

It was concluded that improvements to the east side of the Buckhorn grade provided the greatest travel time reduction, and greatest benefit to the 299 corridor. This project was also determined to be the most expensive and difficult to program. The counties of Humboldt, Shasta, and Trinity, along with Caltrans Districts 1 and 2 have participated in funding the environmental component of the S.R. 299 Buckhorn Grade improvement project.

Another project of significant benefit to harbor interests is the development of a port-rail marine terminal facility with improved highway access. This will improve intra- and inter-regional goods movement, and improve the competitiveness of the region's intermodal systems. Washington Street in Eureka has been designated as a route of intermodal significance because of its rail, port, highway and pipeline accessibility.

Existing Truck Transportation Needs

The following truck transportation needs have been identified:

- New or upgraded sections of highways and county roads must include additional thickness in order to accommodate heavier truck weights and truck traffic volumes.
- Timber industry representatives have indicated that making State Route 101 a four-lane facility south towards San Francisco and north to Crescent City would benefit the industry. Such improvements would provide cost savings to the industry by reducing congestion and travel times. In addition, the industry could use longer trailers to help cut transportation costs. These savings will have to be quantified to determine whether they are significant enough, when coupled with other factors such as safety and operational concerns, to warrant highway expansion.
- Improvements to the east side of the Buckhorn grade will provide the greatest travel time reduction, and greatest benefit to the SR 299 corridor. However, this project was also determined to be the most expensive and difficult to program.

Rail Transportation

The Northwestern Pacific Railroad (NWP) was acquired by the North Coast Railroad Authority in 1996. The NCRA has taken advantage of railroad rehabilitation programs made available by Caltrans and the California Transportation Commission, and invested over \$6 million in reducing the property's deferred maintenance liabilities. The State has invested approximately \$23 million since 1992 (\$10 million from Proposition 116 and \$13 million from Transit Capital Improvement funds). In addition, \$25 million in federal demonstration funds and \$12 million in Q-funds have been invested in improvements on the line. An additional \$35 million was made available in the Transportation Congestion Relief program initiated by the Gray Davis administration for railbed rehabilitation. Federal Emergency Management administration has provided storm damage repair resources for areas washed out by previous storm events. While these monies have improved the NCRA system, little of the money has actually been invested within the HCAOG Regional Transportation Planning Area.

When the line operated, it provided freight service three days a week and occasional excursion passenger service on weekends and holidays. The service operated from Korbel south to Ignacio and east to Schellville and Lombard. The main line extends 160 miles from Eureka to a point

approximately three miles north of Healdsburg. From Eureka, the Korbel branch extends 11.5 miles north through Arcata to Korbel, where it connects with the Arcata and Mad River branch (A&MR). The A&MR branch extends seven miles to a point near Korbel—the rails and ties on this route were salvaged in late 1997. The Samoa branch runs from Arcata south along the coast for 10.4 miles to Fairhaven. From Alton, 21.4 miles south of Eureka, a branch extends five miles to Carlotta. The NCRA system is illustrated in Figure II-12.

Principal freight for the railroad was lumber moving to California and Arizona markets. Additional traffic included dairy products, fish products and aggregates. When the line operated, there was some inbound traffic of coke and calcified lime used in paper production. However, rail traffic had declined substantially, mostly due to lower timber production, logs and farm machinery.

The railroad's ability to offer reliable service depends largely on the condition of the track and roadbed, and the availability of stations. Currently, there are six inactive stations at Willits, Ukiah, Scotia, Fort Seward, Calpella and Laughlin. A considerable program of roadbed, track, bridge and tunnel and station upgrading will be necessary if operations and competitiveness are to be improved.

As a result of a November 25, 1998 Federal Railroad Administration Emergency Order (Order No. 21), the NCRA was ordered to cease all railroad operations. In order to lift the closure and re-open the line south of Willits to Lombard, the NCRA has started rehabilitation work. The work currently underway is part of the \$12 million rehabilitation project for the entire railroad.

The North Coast Railroad Authority (NCRA) released and updated *Capital Assessment Report-Russian River Division*, in November of 2005. The report is a comprehensive condition assessment of the railroad from Lombard to Willits. The updated report provides recommendations for improvements and processes to reopen the railroad, details capital repairs, deferred maintenance, storm water repair, and related environmental requirements to reopen the railroad.

Subsequently, in March 2006, the NCRA released a Strategic Plan and Progress Report. The Strategic Plan has been refined to reflect available funds and the requirement to have completely operable segments to attract and support an operator. The Strategic Plan calls for an eventual reopening of the entire line. In order to maximize funding sources and begin construction, the construction is expected to be phased based on a strategy of operable segments that produce return on investment to an operator. The Strategic Plan identifies current funding sources for each of the nine operable phases, which are as follows: TCRP \$22.3 million, ISTEPA \$8.6 million, Measure M \$3 million, private \$30.2 million, and other \$41.9 million for a total of \$106 million.

Figure II-12:



Economic Development Opportunities: When rehabilitated, opportunities for economic development and growth of rail-freight traffic do exist for the rail line. The Northern segment of the NCRA (Nashmead to Eureka) has been embargoed since February 4, 1998 due to El Nino-related storm damage. Nashmead is located approximately 36 miles north of Willits. Estimates to reopen this segment of the railroad range from between \$2.5 and \$3 million. In March of 1998, Caltrans conducted an analysis on the movement of lumber along the US 101 corridor and along the SR 299 corridor. The analysis looked at operating the Southern segment of the NWP from Willits to Schellville with a truck transload facility in Willits. It included truck rates and transload fees for both the Eureka to Willits corridor as well as the Eureka to Redding corridor.

US 101: Trucking lumber on US 101 to Willits and then transloading onto rail cars showed a significant increase in cost of shipping lumber by truck versus shipping by rail from Eureka. The Union Pacific Railroad (UP) subsidizes a large percentage of the trucking transload cost to prevent this traffic from staying on trucks to its final destination. With the UP subsidy, the net cost to transport lumber from Eureka to Suisun via the US 101 corridor is an additional \$200 per railcar over the existing rail rate.

SR 299: The truck rate between Eureka and Redding via SR 299 is an additional \$350 per railcar higher than the Willits rate. However, the Union Pacific (UP) does not have to share revenue with the NCRA or the California Northern Railroad (CFNR) for transportation to their rail connection in Suisun. The result is the savings in shortline revenue sharing offsets their subsidy for the transload cost. Therefore it is more economical for UP to maintain a transload in Redding than to subsidize a transload in Willits. The UP can control where the transload site is by adjusting the subsidy rate. To ensure the majority of lumber trucks go to Redding, UP subsidizes the trucking cost so they are approximately \$100 per carload less than the Willits transload rate. Several lumber companies are using the Redding reload and will continue to do so as long as the rate remains lower than the Willits rate. Although UP has given assurances they will try to keep the Willits transload competitive, the benefits of a Redding transload for UP will always ensure that Redding transload rate will stay low enough to cause the majority of the lumber traffic to move on SR 299 to Redding.

A telephone survey of the five largest lumber companies in Humboldt County was conducted by Caltrans to determine if the companies would use a transload site in Willits to support the NCRA. One lumber company said they would not accept an increase in transportation costs. Their response indicated they are trucking all of their lumber to Redding and will continue to do so until rail service returns to Eureka. The other four companies all stated they prefer having a rail connection in Eureka, but would support a Willits transload provided it did not significantly increase their transportation costs.

Industry Impacts: Fifty percent of the flakeboard produced in Humboldt County goes to markets outside of California. The most economical way to move this lumber is by rail. For California Redwood, sixty to seventy percent is shipped outside of California. Most of these shipments would potentially go by rail if the NCRA could provide reliable service. To continue to do business in Humboldt County, the lumber mills would be forced to truck their lumber to Redding to remain competitive. The only way to prevent a significant increase in truck traffic on SR 299 would be to continue providing rail service to Humboldt County.

Another existing need is solid waste removal. Humboldt County's landfill has already reached capacity, while Mendocino County estimates its landfill will reach capacity soon. The most economically feasible way to export waste is by rail. It is estimated that new waste traffic on the NCRA would increase transloadings by twenty five percent and provide approximately \$1 million in additional revenue per year. The waste traffic would offer a steady, year-round source of revenue that will only increase as the population of the north coast continues to grow.

The rail system will also have the capability to handle backhaul movements for export traffic through the Port of Humboldt Bay. The backhaul operation could generate an additional \$1.5 million in revenue to the County. The alternative would be to set up a transload point at Willits. If a transload were set up at Willits, the cost of hauling garbage by truck to Willits from Eureka would increase transportation costs to the Counties by \$18 to \$20 per ton or \$1.2 to \$2 million per year in addition to the 9,000 truck movements per year on US 101.

In summary, the additional transportation costs will prevent many Humboldt County lumber companies from being competitive with the rest of the West Coast mills. This could cause many of the small lumber mills in Humboldt County to close, and force the large companies to truck their lumber to a transload site. The effect of eliminating the rail option will be to generate an increase of truck traffic on both US 101 and SR 299 leading to increased maintenance costs for both routes.

The survey and analysis by Caltrans shows a railroad alternative that has the potential to be self-sustaining if properly managed and if sufficient public funding is provided for the rehabilitation of the railroad. Many lumber shippers stated in their survey they would ship more lumber by rail if the service were reliable. During the wet winter months, many customers pay the additional cost of a truck transload so they can guarantee their lumber shipments will be delivered on time. With the necessary capital improvements in place and the ability to restore service in a minimum amount of time, the NCRA would be able to attract year-round shipping contracts.

Marine Transport

The Port of Humboldt Bay is the largest marine shipping facility between San Francisco Bay, located 225 nautical miles to the south, and Coos Bay Oregon, located 156 nautical miles to the north. The port's shipping facilities consist of rock jetties, bar and entrance channels, maintained shipping channels, turning basins, and dock facilities. There are six maintained channels in Humboldt Bay (all channel depths are given as the depth below Mean Lower Low Water):

- The bar channel extends seaward of the entrance channel, and is maintained at a depth of -48 feet. It is approximately 2,300 feet in length, and is 1,600 feet wide at the seaward end and 700 feet wide at the jetties.
- The entrance channel extends through the two rubble mound/jetties forming the bay entrance to the open ocean, and is maintained at a depth of -48 feet. It is approximately 9,000 feet in length, and 500 feet wide.
- The North Bay and Samoa Channel, the bay's main and longest channel, serve as the Bay's major deep-vessel dock facilities along the Samoa bayfront. The North Bay Channel is maintained at a depth of -38 feet. It is 400 feet wide and 18,500 feet in