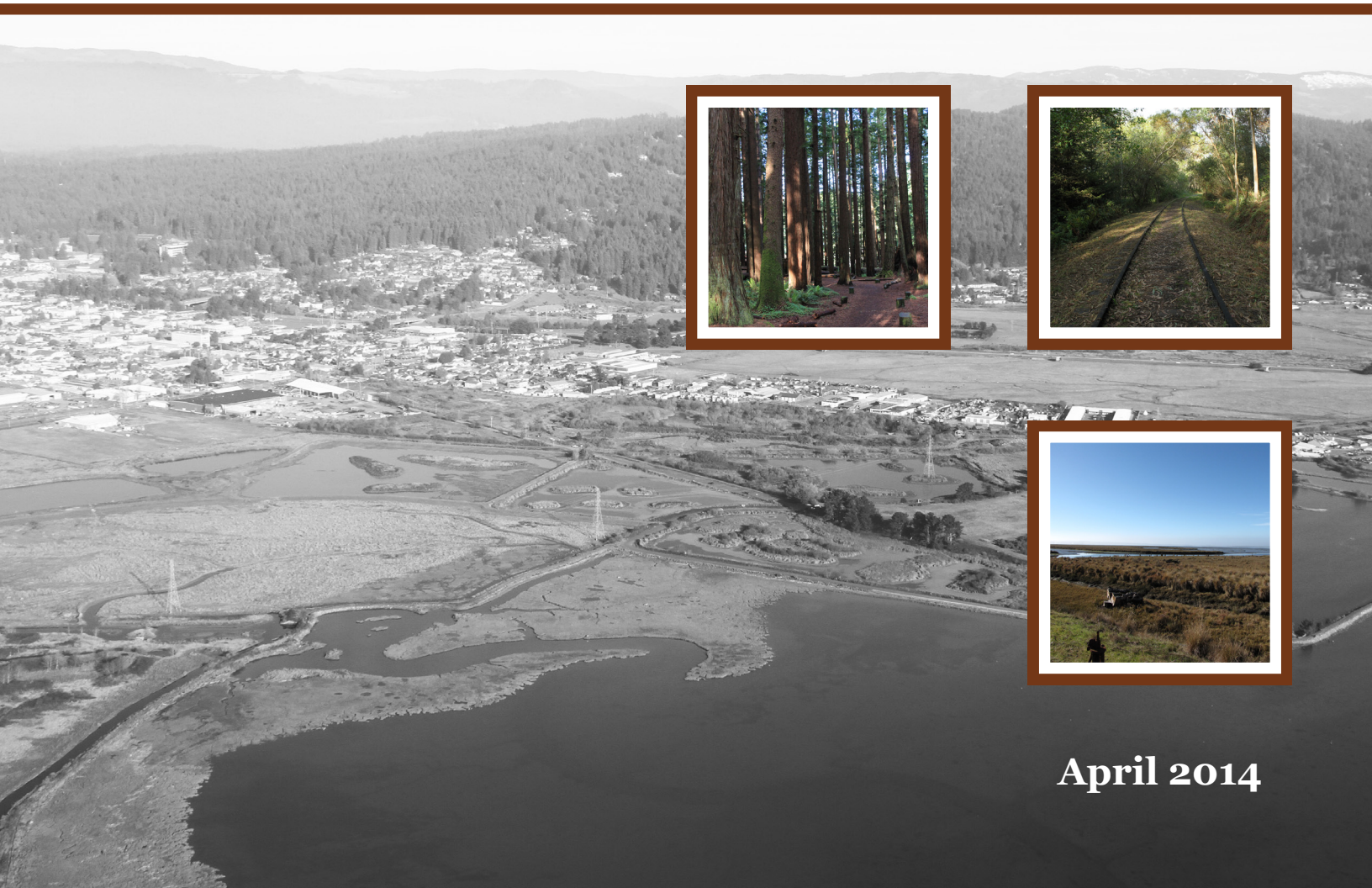




# TIGER VI Grant Application City of Arcata Rail-with-Trail Samoa to Bracut



April 2014



## **TIGER VI: Project Summary**

### **Humboldt Bay Trail: Arcata Rail with Trail Connectivity**

#### **Project Type**

**Multi-modal Transportation, Economic Development, Livable Communities**

#### **Location**

**City of Arcata/Humboldt Bay, Humboldt County, California**

**Congressional District 2, an Economically Disadvantaged Rural Community**

#### **Project Costs**

Arcata Rail with Trail Connectivity		Funding Source	Amount
Total Project Costs	Planning / Design: \$766,000	State Coastal Conservancy and Local Match	\$766,000
	Construction : \$4,300,000	Caltrans:	\$1,000,000
		Local Match / City of Arcata:	\$500,000
		<b>TIGER VI Funds: Remaining Project Costs:</b>	<b>\$2,800,000</b>

**Result: Fully Funded Project!**

### **Long Term Transportation Planning**

- ✓ **#1 Priority:** Humboldt Regional Bicycle Master Plan 2012
- ✓ **#1 Priority:** Humboldt County Coastal Trail Implementation Plan 2011
- ✓ **#1 Priority:** Humboldt County Regional Transportation Plan 2008

### **Long Term Benefits, Innovation, and Partnership**

- ✓ **Supports Multimodal Improvements to the Hwy 101 Safety Corridor**
  - Improves transportation system efficiency
  - Preserves historic rail bed for future use
- ✓ **Economic Competitiveness**
  - Connecting residents with jobs and goods
- ✓ **Livability**
  - Transportation choice for economically disadvantaged families
  - Improves community health
- ✓ **Safety**
  - Reduce transportation-related crashes, injuries, and fatalities
- ✓ **Sustainability**
  - Reduce vehicle miles travelled, gasoline use, and greenhouse gas emissions
- ✓ **Project Readiness: Build Ready!**
- ✓ **Partnership**
  - Driven by demand from citizens, non-profits, civic groups, and businesses

### **Support**

- ✓ Jared Huffman. US Congressman, 2<sup>nd</sup> Dist.
- ✓ Mike Thompson, US Congressman, 1<sup>st</sup> Dist.
- ✓ Wesley Chesbro, Ca. State Assembly, 2<sup>nd</sup> Dist.
- ✓ Noreen Evans, Ca. State Senator, 2<sup>nd</sup> Dist.
- ✓ Diane Feinstein, US Senator
- ✓ Barbara Boxer, US Senator
- ✓ Patricia Berg, California State Assembly 2002-2008

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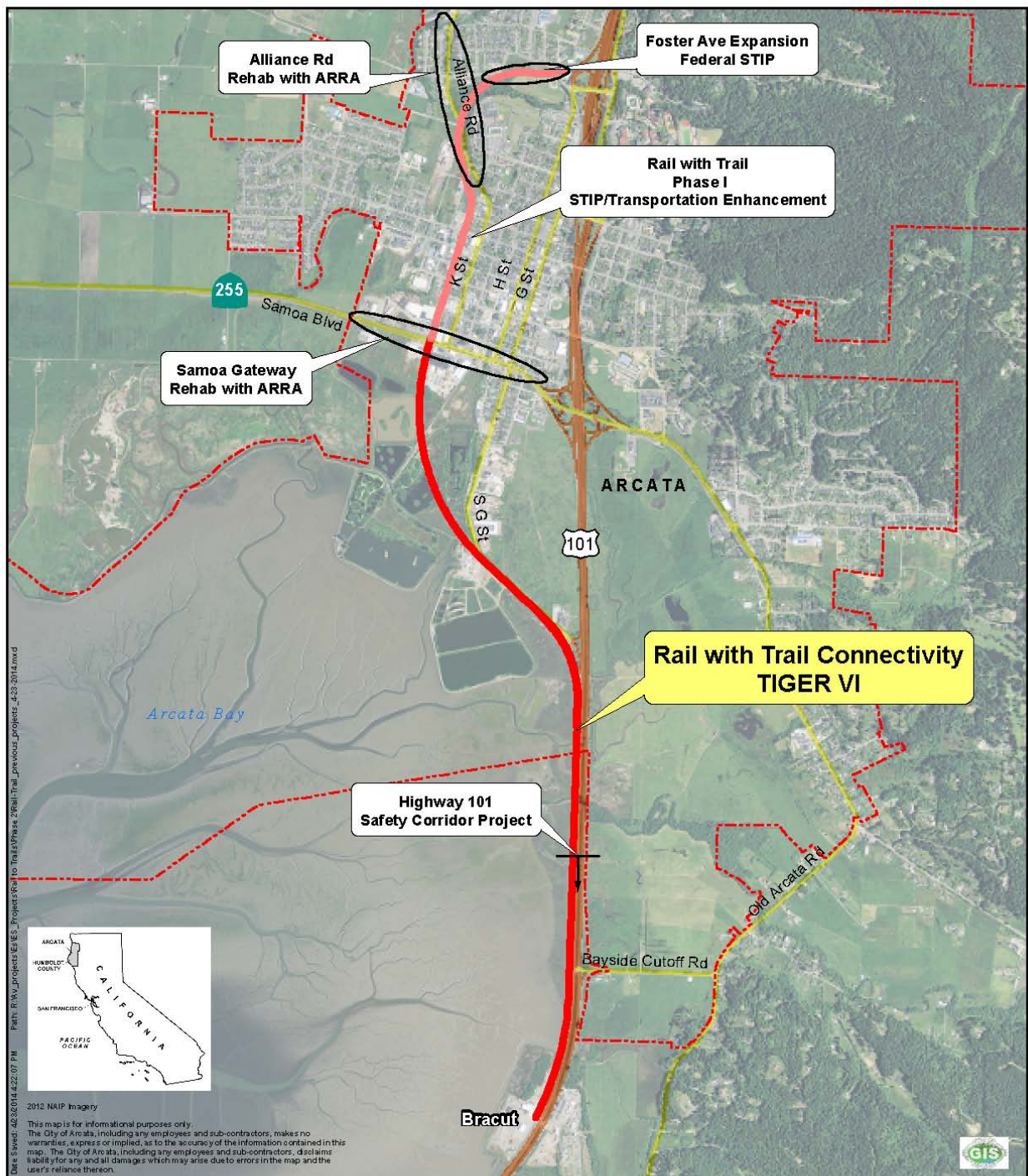



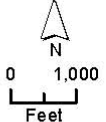
**Existing Condition and  
Proposed Trail Installed  
(Simulated)**





## Project Overview Map



 <p><b>City of Arcata</b> Environmental Services</p>	<p align="center"><b>City of Arcata</b> <b>Rail-with-Trail Connectivity Project</b></p>		<ul style="list-style-type: none"> <li><span style="color: red;">—</span> Rail with Trail Phase I</li> <li><span style="color: red;">—</span> Rail with Trail TIGER VI</li> <li><span style="color: red;">---</span> Arcata City Limits</li> </ul>
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# I. Project Description

## Summary

The Arcata Rail with Trail Connectivity Project (project) is the backbone of Humboldt County's envisioned regional trail system, linking the City of Arcata and the City of Eureka. This Federal investment will complete the necessary funding to assist our disadvantaged, rural community to construct a project that is build-ready, highly matched by local funds, draws on exceptional community support and partnership, and provides significant safety, livability, and environmental benefits. The 4.5-mile-long Class I, ADA-accessible multi-use trail will save lives, substantially improve traffic flow on Highway 101, provide the low income population with a transportation choice that will directly impact their sensitive financial position, preserve rail infrastructure, and protect sensitive coastal habitats. With this necessary Federal investment through the TIGER program, combined with substantial local financial match, this project will create one of the most heavily traveled multi-use trails in Northern California.

## Community Background

Arcata (population 17,231) is a rural community located in the heart of the rugged North Coast region of California (ancestral lands to Wiyot Native Americans). Originally founded as Uniontown, the City was one of the first significant towns in the region. The City was established in 1850 skirting Humboldt Bay, the most important deep water port between San Francisco and Coos Bay, Oregon. The City thrived as a coastal shipping and resupply center supporting the California Gold Rush. Arcata never became a boomtown, but, while other Gold Rush communities disappeared, Arcata survived and prospered by transitioning to serve the growing timber industry, which became the reigning regional employer for decades.

In many ways, Arcata is defined by its position amidst one of our nation's greatest natural treasures and its civically engaged student body. Arcata is a gateway for tourists to enjoy the mighty Redwoods of the Northern California Coast. Within 60 minutes of downtown, visitors can access over 130,000 acres of Redwood forest at Humboldt State Redwood Park and Redwood National Park. Combined, these two parks have over 1.1 million visitors per year. Arcata's golden industry today is education, as it is the home to the northernmost university in the California State University system, Humboldt State University. Students of Humboldt State are known for their civic engagement, particularly their environmental awareness and activism. Recognizing the University's characteristic blending of academic and community work, The Princeton Review named it a "College with a Conscience." The Rail with Trail Connectivity Project reflects the City's character: dedicated to fostering dynamic civic engagement, focused on improving the lives of its citizens, and devoted to promoting and preserving the environment.

Although the City is endowed with abundant natural resources and a vibrant citizenry, it is not an economically privileged community. Over 28% of the City's population lives in poverty, compared to 13.7% in California as a whole and 13.8% in the United States. Arcata residents' median income is \$31,815. Compared to California's statewide average of \$61,632, an Arcata resident makes barely half. These income disparities are even more pronounced by median individual income, which is \$29,701 in the United States, and \$31,245 in California. The median income for an individual in Arcata is \$13,345, not even half of what one could expect to make elsewhere. To contextualize this

point further, consider Flint, Michigan, one of the nation's communities hit hardest by the financial recession and the decline in the auto manufacturing industry: an individual could expect to make over \$2,000 more in Flint (\$15,401) than in Arcata.

These numbers paint a bleak picture of Arcata, but income does not define a community. Despite the substandard pay, the people of Arcata are resolute and hardworking. Maybe it is the area's industrious history, or maybe it is the rugged environment of the region, but the people of Arcata always find work to do. Employment numbers have always been strong, and Arcata's unemployment rate is lower than both state and national averages. As one would expect, Arcata, as the home of a university, has a highly educated population. Of the population aged 25



years and older, 76% have some level of education beyond high school. This far outpaces the rest of the country (56%), and the rest of California (59 percent). These three factors (low wages, high employment, and high level of education) tell the more complete story of Arcata, one of a community that works hard and lives on a tight budget. This encourages the City's efforts to increase affordable transportation alternatives as one of this project's central goals from the start.

	Arcata, CA	California	USA
<b>Percent Living in Poverty</b>	<b>28.48</b>	13.71	13.28
<b>Median Household Income (\$)</b>	<b>32,017</b>	60,883	51,914
<b>Median Individual Income (\$)</b>	<b>13,354</b>	31,245	29,701
<b>Unemployment</b>	<b>9.0</b>	9.4	7.6
<b>Percent of Population with Post High School Education</b>	<b>76</b>	59	56

The Center for Neighborhood Technology has developed the Housing and Transportation Affordability Index (H+T Index) as a more complete measure of affordability beyond the traditional method of assessing only housing costs. In addition to housing costs, it takes into account transportation costs and divides these costs by the representative income. Using the traditional method, which only factors how much a household spends on housing, Arcata looks like a moderately affordable place. The traditional method says spending 30 % of household income on housing is affordable, and the City's residents, on average, spend 27.8 %. However, using more complete metrics tells a very different story. The Center for Neighborhood Technology defines affordable as no more than 45 % of total household income being spent on housing and transportation. Using the H+T Index, Arcata residents spend a staggering 61.5 percent of their total household income on these two expenses. This reveals city living is deemed well beyond affordable.

When the City evaluated these statistics two things were clear. First, there wasn't much that the City could do to significantly impact housing costs. Second, the cost of housing, as a percentage of the



average resident's expenses is affordable. If the City wanted to make an impact to relieve strain on their citizen's tight budgets, it had to focus its efforts on making transportation more affordable.

	Arcata	CNT Established Affordability Index
Collective Housing costs	29 percent	No more than 30% of total household income
Collective Housing + Transportation costs	62 percent	No more than 45% of total household income

## Transportation Challenges

The average daily commute in Arcata is 15.3 minutes. This is much lower than the state and national averages of 27.2 minutes and 25.3 minutes, respectively. With commute times so short, and much of the employment focused locally, the typical assumption would be that a large portion of trips include walking or bicycling. Unfortunately, this is not the case: 70.5 % of commuters in Arcata use a car. This number is all the more surprising considering the relatively low income of Arcata's residents and the fact that the North Coast has some of the highest gas prices in the country. A population that has a direct financial incentive and short daily commute should have a larger percentage of non-motorized commuters. Across the country these factors play an important role in determining a community's likeliness to get off of the road and onto a path. One of the most common reasons why individuals do not make this shift is safety. Safety is the number one concern of the residents, the City, and regional transportation planners. In community forums and surveys, residents and workers in Arcata and Eureka continually emphasize their apprehension about safely travelling the Highway 101 corridor by bike or by foot.

Currently, if someone wants to walk or bike between Arcata and Eureka, he or she has three options: Highway 101, State Route 255, or Old Arcata Road. All three routes pose safety risks to pedestrians and bicyclists. None adequately allow for non-vehicular use, and all three create confusion, distraction, and delays for drivers. Highway 101 is the most heavily trafficked route that pedestrians and bicyclists use. The section of highway used by non-drivers runs approximately 6 miles from Eureka to Arcata, around the northern portion of the Humboldt Bay. There is no dedicated or designed area for bicyclists or pedestrians; they must ride on the highway shoulder, with little room to maneuver and within only a few feet from oncoming motorists. This road is heavily travelled by drivers ranging from commuters and tourists in cars, SUVs, and RVs to drivers in 18-wheelers hauling massive exposed cut timbers. An 18-wheeler hauling cut timber next to a bicyclist is more than just disconcerting to both parties, it is dangerous.

Bicyclists and pedestrians in the highway shoulder can distract drivers, which slows the flow of traffic and creates system-wide inefficiency up and down the corridor. Due to the high rate of accidents along this section of highway, the California Department of Transportation has temporarily made it a "safety corridor." This means that this section of Highway 101 has a reduced speed limit from 65 miles per hour to 50. The DOT has also installed "Share the Road" signs. These changes were implemented in 2002, and have not yet proven to significantly improve safety or pedestrian or bicyclist usage. The other two routes between Arcata and Eureka, State Route 255 and Old Arcata Road, residents find even *less* safe for pedestrians and bicyclists than Highway 101. State Route 255 has equal or higher average speeds than 101, and includes a two-lane, two-way bridge with no shoulder, which creates a bottleneck that is extremely dangerous for pedestrians and

bicyclists. The route via Old Arcata Road is significantly longer than 101 and it is a winding route that is more dangerous due to low visibility. Blind curves, crumbling shoulders, and poor road striping combined with increased distance and travel time to make these two routes just as, or more unsafe alternatives to Highway 101's dangerous route.

## Proposed Project

The Arcata Rail with Trail Connectivity Project will take the first major step towards safely linking Arcata and Eureka for non-drivers. The project will divert bicycle and pedestrian traffic away from Highway 101, State Route 255, and Old Arcata Road and onto a regionally-desired multi-modal trail. The 4.5 mile trail will be completely ADA accessible and will provide a safe route to work and to recreate between the two biggest cities in Humboldt County, while simultaneously refurbishing a community-owned rail bed that will be used in the future. This project has been firmly established as the number-one priority in the region in nearly every transportation plan for the last several years. The proposed transportation corridor will allow the community to eliminate over 60,000 motorized vehicle trips annually while connecting key Arcata neighborhoods with local destinations, such as the downtown, high school, parks, and business and work districts. If funded, work will begin quickly, with a proposed completion date of December 2016. This is possible by utilizing an existing, currently unused piece of transportation infrastructure. In this way, the project will have the immediate benefit of repairing sections of the North Coast Railroad Authority (NCRA) railroad prism. The project will create the mechanism for clearing and maintaining the railroad corridor. In its current state, this historic, publically owned piece of transportation infrastructure is a blighted corridor of overgrown brush. Currently, policing and maintaining this corridor costs the City over \$30,000 annually. The project makes prudent, economic sense, as it will expand safe transportation options for residents and workers—which is particularly important for economically disadvantaged community members who are more impacted by limited travel choices—and will spearhead preserving part of our existing rail road infrastructure.

## Project Outcomes

This project has the potential to transform Arcata and significantly improve the lives of its residents. The City has identified 6 primary benefits of this project once completed.

### *Improve financial flexibility for families*

With low income levels, and a disproportionate percentage of household income spent on transportation, it is essential that efforts be made to allow residents to access affordable transportation alternatives. The community has shown, statistically and through surveys, that there is eagerness to move away from multi vehicle households and shift some of the financial burden away from transportation costs. This project allows multi vehicle households to move to single vehicle households and give households and individuals without a vehicle access to employment opportunities needed to be competitive in a heavily localized job market.

### *Provide safe access for non-motorized travel*

The financial reasons to move away from non-motorized vehicles will be there for families whether this trail is built or not, but current road infrastructure cannot handle an increase without expecting an increase in accidents, injuries, and the unfortunate likelihood of fatalities. This project will allow



increases in pedestrian and bicycle trips that the community so desperately desires while drastically reducing the likeliness of accidents and injuries.

#### *Improve traffic flow on Highway 101*

While safety is of the highest concern, moving pedestrians and bicyclists away from roads that were not meant to accommodate them will improve the overall transportation system's efficiency. By removing driver distractions and allowing the state to raise the speed limit back to 65 miles per hour, this project will result in improved traffic flow and a more efficient transportation system that moves people and goods through the region the way the system was designed.

#### *Improve existing, underutilized rail infrastructure*

This project is the last best hope to maintain the local community's existing rail infrastructure. While this infrastructure is not currently being used, this project provides the dramatic shift needed to allow for realistic future planning. The North Coast Rail Authority, has survived because of the tremendous dedication of the people involved with the railroad since its inception and by believing in the idea that a community that has a developed rail infrastructure should never abandoned it. This project will immediately improve and upgrade rail infrastructure from a state of disrepair to one of functionality.

#### *Protect the environment*

Arcata's residents live amidst some of our country's greatest natural treasures, and the City is dedicated to doing everything possible to preserve and protect those wonders. Removing cars from the road means reducing emissions in the atmosphere, and reducing emissions in the atmosphere means a healthier and cleaner environment for all of us. This project will have a measurable impact on emissions reduction. More than that, this project has been designed to highlight Arcata's natural beauty while also protecting sensitive habitats.

#### *Improve livability and community health*

Arcata is a community filled with active young people who enjoy their time outside. It is also a community frequented by tourists who would rather spend their vacations actively enjoying nature instead of confining themselves indoors. This project creates new avenues for recreation while improving the interconnectivity of neighborhoods, shops, and open spaces. Additionally, this trail will be a driver for fostering community interaction, improving the health of our citizens, and promote a sense of place that directly supports and values the region's existing communities. Put simply, it embodies all of the principles of the federal government's Sustainable Communities Initiative.

However, despite years of commitment and prioritization, diligent community advocacy, and substantial benefits, this project sits at a standstill. The fiscal reality is that as a small, rural, economically disadvantaged community, it has been financially impossible for our region to build this trail. Arcata, Eureka and Humboldt County cannot fund this project on its own, and we again reach out to the Federal Government for support. Arcata stands ready to join with the Department of Transportation to take an innovative approach to solving real problems for real people. In the process, the City believes that the Arcata Rail with Trail Connectivity Project will become a showcase for the TIGER program and a national model for how communities can be reimagined through transportation investment.

## II. Project Parties

This project was born from citizen's frustration. The two largest cities in Humboldt County are a straight, flat six miles apart, however commuting between them requires riders to hug the edge of a highway shoulder frequently shielding themselves from the winds and flying debris of logging trucks and high frequency vehicle and transport truck traffic. Increased interest in non-motorized commuting and travel over the past 5 years has elevated this project to the region's top priority non-motorized transportation project.



Through the diligence of local agencies, we have developed a strong partnership to pool resources to complete all the planning required to make this project construction ready. Our local efforts have attracted the assistance of the California State Coastal Conservancy. Thanks to their financial assistance we were able to completely fund the project engineering, environmental analysis, and operational plan. This has allowed us to significantly lower our TIGER V request.

### Primary Project Partners

**The California State Coastal Conservancy (SCC):** The SCC has committed staff resources and \$1,065,000 for the development of construction documents, engineered plans, and the environmental review which will now make this project shovel ready.

**California Department of Transportation (Caltrans):** The State Transportation Department has worked closely with the planning team to support the local vision of a class I trail adjacent to Highway 101. It is actively working on highway improvements to this section with the intent of restoring highway speeds. Original discussions for this section included wider bike lanes. Fortunately, Caltrans has listened to the community and continues to support the desired vision of a separated trail for commuters as well as local and tourism generated recreational uses. Caltrans is providing an in-kind the match of completing NEPA. As an additional indicator of the State's strong support for this project, Caltrans has also committed a match of up to \$1 million towards project construction.

**North Coast Railroad Authority (NCRA):** While there has historically been a conflict between the North Coast's non-operating railroad and the local trail advocates, this project partnership between the City of Arcata and the NCRA demonstrates that the rail line and adjacent trail use are compatible and the trail project is the best near-term means to support revitalizing the rail corridor, through compatible design, established management strategies, and continued cooperation. The NCRA does not have financial resources to maintain their existing corridor or assist with improvements, but they have committed many staff hours retrieving corridor maps and plans and reviewing project details.

**United States Fish and Wildlife Services (USFWS):** Approximately half of the proposed trail runs adjacent to USFWS wildlife refuge property. The USFWS has helped design the project to minimize impacts to the coastal resources between Highway 101 and Humboldt Bay.

**Humboldt County Association of Governments:** Is the designated Regional Transportation Planning Agency (RTPA) as well as the Service Authority for Freeway Emergencies (SAFE). HCAOG has provided planning and technical assistance for this project.



### III. Grant Funds and Sources/Uses of Project Funds

The City of Arcata is requesting a total of \$2,800,000 from the TIGER 2014 grant program, out of a total project cost of \$5,066,400. Funds from the TIGER VI program will be used only to fund the construction of this long awaited corridor.

Even though it is not required by DOT for projects in rural communities, the importance of this project to the community has facilitated the ability to raise funds through both a voter passed ballot initiative (Measure G) and state funding which secured an overall match of 45% of the total project and 35% of actual construction costs.

The California Department of Transportation has committed up to \$1 million cash match for the project in addition to in-kind donations of staff resources to complete the NEPA review and provide permit assistance. The City of Arcata has committed \$500,000 from its general funds which have increased through the passage of tax measure G.

Project Element	Arcata Rail with Trail Phase II	TIGER 2014 Grant Request	Non-Federal Match
Trail Alignment Alternatives Analysis	\$118,000	\$0	\$118,000
Project Design Engineering	\$375,000	\$0	\$375,000
Project Environmental Review (CEQA / NEPA)	\$130,800	\$0	\$130,800
Project Environmental Permitting	\$87,000	\$0	\$87,000
Project Policy Planning Documents: Operational Plan, Review of compliance with NCRA Rail with Trail Policies	\$45,600	\$0	\$45,600
Property Acquisition and transfer expenses	\$10,000	\$0	\$10,000
Project Construction including required project mitigation measures	\$4,300,000	\$2,800,000	\$1,500,000
<b>TOTAL</b>	<b>\$5,066,400</b>	<b>\$2,800,000</b>	<b>\$2,266,400</b>

The City has a successful history of managing projects with complicated, mixed funding streams including Federal and State grants. In just the past 5 years, the City has secured and managed expenditures for four multimillion dollar projects.

**ARRA Transportation Project:** The City received funding for four road rehabilitation projects totaling \$3.2 million. The largest of these projects, Samoa Gateway included improved bicycle lanes which bisect the Arcata Rail with Trail Project at its center point and will provide a major East/West feed for commuters in both directions.



*Samoa Boulevard before rehabilitation*



*Samoa Boulevard after rehabilitation*

**Statewide Transportation Improvement Program:** The City is currently completing a Federal STIP project to expand Foster Ave. This is a \$2.9 million project. This project will also complete the North section of the Rail with Trail project bringing the trail from Western Ave. to Sunset Boulevard.

**FEMA disaster relief:** The City completed \$2.8 million in levee and road repairs.

**Restoration and habitat development:** The City has completed restoration and enhancement to 875+ acres of California coastal wetland and agricultural lands. These projects secured over \$3.1 million of grant funds from the US Fish and Wildlife Service, National Oceanic and Atmospheric Administration (NOAA), National Resources Conservation Services and State Coastal Conservancy. Levee breach to allow Humboldt Bay to return to historic reaches is scheduled for August 2013.



*McDaniel's Slough Restoration*



## IV. Selection Criteria

### A. Long - Term Outcomes

#### i. State of Good Repair

##### Relevant Plans

This project provides a clear action towards achieving several City and regional policy goals that address the state of good repair to local road and rail infrastructure. This Project supports both highway and rail network preservation and efficiency.

The Regional Transportation Plan, April 2013 Public Draft, outlines Caltrans Highway 101 Corridor Improvement Project between Eureka and Arcata to address safety, operational and maintenance improvements. Removal of bicycle and pedestrian traffic from the current shoulder is important to achieve the plans and goals and to extend the life of this facility without needing expansion. Currently a section of this Highway has reduced speeds of 50 mph. A separated bikeway will help assist restoration of the highway speed and more efficient movement of goods and people.

The Humboldt Regional Bicycle Plan includes as its first infrastructure policy 1.2: HCAOG recognizes the high level of public support for a dedicated bicycle and pedestrian trail in the NCRA and Caltrans corridor between Eureka and Arcata (the “Humboldt Bay Trail”), and supports multi-jurisdictional, public, and private efforts to develop it.

The project supports the long term existence of the railroad corridor. North Coast Railroad Authority was left inoperable after storms in 2001. By 2011 they have reopened service to Petaluma California, 235 miles south of Eureka and are currently working to restore service to Willits which is 130 miles south of Eureka. Until focused restoration efforts on the North Coast can be made; the track and rail prism will continue to rapidly deteriorate, especially along the waters of Humboldt Bay. Construction of this trail corridor will reinforce the existing prism, repair failing culverts and provide ongoing clearing and maintenance of the corridor.

HP3-Human People Power Pathways “HP3” is a local initiative to develop regional non-motorized commuter pathways and regional connected tourist/travel routes.  
[http://www.cityofarcata.org/sites/default/files/files/document\\_center/Environmental%20Services/Rail%20with%20Trail/HP3%20Active%20Transportation%20Network.pdf](http://www.cityofarcata.org/sites/default/files/files/document_center/Environmental%20Services/Rail%20with%20Trail/HP3%20Active%20Transportation%20Network.pdf)

The HP3 Plan was developed to vocalize and provide funders an understanding of the need and the challenges that economically disadvantaged, rural communities have in developing critical non-motorized transportation corridors that are safe and efficient. Sixty percent of the County’s population lives in the Humboldt Bay region. The seven incorporated cities, ranging from 400-30,000 residents are connected by state highways or rural two-lane roads that lack dedicated non-motorized facilities.

##### Sustainable Revenue Source for Long-Term O&M

The City currently manages over 20 miles of recreational trails. The addition of the 4.5 miles Rail with Trail will be folded into City annual maintenance routines. The City currently spends approximately \$12,000 per year maintaining and \$18,000 per year patrolling the existing railroad corridor. These funds will be reallocated to provide maintenance and security to the trail, which by

its very design and existence will reduce the illegal activities currently occurring along the vacant tracks. As outlined in the Cost-Benefit Analysis, in the first full year of operation, the trail is expected to cost \$18,000 in maintenance and \$21,250 in security and management. The City has identified two other sources of support for these expenses. The first is City General Funds collected through the implementation of Measure G, a locally generated sales tax that was passed in part to support transportation. The second is through an agreement with the Humboldt Trail Trust – Trail Stewards Program. The Trail Stewards program was launched in Arcata in January of 2013 and will include this trail as part of its contracted volunteer patrol, clean up and maintenance.

Local hotel and business industries have initiated a “stay another night” campaign. This campaign encourages the development of attractions that interest tourists to stay. The Arcata Rail with Trail project has been identified as a project that will encourage families to stay an additional night. Increased Transient Occupancy Tax and Sales Tax from a regional trail system will contribute funds to support long-term maintenance of additional commuter and recreational trail segments.

## **ii. Economic Competitiveness**

### **Long-Term Efficiency**

The project’s primary focus is to move non-motorized commuters off the Highway 101 shoulder. This section of Highway has mixed speeds due to a historically poor safety record. The safety corridor section of this project slows standard Highway traffic to a speed of 50 mph. This deceleration increases freight haul times both due to the slower speed and the congestion that is created when highway traffic is forced to decelerate. Caltrans has plans to improve the corridor specifically to reduce collisions, reduce operational conflicts (left turn and left merge movements) and increase the flow of goods and services by reducing delays. The Highway project is approximately \$40 million funded through STIPP (both local and inter-regional) with additional support projects funded through SHOPP. The project received a positive consistency finding from California Coastal Commission in 2013 and is moving forward.

Removal of non-motorized vehicles from the 101 shoulder will improve both motorized and non-motorized travel times. Further, shifting from auto commuting to bicycle commuting has a direct benefit to individual household expenses. Humboldt County has the highest gas prices in the nation. Today average gas prices in the nation are \$3.67/gallon and \$4.22/gallon in California. Arcata’s gas prices range from \$4.39 - \$4.43/gallon. The cost of owning a car in Arcata is estimated at \$345/month more than relying on transit and non-motorized means. (Arcata Economic Development Strategic Plan 2010-2014) Money saved by local commuters is money that returns to the local economy.

### **Increase Economic Productivity and Job Creation**

The Humboldt Bay area continues to struggle economically. Since historical natural resource industries are not rebounding as the economy picks up, our rural community is searching for economic enhancement strategies. The physical beauty of the North Coast is known for its tourism potential, but we do not have the bicycle infrastructure needed to support or attract bicycle tourism. This project will provide the foundation of a regional trail system and constructs a section of the California Coastal Trail which will attract travelers. Focusing on local commuters alone (i.e., not



recreational/tourism or bicycle touring user groups), this trail is estimated to provide \$1,200,000 annually towards the local community.<sup>1</sup> Recreational cyclists will add substantially to that.

The trail is projected to continually deliver economic productivity. The northern end of the trail runs parallel to a Federally Funded (STIP) road project, Foster Ave Expansion. Adjacent property is planned for moderate density housing which will be served directly by the trail. As the trail winds through town it crosses 2 large tracks of land which are actively planning development. The historic Little Lakes Industry is owned by the City and included in Arcata's South of Samoa Specific Plan. The Winzler/Slack property located between Samoa Boulevard and the Marsh and Wildlife Sanctuary is privately owned with designs for mixed use manufacturing, commercial, light industrial and residential. Both properties have current design concepts which include internal pathways connecting to the project trail and both projects are looking to attract businesses that naturally benefit from the trail. Investment in this project will directly improve these developments's economic success and encourage initiation of construction by bringing more people to the area.

Existing business districts are also looking to redesign their appeal and access to trail users. The Historic Creamery District is undergoing a grassroots planning process to develop a "creative place making" where partners from public, private and non-profits are strategically shaping the physical and social character of their neighborhood around arts and cultural activities and foster entrepreneurial businesses that generate jobs and industries. This neighborhood's draft design includes an archway from this trail project as a gateway to their District.

The importance of linking Arcata to Eureka via a non-motorized transportation corridor cannot be overstated. Sixty percent of the County's population lives in or near these Humboldt Bay cities. Employment opportunities in Arcata and Eureka are very different. Arcata's job base is comprised of the university/government and small manufacturing followed by healthcare and retail. Arcata has 74 % of all niche manufacturing jobs in the County, however only 50% of these jobs are filled by Arcata Residents. Eureka is the regional trade center dominated by retail and hospitality industries as well as government and healthcare. The job diversity between the two major cities results in high employment commute rates between the two cities. Safe non-motorized routes will open up jobs to our most economically disadvantaged individuals and families and open up opportunities for two car families to live successfully with one car, saving both money and gas. Specifically this project connects to the Westwood Neighborhood which houses one of Arcata largest low-income housing developments, the Humboldt Plaza Housing.

Humboldt County residents have some of the lowest household income levels in California. Arcata resident's median income is \$31,815 or only 51% of the statewide average of \$61,632 (Census 2007-2011). Access to less-costly transport options will give these struggling families the opportunity to afford healthy food and better housing, particularly in a rural region with fewer choices.

### **iii. Quality of Life**

This project is the product of citizen demand. For over a decade concerted efforts have been made by residents, business leaders, and local non-profits to develop and build a safe non-motorized transportation system in the Humboldt Bay region. Though the redwood coast is widely regarded as

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<sup>1</sup> Estimated from Alta Planning + Designs National Bicycle and Pedestrian Documentation, based on a combination of factors: comparisons with pathways counts from around the country; the quality of the facility; climate; population of area served; regional population; and annual visitors to the region.

a “healthy” place to live, the majority of Humboldt County residents are physically inactive and experience a disproportionate number of pedestrian-and bicycle-auto collisions (HCDHHS, 2008a). In 2008 the City of Arcata conducted a survey of over 1100 residents and visitors to assess its parks and recreation system. The number one recreational amenity that survey respondents requested was more trails connecting points of interest and businesses throughout the City. When further asked why trails were desired, the number one response was for safer and more convenient non-motorized transportation options.

## **Transportation Choices**

Despite having one of the wettest climates on the North Coast, the Humboldt Bay Area has an enthusiastic and determined active transportation culture, which has for years proactively campaigned for this non-motorized transportation link. However, despite dozens of organizations, hundreds of residents, and over a decade of advocacy backing it, the project has not been built. The fiscal reality is that as a small, rural, economically disadvantaged community, it has been financially impossible for our region to build the non-motorized alternative to Highway 101 that the community desires.

The perception of safety was the number-one reason why people don’t use non-motorized means to commute and make short trips (public survey, 2009-2010 Arcata Parks and Recreation Master Plan). Inadequate bicycle and pedestrian facilities throughout the trail alignment force bicycle and pedestrian commuters into unsafe traffic lanes.



The City of Arcata H+T Affordability Index score for housing and transportation clearly shows how the transportation costs in rural communities can devastate a household budget. The benchmark for the percent of household income that can affordably be spent on housing is 30% and the benchmark for transportation is 15%. Combining this index to allow for some variation means total H+T should not exceed 45%. In the Humboldt Bay region the H+T Index is 64.16%. Shifting from car commuting to bike commuting will significantly reduce this index and increase the affordability of living in Arcata and Eureka. As stated earlier, the average monthly savings from shifting from an auto to a bicycle in Arcata is \$340 per month. For many of these families, 32% which live below the poverty level compared with 14% statewide average, a savings of over \$300 per month is significant and life changing.

This project will connect residential neighborhoods to employment business districts, schools, the downtown and parks and open spaces. Secondly, it will safely connect Arcata and with an off-road trail. This project will support the community’s bike culture and encourage a shift from autos to bike transportation. Arcata has a goal of 50% non-motorized mode share by the year 2020. This project has been identified as a key infrastructure element needed to achieve that goal. Further by reducing 518,853 vehicle miles traveled each year we reduce gasoline use by 25,559 gallons per year and are no longer emitting 236.73 tones of greenhouse gases.

## **Equitable, Affordable Housing**

Both the Westwood and South of Samoa neighborhood, which this trail crosses, have significant poverty rates. These neighborhoods have flat terrain very suitable for bicycling and walking. Further, a developed transportation trail system will enhance the values of these residential neighborhoods. A high-quality transportation trail such as the one proposed truly reaches people of

all ages, income levels, race and ethnicity. Trails which offer safe, ADA accessibility and connect people with places of commerce and local attractions are used by all populations in a community and often foster new connections between neighborhoods.

### **Support Existing Communities - Community Revitalization and Encourage Development**

The construction of high-quality transportation trails increase local property values and improve community connectedness. This project has the potential to significantly benefit at least three development projects currently being planned.

- The historic Little Lakes Industry, a former Brownfield site, is owned by the City and included in Arcata's current South of Samoa Specific Plan. Planning includes mixed use green infrastructure development with interior trail connectivity that feeds into the Rail with Trail Project.
- The Winzler/Slack property between Samoa Boulevard and the Marsh and Wildlife Sanctuary, a privately owned development, is being planned for mixed use manufacturing, commercial, light industrial and residential. The Trail runs the entire length of the property. Current design concepts include internal pathways to connect to the project trail and attracting businesses that benefit from the trail.
- The Historic Creamery District is undergoing a grassroots planning process to develop a "creative place making, where arts and industry collide" where public, private and non-profits are strategically shaping the physical and social character of their neighborhood around arts and cultural activities to rejuvenate public and private structures to foster entrepreneurial businesses that generate jobs and industries. This neighborhood's draft design has an archway from this trail project as a gateway to their District.

This community is overwhelmingly excited about this project. As developments within the vicinity of the project come forward Arcata works to integrate the Trail to maximize its benefits for adjacent properties.

### **Leverage Federal Policies and Investments**

This project supports both Statewide and Federal Obama Administration policies including;

- *The Global Climate Change Initiative.* Transportation accounts for 26% of the greenhouse gas emissions for the Arcata Community. This project will reduce emissions by 236 tons per year.
- *United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations.* This project establishes a well-connected biking and walking artery that in an important component for a livable community. Arcata supports this policy encouraging Federal-aid for these projects.
- *The 2014 Fiscal Year Budget* focuses to strengthen the middle class, create jobs, and grow the economy. This project will create local construction jobs and provide low cost transportation options to and from business centers supporting both low and middle income households as well as businesses.

This project will build upon current public works investments including;

- Foster Ave. Expansion. Funded through Federal STIP the expansion of Foster Ave. follows the direct alignment of the north segment of this trail project.



- Samoa Gateway – Phase I and II. This ARRA funded project completely rehabilitated Samoa Blvd. from Highway 101 east to this Trail Project. Samoa Blvd. is the highest traffic volume crossing for this Trail Project. Improvements to Samoa Blvd. greatly reduced traffic speeds and eliminated a full lane of traffic which will facilitate a safe trail crossing.
- The Highway 101 Corridor Improvement project, estimated at \$62 million. Removal of bicycle traffic from the shoulder of this Highway will greatly assist the 101 project's safety goals and as such Caltrans has contributed a significant match to this project.

This project will build upon state and federally funded planning and design efforts including;

- US Department of Interior's National Park Service, Rivers, Trails and Conservation Assistance Program funded an 18 month local planning process bringing together a diverse cross section of local, state and federal agency staff with business interests and non-profits to find a solution to connect Arcata and Eureka via a safe, non-motorized corridor.
- State Coast Conservancy stepped in at the end of the National Park Service's planning process and invested \$1,065,000 to the planning and design work that prepared this construction ready project.

## **Communities and Neighborhoods**

The entire process of developing this project has been one of incredible public involvement and participation - ranging from grassroots campaigns, to professional planning outreach efforts. Meetings have been held in several local neighborhoods, community "Walk the vision" events have drawn the community together. These efforts lead adjacent properties to consider how to tie their activities into the trail. The high school is currently looking at their access to the trail as is the Historic Creamery District. A new residential neighborhood, Twin Parks, is designing access points to the trail that will run along the backside of the development.

The through town segments include many access points and additional points of entry to accommodate current and new residential developments. The trail strategically crosses 10<sup>th</sup> Street in Arcata designed to be the City's primary East / West Bike Boulevard.

The United States is currently experiencing a health epidemic – caused, in part, by a lack of physical activity. Arcata and Eureka are no exception. Local research indicates that investments in safe, active transportation systems reduce chronic disease associated with inactivity and decrease the proportion of pedestrian and bicycle injuries and fatalities. Half of Humboldt County's youth and 60% of adults are not regularly active; one-quarter of adults are completely inactive (HCDHHS, 2008a). Obesity rates for white females and diabetes-related deaths are some of the highest in the state. Diabetes is particularly deadly among the local Native American community.

The community and neighborhood benefits of the Arcata Trail Connectivity project include: increased access to safe active transportation routes to schools, work and recreational destinations, provision of a low-cost exercise alternative for daily exercise during work and lunch breaks, and the ability to connect to the larger California Coastal Trail.

## **iv. Environmental Sustainability**

Arcata is a leader in environmental sustainability on the North Coast, and is recognized world-wide for its sustainable practices, green lifestyle, recycled product manufacturing, towering Redwood Forest, and fantastic goat cheese! This leadership is supported by the City's General Plan 2020.

### Arcata General Plan 2020

The Air Quality Element recommends pedestrian and bicycle friendly land uses and employment based transportation demand measures to reduce motorized vehicle trips and air pollution emissions.

AQ-2a: Implement land use measures to reduce vehicle trips, miles traveled, and air pollutant emissions.

AQ-2b: Implement transportation measures to reduce vehicle trips, miles traveled, and air pollutant emissions.

The Transportation Element promotes transportation choices, striving to de-emphasize dependence on the automobile.

TE-T1: Create and maintain a balanced transportation system with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. Reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes.

TE-T2: Reduce the percentage of automobiles and reduce the annual vehicle miles traveled.

### **Reduce Energy Use**

The City of Arcata has provided leadership on energy issues, and was the first city in the region to inventory community greenhouse gas emissions. Over 26% of the community's emissions are generated from the transportation sector; annual emission total over 34,465 tons of CO<sub>2</sub> (City of Arcata, 2006 inventory of Greenhouse Gas Emissions).

[http://www.cityofarcata.org/sites/default/files/files/document\\_center/Environmental%20Services/Energy/Greenhouse%20Gas%20Inventory%202006.pdf](http://www.cityofarcata.org/sites/default/files/files/document_center/Environmental%20Services/Energy/Greenhouse%20Gas%20Inventory%202006.pdf) )

In 2000 the City of Arcata adopted the *Community Greenhouse Gas Reduction Plan*. This plan outlines the City's program to reduce greenhouse gas emissions by 20%.

[http://www.cityofarcata.org/sites/default/files/files/document\\_center/Environmental%20Services/Energy/Greenhouse%20Gas%20Reduction%20Plan.pdf](http://www.cityofarcata.org/sites/default/files/files/document_center/Environmental%20Services/Energy/Greenhouse%20Gas%20Reduction%20Plan.pdf)

The program outlines a blueprint to:

Improve bicycle and pedestrian infrastructure.

Improve mass transit infrastructure.

Educate to discourage driving and create incentives to lessen driving.

Support local sustainable transportation efforts.

Green the City fleet.

Promote "smart growth" policies and preserve rail rights-of-way where appropriate.

Using the ICLEI-Local Governments for Sustainability Clean Air and Climate Protection software, the Rail with Trail Connectivity Project was analyzed for greenhouse gas and associated air pollutant reductions. As trail usage increases, pollution will decrease. A complete analysis of reduced emissions is provided in the Cost and Benefit Analysis. In summary the Project reduces energy use and harmful emissions through;

- Designed alignment to capture as many of the active commuter traffic routes as feasible from a curved-linear structure.
- Use:
  - It will reduce 237 tons of greenhouse gasses (CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>, VOC and PM<sub>10</sub>) annually.

- It will eliminate the use of 25,559 gallons of gas annually.
- It will reduce 60,000 vehicle trips totaling 518,853 miles annually.
- It will include construction materials with long-lasting durable design life and L.I.D. standards.

### **Avoidance of Adverse Impacts**

The project has been designed with sustainability in mind. The project incorporates appropriate landscaping with native plants and minimal water requirements. Base material and trail tread material will utilize recycled content specifications. Recycling receptacles for all containers are already located at major trailhead points on the north and south sections of the trail.

The trail alignment selection stage of the project analyzed 3-5 different alignments for each section. Each section was rated for its impacts to aesthetics, agriculture, air quality, biological resources, cultural resources, geology, hazards, hydrology and water quality, mineral use, land use planning, noise, population and housing, public services/ recreation, traffic and utilities. It also analyzed the strength of and challenges to the following publicly requested criteria:

- |  |  |
|--|--|
| ○ Impact to adjacent properties                  | ○ Overall user experience                    |
| ○ Availability of Right of Way                   | ○ Accessibility of trail segment             |
| ○ Land acquisition considerations                | ○ Connectivity of segment                    |
| ○ Operations and maintenance cost considerations | ○ Potential construction / engineering costs |

By going through this extensive analysis we selected the most efficient, least impacting alternative available that meets the project goals. Lastly, design priorities have been given to sensitive wildlife areas to ensure passage of wildlife and minimize impact to waterways where new bridge structures are required.

### **Environmental Benefits**

The project includes several opportunities to benefit the environment. It's engineered with Low Impact Designs to manage storm water and runoff through bioswales and natural vegetation strips. The Humboldt Bay section includes opportunities for nature education and the establishment of a conservation ethic. An understanding of one's natural environment leads to future preservation of lands that are ecologically important.

The Bay is an ecologically rich resource, and environmental education and recreation activities, such as bird and wildlife viewing, are anticipated by improving access to the Humboldt Bay National Wildlife Refuge and the Arcata Marsh and Wildlife Sanctuary. The project also includes street trees, planters and rain gardens.

### **v. Safety**

The locally identified priority safety solution for regional non-motorized commuters and visitors is developing a non-motorized trail separated from the lane of travel. Approximately half of the trail is within the Highway 101 corridor. This span of Highway 101, because of its significant rate of accidents has been designated a "safety corridor" with a reduced speed limit of 50 miles/hour.



## Reduced Accidents

City traffic counts one block from the trail site in the mid-point of the trail indicate that 9% of trips are made in this region by pedestrian or bicycle with approximately 25 bicycle trips per hour at the center point of the trail. <http://www.cityofarcata.org/departments/public-works/parks/rail-with-trail>.

Within a 1.5 mile buffer of the proposed trail, between 2007 and 2009, the Arcata Police Department responded to 19 pedestrian/vehicle collisions and 48 bicycle collisions that resulted in injury and three fatalities (see table). Pedestrian and bicycle collisions accounted for 75% of the traffic related-injuries in Arcata.

	2007	2008	2009
Bicycle accidents resulting in injury/fatality	12	12	24 1 fatal
Pedestrian accidents resulting in injury/fatality	2	7	10 2 fatal

The proposed separated trail will keep bicycles and pedestrians safe through the City and within the Highway 101 corridor.

*Humboldt County General Plan Update* (still in final review)

The County's proposed policy, in the updated Circulation Element, supports safety improvements for Highway 101 Safety Corridor, where the Arcata Rail with Trail Connectivity Project is located: C-P17. U.S. Highway 101 Safety Corridor Improvements. The County supports a strategy for improvements to the U.S. Highway 101 Safety Corridor that minimizes impacts to coastal resources, and treats all three main roads between Arcata and Eureka as one system. The strategy would develop an overall improvement plan considering motorized and non-motorized transportation that phases improvements on a prioritized basis between the three roads: U.S. Highway 101, State Route 255, and Old Arcata Road/Myrtle Avenue.

Although there is currently no active rail service, the railroad tracks have historically and continue to be used as a natural pathway. By providing a high quality trail adjacent to railroads, the safety of the corridor is improved. In 2009 the North Coast Railroad Authority adopted a set of Rail with Trail Guidelines which this project meets. Further the trail is designed to meet and whenever practicable exceed, the distance separation standards set by the California Public Utilities Commission, (8 feet and 6 inches on either side of the track centerline on tangent track and 9 feet and 6 inches on either side of a the track centerline around curves).

## B.Secondary Selection Criteria

### i. Innovation

The Arcata Rail with Trail Connectivity Project is innovative through:

1. The Community led effort that keeps moving the project forward.

As has been stated many times, Humboldt Bay residents yearn for this connectivity. Their dedicated interest and advocacy fills tables with local governments and agencies trying to support their efforts. When the public learned that local governments were cutting back they understood that bicycle and trail maintenance would be affected and that local agencies would be reluctant to take on new large regional projects. They responded by forming the Humboldt Volunteer Trails Stewards Program. The Stewards have been actively working in Arcata for two years now and have improved trail conditions through regular patrols and volunteer maintenance days. They are enthusiastic about adding the Rail with Trail Connectivity Trail to their inventory. [http://humtrails.org/Trail\\_Stewards.html](http://humtrails.org/Trail_Stewards.html)

2. It demonstrates the unique commitment to non-motorized transportation on the North Coast. Despite having one of the wettest climates on the North Coast, the Humboldt Bay Area has an enthusiastic and determined active transportation culture. In part it is because we have very low paying wages and a high cost of transportation that requires a commitment to find a less expensive way to commute.
3. Its solution oriented approach has brought together rail and trail support to achieve the highest and best use from our public rights of way.

## ii. Partnerships

The partnership and community's commitment on this project is the single reason that it has moved forward to this state of readiness. The partnerships established for the Arcata Rail with Trail Connectivity Project demonstrate the diverse support that the project has. Government agencies, local non-profits, business communities and environmental advocacy groups have all joined in support of this project. Additional letters of support available at <http://www.cityofarcata.org/departments/public-works/parks/rail-with-trail> include

- US Congressman Jared Huffman
- California Department of Transportation
- Assemblyman Wesley Chesbro
- Arcata Chamber of Commerce
- United States Department of Interior
- Redwood Community Action Agency
- Humboldt Bay Harbor District
- Senator Barbara Boxer
- Redwood Community Action Agency
- Humboldt Area Foundation
- Humboldt Bay Bicycle Commuters
- North Coast Environmental Center
- Bay (T)rail Advocates
- Humboldt County Association of Governments (HCAOG)



The community continues to raise awareness, receive input and raise funds for our local match through creative events such as the Jammie Jog this April.

## Steering Team and Stakeholders

From early on, an ad-hoc Steering Team and Stakeholder Team advised the project team through the planning process. The Steering Team consisted of nine organizations with direct influence over the project (such as permitting authority). The Stakeholder Team consisted of 19 local environmental groups, citizen groups, and other

organizations, plus non-affiliated individuals with some interest or stake in the project.

The following organizations participated in the project as Steering Team members:

1. California State Coastal Conservancy (project partner)
2. North Coast Railroad Authority (project partner)
3. US Fish and Wildlife Service (project partner)
4. California Department of Transportation (project partner)
5. California Public Utilities Commission
6. Redwood Community Action Agency
7. Humboldt County Association of Governments
8. California Department of Fish and Wildlife
9. US Army Corp of Engineers
10. Humboldt Community Association of Governments (HCAOG)

The following organizations participated in the project as stakeholders:

1. Humboldt Bay Harbor District
  2. Local Birding Groups/Audubon
  3. Local Waterfowl Hunters
  4. Pacific Gas & Electric
  5. County of Humboldt Public Works
  6. Friends of the Arcata Marsh
  7. Green Wheels
  8. Humboldt Baykeeper
  9. Coastwalk
  10. Humboldt Bay Bicycle Commuters' Association
  11. Humboldt State University
  12. Humboldt Trails Council
  13. Corridor Access Project
  14. Pacific Coast Joint Venture
  15. Arcata Chamber of Commerce
  16. Eureka Chamber of Commerce
  17. Humboldt County Convention & Visitors Bureau
  18. Timber Heritage Association
  19. Bracut Industrial Park
- Plus:
- Owners of private parcels and
  - Members of the public (unaffiliated)

**Local Community:** This region, birthplace and home to the 30-year-old Kinetic Sculpture Race, can truly envision an active transportation system. In 2008, the Arcata voters passed an initiative to add  $\frac{3}{4}$  cent local sales tax to support City projects, including local transportation projects. Further community support is exemplified by a weekly “*Happy Trails*” radio show, a citizen-initiated/citizen-led “bay [t]rail plan” ([www.baytrailplan.org](http://www.baytrailplan.org)), local project fundraising, and political advocacy. The community’s continuous voice for access to a safe and efficient non-motorized transportation system has kept this project moving forward. It is now Ready for Funding!





## Results of Cost Benefit Analysis

The Arcata Rail with Trail Connectivity Project will achieve a benefit of 15.5:1 at 3% discount and a benefit of 10.9:1 at 7% discount. The city has made every effort to capture all benefits while maintain a conservative approach. While we can say with a strong level of certainty that this project will improve real estate values, generate increased tax revenues, create short term jobs, and induce long-term jobs these benefits do not factor into this cost-benefit analysis per the guidance issued by DOT.

Table 1: Benefit – Cost Analysis Overview			
Project Year	Cost	Total Benefit Discounted 7%	Total Benefits Discounted 3%
2009/11	\$1,065,000	\$0	\$0
2012/13	\$535,000	\$0	\$0
2014	\$6,400,000	\$0	\$0
2015		\$6,958,807	\$7,801,434
2016		\$6,514,039	\$7,586,414
2017		\$6,091,023	\$7,369,245
2018		\$5,695,486	\$7,158,304
2019		\$5,325,645	\$6,953,414
2020		\$4,979,828	\$6,754,400
2021		\$4,656,474	\$6,561,093
2022		\$4,354,125	\$6,373,330
2023		\$4,071,415	\$6,190,952
2024		\$3,807,067	\$6,013,802
2025		\$3,559,889	\$5,841,733
2026		\$3,328,766	\$5,674,596
2027		\$3,112,653	\$5,512,252
2028		\$2,910,577	\$5,354,561
2029		\$2,721,624	\$5,201,391
2030		\$2,544,943	\$5,052,612
2031		\$2,379,735	\$4,908,097
2032		\$2,225,257	\$4,767,724
2033		\$2,080,809	\$4,631,375
2034		\$1,945,742	\$4,498,933
2035		\$1,869,511	\$4,490,541
<b>Total</b>	<b>\$8,000,000</b>	<b>\$81,133,414</b>	<b>\$124,696,203</b>
<b>Net Present Value Discounted 7%</b>			<b>10.9</b>
<b>Net Present Value Discounted 3%</b>			<b>15.5</b>

As Table 1 shows, over this analysis' time scope, there will be a total benefit of \$124,696,203 at 3% discount and \$81,133,414 at 7% discount. More detailed review, seen in Table 2, shows that this project achieves significant benefit in all of the primary selection criteria with exceptional benefit in 4 of the 5 primary selection criteria. Safety is far and away the strongest comparative benefit factor as would be expected from a project that is focused on providing a safe alternative to an otherwise

dangerous current situation. In Livability, the project also rates exceptionally well thanks its ability to improve the health and vitality of a community by creating a new avenue for recreation and a physically active and financially beneficial alternative to drive a car to work. In sustainability this project highlights the positive environmental impacts that can occur when a community is given a legitimate alternative to motorized vehicle travel. In economic competitiveness, the conservative approach to this analysis significantly lowered the projects overall benefit-cost, but the increased avoidance of gas and car ownership costs will make a huge impact on a community that is predominantly low and moderate income. The weakest area of this project with regard to the BCA is in State of Good Repair however even here; this project collects strong benefit from its recouping of Maintenance and Operation costs.

<b>Table 2: Benefits By Selection Criteria</b>	<b>Total Benefits over 20-Years</b>
<b>State of Good Repair</b>	
Maintenance and Operations Costs	<b>\$824,250</b>
Rebuilding a dilapidated rail corridor	<b>Not Included</b>
<b>Economic Competitiveness</b>	
Cost Savings from Avoided Auto Ownership	<b>\$5,593,439</b>
Cost Savings from Avoided Gas	<b>\$2,176,992</b>
Increase Tax Revenues	<b>Not Included</b>
Increase Jobs	<b>Not Included</b>
<b>Livability</b>	
Community Commuter and Recreational Benefit	<b>\$50,573,963</b>
Community Health Benefits (Bicyclist Only)	<b>\$14,880,098</b>
Increased Real Estate Values in neighborhoods adjacent to the rail project (primarily low and moderate income)	<b>Not Included</b>
<b>Sustainability</b>	
CO2 Emissions Reductions	<b>\$144,282</b>
VOCs, NOx, PM, Sox Emissions Reductions	<b>\$1,882,223</b>
<b>Safety</b>	
Reduced Accidents (Injuries and Fatalities)	<b>\$105,869,400</b>

## V. Project Readiness

This project has completed 100% of the planning and engineering required for construction. CEQA was certified by the City of Arcata in May 2013 and CEQA concurrence was certified by the California Transportation Commission in March 2014. The State Transportation Department, Caltrans, is processing NEPA for the project. The Caltrans Local Assistance Division is not authorized to initiate NEPA until a Federal Aid Number is assigned to the project. Since our match funds are not Federal Funds we have not been able to secure the Federal Aid Number to begin submittal of the NEPA studies and documents for review. However, based on feedback from TIGER V in 2013 Caltrans has taken internal steps to initiate NEPA review for this project and developed a timeline to ensure that all the TIGER VI deadlines are able to be met. Below is the timeline for NEPA completion and a status of each requirement. NEPA is scheduled for certification by December 2014.

NEPA Item	Reviewing Authority	Status	Next Steps	Completion Date
Initial Site Assessment	Caltrans	Study Complete	14 day review	June 2014
Natural Environmental Study	Caltrans	Study Complete	14 day review	June 2014
Biological Assessment	NMFS/USFWS	Assessment Complete	135 day review	October 2014
Visual Memorandum	Caltrans	Review Completed	14 day review	June 2014
Floodplain Analysis	Caltrans	Analysis Completed	14 day review	June 2014
Cultural Resources	Caltrans / SHPO	Study Complete	14 day review Caltrans 30 day review for SHPO	August 2014
Architectural Historical Review	Caltrans / SHPO	Studies Complete including Historic Property Survey Report (HPSR) and Historic Resource Evaluation Report (HREER)	14 day review Caltrans 30 day review for SHPO	August 2014
4f De Minimus Determination	Caltrans	Noticing developed	30 day noticing 14 day review by Caltrans	August 2014

The documents listed below demonstrate construction readiness; all documents are available at: <http://www.cityofarcata.org/departments/public-works/parks/rail-with-trail>.

The technical planning for this project consisted of the following steps.

**Route Alternative Analysis:** During this phase, a broad corridor was divided into 28 segments. For each segment 3-5 different alignments that would connect north Arcata, through town and south towards Eureka to the 101/Bracut Intersection were reviewed. Each segment was evaluated for both environmental impacts, user efficiency, construction cost efficiency and overall connectivity to key destinations and supporting bike/pedestrian infrastructure. At the end of the evaluation our citizens believe that we have determined the most cost effective route that offers connectivity to



critical neighborhoods and business districts while still providing a quality riding experience that our citizens have come to appreciate.

- The preferred route has been engineered incorporating Low Impact Development techniques. The project meets the operational needs of adjacent and intersecting roadways, the railway system, area businesses and trail users. Design standards were derived from US Department of Transportation (USDOT), American Association of State Highway and Transportation Officials (AASHTO), California Department of Transportation (Caltrans), North Coast Railroad Authority (NCRA), and the Public Utilities Commission (PUC).
- Detailed Environmental review was completed on the preferred route. The following NEPA/CEQA environmental studies have been completed for the project. CEQA is complete. NEPA is prepared and will be filed once funding is secured for the project:
  - Initial Study
  - Mitigated Negative Declaration – adopted May 2013
  - Federal Biological and State Biological Assessments
  - Phase 1 Corridor Study
  - Wetlands Delineation
  - Cultural Resources Investigation - *available upon request* and an Architectural Historical Review
  - Geotechnical Analysis of bridge structure regions
  - 100% Complete Construction Plans
  - Wetland Mitigation and Monitoring Plan



## Cost Estimate

An Opinion of Probable Construction Cost was developed based on the final trail engineered designs. Construction cost is summarized below.

Item	Units	Unit Cost	Quantity	Cost
Mobilization and Demobilization	LS			\$150,000
Construction Area Signs	EA	\$500	7	\$3,500
Traffic Control	LS			\$35,000
Water Pollution Control	LS			\$40,000
Sub grade Replacement	CY	\$55	650	\$35,750
Control of Water	LS			\$18,000
Clearing and Grubbing	LS			\$50,000
Temporary Shoring and Trench Safety	LS			\$45,000
Adjust Utility Cover to Grade	EA	\$400	5	\$2,000
Adjust Existing Manhole Cover to Grade	EA	\$1,000	5	\$5,000
Type of GI Drainage Inlet	EA	\$4,000	5	\$20,000
6'-24" storm drain pipe	LF	\$102	96	\$9,792
Replace Asphalt Concrete Surfacing	LS			\$8,600
Excavation and Grading	CY	\$18	6000	\$108,000
Embankment /Imported Borrow	CY	\$30	2000	\$60,000
Grade Drainage Swale	LF	\$5	4700	\$23,500
Class II Aggregate Base	CY	\$50	9600	\$480,000
RSP (1/4 ton)	Ton	\$100	250	\$25,000
Asphalt Concrete	Ton	\$100	2800	\$280,000
Minor Concrete (sidewalk, ramps)	LS			\$25,000
Cast in Concrete Footings	CY	\$1,800	116	\$208,800
Concrete Structures	EA	\$13,500	40	\$540,000
Steel Bridges	EA		3	\$860,000
Concrete Bridge Decking	LS		2	\$67,000
Rail Fence	LF	\$50	9600	\$480,000
Guard Rail Detectable Warning Systems (Truncated Doms)	LS			\$5,000
Thermoplastic and signs (road, way finding, interpretative)	LS			\$47,000
Mitigation and avoidance measures	LS			\$668,058
<b>Total</b>				<b>\$4,300,000</b>

## Funding Sources

**The City of Arcata** has committed \$500,000 of General Funds to this project. This is a significant match for our community with an annual budget of only \$31 million total. This match would not be possible without the additional General Funds that we receive from a recent Ballot initiative that increases Sales Tax. The voters supported this tax to improve our transportation system.

**California Department of Transportation** has committed \$1 million towards this project. They recognize the importance of this project in our community and the positive benefits that it will have improving the efficiency on Highway 101.

**TIGER VI:** We are requesting the remaining funds for this project from TIGER VI. The total request is \$2,800,000. This represents 65% of the construction expense for this project and 55% of the total project cost.

**Contingency:** The State Coastal Conservancy has already provided \$1,065,000 towards the development of this project. If the project needs additional funds they have indicated that they will try to support our request.

## Project Schedule

Item	Date of Completion
Finalize CEQA (NOD, NOC, NOI)	Adopted and Completion Notice filed May 2013.
Finalize NEPA review - All Studies are Complete -Continue to Support Caltrans as needed	Caltrans local assistance does not submit NEPA for circulation until project funding has been secured. They have agreed to initiate NEPA for this project and have held a project walk through in preparation for NEPA filing. The City has completed all necessary reports to complete the filing. If TIGER funding is available to this project we have agreed to have NEPA certified by December 2014 (see below breakout)
Submit all Project Permits	July – December 2014
Complete Property Acquisition (see below)	December 2014
Update Construction Bid Documents based on Permit and Regulatory Agency Final Review	December 2014 – March 2015
Release Bid Documents	June 2015
Award Bid / Execute Contract	July 2015
Project Construction includes trail, trail heads landscape and fencing, signage and wetland mitigation.	August 2015 – December 2016/17, Given the North Coast Climate - 1 additional construction season is requested.



## Pre Construction Activities / Right of Way Acquisition

**Property Acquisition.** This project requires one right-of-way acquisition. The preferred alignment of the trail leaves the Railroad corridor and runs along the edge of a currently vacant parcel. The property owner is working on design plans for the parcel and has designed the Trail as part of the development. We have not proceeded with acquisition of this property because we have not had construction funding. If we are ready to construct prior to the property owner being ready to develop we will complete this property transfer as an acquisition. If the property owner is ready to develop before we are prepared to construct there is a chance that they would donate the right-of-way as an amenity for the development which is why we have held off from the acquisition. The City has funds available for the acquisition. As a contingency the trail could remain in the railroad corridor moving the alignment only 15 feet to the East. However, it is very doubtful that this contingency would be required.

**Wetland Mitigation:** The City has completed a Wetland Mitigation and Monitoring plan for impact to wetlands from this project. The plan was sent out for agency review through the State Clearinghouse and adopted by the City Council in May 2013. The plan outlines several properties for mitigation. In addition to these lands, the City is working with Caltrans and the State Coastal Commission to develop mitigation options for this project in connection with the State Highway Improvement Project that would create larger mitigation blocks. Once funding is secured for the Trail the top priority mitigation site(s) will be incorporated into the Coastal Development Permit.

**Expenditure Timetable:** This project will be awarded for construction in July 2015. Initial fund expenditure will begin immediately. The order of work will allow the contractor to begin with installation of structures during the North Coast's dry season of August / September. This will allow them to return to work no later than May 15<sup>th</sup>, 2016 to complete the remaining trail construction. Because of the nature of Northern California Coastal weather, one additional construction season is requested should 2016 be abnormally wet. Allowing this buffer upfront will attract more competitive bids.

## Planning Approvals

### Environmental Review and Approvals

This project has completed all of the required environmental, cultural and geotechnical studies required for CEQA and NEPA. Documents available for review include:

- Initial Study, Mitigated Negative Declaration – adopted May 2013
- Federal Biological and State Biological Assessments
- Phase 1 Corridor Study
- Wetlands Delineation
- Cultural Resources Investigation (*available upon request*) and Architectural Historical Reports
- Geotechnical Analysis of bridge structure regions
- 100% Complete Construction Plans
- Wetland Mitigation and Monitoring Plan

CEQA: Complete. Adopted Mitigated Negative Declaration and Wetland Mitigation and Monitoring Plan, May 2013. Concurrence received by the California Transportation Commission in March 2014.

NEPA: California Department of Transportation is ready to submit the project NEPA analysis for review. The project only needs a Federal Project Aide number (committed Federal funding) for the official review to commence. NEPA was certified by Caltrans and the California Transportation Commission in March for Phase I that received construction funding from the Transportation Enhancement Fund and State STIP this year. This is a top priority project for Caltrans Local Assistance. They have committed to complete NEPA by December 2014 if the TIGER VI is awarded.

### **Legislative Approvals and Other Agency Reviews/Permits**

This project has been approved by both the City of Arcata and Humboldt County for construction. All other responsible and trustee agencies and interested parties and organizations have commented on the project through the CEQA process and their comments have been incorporated into the final designs.

Initial consultations have been completed with the following permitting agencies and draft permit applications have been completed and will be submitted by December 2014.

- Army Corps of Engineers - 404 Permit
- Regional Water Quality Control Board - 401 Water Quality Certification / SWPPP
- California Coastal Commission Coastal Development Permit
- California Department of Fish and Wildlife - Streambed Alteration Permit
- Humboldt Bay Harbor, Recreation and Conservation District Permit
- County of Humboldt, Grading Permit
- Caltrans Encroachment Permit

**North Coast Railroad Authority:** The City is currently working with the North Coast Railroad Authority to finalize a License Agreement (a draft is available on the website) <http://www.cityofarcata.org/departments/public-works/parks/rail-with-trail> for shared use of the railroad right-of-way. The template was approved by the NCRA Property Committee and Board of Directors in March 2014 for a segment of Rail with Trail South of Arcata in Ukiah, CA. We expect the License Agreement to be fully executed by May 2014 as we now have funding to construct the Phase I of this project which was required to initiate the License Agreement. This is a significant advancement from this project's TIGER V application where there was not a project with cleared funding for the NCRA Board to approve License Agreement. The License Agreement, although predicated on construction of Phase I will also encompass the full right-of-way for this Phase II project.



# Federal Wage Rate Certification



736 F Street  
Arcata, CA 95521

City Manager (707) 822-5953	Environmental Services 822-8184	Police 822-2428	Recreation 822-7091
Community Development 822-5955	Finance 822-5951	Public Works 822-5957	Transportation 822-3775

April 21, 2014

RE: Federal Wage Rate Certification for City of Arcata Rail with Trail Project,  
TIGER VI 2014 Grant Application

The City of Arcata hereby certifies that it will comply with the requirements of the subchapter IV of chapter 31 of title 40, United States Code (federal wage rate requirements), as required by the FY 2014 Continuing Appropriations Act.

*Randal J. Mendosa*

Randal J. Mendosa, City Manager  
City of Arcata

*4-22-14*

Date