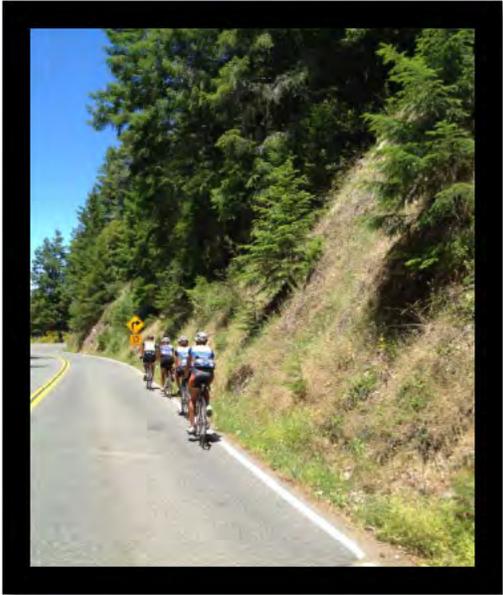




District 1 - District System Management Plan 2012



For individuals with sensory disabilities, this document is available in alternate formats. To obtain a copy in an alternate format, please call or write to the Caltrans Office of System, Regional and Community Planning, 1656 Union Street, Eureka, CA 95501. (707) 445- 6412 Voice, (916) 654-3847 TT



DISTRICT 1 – DISTRICT SYSTEM MANAGEMENT PLAN – SEPTEMBER 2012

Information in this District System Management Plan is subject to change as conditions change and new information is obtained. It is intended for use as a guide to the maintenance, management and development of the transportation system over the next 20 years and beyond.

This plan has been developed in cooperation with Caltrans' Regional Transportation Planning Agency planning partners, with additional direction from District System Management Plan Advisory Committee members.

Approval recommended by Caltrans District 1 Deputy District Directors:

Cheryl S. Willis 9/25/12
Cheryl S. Willis Date
Planning and Local Assistance

Jana Hollifield 9-25-12
Jana Hollifield Date
Administration

Matt Brady 9/25/12
Matt Brady Date
Program/Project Support

Mark Suchanek 9/25/12
Mark Suchanek Date
Maintenance and Operations

Approved:

Charlie Fielder 10/31/2012
Charlie Fielder Date
District Director
Caltrans District 1



Table of Contents

Executive Summaryvi

- The District System Management Planvi
- Transportation Modes in District 1.....vi
- Transportation and the Environmentvi
- Planning Strategies and Toolsvi

1 - Introduction..... 1

- Welcome to District 1.....1
- Purpose of the District System Management Plan1
- A History of Transportation System Legislation in California2

2 – Caltrans Strategic Planning 4

- Caltrans Values4
- Caltrans Goals4
- Transportation Partnerships4

3 – District Organization 6

- District Management.....6
- District Functional Areas.....7
- Regional Functional Areas8

4 - Transportation Modes in Caltrans District 1 – Existing and Future..... 9

- Interregional Bus and Regional Bus/Transit.....9
- Highways, Streets and Roads14
- State Highways14
- Issues and Strategies19
- Programmed Improvements.....25
- Future Improvements.....28
- Local Streets and Roads.....31
- Non-Motorized Facilities32
- Programmed Improvements.....35
- Railroads.....36
- Airports38
- Seaports41
- Pipelines42
- Telecommunications43



5 – Transportation and the Environment	44
Climate Change	44
Environmental Mitigation.....	46
Environmental Quality	47
6 – Planning Strategies and Tools	47
System Planning.....	47
Tools to Optimize the System	48
Other Tools to Optimize the System.....	49
Complete Streets.....	51
Appendices	55
Appendix A – Outreach Efforts.....	A
Appendix B – Advisory Committees.....	B
Appendix C – System Planning Flow Chart.....	C
Appendix D – Tribal Coordination	D
Appendix E – 2012 Planning Projects List Beyond the STIP and SHOPP	E
Appendix F – Programming Process	F
Appendix G – Acronyms	G
Appendix H - References.....	H



Figures

Figure 1 – Fernbridge on State Highway 2

Figure 2 – Humboldt Transit Authority’s Redwood Transit System..... 9

Figure 3 – Middletown Park and Ride, Route 29 in Lake County..... 17

Figure 4 – Division of Highways truck after a collision on Route 101 South of Eureka (1930’s) 19

Figure 5 – Richardson Grove, US 101 in Humboldt County 20

Figure 6 – NCRA Facilities map..... 36

Figure 7 – California Flood Risk: Sea Level Rise..... 45

Figure 8 – Caltrans Solar Project, Eureka 46

Figure 9 – Bridge Rail on SR 169 between Wautec and Weitchpec..... 51

Figure 10 – Route 299 Through the Community of Willow Creek 54

Figure 11 – Bridge on Route 169 between the Communities of Wautec and Weitchpec on the Yurok Reservation E

Tables

Table 1 – Fixed-route Public Transit Providers in District 1 13

Table 2 – District 1 Major State Highway Projects Programmed in the 2010 STIP..... 26

Table 3 – 2012 Amended 2010 State Operation and Protection Program for District 1..... 28

Table 4 – Improvements Necessary to meet Ultimate Transportation Concepts in District 1..... 29

Table 5 – District 1 Programmed Non-Motorized Projects with Regional/Interregional Significance 34

Table 6 – Aviation Facilities in District 1 39

Table 7 – Cities and Communities in District 1 Where a State Highway Route Functions as a Main/Major Street 52

Maps

Map 1 – Interregional Bus and Regional Bus/Transit Routes in District 1 12

Map 2 – Functional Classifications and Capacity Concerns in District 1..... 16

Map 3 – Park and Ride Lots and Safety Roadside Rests in District 1 18

Map 4 – STAA Truck Access on the National Highway System (NHS) in District 1 21

Map 5 – District 1 Major State Highway Projects Programmed 27

Map 6 – New Facility Improvements Necessary to Meet Ultimate 30

Map 7 - Generalized Highway Shoulder Widths and the Pacific Coast Bike Route in District 1..... 33

Map 8 – Existing Rail and Seaport Facilities in District 1..... 37

Map 9 – Airports in District 1..... 40

Map 11 – Greater Eureka Area Travel Model Year 2020 Anticipated Volume to Capacity (V/C) Ratios..... 50

Map 12 – Main Street Cities and Communities on the State Highway in District 1 53



EXECUTIVE SUMMARY

THE DISTRICT SYSTEM MANAGEMENT PLAN

The District System Management Plan (DSMP) is a long range, primarily internal, strategic planning document that explains how District management envisions maintaining, managing, and developing the transportation system in District 1. The District undertakes this task in cooperation with our planning partners and in conformance with Caltrans' overall strategic planning goals. These transportation partners include Regional Transportation Planning Agencies (RTPAs), Tribal and local governments, and other transportation providers and advocates within the District, many of whom served on the DSMP's external advisory committee (see Appendix B).

This plan identifies the issues and challenges associated with the current Transportation Planning climate, and describes tools and strategies employed for addressing those issues in District 1.

TRANSPORTATION MODES IN DISTRICT 1

The DSMP describes the District's transportation systems, including:

- Interregional and Regional Bus/Transit
- Highways, Streets and Roads
- Non-Motorized Facilities
- Railroads
- Airports
- Seaports
- Telecommunications

TRANSPORTATION AND THE ENVIRONMENT

District 1 strives to find the balance between enhancing our natural environment and surroundings while supporting economic growth and development within our counties and region. The District is dedicated to ensuring that the qualities which draw people to the area are

maintained and that access to these assets is improved at every available opportunity.

PLANNING STRATEGIES AND TOOLS

Historically, District System Management Plans have focused on expansion and new facility improvements. This DSMP focuses on optimizing the existing system and community planning goals, while keeping options open for future new facility (capacity increasing) improvements.

Emphasis will be on safety, multi-modal transportation, and on the tools that will help to maximize the capacity and efficiency of the existing system. This focus will help the District provide the best service to the public with the limited funding available.

Tools that the District and its partners anticipate using to optimize the existing system include:

- System Planning Products, including the Interregional Transportation Strategic Plan (ITSP), this District System Management Plan, Transportation Concept Reports (TCR) and the Transportation System Development Plan (TSDP).
- Transportation System Management: Efficient management of the existing transportation system often coupled with minor improvements.
- Intelligent Transportation Systems (ITS): ITS applies information and communication technology to both transportation systems and vehicles to improve system operation.
- Transportation Alternatives (TA): Projects often include traffic calming measures which, when appropriate, can result in increased motor vehicle safety, and provide safer access for bicycles and pedestrians. Other activities include safety roadside rests, scenic overlooks,



bicycle/pedestrian facilities, landscaping and beautification.

- **Alternative Modes of Transportation:** The District encourages and strongly supports alternatives to the single occupancy vehicle including ridesharing, transit, and non-motorized transportation.
- **Computer Modeling:** Caltrans uses Travel Demand Modeling to forecast long-range conditions and micro-simulation modeling to test alternative corridor improvement options.
- **Engineered Feasibility Studies:** The link between a planning concept and an engineered candidate project.

- **Performance Monitoring System (PeMS):** Real time traffic monitoring for traveler information and the identification of traffic needs.
- **Context Sensitive Solutions (DP-22):** Integrating community values with transportation goals to develop facilities that are appropriate to their surroundings.
- **Complete Streets (DD-64-R1):** A planning approach that encourages “safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists...”



1 - INTRODUCTION

WELCOME TO DISTRICT 1

District 1 is situated on California’s North Coast, and is made up of four rural and geographically diverse Counties: Del Norte, Humboldt, Mendocino, and Lake. District 1, with a total combined area of nearly 10,500 square miles, is unparalleled in the State in terms of geologic instability, coastal resources, sensitive natural habitats and biological species, and the regulatory environment that governs all of these features. Mendocino, Humboldt and Del Norte counties all have State facilities within the Coastal zone.



The California Department of Finance (DOF) population figures for the District show a total population of 316,838 as of January 1, 2011. Department of Finance figures for individual counties in District 1 in 2011 are as follows:

- Del Norte County: 28,594
- Humboldt County: 135,263
- Lake County: 64,784
- Mendocino County: 88,197

Coastal areas of the District experience mild, dry, and frequently foggy summers, and wet, cool winters. Inland, summers are dry and substantially warmer, while winters are wet and cool, with snowfall common at elevations over 3,000 feet.

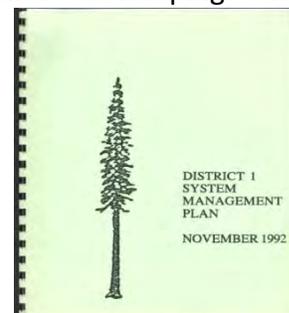
Historically, the area’s economy has been based on natural resource extraction (primarily timber and fishing), but more recently the economic base has shifted more toward retail sales and service and government. Part of this transition stems from the establishment and expansion of Redwood National State Parks, and the growth of Humboldt State

University. Agricultural production, including wine grapes, orchard fruits and dairy, continues to be an important aspect of the District’s economy.

The North Coast economy is critically dependent on its transportation system because of its reliance on tourism and its isolation from major industrial and population centers in the State. Transportation system deficiencies have been recognized by the County of Humboldt’s Economic Development Division as one reason why economic growth has been slower in the North Coast region than elsewhere in California.

PURPOSE OF THE DISTRICT SYSTEM MANAGEMENT PLAN

The District System Management Plan (DSMP) is primarily an internal strategic planning document that explains how District management envisions maintaining, managing, and developing the transportation system in the District over the next 20 years and beyond. All transportation-related decisions at the District level are made in cooperation with our planning partners and in conformance with Caltrans statewide strategic planning goals. It explains District strategies and describes tools the District intends to use to implement those strategies.



This DSMP utilizes Regional Transportation Plans, the District’s Transportation Concept Reports, the Caltrans Interregional Transportation Strategic Plan, Department Policy, and District management guidance as its primary content sources.

Since the focus of the DSMP is interregional in nature, the plan includes little local detail. General

guidelines for development of the DSMP are provided by Caltrans' Division of Transportation Planning, System Planning Branch.

The DSMP is neither a funding plan nor an environmental document. It does not program projects nor does it identify funding sources. It is, therefore, subject to neither the California Environmental Quality Act (CEQA) nor the National Environmental Policy Act (NEPA).

The System Planning branch of Transportation Planning is responsible for the preparation of the DSMP. All functional units are responsible for the implementation of the goals and strategies of this Plan.

A HISTORY OF TRANSPORTATION SYSTEM LEGISLATION IN CALIFORNIA

In 1895, the Bureau of Highways was created by the State Legislature. The first plan for an organized system of 28 numbered highways consisting of 4,500 miles came shortly thereafter. The plan was intended to link all of the county seats throughout the state. This first system was built mainly on existing county and local roads. Throughout the next century, a burst of development led California to the forefront of the transportation age. Numerous bond acts and laws to encourage investment in infrastructure echoed the rise of the automobile, especially in the west. As an example, in 1944, the California Highway Commission recommended a major post-war highway construction program of 145 individual projects, at an estimated cost of \$80,000,000. According to the Federal Reserve Bank of Minneapolis (a commonly used source for escalating costs) this amount in current 2012 dollars is approximately \$1.1 billion.

The construction of our current freeway system was in full swing by the 1960s. In 1970, the California Environmental Quality Act (CEQA) was

enacted, adding a layer of complex regulatory review to construction projects, and began a slowing of previously unfettered construction.

In 1972, AB 69 was passed, which reorganized the Department of Public Works and the Department of Aeronautics into a new Department of Transportation (Caltrans), with six functional and modal divisions: Highways, Mass Transportation, Aeronautics, Transportation Planning, Legal, and Administrative Services. The legislation also required Caltrans to prepare a California Transportation Plan, based on input from regional planning agencies and overall state objectives. This was a significant shift, as the focus now moved from just highways (focused on single-occupancy vehicles) to multi-modal transportation, and from a central planning agency to regional agencies.



FIGURE 1 – FERNBRIDGE ON STATE HIGHWAY ROUTE 211 CIRCA 1911

The 1970's saw a dramatic rise in inflation, vehicle fuel efficiency, escalating highway construction costs, and environmental protests over new highways and expansion projects. In 1998, in an effort to give more planning input and authority to RTPAs, Senate Bill 45 completely changed transportation improvement programming by requiring that local transportation planning agencies program the majority of highway funds.



The future of transportation will continue to change at a rapid pace. Environmental constraints, dependence on non-renewable fuels and escalated construction costs are already driving advancements in non-motorized and multi-modal strategies. High-speed rail projects, Transit

Oriented Development, improvements in system optimization and new collaborations between traffic engineering and land use planning are making progress toward a more vibrant multi-modal system, with less emphasis on the single-occupancy vehicle.



2 – CALTRANS STRATEGIC PLANNING

The overall mission and vision of the California Department of Transportation is: **Caltrans improves mobility across California.** The four core values and five strategic goals identified to support this mission/vision follow:

CALTRANS VALUES

- **Integrity:** We promote trust and accountability through our consistent and honest actions.
- **Commitment:** We are dedicated to public service and strive for excellence and customer satisfaction.
- **Teamwork:** We inspire and motivate one another through effective communication, collaboration, and partnership.
- **Innovation:** We are empowered to seek creative solutions and take intelligent risks.

Caltrans staff strives to have these values guide their actions, shape the organization, and positively impact relationships with colleagues, partners, and the public.

CALTRANS GOALS

Strategic goals provide Caltrans staff with focus areas for improving performance and realizing the Department’s vision and mission.

- **Safety:** Provide the safest transportation in the nation for users and workers.
- **Mobility:** Maximize transportation system performance and accessibility.
- **Delivery:** Efficiently deliver quality transportation projects and services.
- **Stewardship:** Preserve and enhance California’s resources and assets.
- **Service:** Promote quality service through an excellent workforce.

TRANSPORTATION PARTNERSHIPS

EXTERNAL PARTNERS

In preparing this document, District staff established internal and external advisory committees. The committees each had technical expertise in different aspects of the transportation system. The committee members offered their individual suggestions for issues and topics to be addressed in the DSMP.

In response to these outreach sessions, staff identified partnerships and collaboration with external and internal partners as a priority for improvement. Caltrans is committed to achieving the goal of improving partnerships and collaboration efforts among all our partners.

Our external partners include the four RTPAs, local governments, Native American Tribes, non-profit organizations, political representatives, bicycle and pedestrian advocacy groups and other stakeholder organizations. Consistent and inclusive communication between partners is the foundation for the exchange of knowledge, sharing of ideas and problem solving. External partners provide valuable information about community values, the needs of local facility users, aesthetic preferences and safety concerns in the community. Collaborating with external partners early in the planning process helps Caltrans optimize transportation system benefits and minimize duplication of effort. Early collaboration promotes a balance between community values and transportation goals which makes for an easier transition to change. Caltrans is committed to providing our partners the opportunity to participate in the project planning processes that affect the communities in which they live and work.



Caltrans is currently engaged in practices that support our strategy to improve partnerships and collaboration efforts with external partners through a variety of methods including:

- Participation on Regional Transportation Planning Agencies' Technical Advisory Committees (TACs) and Boards, and collaboration with local governments, Tribes and community groups;
- Offering open houses and public forums during project planning and feasibility studies;
- Keeping the District 1 website updated with current information;
- Maintaining open lines of communication with partners; and
- Ensuring consistency and conformance with RTPs and local agency plans by reviewing plans in the early planning process and project development.

INTERNAL PARTNERS

System Planning staff has identified communication, partnerships, and collaboration among internal partners as a priority. As multiple functional units within Caltrans initiate potential projects, communication is key to managing the magnitude of work that flows into project planning. Internal collaboration efforts can assist Caltrans in:

- Prioritizing planning efforts;
- Preventing conflict and miscommunication between units;
- Decreasing duplication of planning efforts; and
- Improving efficiency and timeliness of project planning, development and delivery.

A chart showing the outreach efforts undertaken by Planning staff to initiate the DSMP update is shown in Appendix A. A list of members of the Internal and External DSMP Advisory Committees is included in Appendix B.



3 – DISTRICT ORGANIZATION

DISTRICT MANAGEMENT

District 1 Management Team:



District Director
Charlie Fielder
(707)445-6445



Deputy District Director for Administration
Jana Hollifield
(707) 445-6447



Deputy District Director for Program/Project Management
Matt Brady
(707) 445-6490



Deputy District Director for Planning and Local Assistance
Cheryl Willis
(707) 445-6413



Deputy District Director for Maintenance and Operations
Mark Suchanek
(707) 445-6393



DISTRICT FUNCTIONAL AREAS

The following is a description of the functional areas of responsibility for each Deputy District Director:

ADMINISTRATION

- **Budgets**
 - District Budget
 - Project Control
 - Acquisitions
 - Graphic Design
 - Position Management
 - Mailroom
- **Administrative Services**
 - Training & Recruitment
 - Small Business & Property Control
 - Equal Opportunity
 - Safety
 - Personnel Liaison
 - Personnel Transactions
 - Executive Support
- **Public Information**
 - Information/contact for media
 - Claims
 - Reception
 - Cashier
 - Auto Pool
 - Reproduction
 - California Public Records Act Requests
- **Business Services**
 - Telecommunications and Security
 - Building Maintenance
 - Facilities Coordination
 - Custodians

PROGRAM/PROJECT MANAGEMENT

- **Project Management**
- **Project Coordination**
 - Minor Program
 - Capital Program Support (Assist Program Managers)

- Programming

PLANNING AND LOCAL ASSISTANCE

- **Planning**
 - Regional Planning
 - Community Planning/Planning Grant Administration
 - Intergovernmental Review Coordination
 - System Planning
 - Traffic Modeling
- **Advanced Planning**
 - Project Initiation Documents
 - Feasibility Studies
 - Manage District Planning Resources
- **Local Assistance**
 - Local Project Oversight
 - Planning Administrative Services
- **Environmental Planning**
 - Local Project Environmental Oversight

MAINTENANCE AND OPERATIONS

- **Traffic Safety**
 - Safety Investigations
 - Design Review
 - Collision Analysis
 - Signing Coordination
 - Speed Zone Coordination
- **Traffic Operations**
 - Traffic Management Plans
 - Encroachment Permit & Intergovernmental Review
 - Initiate/Coordinate Operational Improvement Projects
 - Traffic Operations Analysis (modeling)
 - Traffic Signal Timing
 - Lane Closure System Coordination
 - Minor Electrical Design/Review
- **Traffic Management System (TMS) Support/Trucking Services**
 - Encroachment and Special Event Permits



- Permit Related Field Inspection
- Traffic Management Center
- Intelligent Transportation Systems
- **District Hydraulics/Major Damage Engineer**
 - Culvert Replacement & Improvement Program
 - Storm Damage Response & Management
 - Rock Scaling
- **District Maintenance Engineer**
 - Pavement Management
 - Disposal Sites
 - Field Maintenance Support
 - Relinquishments
 - Highway Maintenance Design and Coordination
 - Signals and Lighting
 - Cell Phone Support
 - Lands and Buildings Minor Projects

- **District Maintenance Manager**
 - District Field Maintenance
 - Special Crews (Landscape, Electrical, Bridge, Tree, Signs and Stripes)
 - Maintenance Support

REGIONAL FUNCTIONAL AREAS

The North Region, headquartered in Marysville, provides Project Development Support for District 1, including the following functional areas:

- Design
- Construction
- Right of Way
- Environmental Planning
- Surveys/Right of Way Engineering
- Engineering Services

4 - TRANSPORTATION MODES IN CALTRANS DISTRICT 1 – EXISTING AND FUTURE

This section discusses existing transportation systems in District 1 by mode, including issues and strategies for implementing or improving each transportation mode. Improvements that are either programmed, planned, or being considered are listed for each mode.

INTERREGIONAL BUS AND REGIONAL BUS/TRANSIT

EXISTING INTERREGIONAL BUS AND REGIONAL BUS/TRANSIT SYSTEMS IN DISTRICT 1

There are five interregional bus service providers in District 1. Greyhound operates one bus per day from Arcata and Eureka to San Francisco. Redwood Coast Transit provides a connecting interregional service from north of the community of Smith River to the Arcata Intermodal Transit Facility.



FIGURE 2 – HUMBOLDT TRANSIT AUTHORITY'S REDWOOD TRANSIT SYSTEM

Amtrak operates two buses per day from the Arcata Intermodal Transfer Facility to Healdsburg, with connecting bus service to the City of Martinez and the Amtrak rail terminal.

The Lake Transit Authority's intercity service operates between St. Helena (in Napa County), Clearlake, Lakeport and Ukiah.

Trinity Transit cooperates with Redwood Transit System and Redding Area Bus Authority to provide connecting bus service between Eureka and Redding along State Route 299 including spurs to the communities of Lewiston and Hayfork.

South West Point, a component of Oregon intercity public transit, operates one shuttle bus in each direction from Brookings,



Oregon to Klamath Falls, Oregon. Their route includes several stops in California, including Smith River, Crescent City, and Gasquet. This service connects with Greyhound in Grants Pass, Oregon, and Amtrak in Klamath Falls, Oregon. Redwood Coast Transit connects with Southwest Point at Crescent City and with the Curry Coastal Express at Smith River. It is the link between Arcata Greyhound/Amtrak and Southern Oregon.



Regional transit agencies also provide interregional service, often serving as a connection to other transportation

providers. Redwood Coast Transit serves the Smith River to Arcata corridor, where connections can be made to either Amtrak or Greyhound intercity bus service. Mendocino Transit Authority provides interregional service from the Mendocino Coast and Ukiah to Santa Rosa. Lake Transit Authority intercity service operates on State Routes 29 and 20 between St. Helena in Napa County and Ukiah in Mendocino County.



Map 1 shows interregional bus and regional bus/transit routes in District 1.

All four of the counties that make up District 1 have their own transit entities, which operate their own rolling stock, and have their own schedules, facilities and personnel. Transit is a major component in the Complete Streets movement; accommodating transit and enhancing existing transit routes is an important part of the provision of modal choices.

The Consolidated Transportation Service Agencies compile a list of transit service requests annually. Regional Transportation Planning Agencies consider this list and determine if any of the service requests qualify as an “unmet transit need” and then evaluate the “unmet transit needs” to determine if any of them are “reasonable to meet.” Those transit needs deemed “reasonable to meet” are then included in transit providers’ budgets and are eligible for Transportation Development Act (TDA) funding.

Table 1 shows local and regional fixed-route public transit providers in District 1. As previously noted, several of the regional transit providers offer interregional services.

In addition to fixed route bus services, there are several demand response services for people who are elderly or disabled within the District. Many of these services are provided by non-profit agencies. The Yurok Tribe has procured funding to initiate and Klamath/Klamath Glen dial-a-ride service and is in the process of initiating a river transit service on the Klamath River to link the Tribe’s population centers that are currently separated by the gap in State Route 169.

Lastly, several of the Tribal casinos offer shuttle services on an expanded scale. The Blue Lake Rancheria partnered with the City of Blue Lake to provide a service to residents in the Blue Lake/Glendale area.

From the Rancheria’s website:

The Blue Lake Rancheria Transit System (BLRTS) began as a solution to a public need. The City of Blue Lake and surrounding community did not have widespread, reliable public transportation. Further, the area population is largely rural, dispersed across significant distances and requires access to urban areas for services and supplies.

TRANSIT AND INTERREGIONAL BUS ISSUES AND STRATEGIES

Generally, the District’s low population densities make it difficult to provide cost-effective, fixed-route transit service. Recently, higher fuel prices and California Air Resources Board (CARB) mandates have amplified this concern. Most transit operations are subsidized by Transportation Development Act funds. Funding to meet identified needs is an issue common to the majority of the public transit providers in the District.

The Arcata and Mad River Transit System, serving the City of Arcata, is an exception. About three-quarters of their revenue is from Humboldt State University, which helps fund the system using parking fines and a mandatory transportation fee for the majority of students whose tuition includes an unlimited bus pass good for the current semester/ session.

Regional and interregional transit providers struggle with the issue of scheduling connectivity. Often a connecting route has a different operator with different priorities, which is compounded by the fact that these buses may make only one or two trips daily. The District strongly supports bus transit improvements, particularly for regional transit and interregional bus. Not only do these modes serve the transit dependent, they provide



an energy efficient and environmentally friendly alternative to the single-occupancy vehicle.

Mendocino Transit Authority (MTA) is committed to an alternative fuel strategy, and is currently replacing their maintenance facility with an energy conserving, solar powered facility. This facility was funded through a Federal Transit Administration grant at a cost of \$5 million. MTA has secured an additional grant of about \$0.5 million to construct solar canopies over their bus stalls and plans to use the energy generated to power their administration/operations building.

Interest has arisen among transit service providers to look into developing a regional study that would focus on alternative energy sources, Intelligent

Transportation Systems (ITS) and other strategies as a way to improve interregional transit while achieving a more sustainable multi-modal system.

Currently, RTPAs are not qualified to apply for Federal Transit Administration (FTA) funds which are only awarded to Metropolitan Planning Organizations (MPOs) in urbanized areas. With appropriate coordination efforts between the District and the RTPAs, it may be possible to have Caltrans' Division of Mass Transit sponsor an application to FTA for this regional study which would benefit interagency and interregional transit users.

MAP 1 – INTERREGIONAL BUS AND REGIONAL BUS/TRANSIT ROUTES IN DISTRICT 1

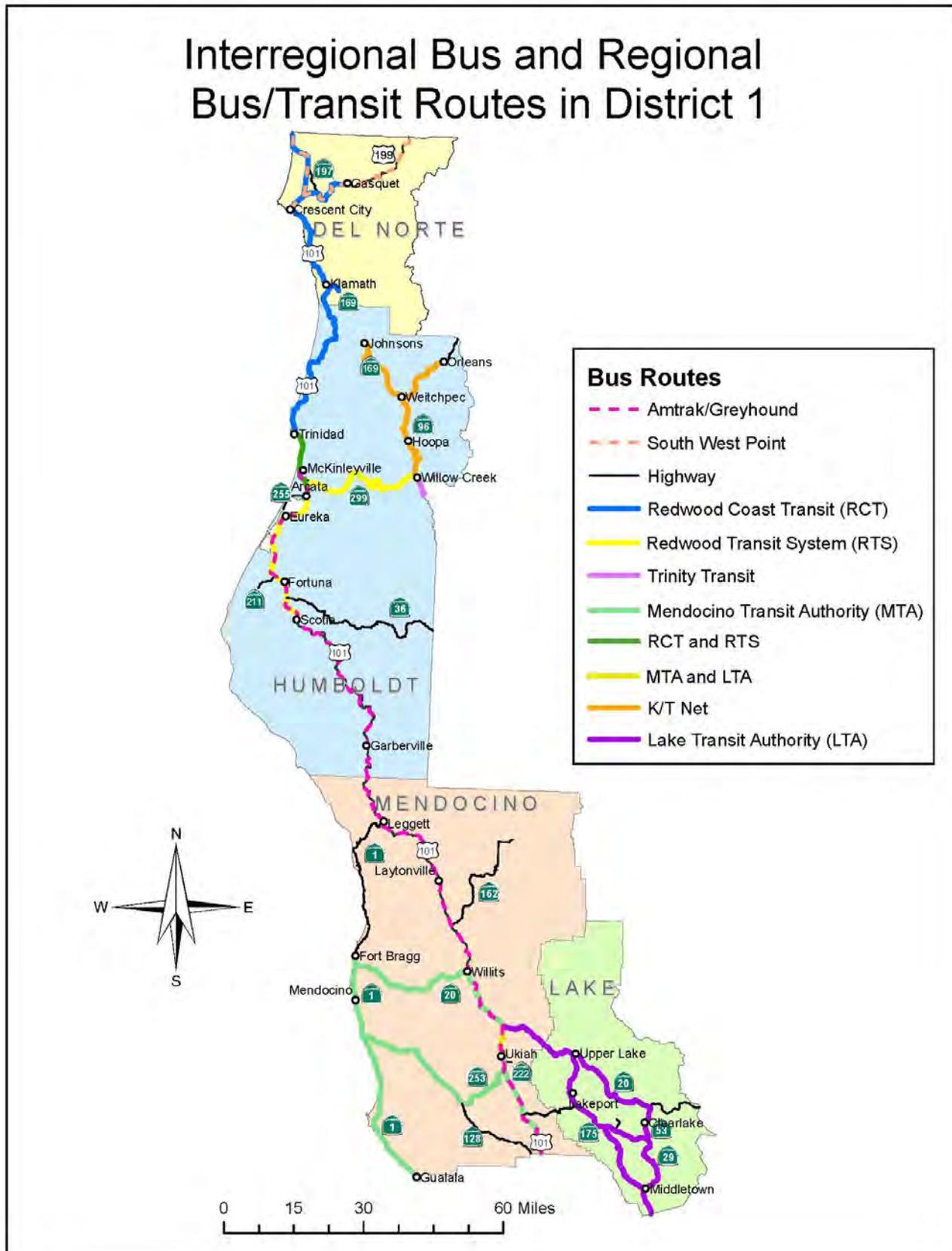




TABLE 1 – FIXED-ROUTE PUBLIC TRANSIT PROVIDERS IN DISTRICT 1

Transit Provider	Service Area	Number of Coaches	Annual Ridership (Year)
Redwood Coast Transit (RCT)	Crescent City Area, Gasquet to Crescent City and North of Smith River to Arcata	14	150,000+ (2009/2010)
Redwood Transit Service (RTS)(operated by Humboldt Transit Authority - HTA)	Garberville to Scotia to Trinidad, Arcata to Willow Creek	19	612,916 (2010-2011)
Eureka Transit Service (ETS) (operated by HTA)	City of Eureka and vicinity	6	232,738 (2010-2011)
Klamath-Trinity Non-Emergency Transportation (K-T Net)	Hoopla to Willow Creek, Wauteck Village to Hoopa (5 days/wk), Hoopa to Orleans (2 days/wk)	3	NOT AVAILABLE
Trinity Transit	Willow Creek to Weaverville	7	2,623 (2011)
Arcata and Mad River Transit System (A&MRTS)	City of Arcata	6	220,862 (2010-2011)
Mendocino Transit Authority (MTA)	Greater Ukiah area, Willits, Fort Bragg, Willits to Ukiah, Fort Bragg to Gualala and Santa Rosa, the Mendocino Coast to Ukiah and Santa Rosa	37 (includes dial-a-ride vehicles)	422,081 (2008/2009)
Lake Transit Authority (LTA)	Around Clear Lake and vicinity, Upper Lake to Ukiah and Lower Lake to St Helena	23	400,000+ (2009/2010)

IMPROVEMENTS PLANNED OR BEING CONSIDERED

Redwood Coast Transit improvements focus on bus replacement, and some shelter and security improvements.

Humboldt Transit Authority, Eureka Transit System and the Arcata and Mad River Transit System planned improvements are also primarily bus replacement, but include farebox systems that allow seamless transfer between bus transit operators. If additional money becomes available, the local/regional systems have identified areas where they would like to extend service.

Humboldt Transit Authority is also planning to implement a “passenger information system”

that will allow transit users to send a text message to get real-time information regarding when a bus will arrive at their stop.

As previously noted, Amtrak provides service from Arcata to Healdsburg, with connecting bus service to the City of Martinez and the Amtrak rail terminal. Interest has been expressed in extending the Amtrak route north to Crescent City and Southern Oregon.

Lake Transit Authority (LTA) is planning transit improvements to address issues including passenger overcrowding, insufficient transit facilities and vehicle stock, and security and passenger safety concerns. LTA is also



considering providing evening service hours to respond to unmet needs of college students and evening commuters and, in the long term, an additional route connecting Lake County with the Sacramento Valley.

In addition to its structural upgrades, MTA plans to further reduce the Greenhouse Gas (GHG) emissions of its operations by replacing its current fleet first with hybrid vehicles and, ultimately, with electric vehicles.

HIGHWAYS, STREETS AND ROADS

RELATIONSHIP TO OTHER MODES

The District is committed to cooperatively working with our partners in the development of a modally integrated transportation system. In addition to traditional motor vehicles, other modes depend on the highways, streets, and roads system. Transit and most non-motorized traffic travels on this system; pipelines and telecommunication facilities frequently use highway, street, or road rights-of-way to locate their facilities; and railroads, airports, and seaports use highways, streets, and roads for access and the distribution of goods and merchandise.

As the owner and operator of the State Highway System, Caltrans must recognize this dependence and plan, construct, operate and maintain our facilities with the goal of supporting all modes of transportation.

STATE HIGHWAYS

EXISTING SYSTEM

Twenty-three State highways are wholly or partially located within District 1, with a combined length of 945 centerline miles.

In addition to the 23 constructed highways, there are four legislatively adopted, but partially constructed State highways in the District (portions of Routes 162, 169, 211, and 281). The constructed portions of these routes have a total mileage of 160, bringing the total State highway mileage in the District to 1,105.

The Yurok Tribe is interested in completing the 18.2 mile long unconstructed portion of Route 169. While we support the Tribe's concept, funding and environmental issues may be too great to overcome. Currently, there are no plans to complete the remainder of the unconstructed portion of the system.

Highways, streets, and roads are functionally classified, based on federal functional classification guidelines, to indicate their usage and importance to the system. Principal arterials are the most important routes in the District, generally carrying higher traffic volumes for longer distances, including more interregional traffic. Principal arterials, with the exception of a short segment of Route 255 within the City of Arcata, make up the National Highway System and the Interregional Road System in District 1. These Routes are included in the "High Emphasis Route" category in the *Interregional Transportation System Plan*, and all but Route 199 are "Focus Routes" in that Plan.

Minor arterials serve a function similar to the principal arterials, but generally carry lower traffic volumes. Major and minor collectors support the arterial system, while local roads feed higher function routes.



One of the categories of highway that is commonly referred to in transportation planning is the Strategic Highway Network (STRAHNET). This is a national system of public highways that provides defense access, continuity and emergency capabilities for movements of personnel and equipment in peace time and in times of national distress. These state highways can handle military convoys and link military establishments across the country.

Another category is the National Highway System which includes the following subsystem of roadways:

- **Interstate:** The Eisenhower Interstate System of highways retains its separate identity within the NHS. There are no Interstates in District 1.
- **Principal Arterials:** These are highways in rural and urban areas which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility. The routes within the National Highway System in District 1 are: US 101, US 199 and the Principal Arterial Corridor (PAC) of State Routes 20/29/53 in Lake County.

- **Major Strategic Highway Network Connectors:** These are highways which provide access between major military installations and highways which are part of the Strategic Highway Network (STRAHNET). In District 1, the State highways in the STRAHNET are: SR 299 and US 101.
- **Intermodal Connectors:** These highways provide access between major intermodal facilities and other subsystems making up the National Highway System.

The US Numbered Highway System  is not a Federal program of national roadways, but rather a series of interconnected state highways with a common numbering plan established for the purpose of aiding navigation. US numbered routes are assigned a unique number nationwide. State numbered routes are unique only to the state assigning the number.

Map 2 shows the State Highway System in District 1, by functional classification. Locations where the highway facility operates at capacity during the peak hour are shown in red.

MAP 2 – FUNCTIONAL CLASSIFICATIONS AND CAPACITY CONCERNS IN DISTRICT 1



PARK & RIDE / SAFETY ROADSIDE REST AREAS

Park and ride lots have the potential to reduce the number of single-occupancy vehicles using the State Highway System. Some park and ride lots serve only those who rideshare, but many have been integrated with regional transit routes.

Seven park and ride lots are located in District 1, as follows:

- HUM-101-59.90 Fortuna
- HUM-101-74.80 Elk River, south of Eureka
- HUM-101-100.70 Trinidad, east of 101
- HUM-101-100.70 Trinidad, west 101
- LAK-29-5.45 Middletown
- LAK-29-34.70 Kelseyville
- LAK-29-39.80 Lakeport

Caltrans provides Safety Roadside Rest Areas to reduce drowsy and distracted driving and to provide a safe and convenient alternative to parking along the roadside.

Six safety roadside rests are located in District 1, as follows:

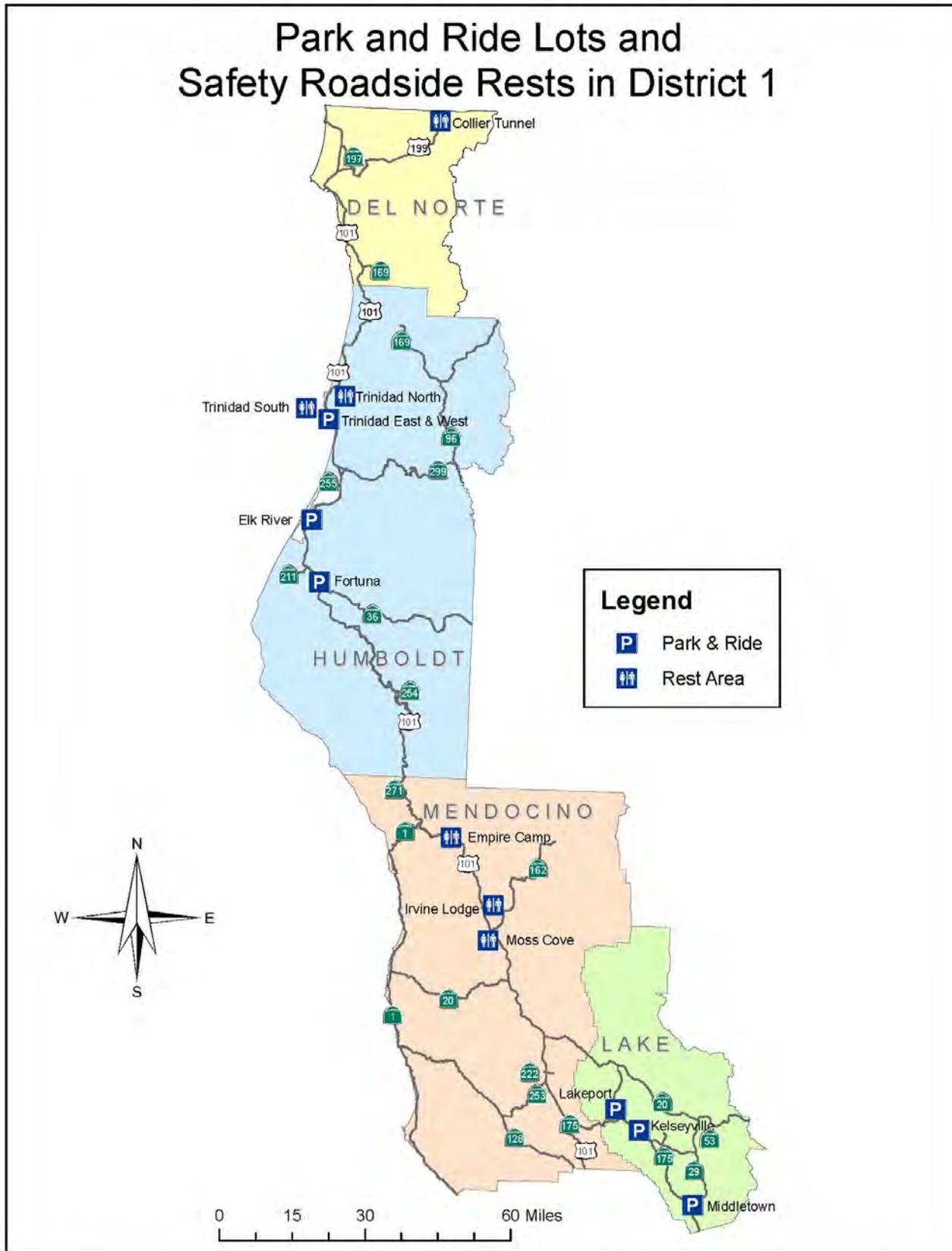
- DN-199-33.40, Collier Tunnel, just south of Oregon border
- MEN-101-58.90, Moss Cove, SB, between Willits and Laytonville
- MEN-101-60.6, Irvine Lodge, NB, between Willits and Laytonville
- MEN-101-82.50, Empire Camp, NB, between Leggett and Laytonville
- HUM-101-R102.90, Trinidad, SB
- HUM-101-R105.14, Trinidad, NB

In addition, District 1 maintains the Francis B. Mathews Safety Roadside Rest Area on Route 299 in Trinity County, about 4 miles east of the District 1 boundary. Map 3 shows Park and Ride lots and Safety Roadside Rest Areas in District 1.



FIGURE 3 – MIDDLETOWN PARK AND RIDE, ROUTE 29
IN LAKE COUNTY

MAP 3 – PARK AND RIDE LOTS AND SAFETY ROADSIDE RESTS IN DISTRICT 1



ISSUES AND STRATEGIES

SAFETY

Caltrans uses the Traffic Accident Surveillance & Analysis System (TASAS) that systematically identifies high accident concentration locations on State highways. This system utilizes a California Highway Patrol database that contains highway classification and collision data from the Statewide Integrated Records System (SWITRS). A quarterly report known as a TASAS Table C is produced by the system. The Table C report identifies intersections and highway segments with collision histories showing statistical significance based on a number of conditions. District 1 receives the Table C report for highways within its boundaries, and investigates the identified locations to determine if improvements are warranted and feasible.

Two safety audits have been completed on segments of Route 101 in District 1. The first was a *Pedestrian and Bicycle Road Safety Audit* in Eureka, from K-Mart to 4th Street (01-HUM-101-75.00/78.03), and was completed during August of 2008. In November 2010, a *Road Safety Assessment* was made in the Smith River Corridor (01-DN-101-35.90/46.49).

Safety audits are performed by a multi-agency team, with representatives from the Federal Highway Administration, Caltrans, local and regional agencies, transportation interest groups, and Native American Tribes (when applicable). The team reviews collision data, traffic volume data and the existing facility, then considers the likely causes of collisions in the study area and makes suggestions for improvements to reduce the number and severity of collisions.



FIGURE 4 – DIVISION OF HIGHWAYS TRUCK AFTER A COLLISION ON ROUTE 101 SOUTH OF EUREKA (1930'S)

Upgrading locations to current design standards where safety concerns have been identified may not be feasible due to environmental conditions and high costs. As a result, safety improvements are often incremental and may involve warning signs rather than physical improvement of the roadway.

One safety concern that has been difficult to address is unreported collisions, particularly on the more rural routes in District 1. Unreported collisions make it more difficult to justify safety projects at locations where such improvements may be beneficial.

STRATEGIC SAFETY PLAN

Caltrans has a Strategic Highway Safety Plan that identifies sixteen challenges related to highway safety. While it will require engineering, enforcement, education, and emergency response functions to address these safety challenges, those challenges that are most closely related to highways include:

- Reduce the occurrence and consequences of leaving the roadway
- Improve interchange and intersection safety
- Improve non-motorized safety
- Enhance work zone safety
- Improve data management



The District's Traffic Safety Office aggressively pursues strategies to improve safety in all of the above areas, to the extent that funding is available. The Safety Office stresses the need to improve data management among the various agencies involved. Currently, collision reporting cannot be considered complete until several months, if not a year, after collisions occur. While real time collision information may be unrealistic, most information regarding collisions could be made available within a few days or a week. This would allow a much quicker reaction time to identify locations with collision concerns, and to review and consider improvements to reduce the potential for collisions.

GOODS MOVEMENT - TRUCK ACCESS

The Surface Transportation Assistance Act (STAA) of 1982 which allows truck access on the National Highway System (NHS) continues to be an issue in District 1. STAA trucks are longer than California legal trucks. A few locations on the NHS combine curvilinear alignment and narrow shoulders and, as a result, the longer trucks must encroach (off-track) into the opposite lane to negotiate curves in these locations. This has resulted in the prohibition of STAA trucks on routes providing truck access to population centers in Humboldt and Del Norte Counties. Map 4 shows STAA Terminal Access Routes, and the routes and route segments of the NHS in District 1 where STAA truck access is prohibited.

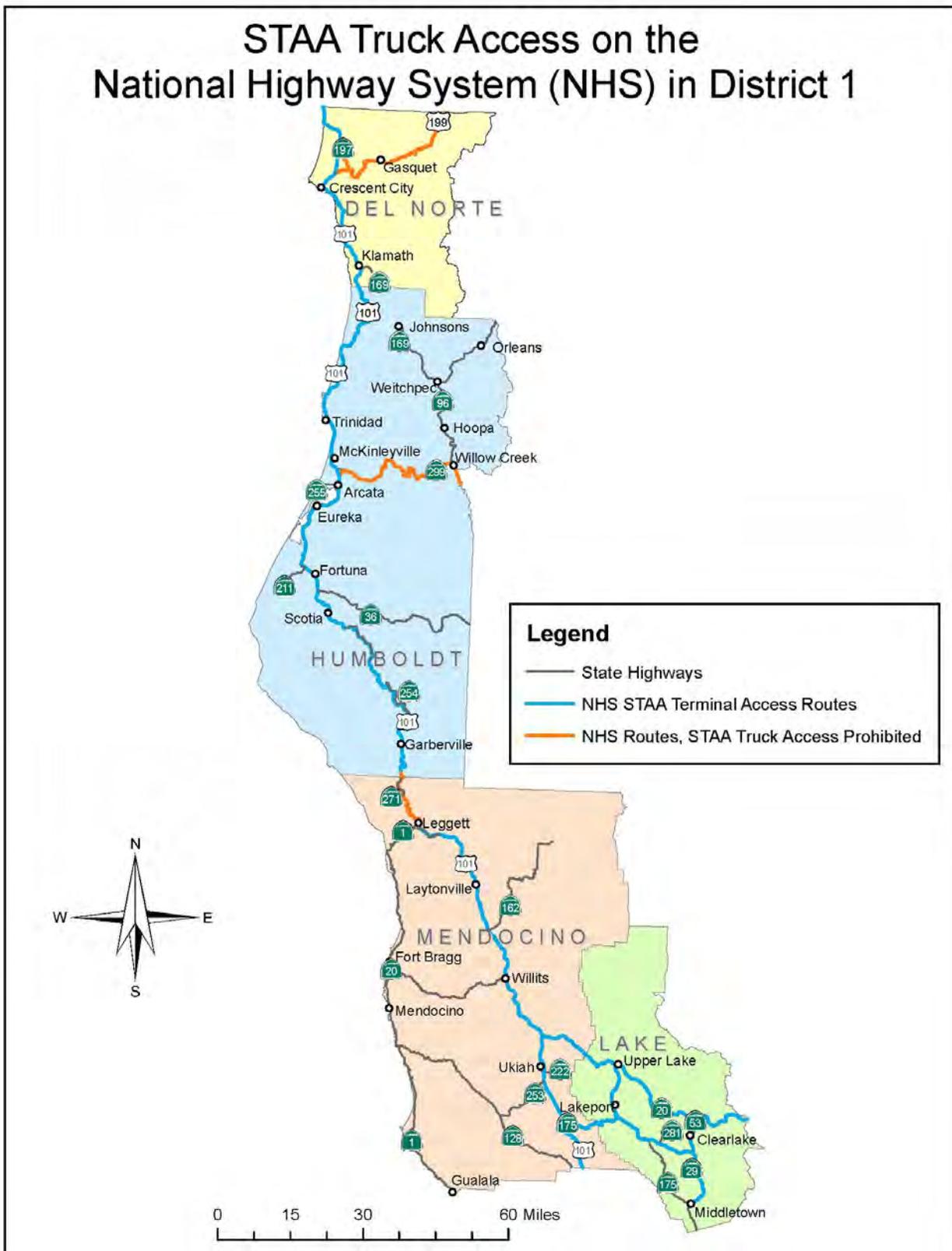


FIGURE 5 – RICHARDSON GROVE, US 101 IN HUMBOLDT COUNTY

Much of Route 101 is designated as a "Terminal Access Route", to meet the Federal requirement that STAA trucks have reasonable access to terminals. This access route is interrupted at Richardson Grove, about 80 miles south of Eureka. A project is approved and ready for construction at this location (01-HUM-101-0.2/1.0), however, as of this writing, the project has been delayed by litigation.

STAA truck access is also prohibited on Route 199 in Del Norte County. Restrictions exist at locations near the Patricks Creek Narrows (01-DN-199-20.5/26.5) and in Jedediah Redwoods State Park.

MAP 4 – STAA TRUCK ACCESS ON THE NATIONAL HIGHWAY SYSTEM (NHS) IN DISTRICT 1





Improvements are programmed for the locations near Patricks Creek Narrows, and for two locations on Route 197, which serves as an alternate to Route 199 within Jedediah Redwoods State Park.

While there are no impediments to STAA truck access on Route 299 in District 1, STAA trucks are prohibited from using this Route since several locations in Trinity and Shasta Counties (District 2) do not meet STAA truck access standards. District 2 has identified these locations and is developing a funding plan for improvements to accommodate STAA trucks. It is anticipated that these improvements, several of which are currently underway, will be funded through the SHOPP and minor program.

HIGHWAY FUNDING

Many transportation funding sources are based upon formulas which tend to favor the more urbanized areas of the State as they are based on population numbers. Rural areas find it more difficult to be competitive in the obligation of funds for highway improvements. While District 1 is home to less than 1% of California's total population, it includes over 6% of the State's highway mileage, based on centerline miles. Since much of this highway system traverses very challenging terrain, construction and maintenance in District 1 is more costly than in most other areas of the State.

Further, the majority of State highway funding (Regional Improvement Program) is subject to County shares, which are calculated based primarily on population (75%), and secondarily on State highway mileage (25%).

Maintenance funding is also a concern, since many of our facilities are reaching their design life

expectancy. This issue has been further exacerbated by recent budgetary constraints.

Highway funding in District 1 is primarily from the Federal Highway Trust Fund and from the State Highway Account. Both of these sources are generated from motor vehicle fuel and transportation-related taxes.

CAPACITY CONCERNS AND TRAFFIC VOLUMES

Existing TCRs identify three areas with existing highway capacity concerns:

- The Fort Bragg segment of SR 1 (01-MEN-1-59.7/62.4)
- The Willits segment of US 101 (01-MEN-101-T43.5/55.2)
- The Eureka segment of US 101 (01-HUM-101-74.8/79.8)

All of these segments include signalized intersections that experience unstable flow at peak periods as shown on Map 2.

The portion of the Willits segment of Route 101 with the greatest capacity concerns (01-MEN-101-R43.1/49.0) is scheduled to be bypassed with the 2-lane Phase I construction starting this year (2012) and completion scheduled for 2019. Phase I is expected to operate at LOS D or worse, emphasizing the need for the development of the 4-lane Phase II project.

Slow economic growth has resulted in generally level traffic volumes Statewide from 2009 through 2011. In District 1, traffic volumes on State highways have generally remained level or slightly increased in and around small urban areas and have generally decreased in the more rural areas of the District.



SCENIC HIGHWAY AND CORRIDOR AESTHETICS PLANNING

STATE SCENIC HIGHWAYS

The intent of the California Scenic Highway Program is to protect and enhance the natural scenic beauty of California's highways and adjacent corridors, through special conservation treatment.

All or portions of ten State highway routes in District 1 are eligible for designation as State Scenic Highways. These routes are: 1, 20, 36, 53, 96, 101 (portions), 197, 199, 254, and 299 (portion). Only one segment of Route 101, entirely within Del Norte Redwoods State Park, has been officially designated as a State Scenic Highway (01-DN-101-11.0/23.1).

NATIONAL FOREST SERVICE SCENIC BYWAYS

National Forest Scenic Byways are part of a larger community that includes National Scenic Byways, All-American Roads, State-designated byways, backcountry byways, and other local byway designations. Funding for the *National Scenic Byways Program* was first incorporated into the Intermodal Transportation and Efficiency Act for the 21st Century (ISTEA) of 1991, and has been continued since 2005 under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The FHWA uses this funding to provide grants to States and Native American tribes to carry out eligible projects on roads designated as scenic byways by States or Tribes and to develop byway programs.

State Highway 96 in District 1 has been designated as the "Bigfoot Scenic Byway" and Route 299 from the City of Blue Lake to the Humboldt/Trinity County Line (01-HUM-101-R5.5/43.0) in District 1 has been designated as the "Trinity Scenic Byway." Both of these are National Forest Service Scenic Byway designations.

The Yurok Tribe is in the process of developing a Scenic Byway through their Tribal lands which would link the southern portion of the Yurok Reservation in Humboldt County to the northern portion in Del Norte County. These two centers are currently bisected by the Klamath River. The Scenic Byway will utilize State highways (SR 169 and US 101) and local County roads (Martin's Ferry Bridge and Bald Hills Road), as well as public roads through Redwood National Park.

FEDERAL SCENIC BYWAY PROGRAM



The vision of the Federal Highway Administration's National Scenic Byways Program is to "create a distinctive collection of American roads, their stories and treasured places."

The National Scenic Byways (NSB) Program was established under ISTEA in 1991, and reauthorized in subsequent bills. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. There are 150 such designated Byways in 46 states. The Federal Highway Administration promotes the collection as a part of the America's Byways® program.

In the early 1990s, California, Oregon, and Washington worked on a cooperative effort to establish the "U.S. 101 Tri-State Pacific Coast Scenic Byway". The California portion of the Scenic Byway was to have extended from the California/Oregon State Line to the City of Eureka. Ultimately, the State of Oregon obtained scenic byway status for all of Route 101 in Oregon, but concerns regarding possible future federal regulation eroded support for the Byway in California and Washington.



AESTHETIC CORRIDOR MASTER PLANS

Route 20 in District 1 is part of the *Project Tahoe – Pacific*, an Aesthetic Corridor Master Plan (ACMP) to study the Route 20 Corridor, and plan for a more unified visual corridor. Regional Environmental staff is developing the ACMP, and a consultant has been retained for outreach assistance.

AMERICANS WITH DISABILITIES ACT (ADA)

One of Caltrans’ goals is mobility. In support of this goal, Caltrans created the ADA Infrastructure Program under its Maintenance and Operations Program. The objective of the ADA Infrastructure Program is to make Caltrans infrastructure equally accessible to persons with disabilities.

Caltrans does not discriminate on the basis of disability and believes in providing equal access to all of its infrastructure, programs, services, and activities. Caltrans is committed to working with its partners to identify and address access barriers to its infrastructure.

Caltrans is committed to spending at least \$25 million annually on ADA projects. All resurfacing, restoration, rehabilitation and reconstruction projects will address ADA issues and temporary ADA routes will be established through work zones.

The District’s Local Assistance unit also verifies that local projects adhere to the requirements of ADA in their design and implementation.

District 1 recognizes its ADA responsibilities and strives to fulfill them. This will make a significant contribution to our Complete Streets effort, which is discussed in Section 6, *Planning: Strategies & Tools*.

CORRIDOR PRESERVATION

Right of Way works with Transportation Planning to preserve corridors through a variety of means including:

- Donations
- Dedications
- Transportation Impact Mitigations
- Advance Right of Way Purchase

Effective July 1, 1993, Government Code Section 65081.3 and Public Resources Code Section 33910 (Eaves) authorize the Department to acquire land located within a designated corridor of statewide or regional priority to be held and maintained for future transportation purposes. Each land acquisition proposal is submitted for review and recommended action to the RTPA in whose jurisdiction the land is located. The Department may approve the acquisition only after the RTPA holds a hearing and finds that potential transportation facilities to be located on the land can be constructed in a manner that will avoid or mitigate specified environmental impacts or values. Right of Way (R/W) can acquire property for corridor preservation under AB 3719 only when authorized by the local entity.

The District identifies corridor needs through the System Planning and traffic modeling processes. In addition, staff cooperates with local entities through the Intergovernmental Review (IGR) process to discourage land uses that are likely to conflict with future transportation improvements.

ACCESS CONTROL

Access to the State highway is controlled through the enforcement of R/W boundaries using the encroachment permit process. It is important that access onto all classifications of highway is monitored so that the safety and operation of the facility is maximized. The approximately 945 centerline miles of highway in District 1 are divided among the following three (3) classifications:



- 1) Freeway (± 122 miles)
- 2) Conventional (± 630 miles)
- 3) Expressway (± 193 miles)

Each classification has a different “level” of access control:

- 1) Conventional – no access control
- 2) Expressway – partial access control
- 3) Freeway – full access control

No access control means that an encroachment permit is still required for any encroachment onto the right of way, but permits do not require a decision by the California Transportation Commission (CTC). Conventional highways with no access control, typically located in more rural areas, are generally 2-lane highways with lower volumes and at-grade intersections. Conversely, freeway segments have full access control as they are typically higher-speed, multi-lane roadways with interchanges. Expressways are facilities that have partial access control and a limited number of at-grade intersections.

ACCESS MANAGEMENT

Access management on conventional highways is achieved through a series of reviews by functional units within the Caltrans District office. These are primarily Permits, Traffic Operations and the IGR branch of Community Planning. These units coordinate with our local partners who have land use regulatory authority, to ensure that proposed development gains access to the State highway in

the safest and most appropriate way possible. This could include consolidating access points or moving a proposed access point to a location that provides better visibility or another operational benefit. Any changes to access on freeway or expressway facilities must be approved by the CTC.

Access management has been shown to be a significant, cost effective means of improving highway safety.

PROGRAMMED IMPROVEMENTS

STIP

New facility projects are programmed in the State Transportation Improvement Program (STIP), a five year programming document that is updated on April 1 of even years. Projects recommended for programming by RTPAs use Regional Improvement Program (RIP) dollars and those recommended for funding by Caltrans use Interregional Improvement Program (IIP) funds. Projects can be jointly recommended by both an RTPA and Caltrans, and use a combination of RIP and IIP funding, as in the case of the Willits Bypass.

Table 2 lists projects on the State Highway System in District 1 that are programmed in the 2010 STIP (updated in 2012) and includes their funding source, construction year, and amount programmed. The location of these projects is shown on Map 5.



TABLE 2 – DISTRICT 1 MAJOR STATE HIGHWAY PROJECTS PROGRAMMED IN THE 2010 STATE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

PROJECT	FUNDING SOURCE	CONSTRUCTION YEAR	AMOUNT (MILLIONS)
01-DN-199-20.5/25.7 Patrick Creek Widening	RIP	12/13	\$19.424M
01-HUM-101-79.8/85.8 Eureka/Arcata Corridor Improvement	RIP	15/16	\$24.658M
01-LAK-29-23.8/31.6 Diener Dr. to North Rte. 175, 4-E	RIP IIP	R/W, E&P, PS&E ONLY	\$10.773M \$10.883M
01-MEN-1- 61.3/61.6 Fort Bragg Circulation and Safety Improvements	RIP (Non-TE and TE)	13/14	\$2.586M
01-MEN-101- T43.5/51.3 Willits Bypass	RIP IIP	11/12 11/12	\$21.412M \$195.390M
TOTAL			\$285.126M

MAP 5 – DISTRICT 1 MAJOR STATE HIGHWAY PROJECTS PROGRAMMED IN THE 2010 STATE TRANSPORTATION PROGRAM (STIP)





SHOPP

Two planning documents provide background information for development of the State Highway Operation and Protection Program (SHOPP) program; the 5-Year Maintenance Plan and the 10-Year SHOPP.

The 5-Year Maintenance Plan considers three levels of investment for each of three areas: Pavement, Structures, and Drainage. The first funding level is the baseline, and the two other funding levels are more aggressive, either reducing or eliminating maintenance backlog in all categories. The current 5-Year Maintenance Plan recommends the baseline level of funding, which is expected to reduce the backlog of pavement and structures maintenance, while the backlog of drainage maintenance is expected to increase slightly.

The 10-Year SHOPP is a 10-year planning document for projects to maintain, protect, and operate the State Highway System and State highway facilities. The standard SHOPP is a four-year programming document, updated on January 31 of even years. A diagram of the programming process is shown in Appendix F. Table 3 summarizes projects in the 2012 Amended 2010 SHOPP by category and characterizes the dollar amount programmed for each of these categories.

The 2010 10-Year SHOPP lists 58 projects for District 1, with a total cost of approximately \$519 million. Over \$470 million of this amount is for the Bridge Preservation and Collision Reduction programs. Projects included in the 10-Year SHOPP are candidates for programming in future SHOPP cycles.

In addition to the SHOPP, Caltrans has a Minor program for funding smaller projects. Minor A projects are those with cost estimates greater than \$270,000 and up to \$1,000,000. Typically, the

District has approximately \$2-3 million in Minor A projects approved annually. Minor B projects are those with cost estimates up to \$270,000. Typically, the District receives about \$0.5 million for Minor B projects, but is allowed to use Minor A project funding for Minor B projects, if one or more Minor A projects is not deliverable. Statewide, the Minor Program funding is being reduced by approximately 1/3 for the 2012/2013 fiscal year, and the District's Minor Programs are likely to be reduced by a similar amount.

TABLE 3 – 2012 AMENDED 2010 STATE OPERATION AND PROTECTION PROGRAM FOR DISTRICT 1

CATEGORY	COST (MILLIONS)
Safety Improvements	\$47.765
Collision Severity Reduction (Generally Metal Beam Guard Rail and/or Rumble Strips)	\$37.261
Bridge Rehabilitation, Preservation, Rail Replacement, Scour Mitigation, and Seismic Restoration	\$131.671
Emergency Damage Repair	\$38.935
Permanent Restoration	\$208.479
Roadway and Pavement Rehabilitation	\$93.748
Operational Improvements (Including Shoulder Widening)	\$25.001
Culvert Rehabilitation	\$ 28.097
Miscellaneous (Office Facilities and Environmental Mitigation)	\$ 15.247
TOTAL	\$626.204

FUTURE IMPROVEMENTS

District 1 System Planning develops Transportation Concept Reports for each State highway route in the District. Since the relative importance of State highways in the District is based on functional classification, higher priority is generally given to major improvements on Principal Arterial routes. Improvements necessary to meet the Ultimate Transportation Concepts, as identified in the TCRs, are included in Table 4. Map 6 shows the location of these proposed improvements.



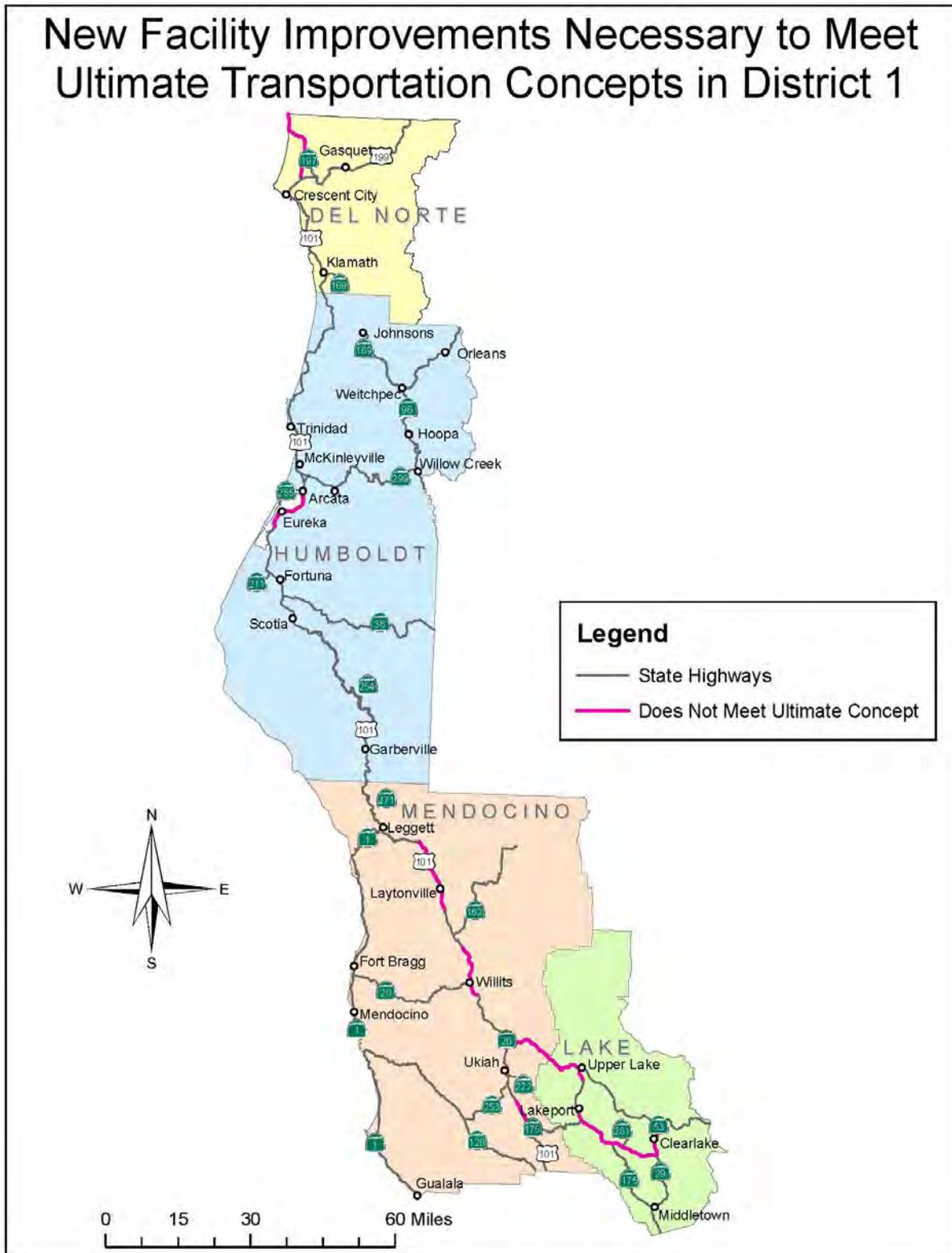
TABLE 4 – IMPROVEMENTS NECESSARY TO MEET ULTIMATE TRANSPORTATION CONCEPTS IN DISTRICT 1

COUNTY, ROUTE AND POST MILE	LOCATION	FACILITY TYPE
MEN-20-33.2/44.1	ROUTE 101 TO THE LAKE/MENDOCINO COUNTY LINE	4-F/E
LAK-20-0.0/8.3	LAKE/MENDOCINO COUNTY LINE TO ROUTE 29	4-F/E
LAK-29-20.3/R40.9	ROUTE 53 TO SOUTH OF LAKEPORT (the 01-LAK-29-23.8/31/6 portion of this segment is partially programmed)	4-F/E
LAK-29-R48.6/52.5	NORTH OF LAKEPORT TO ROUTE 20	4-F/E
LAK-53-0.0/7.4	ROUTE 29 TO ROUTE 20	4-F/E
MEN-101-9.2/17.6	HOPLAND CORRIDOR IMPROVEMENTS	4-F/E
MEN-101-T43.5/52.3	WILLITS BYPASS IMPROVEMENTS, PHASE II	4-F/E
MEN-101-52.3/55.2	WILLITS NORTH	4-F/E
MEN-101-64.7/81.4	LAYTONVILLE CORRIDOR IMPROVEMENTS	4-F/E
HUM-101-74.8/85.8	EUREKA/ARCATA CORRIDOR	4-F/E
DN-101-31.3/46.5	ROUTE 199 TO THE CALIFORNIA/ OREGON STATE LINE	4-F/E

Facility improvements can range in scope from minor widening to the complete bypass of a community to alleviate congestion. New facility improvements necessary to meet the ultimate corridor concepts in District 1 would cost over one billion dollars. It is unlikely that funding to achieve

these concepts will be available in the short term, and funding is not likely to be available through the 20-year plus planning period. Further, increases in traffic volumes over the past decade have been lower than previously anticipated resulting in a reduced need for capacity increasing projects.

MAP 6 – NEW FACILITY IMPROVEMENTS NECESSARY TO MEET ULTIMATE TRANSPORTATION CONCEPTS IN DISTRICT 1





Due to the high cost of these projects, current funding constraints, and less than anticipated growth in traffic volumes, the District is making slow progress on completing the improvements necessary to meet the Ultimate Route Concepts. Our current strategy is to optimize the existing transportation system while not foreclosing future improvement options.

Other improvements considered necessary to meet Route Concepts and identified in the TCRs include:

- Route 1: Widen to 32 feet in conjunction with rehabilitation or non-motorized projects, capacity or operational improvements in the Fort Bragg area.
- Route 20: Passing lanes or turnouts between Fort Bragg and Willits and between Route 53 and the Lake/Colusa County line.
- Route 197: Improvements to accommodate STAA trucks.
- Route 199: Provide additional passing opportunities and improvements to accommodate STAA trucks.
- Route 255: Widen with rehabilitation to provide paved shoulders in Arcata.
- Route 299: Provide turnouts for passing, or additional passing lanes east of Berry Summit.

LOCAL STREETS AND ROADS

EXISTING SYSTEM

The local road system is an important component of the transportation system, accommodating local trips and providing access to routes used for regional and interregional trips. The local system is not identified by specific route, or mapped in the DSMP, since the Plan’s focus is interregional and statewide transportation.

ISSUES AND STRATEGIES

FUNDING

Funding constraints continue to be an issue for local streets and roads. Based on a statewide assessment of pavement condition, only one of the District’s four counties (Del Norte) received a rating of “good”; the other three counties received a “poor” rating. Counties need to find a reliable funding source to maintain and rehabilitate their local streets and roads, as they continue to defer maintenance due to funding shortfalls.

FEDERAL REQUIREMENTS

Meeting federal requirements can be both expensive and time consuming for small agencies with relatively minor projects.

Caltrans' Local Assistance Program oversees more than \$1 billion annually available to over 600 cities, counties and regional agencies for the purpose of improving their transportation infrastructure or providing transportation services. This funding comes from various federal and State programs specifically designed to assist the transportation needs of local agencies. Over 1,200 new projects are authorized annually statewide.

The Local Assistance Program assists local and regional agencies by ensuring that specific program requirements are met, project applications are processed, and projects are delivered in accordance with federal and State requirements.

PROGRAMMED AND POSSIBLE FUTURE IMPROVEMENTS

In view of the previously noted funding constraints, regional and local agencies have found it necessary to adjust the scope of their projects to meet their needs, many of which involve maintaining the existing system, such as chip seals, overlays, and roadway rehabilitation. Most short term new facility projects, such as widening or sidewalks to accommodate non-motorized traffic, safety



improvements, and bridge replacement, are funded by programs that are designated for a specific type of project.

Long-term roadway improvements are generally focused on overlays and roadway rehabilitation projects that are not an immediate need. They also include a few new facility improvements, usually involving the completion or extension of an existing street or road.

Many agencies have expressed an interest in working with Caltrans to improve facilities where local and State jurisdictions meet, such as highways that serve as main streets, or intersections between a State route and a local road.

NON-MOTORIZED FACILITIES

EXISTING NON-MOTORIZED FACILITIES IN DISTRICT 1

The District continues to emphasize the needs of non-motorized users in the development of new facilities. Some of the known benefits that alternative transportation provides include:

- Minimal impacts to the environment;
- Physical exercise which promotes better health; and
- A low-cost alternative to the single-occupancy vehicle.

The popular Pacific Coast Bike Route (PCBR), which attracts hundreds of bicyclists annually to District 1's coastal counties, traverses the entire West Coast of California. In District 1, it utilizes portions of Route 1 and US 101 as a signed Class III bike route. Map 7 shows shoulder widths on State Highways in District 1 and the PCBR through the District.

The District is in the process of completing an Engineered Feasibility Study (EFS) that will evaluate the feasibility of improving the Highway 1 corridor for bicycles and pedestrians. Currently, less than half the length of the route in Mendocino County meets the concept roadway width of two 12' travel lanes with 4' shoulders or 32' of total paved width. Where bicyclists and pedestrians are expected to share the roadway with vehicular traffic, the facility needs to be improved to provide a safe separation among uses.

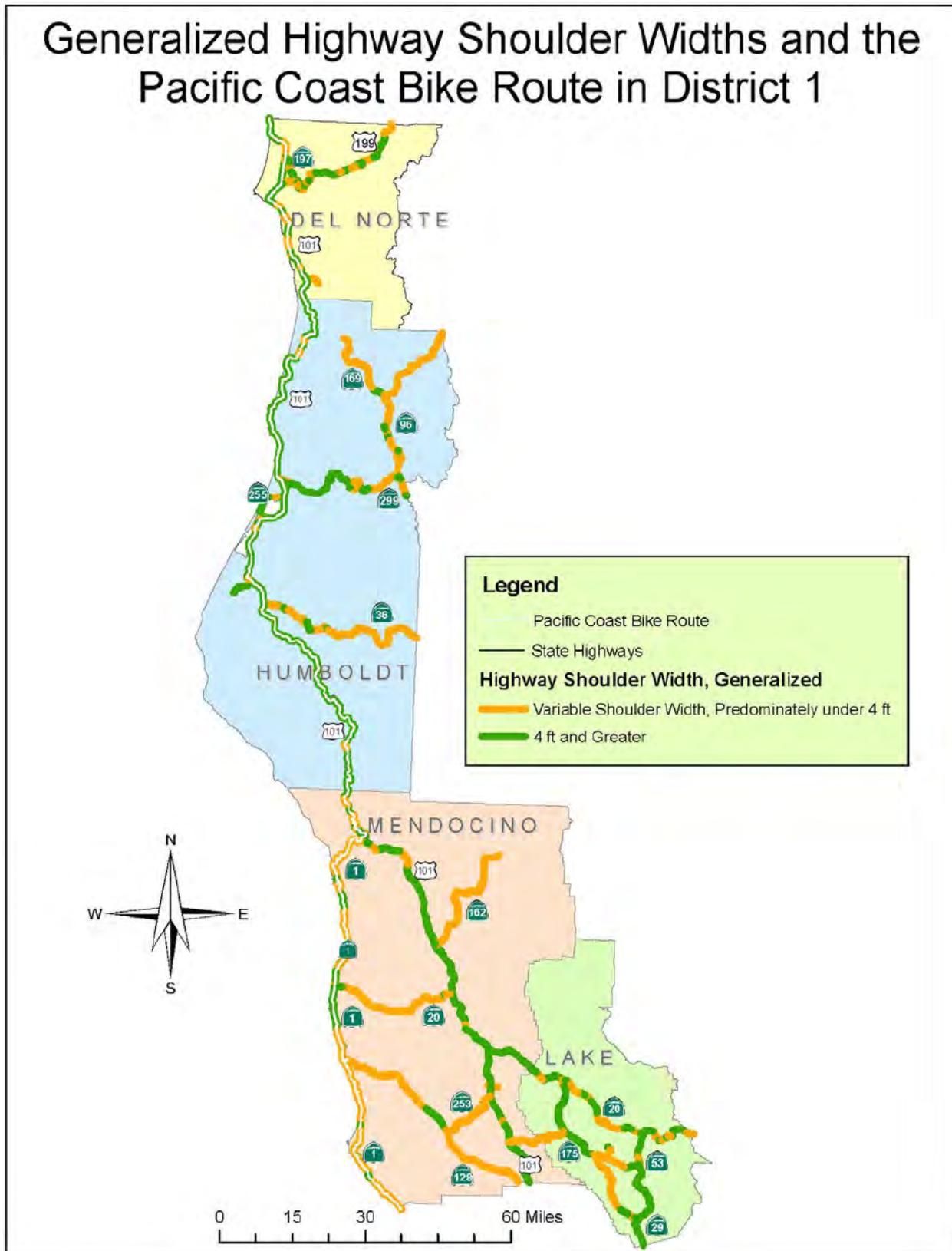
Bicycles are allowed to access all State highways in District 1, including freeways, and virtually all local streets and roads. Pedestrians are allowed on many State highways, but are prohibited on most freeway segments. Pedestrian prohibitions exist primarily on segments of US 101, but also include the Lakeport freeway portion of Route 29 and Route 299 from Route 101 to the City of Blue Lake.

The California Coastal Trail (CCT) traverses the entire California coast. While major portions of this trail remain unconstructed in District 1, we are working to accommodate the needs of the CCT where it utilizes the State Highway System.

Emphasis has been placed on developing a complete local and regional bicycle/pedestrian facilities system, and incremental progress is being made. Dedicated funding sources such as *Safe Routes to School* and the *Bicycle Transportation Account* are helping develop to a bicycle/pedestrian facilities system, with initial emphasis on commuter (rather than recreational) needs.

A recent success story in terms of non-motorized improvements comes from the City of Ukiah in Mendocino County. The City was awarded BTA funds to build Rails with Trails project through the downtown area which will serve both commuter and recreational cyclists.

MAP 7 - GENERALIZED HIGHWAY SHOULDER WIDTHS AND THE PACIFIC COAST BIKE ROUTE IN DISTRICT 1





NON-MOTORIZED ISSUES AND STRATEGIES

MULTI-USE SHOULDERS

It is a District goal to meet State and federal standards, as depicted in the Caltrans Highway Design manual, for multi-use outside shoulders on State highways and to widen existing shoulders whenever and wherever feasible. Initial emphasis for multi-use shoulder widening is on the Pacific Coast Bike Route (State Route 1 and a portion of US 101) and other locations where highway shoulders have significant bicycle and pedestrian use (generally in and adjacent to cities and communities).

PEDESTRIAN ACCESS TO FREEWAYS AND EXPRESSWAYS

Pedestrian access continues to be an issue on freeways and expressways within District 1. We

are required by law (Streets and Highways Code section 157) not to construct a freeway if it results in the severance or destruction of an existing major route for non-motorized traffic unless a reasonable alternate route exists or is provided.

SEPARATE BICYCLE AND PEDESTRIAN FACILITIES IN HIGHWAY RIGHT-OF-WAY

Separate bicycle and pedestrian facilities resolve the conflict between motor vehicles and bicycles and pedestrians. Accommodating this solution is challenging. Issues involved in the development of separated bike/pedestrian facilities include the lack of right of way width to develop separate facilities, the difficulty of funding construction because of environmental constraints or other circumstances, and provisions for long-term maintenance.

TABLE 5 – DISTRICT 1 PROGRAMMED NON-MOTORIZED PROJECTS WITH REGIONAL/INTERREGIONAL SIGNIFICANCE

LOCATION	PROJECT	FUNDING SOURCE	COST (MILLIONS)
01-MEN-01-14.9/21.7	PACIFIC COAST BIKE ROUTE, PHASE II	INTERREGIONAL IMPROVEMENT PROGRAM, TRANSPORTATION ENHANCEMENT	\$ 1.234M
01-MEN-01- 21.0/24.6	PACIFIC COAST BIKE ROUTE, PHASE III	INTERREGIONAL IMPROVEMENT PROGRAM, TRANSPORTATION ENHANCEMENT	\$1.194M
01-HUM NEAR ROUTE 101 IN EUREKA	EUREKA WATERFRONT TRAIL, NORTH SEGMENT	REGIONAL IMPROVEMENT PROGRAM, TRANSPORTATION ENHANCEMENT	\$ 0.230M
01-HUM NEAR ROUTE 101 IN EUREKA	EUREKA WATERFRONT TRAIL, PALCO SEGMENT	REGIONAL IMPROVEMENT PROGRAM, TRANSPORTATION ENHANCEMENT	\$ 0.100M
01-HUM NEAR ROUTE 101 IN EUREKA	EUREKA WATERFRONT DRIVE, PACIFIC COAST BIKE ROUTE BIKE LANES	BICYCLE TRANSPORTATION ACCOUNT	\$ 0.450M
TOTAL			\$ 2.014M



PROGRAMMED IMPROVEMENTS

Table 5 lists programmed non-motorized projects with regional/interregional significance, both on and off the State highway:

Approximately 15 primarily local bicycle/pedestrian projects totaling nearly \$5.6 million are currently programmed using Regional Improvement Program funds. Three additional projects totaling over \$1 million are programmed using Bicycle Transportation Account funding, and eight more projects totaling about \$5.9 million are programmed using Safe Routes to School funding.

POSSIBLE FUTURE IMPROVEMENTS

As previously noted, it is anticipated that candidate bicycle/pedestrian projects on portions of Route 1 in Mendocino County will compete for Transportation Alternatives funding.

Regional Transportation Plans and bicycle plans developed by the RTPAs identify numerous bicycle

and pedestrian facility needs, some of which have regional significance. Examples include:

- The Harbor Trail, a Class I and II bikeway that is part of the California Coastal Trail, which is included as a high priority in the Del Norte County Regional Transportation Plan.
- The Eureka/Arcata Corridor separate bicycle/pedestrian path, identified in the Humboldt County RTP.
- The Lake County Regional Transportation Plan identifies a proposed bicycle/pedestrian project to connect the City of Lakeport with the community of Upper Lake, among others.
- The Mendocino County RTP expresses a desire to connect the Brooktrails subdivision to Willits via a bicycle/pedestrian access route.

District 1 strongly supports the development of bicycle and pedestrian facilities to provide transportation choices.

RAILROADS

EXISTING RAIL FACILITIES IN DISTRICT 1

The North Coast Railroad Authority (NCRA) owns the railroad right of way, facilities, and equipment of the previous Northwestern Pacific (NWP) Railroad and the Arcata and Mad River Railroad (also known as the Annie & Mary RR or A&MRR, see Figure 6). These facilities begin in Marin County near Larkspur and terminate in Humboldt County in the communities of Korbek, east of the City of Blue Lake, and Samoa on the Samoa Peninsula, west of Eureka. Currently, they operate only a portion of the railroad (Lombard to Windsor) south of District 1.

Mendocino Railway is a private company that owns and operates the “Skunk Train” shown as “CWR” or the California Western Railroad on Figure 6. The Skunk Train operates as a commuter, excursion, and parcel delivery service between the Cities of Willits and Fort Bragg, a distance of approximately 40 miles. The Skunk Train carries approximately 50,000 passengers per year. It is not eligible for transit assistance funding.

Map 8 shows existing rail facilities in District 1.

RAILROAD ISSUES AND STRATEGIES

NCRA plans to renew operations on the segment between the cities of Windsor in Sonoma County and Willits in Mendocino County. This section has been restricted for use by the Federal Railroad Authority since late 1998, due to the condition of the track and railbed. Funding availability for the rehabilitation of this segment continues to be a concern. The rails have been salvaged from the A&MRR, between Arcata and Korbek, and NCRA has offered to “rail bank” the right of way along that portion.

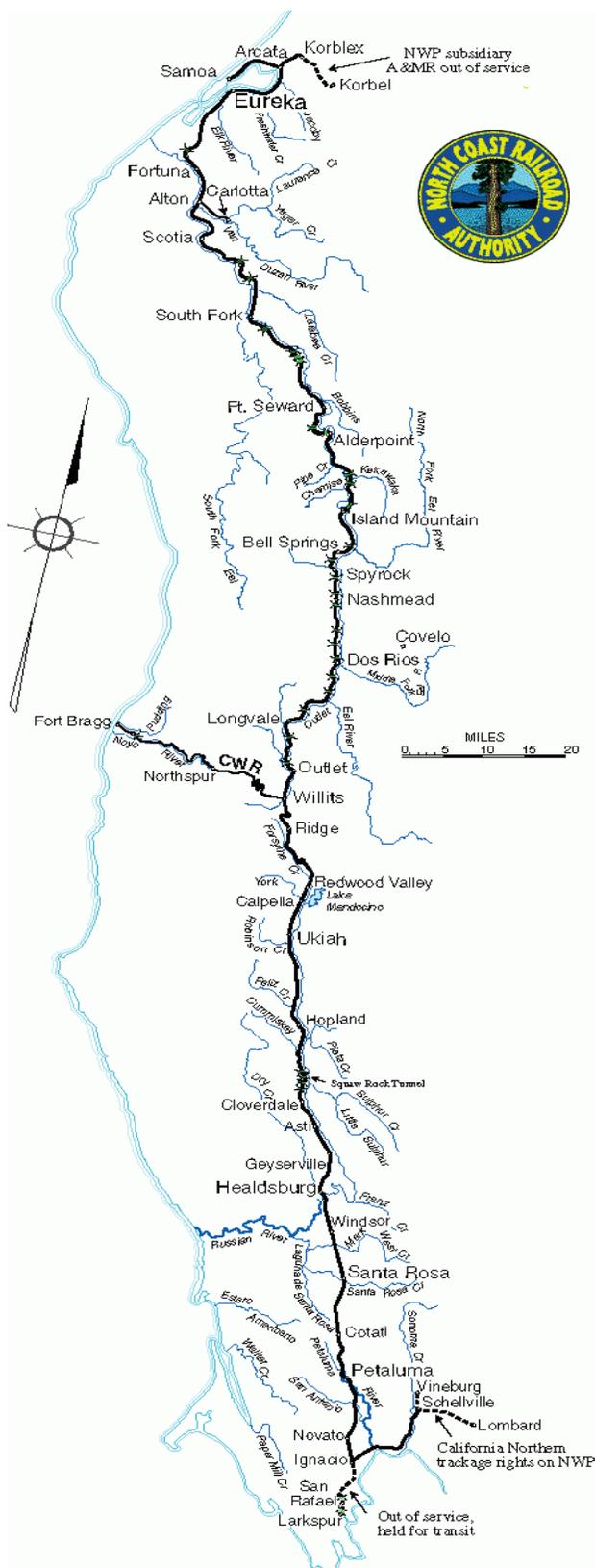
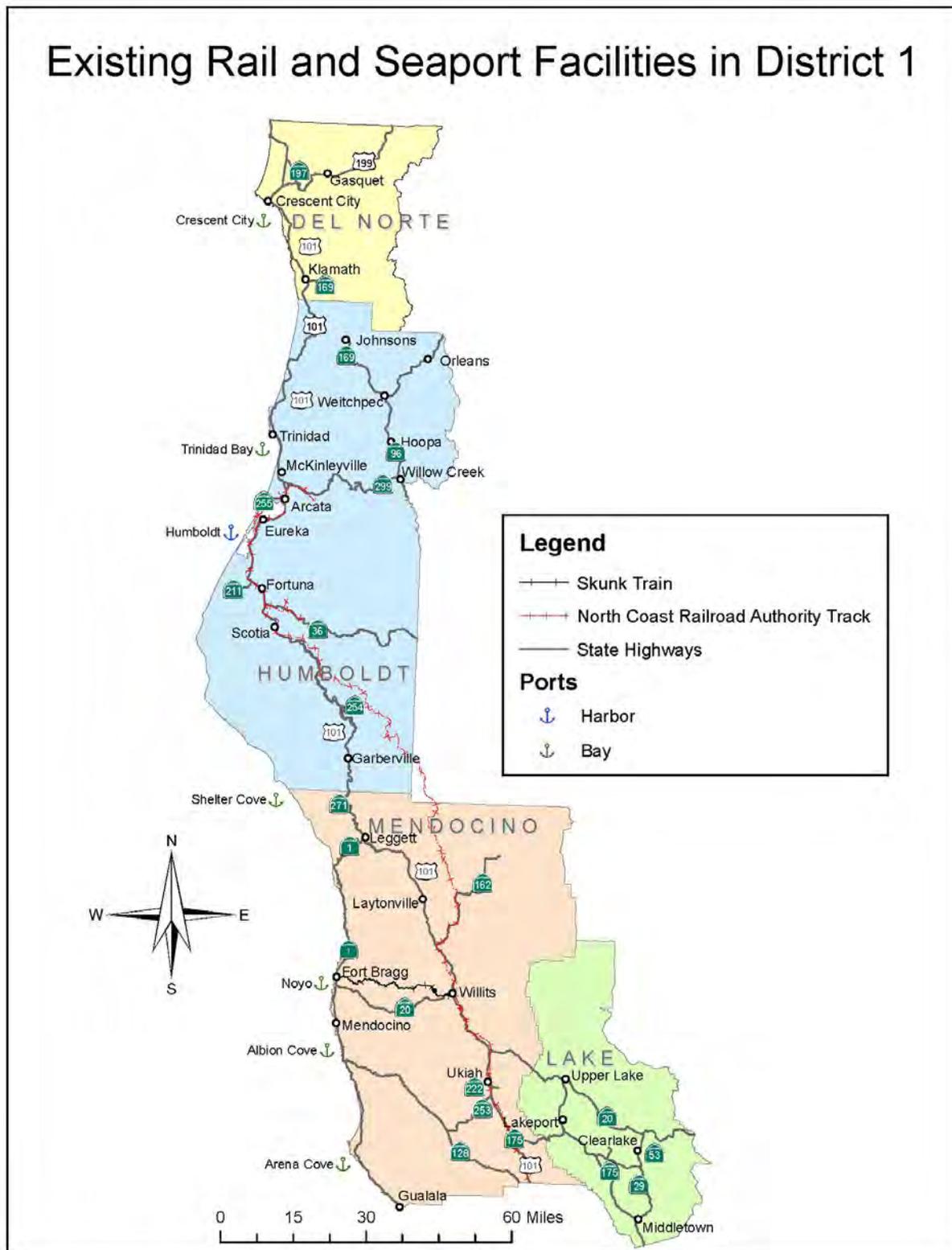


FIGURE 6 – NCRA FACILITIES MAP

MAP 8 – EXISTING RAIL AND SEAPORT FACILITIES IN DISTRICT 1





While NCRA owns railroad facilities and right of way from the City of Willits to the Community of Samoa, west of the City of Eureka, they currently do not have plans to repair and operate this part of the system. The Humboldt County Regional Transportation Plan encourages the restoration of this portion of the railroad to support the Humboldt Bay Port; however, NCRA has stated that they will not consider restoration of service through the Eel River Canyon until the following issues are fully addressed:

- A Business Plan is developed by the operator (NWP Co.) which identifies freight volume sufficient to justify the costs of repairs and maintenance of the NWP line through the Eel River Canyon;
- The funds necessary to repair the NWP line to at least Class II level (25 mph) through the Eel River Canyon have been identified;
- An Environmental Impact Report (EIR) that evaluates the costs to repair the infrastructure and operate trains, and evaluates the environmental impact of such repairs and operations through the Eel River Canyon is prepared and certified by the NCRA Board of Directors.

Mendocino Council of Governments, the City of Arcata, and Humboldt County Association of Governments have developed “Rails with Trails” studies that consider using part of NCRA’s right of way for bicycle and/or pedestrian trails.

The NCRA website notes that: “Trains are good for the environment, good energy policy, and good for the economy” and that each rail car has the potential to remove four large trucks from the State Highway System. The District supports

NCRA’s goals while recognizing the challenges they face, including funding availability, environmental concerns, and geologic instability.

IMPROVEMENTS PLANNED OR BEING CONSIDERED

According to NCRA staff, the agency is planning to repair the track and railbed between the Cities of Windsor and Willits, a distance of over 120 miles. They recently repaired the track and railbed for 60 miles between Lombard and Windsor in Sonoma County to the south of District 1, at a cost of over \$60 million. Estimates from NCRA’s engineer to repair the track and railbed between the Cities of Windsor and Willits are approximately \$600,000.00 per mile or roughly \$72,000,000.00.

AIRPORTS

AVIATION FACILITIES IN DISTRICT 1

Jack McNamara Field near Crescent City and the Arcata-Eureka Airport in the community of McKinleyville are the only airports in District 1 that are considered commercial airports and provide regular, scheduled passenger service and parcel/freight service. Four other airports, Lampson Field near the City of Lakeport, Ukiah Municipal, Murray Field near the City of Eureka (which FedEx utilizes), and Rohnerville near the City of Fortuna are the most frequently used general aviation airports. Table 6 provides a summary of public use airports in District 1 and Map 9 shows the location of these facilities.

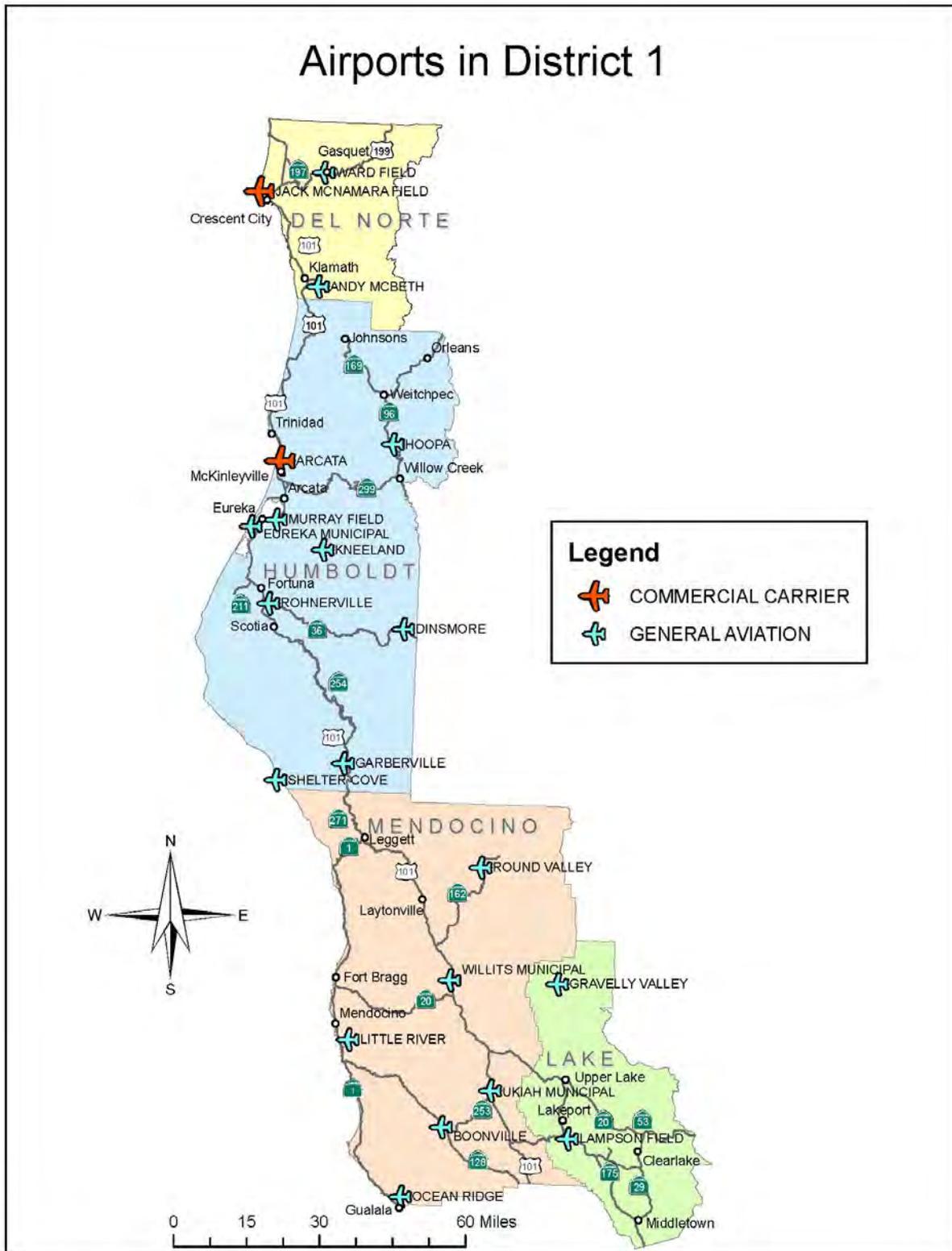
In addition to airports, there are several heliports located in District 1; primarily at medical facilities.



TABLE 6 – AVIATION FACILITIES IN DISTRICT 1

<u>COUNTY</u>			NUMBER OF	NUMBER OF
AIRPORT NAME	TYPE	RUNWAY LENGTH(S)	ANNUAL OPERATIONS	BASED AIRCRAFT
<u>DEL NORTE</u>				
Andy McBeth	General Aviation	2,400	1,500 (2010)	0
Jack McNamara (Del Norte Regional)	Commercial Service	5,002	1,800 (2010)	38
Ward Field	General Aviation	5,002		2
		2,900	2,200 (2010)	
<u>HUMBOLDT</u>				
Arcata – Eureka	Commercial service	5,999	50,500 (2010)	11
		4,498		
Dinsmore	General Aviation	2,510	1,670 (2010)	1
Eureka Municipal	General Aviation	2,700	2,500 (2010)	12
Garberville	General Aviation	3,050	16,017 (2010)	19
Hoopla	General Aviation	2,325	1,040 (2010)	1
Kneeland	General Aviation	2,270	6,500 (2010)	1
Murray Field	General Aviation	3,000	48,050 (2010)	53
		2,030		
Rohnerville	General Aviation	4,025	29,370 (2010)	12
Shelter Cove	General Aviation	3,400	2,184 (2010)	Not Available
<u>LAKE</u>				
Lampson Field	General Aviation	3,450	10,850 (2011 FY)	64
Gravelly Valley	General Aviation	4,050	1,000 (2011 FY)	Not Available
<u>MENDOCINO</u>				
Boonville	General Aviation	3,240	5,000 (2010)	10
Little River	General Aviation	5,250	6,800 (2010)	15
Ocean Ridge	General Aviation	2,500	5,000 (2010)	21
Round Valley	General Aviation	3,670	2,000 (2010)	6
Ukiah Municipal	General Aviation	4,415	6,200 (2010)	73
Willits Municipal	General Aviation	3,000	54,60 (2010)	23

MAP 9 – AIRPORTS IN DISTRICT 1





AIRPORT ISSUES AND STRATEGIES

Airports are an essential component of the north coast’s transportation system. They provide:

- Connections with other air carriers in major cities;
- Emergency medical transportation services;
- An emergency supply network when other transportation modes are damaged; and
- Freight and parcel service for time sensitive and perishable goods.

The District’s low population densities result in a limited number of daily flights on scheduled commercial airlines at an increased cost. This also results in a lack of scheduled airline service in the southern portion of the District.

Many general aviation airports in the District do not have sufficient funding for required maintenance, and are deferring maintenance. Adequate clear zones and noise attenuation are concerns at some of the airports within the District. Most rural general use airports in the District do not provide services such as fuel sales, aircraft repair, or hanger rental.

AIRPORT IMPROVEMENTS PLANNED OR BEING CONSIDERED

Runway extensions are planned for Jack McNamara Field near Crescent City, and are underway at the Arcata-Eureka Airport. Both lengthening and widening of the runway is being considered for the Eureka Municipal Airport, and lengthening and straightening the runway is being considered for the Shelter Cove Airport on the Southern Humboldt Coast. Widening of the runway is being considered for the Boonville Airport in Mendocino County. Slope stabilization and rehabilitation are planned for the runway at the Willits Airport. Other improvements planned for airports in the District

include fencing, aircraft storage, tie downs, taxiway improvements, lighting, and fuel facilities.

SEAPORTS

Humboldt Bay is the largest harbor in District 1, and the only one with a channel depth capable of serving ocean-going dry cargo vessels in the Panamax class. The Humboldt Bay Harbor Recreation and Conservation District (HBHR&CD) was formed by the State of California in 1970, with the primary goal of efficiently balancing the variety of uses in Humboldt Bay.

The HBHR&CD developed a strategic plan for 2007 – 2011, to provide a framework for balancing conservation and economic goals. This strategic plan stresses the Harbor District’s policies to identify, protect, and give priority to harbor related land uses around Humboldt Bay. Other policies include the development of plans for District-owned parcels, shoreline protection policies that minimize environmental impacts, and to provide information to facilitate harbor-related opportunities for Humboldt Bay.

An ongoing issue for the HBHR&CD has been whether to develop the Humboldt Bay harbor primarily for industrial and commercial uses or for recreation and commercial fishing.

The *2003 Harbor Revitalization Plan* identified a number of competitive advantages for the Port of Humboldt Bay, including: waterfront industrial sites; natural resource availability; tourism; a marine science and environmental base; and “livability.”

The key disadvantages identified in the Revitalization Plan were: small local market size and difficult inland transportation access (truck and rail).



While the competitive advantages identified by the Revitalization Plan are likely to create opportunities for developing the Port of Humboldt Bay, the two key disadvantages that were identified will likely hinder it from developing into a major international shipping port. However, there does appear to be potential for adding the Port of Humboldt Bay to the M-5 Marine Highway Corridor system and developing a short-sea shipping complex that utilizes our port for “local” (non-transpacific) commerce. The “West Coast Hub-Feeder Initiative” is located on the US DOT Maritime Administration’s website and provides a brief description of the Corridor concept.

Other harbors within the District, including Crescent City Harbor, Trinidad Bay, Shelter Cove, Noyo Harbor, Albion Harbor, and Arena Cove, primarily serve commercial fishing and recreational boaters. Map 8 on page 40 shows seaports in District 1.

The nearly-complete replacement of the Trinidad Bay Pier was funded through a variety of sources including State, federal and Tribal, at a cost of approximately \$9 million.

SEAPORT IMPROVEMENTS PLANNED OR UNDER CONSIDERATION

In 2008, the HBHR&CD commissioned the *Redwood Marine Terminal Feasibility Study*. Based on that study, the Harbor District selected an option that would position Humboldt Bay to compete for secondary port funding. Under that strategy, the Redwood Marine Terminal would initially have a single multi-purpose berth developed that would accommodate cargo ships, cruise ships and barges, at a cost of \$32 - \$38 million.

In addition, the HBHR&CD is interested in developing improved connectivity with the State Highway System for the entire industrial waterfront

of the Samoa Peninsula and in the Fields Landing area.

District 1 supports the HBHR&CD in their effort to balance conservation and economic goals, and looks forward to continuing our partnership.

West Coast Hub-Feeder Initiative

Sponsor: Humboldt Bay Harbor, Recreation & Conservation District

Corridor: M-5 Marine Highway Corridor (Sponsor: West Coast Corridor Coalition)

Initiative Snapshot: The West Coast Hub-Feeder Initiative proposes development of an intermodal distribution network along the coastlines of Washington, Oregon and California. Two related but distinct freight markets can be served by this Initiative: domestic freight moving from wholesale to retail centers and international containers via a hub-and-spoke system along the coast.

Attributes: The West Coast Hub-Feeder Initiative can offer desirable freight transportation improvements such as reducing emissions, increasing fuel efficiency and routing freight away from highly congested corridors. Fully developed, this Initiative can offer a future alternative to landside north-south freight transportation along Interstate-5 while reducing emissions in several "Non-Attainment" air quality zones along the corridor. This is a significant corridor within the national freight system.

The U.S. Department of Transportation will work with the Humboldt Bay Harbor, Recreation and Conservation District and the West Coast Corridor Coalition to develop a better understanding of the feasibility, benefits and potential efficiencies this proposed Hub-Feeder might offer. Research and planning efforts will help advance the concept and identify specific Marine Highway opportunities.

PIPELINES

Only two major natural gas pipelines exist in District 1. One serves the greater Eureka area from the upper Sacramento Valley and the second serves the Willits/Ukiah area from the Bay Area.



TELECOMMUNICATIONS

EXISTING TELECOMMUNICATION FACILITIES IN DISTRICT 1

Telecommunication strategies offer an option to physical transportation, and have the potential to reduce motor vehicle traffic, especially the single occupancy vehicle. District 1 recognizes this potential, and supports improvements to the telecommunication system.

Existing telecommunication facilities in District 1 are primarily fiber optic cable in and around small urban areas, and dial-up service in rural areas. There is some DSL and satellite service in both small urban and rural areas.

TELECOMMUNICATION ISSUES AND STRATEGIES

The primary telecommunication issues in District 1 include:

- Lack of fiber optic cable redundancy: The Crescent City area in Del Norte County lacks fiber optic cable redundancy. Microwave backup systems are not available to many users, and do not have adequate capacity. Humboldt County is currently in the process of updating its microwave capacity.
- No access to a fiber optic cable network: Many rural areas have no broadband service providers, and have only limited access to the internet.
- Speed (transfer rate) and usage limits: These may be related to fiber optic cable capacity or the service provider's cost to use a fiber optic cable that they do not own.
- Caltrans maintenance crews experience a direct impact due to unreliable radio coverage in the remote areas of the District.

TELECOMMUNICATION IMPROVEMENTS PLANNED OR BEING CONSIDERED

There are plans to complete a fiber optic cable along the US 199 corridor between Grants Pass, Oregon, and Crescent City, and provide fiber optic cable redundancy for the greater Crescent City area. Currently, an approximately 25 mile gap exists between the Community of Gasquet, California and Cave Junction, Oregon.

A study has been completed on the potential for laying a fiber optic cable in the SR 299 corridor, between Redding and Eureka. Like the recently completed fiber optic redundancy project through the SR 36 corridor, this project would provide more fiber optic cable options and greater competition for the greater Eureka/Arcata area, and also provide fiber optic cable network access to a number of currently underserved communities on and along the SR 299 corridor.



5 – TRANSPORTATION AND THE ENVIRONMENT

CLIMATE CHANGE

Caltrans' Climate Action Program describes climate change as "long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gases (GHGs), particularly those generated from the production and use of fossil fuels."

According to the Climate Action Program, California's largest source of GHG emissions is the generation of electricity followed by transportation (primarily motor vehicles).

As appropriate and feasible, Caltrans incorporates climate change mitigation and adaptation considerations into all facets of Departmental operations. Caltrans also considers and integrates climate change strategies and activities in compliance with the following regulations:

- Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 mandating the reduction of Greenhouse Gas (GHG) emissions to 1990 levels by the year 2020;
- Executive Order (EO) S-20-06 directing State agencies to implement the California Global Warming Solutions Act of 2006;
- EO S-13-08 directing State agencies with vulnerable construction projects to plan for potential Sea Level Rise (SLR) impacts;
- EO B-18-12 directing State agencies to reduce entity wide GHG emissions, reduce water use at State facilities, and purchase and use environmentally preferable products.

Caltrans promotes measures, practices, and business operations that minimize GHG emissions.

Caltrans partners with local, regional, State and federal agencies, academic and research institutions, and other stakeholders to advance the State's climate change objectives. The Caltrans Climate Change Branch oversees activities throughout the Department, and provides guidance and support.

In District 1, portions of the coastal transportation infrastructure are vulnerable to the impacts of sea level rise. Several segments of the District's highways and other facilities are currently impacted by major flood events, especially in conjunction with high tides, high winds and storm surges. Rises in sea level would aggravate flooding and potentially increase damage.

In 2009, Pacific Institute released a report projecting a 1.4 meter (4.59 feet) rise in sea levels by 2100. Figure 7 shows the impact of a 1.4 meter sea level rise in the Crescent City area, during a 100 year flood event. The light blue area shows the result of a 100 year flood event at existing sea level elevation, and the dark blue shows the additional area that would be inundated with the projected 1.4 meter rise in sea level.

Considering the State's 2009 population, this amount of rise would put 11,050 residents of District 1 coastal counties (Del Norte, Humboldt and Mendocino) at risk. Caltrans' Climate Action Program is utilizing Pacific Institute's data in its statewide SLR planning efforts.

Caltrans strives to achieve the State's emissions obligations through regular maintenance of the State's highways and through the development of Intelligent Transportation System (ITS) strategies that maximize the efficient use of the highways for all modes of transportation.

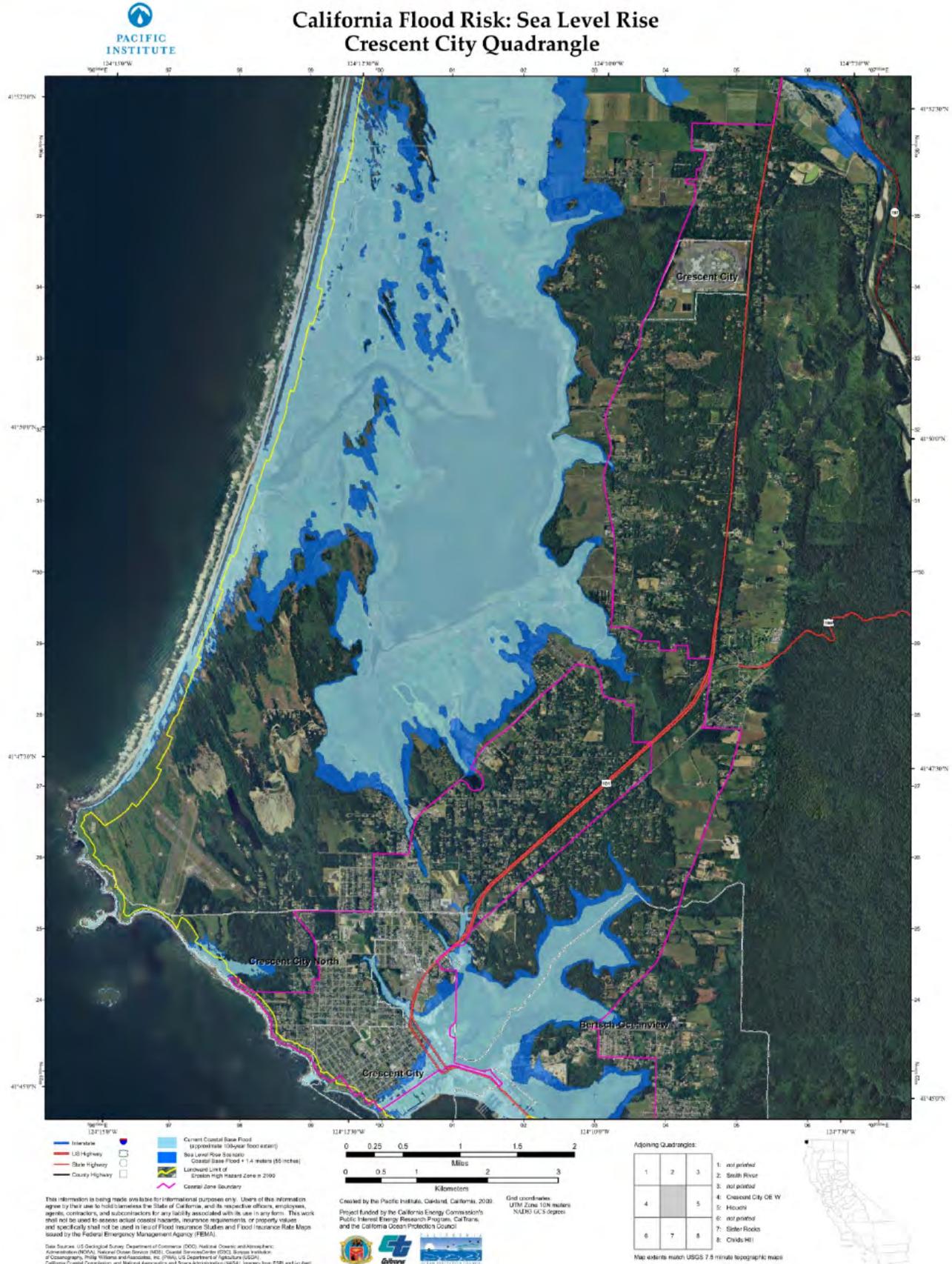


FIGURE 7 – CALIFORNIA FLOOD RISK: SEA LEVEL RISE



FIGURE 8 – CALTRANS SOLAR PROJECT, EUREKA

In addition to the aforementioned solar energy improvements to the Mendocino Transit Authority’s structures, several of the District’s partners are actively pursuing planning assistance and funding for the development of alternative fuel stations along US 101 through Mendocino and Humboldt Counties as well as within the City of Eureka. Caltrans also installed a 75.0 kW DC photovoltaic (PV) system on the District offices in Eureka. Since March 2011, the PV system has resulted in a savings of 100 tons of CO₂ and represents savings in energy production of over 11,000 gallons of gas. Figure 8 shows a snapshot of the district office’s energy generation.

Statewide, Caltrans has replaced 40,000 street lights with LED fixtures that will save the taxpayers approximately \$2 million per year and reduce our carbon footprint by 10,000 cubic yards per year. Such innovations continue to lead the way in terms of State Departments of Transportation improvements.

ENVIRONMENTAL MITIGATION

The mitigation of environmental impacts resulting from construction projects, especially in the Coastal zone, is a major consideration for all transportation projects, whether undertaken by the State or by local agencies. Caltrans’ local partners have voiced an interest in pursuing options for sharing mitigation efforts in the form of a “mitigation bank” in an effort to expedite permitting timeframes. Designating one location for a mitigation bank, or series of locations, all at once could also benefit public agencies by providing a “one-time dispute resolution” opportunity wherein conflict with environmental advocacy groups could be removed from the equation at the project-by-project level.

The “mitigation bank” concept has been used by the Dept. of Fish & Game in at least one location in District 1 along the US 101 corridor between the Cities of Arcata and Eureka.



ENVIRONMENTAL QUALITY

The rural and isolated nature of District 1 is both an asset and a detriment to the economic sustainability of the region. Because of its natural beauty, public lands, parks, National Forests, and miles of coastline, the tourism industry has always flourished. The resource extraction industries of

6 – PLANNING STRATEGIES AND TOOLS

SYSTEM PLANNING

The DSMP is one of our long-range system planning products; others include:

- The *Interregional Transportation Strategic Plan* (ITSP) which provides a framework for the long-term development of the interregional transportation system. The ITSP recommends a course of action and considerations for Interregional Improvement Program (IIP) funding over the 20-year planning period. It identifies planned State Highway System and intercity rail improvements, and provides a basis for other modal improvements.
- *Transportation Concept Reports* (TCRs) - analyze a transportation corridor and establish 20-year transportation planning concepts for development of a specific Route. Concepts for some Routes where extensive improvements are planned include an ultimate concept that extends beyond 20 years.

Concepts include a facility type and a facility Level of Service (LOS), based on the Transportation Research Board's Highway Capacity Manual (HCM) methodology for uninterrupted flow segments. The concept LOS is not intended to be used in conjunction with HCM interrupted flow methodology.

the past, however, have diminished. As times change and the economics of the region change, Caltrans is dedicated to ensuring that the qualities that draw people to the area are maintained; striving to find a balance between preserving our natural environment and supporting economic growth and development.

- The *Transportation System Development Program* (TSDP) - identifies transportation corridor Improvements by modal categories and funding levels. It is used by the District to plan and prioritize long-range improvements.

Concepts for some of the District's more important Routes (Rural Principal Arterial routes on the National Highway System) include major capacity increasing improvements. These Routes are all part of the 34 "high emphasis" Routes on the Interregional Road System (IRRS), as identified in the *Interregional Transportation Strategic Plan*, and all but one (Route 199) are IRRS "Focus Routes". Recognizing limited resources, the District intends to focus new facility improvement funding on completing the National Highway System to the corridor concepts identified in Transportation Concept Reports.

The District supports the need to develop capacity increasing projects as warranted, and will pursue an interim strategy of system optimization within the 20-year planning period. Emphasis will be on safety, operations, alternative transportation modes, community enhancements, and developing the tools that will help to maximize the capacity and efficiency of the existing system. The District will continue to work in partnership with regional and local agencies, Tribes and communities to identify needs on the State Highway System and to implement programs to meet those needs. (See Planning's 2012 list of studies and project needs beyond those programmed in the STIP and SHOPP, included as Appendix E.)



TOOLS TO OPTIMIZE THE SYSTEM

Tools that the District and its partners anticipate using to optimize the existing system include:

- The System Planning products previously identified and described.
- Engineered Feasibility Studies (EFS): The District is developing EFSs to examine a system approach of current and future transportation needs, including non-motorized and traffic calming features. We have several EFSs in progress, and Del Norte 101-Smith River is the first to be completed. It includes an assessment of the feasibility/viability of a wide range of system improvements, considers both capital as well as support funding needs of the corridor, and recommends several improvement scenarios for the corridor as a whole. At the same time, the EFS provides sufficient information for independent improvements within the corridor to allow the flexibility of pursuing appropriate funding sources.
- Transportation System Management: Efficient management of the existing transportation system, often coupled with minor improvements, to enhance capacity and improve operating characteristics.
- Intelligent Transportation Systems (ITS): ITS applies information and communication technology to both transportation systems and vehicles to improve system operation.

Beginning in 1998, District 1 participated in the “California/Oregon Advanced Transportation Systems Showcase” (COATS), which was a “...bi-state partnership to improve rural transportation through the demonstration and evaluation of

advanced technologies”.¹ This project focused on the development of an ITS Architecture that adapted technological solutions to rural transportation concerns. The COATS Architecture Plan was approved in 2000. It is expected to be coupled with Regional Transportation Plans and other local plans to identify the most appropriate ITS strategies and implementation programs for this region.

Many ITS applications are available for urbanized areas, and some are adaptable to rural systems, including:

- Highway Advisory Radio (HAR): This application is used to advise motorists of construction zones or potential safety concerns such as pedestrian or animal crossings in parks. The District anticipates expanding HAR in the future.
- Changeable Message Signs (CMS): These signs warn motorists of construction, road condition when affected by weather, or incidents impacting the highway, when these conditions exist. They typically display safety messages the remainder of the time.
- Dynamic Warning Signs: This application generally combines speed detection technology with a changeable message sign, to warn a motorist if they are traveling too fast for the alignment or road condition they are about to encounter. These are being used increasingly at locations with collision concentrations.
- Emergency Vehicle Notification Systems: Notification is made either automatically by a vehicle’s system, or manually by its occupants, providing for quicker emergency vehicle response.

¹ California Oregon Advanced Transportation Systems Showcase, Western Transportation Institute, Montana State University-Bozeman, 2002.



- Technological applications that promote Systems Compatibility: Applications that help provide for “seamless” transfer between transit modes encourage multi-modal trips as an alternative to the single occupancy trip.
- Performance Monitoring System (PeMS) – This is the Department’s real time speed traffic monitoring system. It will become a better optimization tool in District 1 as more data gathering locations are constructed.
- Transit Passenger Information System – Caltrans is implementing such devices as: Automatic Vehicle Location and Advanced Communication Systems (AVL/ACS), Transit Signal Priority (TSP) and Dynamic Passenger Information (DPI) to improve transit reliability and to assist commuters in choosing the most appropriate routes and modes for their daily commute.

As System Planning develops and updates our list of studies and project needs, we will continue to prioritize ITS projects that further the goals of the COATS program while enhancing relationships with our local partners.

The Transportation Management System Support Branch (formerly known as the Permits Branch) plans to update our existing Intelligent Transportation System plan in the near future, coordinating specific functions with the Planning Branch and our Regional Transportation Planning Agencies.

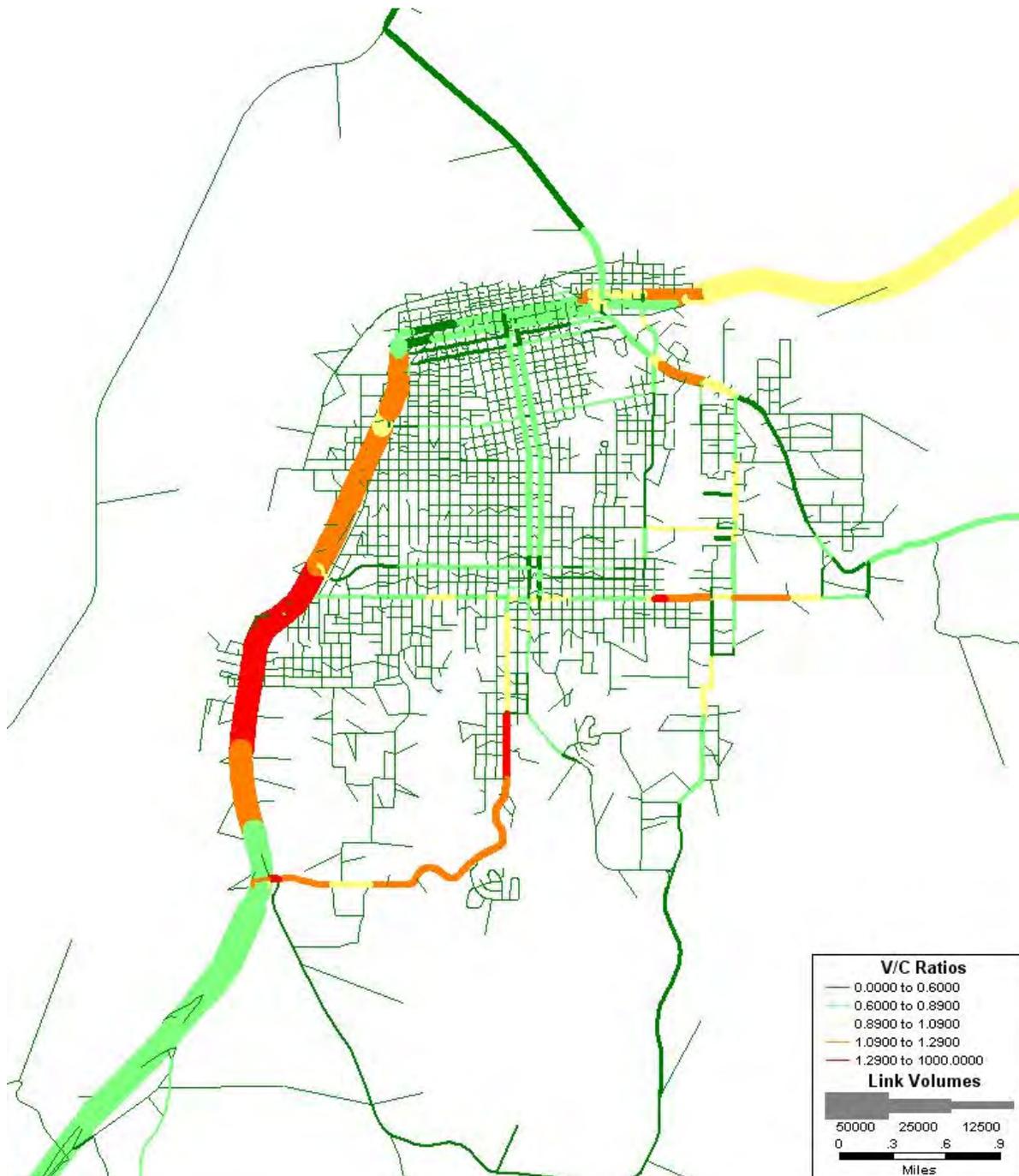
OTHER TOOLS TO OPTIMIZE THE SYSTEM

- Transportation Alternatives: Transportation Alternatives often include traffic calming measures intended to reduce motor vehicle speeds, and provide safer access for bicycles and pedestrians. These enhancements are

generally identified from community planning efforts and studies. Other enhancement activities include safety roadside rests, overlooks, landscaping, bike/ped facilities, and beautification.

- Alternative Modes of Transportation: The District encourages and strongly supports alternative modes and all alternatives to the single occupancy vehicle including ridesharing, transit, and non-motorized transportation.
- Modeling: Modeling can be used to replicate and project conditions in a transportation corridor, and test alternative corridor improvement options to determine the most cost effective corridor improvements. However, developing and maintaining such models is challenging, due to the expertise required. District 1 has made the commitment to develop and maintain models, working in close partnership with regional and local agencies. In the year 2000, the District established and supported the Greater Eureka area Technical Advisory Committee, as a pilot effort in the Humboldt/ Eureka area. Since then, modeling has been expanded to all four Counties in the District.
- Caltrans uses a Trans-CAD Transportation Demand Model (TDM) for the entire District. A Trans-CAD TDM graphic showing anticipated 2020 traffic volume to capacity ratios in the City of Eureka is shown in Map 10.
- The District uses micro-simulation modeling to consider improvements and strategies for segments that the model shows as operating at or near capacity, and tests the effectiveness of these improvements or strategies under both existing conditions, and with anticipated traffic volume increases.

MAP 10 – GREATER EUREKA AREA TRAVEL MODEL YEAR 2020 ANTICIPATED VOLUME TO CAPACITY (V/C) RATIOS



As shown in the graphic, with no improvements, much of South Broadway (US 101) is expected to operate at or near capacity by the year 2020, with delays

exceeding 15 minutes during the peak hour for motorists between Harris and Hilfiker Streets.

- Context Sensitive Solutions (DP-22) - Solutions that integrate and balance community, aesthetic, historic and environmental values with transportation safety, maintenance and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.

An example of Context Sensitive Solutions is evident on the bridge rails of several bridges on SR 169 between Wautec Village and the community of Weitchpec in Humboldt County. The constructed portion of this route is almost entirely within the Yurok Reservation. After consultation with the Yurok Tribe, symbols and designs significant to the Tribe were cast and/or painted into bridge railings on this route.



FIGURE 9 – BRIDGE RAIL ON SR 169 BETWEEN WAUTEC AND WEITCHPEC

COMPLETE STREETS

Complete Streets – Integrating the Transportation System, is based on Deputy Directive 64-R1, signed by the Caltrans Director in October 2008. Since then, a Technical Advisory Committee has been tasked with creating an implementation strategy which includes revisions to the Caltrans Highway Design Manual, Caltrans Maintenance manuals, the RTP Manual, the CA Manual of Uniform Traffic Control Devices (MUTCD) and many others.

Caltrans defines a Complete Street as: “A transportation facility that is planned, designed, operated and maintained to provide safe mobility for **all** users, including bicyclists, pedestrians, transit vehicles, truckers and motorists, appropriate to the function and context of the facility. Complete street concepts apply to rural, suburban and urban areas.” It is our job to ensure that regional and interregional travel is accommodated, while minimizing adverse impacts to community residents living along our highway corridors.

In towns and cities across California, the State highway may be the only through street or may function as a local street. Table 7 lists cities and communities in District 1 where a State highway functions as the main street or as a major local street.



TABLE 7 – CITIES AND COMMUNITIES IN DISTRICT 1 WHERE A STATE HIGHWAY ROUTE FUNCTIONS AS A MAIN/MAJOR STREET

COUNTY	COMMUNITY	ROUTE	COUNTY	COMMUNITY	ROUTE
DN	CRESCENT CITY	101	LAK	UPPER LAKE	20
DN	SMITH RIVER	101	LAK	NICE	20
DN	HIOUCHI	199	LAK	LUCERNE	20
DN	GASQUET	199	LAK	CLEARLAKE OAKS	20
HUM	ORICK	101	LAK	LOWER LAKE	29/53
HUM	EUREKA	101	LAK	MIDDLETOWN	29
HUM	ORLEANS	96	LAK	COBB	175
HUM	HOOPA	96	MEN	WILLITS	101
HUM	WILLOW CREEK	299	MEN	HOPLAND	101
HUM	ARCATA	255	MEN	LAYTONVILLE	101
HUM	MANILA	255	MEN	COVELO	162
HUM	FERNDALE	211	MEN	GUALALA	1
HUM	HYDESVILLE	36	MEN	POINT ARENA	1
HUM	CARLOTTA	36	MEN	MANCHESTER	1
HUM	RIO DELL/SCOTIA	283	MEN	ELK	1
HUM	REDCREST	254	MEN	FORT BRAGG	1
HUM	MYERS FLAT	254	MEN	CLEONE	1
HUM	MIRANDA	254	MEN	WESTPORT	1
HUM	PHILIPSVILLE	254	MEN	PHILO	128
			MEN	BOONVILLE	128

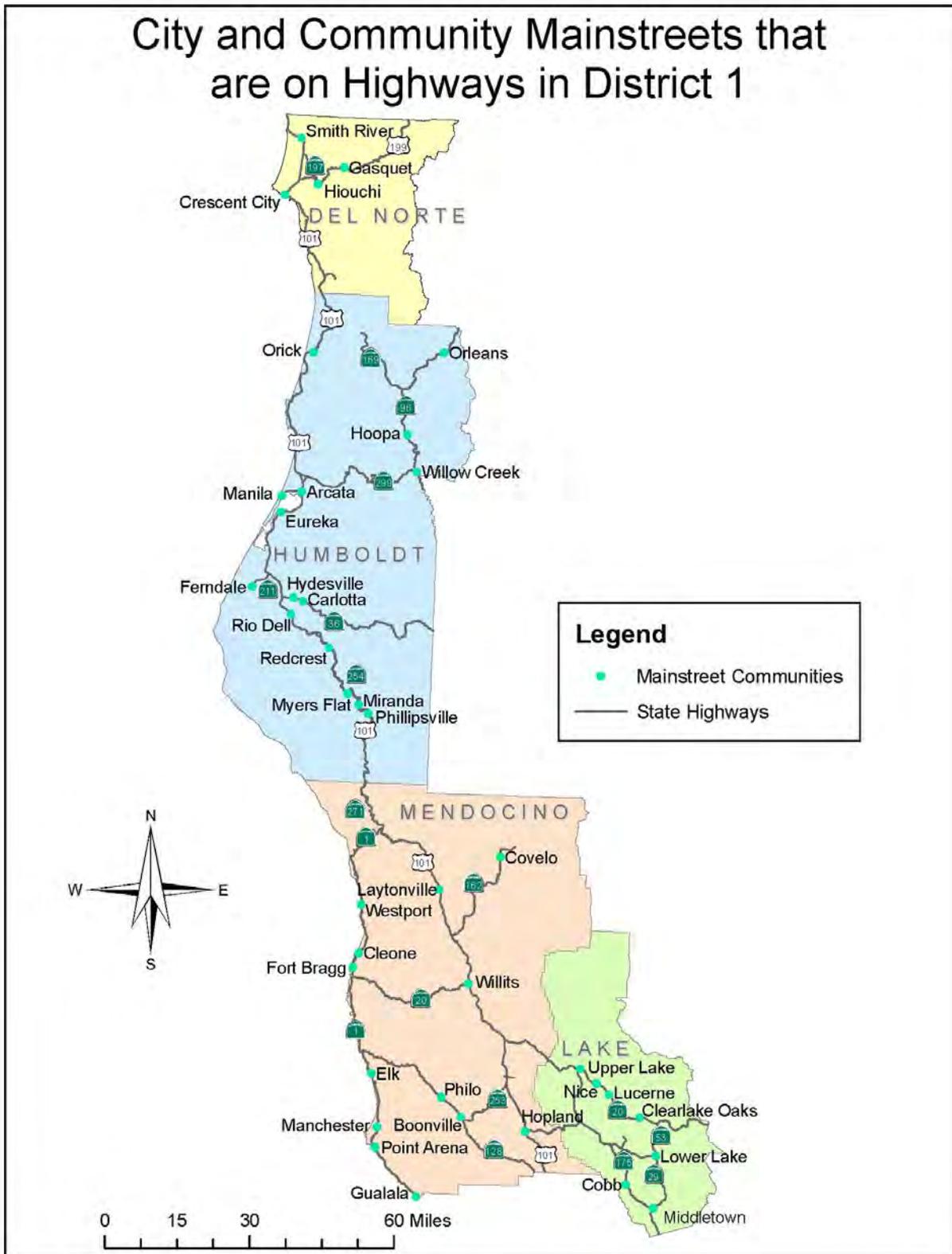
Map 11 shows city and community mainstreets/major streets that are on the State Highway System in District 1.

These communities would like their main streets to be economic, social, and cultural assets, as well as to provide for the safe and efficient movement of people and goods. In urban areas, many communities want transportation projects to provide opportunities for enhanced non-motorized travel and visual quality. In natural areas, projects can fit

aesthetically into the surroundings by including contour grading, aesthetic bridge railings, and special architectural and structural elements. Addressing these needs will assure that transportation solutions meet more than transportation objectives.

Providing Complete Streets increases travel options which, in-turn, reduces congestion, increases system efficiency, and enables environmentally sustainable alternatives to single driver automotive trips.

Map 11 – Main Street Cities and Communities on the State Highway in District 1



Implementing Complete Streets and other multi-modal concepts supports the California Complete Streets Act of 2008 (AB 1358), as well as the California Global Warming Solutions Act of 2006 (AB 32) and Senate Bill 375, which outline the State’s goals for reducing GHG emissions.



FIGURE 10 – ROUTE 299 THROUGH THE COMMUNITY OF WILLOW CREEK

Some Caltrans documents that assist in the development of livable mainstreets include: *Main Streets: Flexibility in Design and Operations* (2005),

the *Project Development Procedures Manual* (updated for Complete Streets in 2010), the *Highway Design Manual*.

In District 1, we have been using the concepts of Complete Streets in our design and implementation of projects prior to the policy enacted by the State legislature in 2008. The Willow Creek Shade Project (1-HUM-299) converted a very wide 4-lane downtown segment with virtually no bicycle, pedestrian or landscape treatments, to what is seen here in Figure 9. This work was undertaken by the local Community Services Department to make their “main street” more livable. The results were: bike lanes, parking lanes and bulb-outs with landscaping, street trees, new sidewalks and grassy divider, crosswalks, raised medians and gateway signage.

It is a District goal to incorporate Community Planning into all projects that are undertaken in the cities and communities located on the District’s State Highway System. Care will be taken to balance the needs of the interregional motorist with those of people residing in communities along State highway routes.



APPENDICES



APPENDIX A – OUTREACH EFFORTS

DISTRICT SYSTEM MANAGEMENT PLAN OUTREACH EFFORTS

DSMP Outreach Schedule	
Date	Agency
1/26/11	Internal Technical Advisory Group Kick-Off
1/27/11	External Technical Advisory Group Kick-Off
3/2/11	North District External Advisory Liaison (Political Representatives)
3/3/11	South District External Advisory Liaison (Political Representatives)
3/16/11	Mendocino Council of Governments TAC (RTPA)
3/22/11	Caltrans Resident Engineers Quarterly Roundtable
4/4/11	Mendocino Council of Governments Board (RTPA)
4/7/11	Del Norte Local Transportation Commission TAC (RTPA)
4/20/11	Caltrans PE Quarterly Roundtable Group
4/21/11	Lake County Area Planning Commission TAC (RTPA)
5/4/11	Lake County Area Planning Commission Board (RTPA)
5/12/11	Humboldt County Association of Governments TAC (RTPA)
5/12/11	North Coast Tribal Transportation Commission
5/16/11	Caltrans Senior Staff Meeting
5/26/11	Humboldt County Association of Governments Board (RTPA)
6/4/12	First Comments on Draft Received by Internal TAG
6/25/12	External TAG Draft Review Meeting, Comments Received 7/9/12
7/13/12	Comments due back from HQ, D2/D3, North Region Managers
7/16/12	Draft to Tribes/RTPAs, comments due 8/31
9/7/12	Final Draft to D1 Executive Staff, comments due 9/14/12
9/28/12	Circulate for D1 Executive Staff signature
10/15/12	Final Presentation to D1 Staff and posting to D1 System Planning Website

Note: The Del Norte LTC Director requested a presentation to its TAC only



APPENDIX B – ADVISORY COMMITTEES

DISTRICT SYSTEM MANAGEMENT PLAN EXTERNAL ADVISORY COMMITTEE

<u>Represented Community</u>	<u>Advisory Committee Member</u>	<u>Advisory Committee Member Agency</u>
Bicycle and Pedestrian	Emily Sinkhorn Jen Rice* emily@nrsrcaa.org	Redwood Community Action Agency (RCAA)
D1 Tribes	Jacque Hostler cherae.roads@gmail.com	North Coast Tribal Transportation Commission (NCTTC)
RTPA	Phil Dow dowp@dow-associates.com	Mendocino Council of Governments (MCOG)
RTPA	Lisa Davey-Bates daveybatesl@dow-associates.com	Lake County/City Area Planning Council (LC/CAPC)
RTPA	Tamara Leighton tamera@dnltc.org	Del Norte Local Transportation Commission (DNLTC)
RTPA	Marcella Clem marcella.clem@hcaog.net	Humboldt County Association of Governments (HCAOG)
Transit	Bruce Richard bruce@4mta.org	Mendocino Transit Authority (MTA)
Goods Movement	Steve Shamp CTS@humboldt1.com	California Truckers Association
Goods Movement	Jack Crider jcrider@portofhumboltdbay.org David Hull*	Humboldt Bay Harbor District
Transit	Mark Wall mwaconsulting@comcast.net	Lake & Del Norte Transit
Elected Officials' Representatives	Zoey Goosby (Sen. Evans) Zuretti.Goosby@sen.ca.gov John Driscoll (Congress. Thompson) john.driscoll@mail.house.gov Liz Murghia* John Woolley (Assemblyman Chesbro) john.woolley@asm.ca.gov	Second Senate District, First Congressional District, First Assembly District

* Denotes previous external advisory committee attendee



DISTRICT SYSTEM MANAGEMENT PLAN INTERNAL ADVISORY COMMITTEE

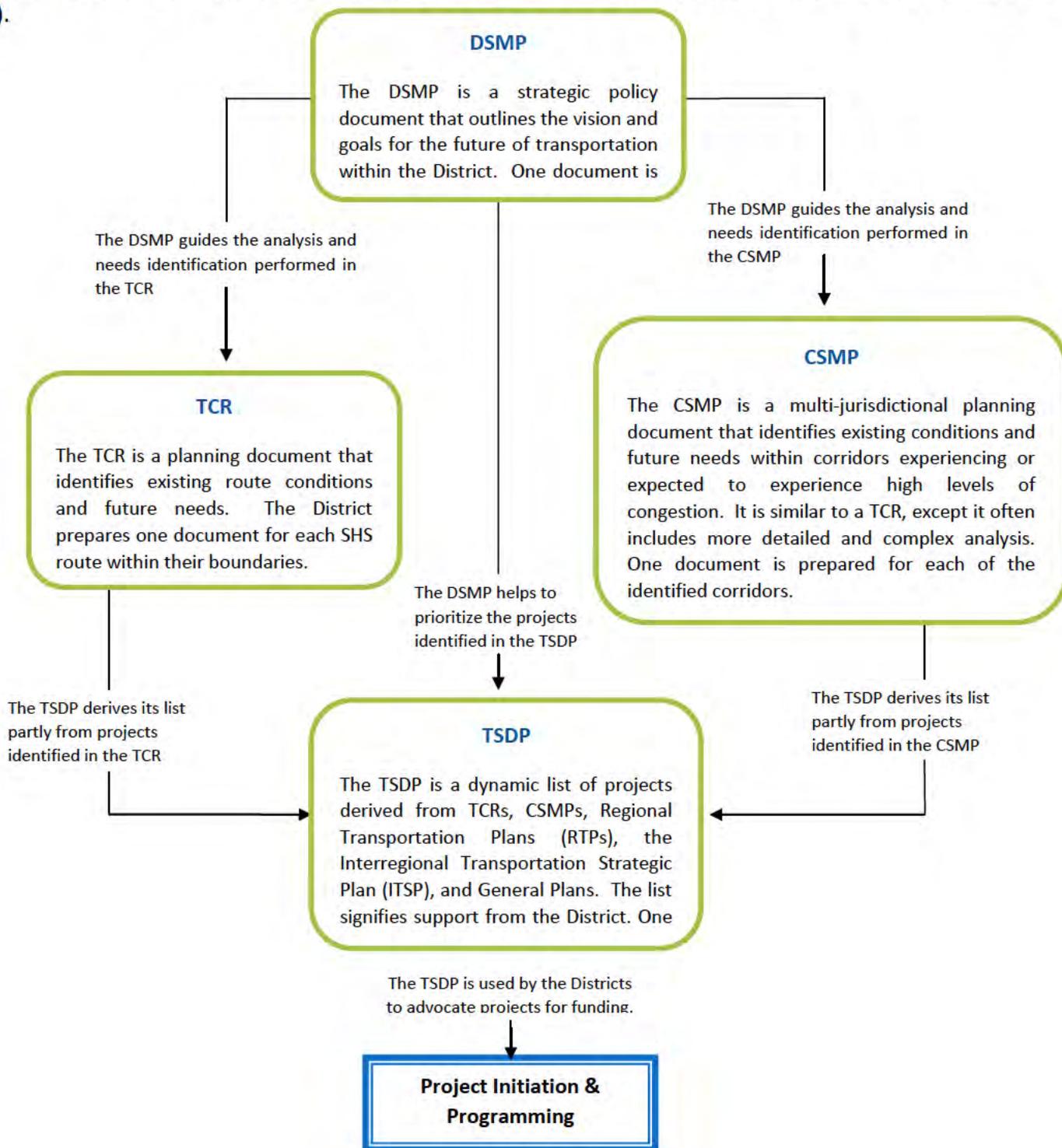
<u>Functional Unit</u>	<u>Advisory Committee Member</u>	<u>Management</u>
Transportation Planning	Rex Jackman	Cheryl Willis
Advance Transportation Planning	Brian Simon	Ilene Poindexter
Traffic Operations		Troy Arseneau
Traffic Safety		Ralph Martinelli
Design		Lena Ashley
Environmental	Dana York	
Right of Way Engineering		Don Campbell
Right of Way	Lisa Spellenberg	
Encroachment Permits		John Carson
Programming		Gary Banducci
Public Information Office		Ann Jones
Landscape Architecture		Ron Flory
Local Assistance	Jen Buck	
Native American Liaison		Kathleen Sartorius
Structures/Construction	John Walters	
Facilities	Brenda Hall	



APPENDIX C – SYSTEM PLANNING FLOW CHART

SYSTEM PLANNING FLOW CHART

System Planning is Caltrans long-range (20-25 years) transportation planning process to evaluate current & future operating conditions & deficiencies on the State Highway System. The system planning process is made up of four documents, the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP), and the Transportation System Development Plan (TSDP).





APPENDIX D – TRIBAL COORDINATION

FEDERALLY RECOGNIZED TRIBES IN DISTRICT 1

Of 109 federally-recognized Tribes in California, 28 are located in District 1. A listing of federally-recognized tribes in District 1 is shown in Table 8. Each of the Tribal chairs received a copy of the draft DSMP for review and comment.

FEDERALLY RECOGNIZED TRIBES IN DISTRICT 1

TRIBE	COUNTY
Bear River Band of Rohnerville Rancheria	Humboldt
Big Lagoon Rancheria	Humboldt
Big Valley Rancheria	Lake
Blue Lake Rancheria	Humboldt
Cahto Tribe – Laytonville Rancheria	Mendocino
Coyote Valley Reservation	Mendocino
Elm Indian Colony	Lake
Elk Valley Rancheria	Del Norte
Guidiville Rancheria	Mendocino
Habematolel Pomo of Upper Lake	Lake
Hoopa Valley Indian Reservation	Humboldt
Hopland Reservation	Mendocino
Karuk Tribe	Humboldt/Siskiyou
Lower Lake Rancheria	Lake
Manchester-Point Arena Rancheria	Mendocino
Middletown Rancheria	Lake
Pinoleville Reservation	Mendocino
Potter Valley Rancheria	Mendocino
Redwood Valley Rancheria	Mendocino
Resighini Rancheria	Del Norte
Robinson Rancheria	Lake
Round Valley Reservation	Mendocino
Scotts Valley Rancheria	Lake
Sherwood Valley Rancheria	Mendocino
Smith River Rancheria	Del Norte
Trinidad Rancheria	Humboldt
Wiyot Tribe	Humboldt
Yurok Tribe	Del Norte/Humboldt

Many of the Tribes have a State highway running either through or adjacent to their reservations, rancherias, or pre-contact Tribal territories. This is the case with the Hoopa Tribe in Humboldt County, the Smith River Rancheria in Del Norte County, the Round Valley Reservation in Mendocino County and the Robinson Rancheria in Lake County, among others.



FIGURE 11 – BRIDGE ON ROUTE 169 BETWEEN THE COMMUNITIES OF WAUTEC AND WEITCHPEC ON THE YUOK RESERVATION

Caltrans has an 18-member Statewide Directors Native American Advisory Committee on Tribal transportation issues and concerns. Tribal Advisory Committee members are appointed to 2-year terms, and meet four times per year. Caltrans also has a Native American Liaison Branch that helps maintain government to government relationships with Tribes.

Eleven Tribes in Humboldt and Del Norte Counties have organized the North Coast Tribal Transportation Commission (NCTTC). Commission members work together on common interests and technical concerns and coordinate with Regional Transportation Planning Agencies and Caltrans. A major area of Tribal transportation emphasis is on obtaining funding to improve the safety of rural roads that serve their Tribes.

TRIBAL CORRIDOR MANAGEMENT PLANS AND TRANSPORTATION PLANS

District 1 encourages Tribes to develop Tribal Corridor Management Plans for highways within their jurisdiction. Corridor Management Plans include an inventory the transportation corridor and set consensus goals and objectives for managing the corridor. Typically, a “Complete Streets” approach will be used, which considers aesthetics and helps to assure safe access for vehicles and non-motorized users of the transportation corridor.

District 1, along with numerous agencies and organizations, participated in developing the Hoopa Tribe’s “Conceptual Plan for Downtown Hoopa”, funded through the Caltrans Environmental Justice (EJ) Program and completed in 2006. Subsequently, similar planning efforts were undertaken by Tribes in cooperation with their transportation partners, including District 1, in Klamath, Round Valley, and Smith River.

The *Yurok Tribe Transportation Plan*, also completed in 2006 using a Caltrans EJ funds, is a comprehensive plan for all highways, streets, and roads on Yurok lands. This Plan followed a *Route 169 Needs Assessment Study*, which was prepared in 2004 by District 1 staff in conjunction with the Yurok Tribal Council. While Routes 101 and 169 are the backbone on the Yurok transportation network, there are numerous County and Tribal roads that help provide access for the Yurok reservation.

The Elk Valley Rancheria near Crescent City has obtained a Caltrans EJ grant and will be preparing a transportation plan for all of the highways, streets, and roads within their jurisdiction, including a portion of Route 101.



DEVELOPMENT REVIEW

Frequently, Tribal development adjacent to a State highway route will impact the transportation system. As a result of Tribal government’s close working relationship with Caltrans, Tribes have

been more willing to participate in improvements to mitigate the transportation impacts of their developments. Generally, these improvements benefit both the Tribe’s developments and the traveling public.



DISTRICT 1 – DISTRICT SYSTEM MANAGEMENT PLAN – SEPTEMBER 2012

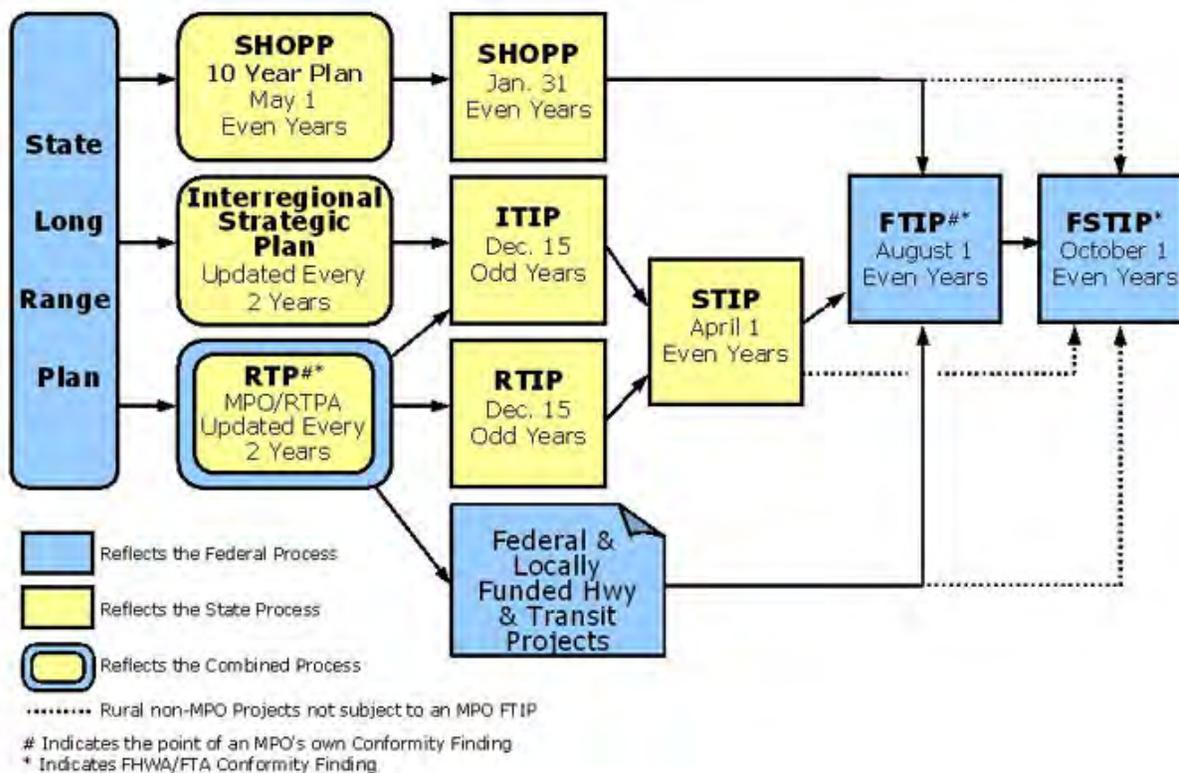
APPENDIX E – 2012 PLANNING PROJECTS LIST BEYOND THE STIP AND SHOPP

District	County	Route	Begin Postmile	End Postmile	Purpose & Need	Improvement Description	Location	Original Work Program Status	Capital Cost (\$M)	Support Cost (\$M)	STIP Funding (TIP/RTIP/Both/NA)	STIP Programming Cycle(s)	Federal Funding (Y/N)
1	MEN	162	29.25	30.27	Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address community needs.	Shoulder Widening, Non-motorized Improvements	Covelo from East Lane to Biggar Lane (near Health Center)	Carryover	\$2.1	\$0.6	ITIP	2014	Y
1	DN	101	24.4	27.8	Purpose: enhance safety and facilitate non-motorized travel in transition zones between urban and rural highway segments. Need: identified by DNLTIC as a	Traffic Calming, Non-motorized and Gateway Improvements	Crescent City	Carryover	\$1.2	\$0.4	Both	2014	Y
1	HUM	96	12.26	12.26	Purpose: to provide a safe pedestrian, equestrian and non-motorized vehicle crossing of Trinity River. Need: Existing bridge does not have sidewalks or non-motorized crossing access.	Add Sidewalk/Replace Bridge	Trinity River Bridge # 4-137 in downtown Hoopa	Proposed	TBD	TBD		TBD	Y
1	HUM	101	98.35	100.7	Purpose: provide a more reliable access to Trinidad Rancheria/Scenic Drive. Need: Scenic Dr. subject to geologic instability and road closure.	New Interchange	Between 6th St. exit and Trinidad Road exit	Carryover	\$13.5	\$4.1	NA	2014	Y
1	HUM	255	1.7	5.4	Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address community needs.	Traffic Calming, Non-motorized Improvements, Beautification/Landscaping	Manila	Proposed	TBD	TBD	ITIP	2014	Y
1	LAK	20	31.1	32.5		Lake 20/53 Interchange & SR 53 Corridor Improvements	SR 20 0.95 KM West of 20/53 Jct. to 1.3 KM East of 20/53 Jct. & on SR 53 0.5 KM North of SR 53/40th Ave.	Proposed	TBD	TBD		TBD	Y
1	LAK	29	5.12	6.37	Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address community needs.	Traffic Calming, Bike/Ped Improvements	Middletown	Proposed	TBD	TBD		TBD	Y
1	LAK	29	23.8	31.6	Purpose: To provide additional capacity and passing opportunities. Identified as a need in the Route 29 TCR.	Convert to 4 Lane Freeway/Expressway (Segment 1& 2 refresh)	Near Lower Lake from 0.2 KM North of Diener Drive to 0.9 KM North of the Jct. 29/175	Proposed	TBD	TBD		TBD	Y
1	LAK	29	31.6	34.9	Purpose: To provide additional capacity and passing opportunities. Identified as a need in the Route 29 TCR.	Convert to 4-Lane Freeway (Segment 3-4)	Near Kelseyville from 0.7 KM North of Jct 29/175 to Jct. 29/175 near South Lakeport	Proposed	TBD	TBD		TBD	Y
1	MEN	1	0.59	1.02	Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address non-motorized needs.	Non-motorized Improvements	Gualala (PCBR)	Proposed	TBD	TBD	ITIP	2014	Y
1	MEN	1	0.0	14.70	Purpose: widen shoulders to 4' from Son/Men county line to Point Arena. Need: Address non-motorized needs.	Shoulder Widening and Non-motorized Improvements	Sonoma/Mendocino County line to Point Arena	Proposed	TBD	TBD	ITIP	2014	Y
1	MEN	1	62.12	70.35	Purpose: reroute PCBR from Pudding Creek Bridge to Ocean Medal Circle and widen to 4' shoulders. Need: State park has not installed directional signs nor maintained PCBR to Caltrans standards	Shoulder Widening and Non-motorized Improvements	Pudding Creek Bridge to Ocean Medal Circle	Proposed	TBD	TBD	ITIP	2014	Y
1	MEN	20	32.76		Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address non-motorized needs.	Intersection Improvements	Blosser Lane	Proposed	TBD	TBD		TBD	Y
1	MEN	101	13	17.6	Purpose: To provide additional capacity and passing opportunities. Identified as a need in the Route 101 TCR.	Convert to 4-Lane Expressway (Bypass)	Hopland	Proposed	TBD	TBD		TBD	Y
1	MEN	101	65.61	65.62	Purpose: provide safe parking area for wildlife viewing. Need: address community needs.	Vista Point	Near Laytonville	Carryover	\$1.2	\$0.3	ITIP	2014	Y
1	MEN	101	68.74	69.51	Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address community needs.	Traffic Calming	Laytonville 2	Proposed	TBD	TBD		TBD	Y
1	MEN	101	643.1	49	Purpose: To provide additional capacity and passing opportunities. Identified as a need in the Route 101 TCR.	Construct 4-Lane Freeway, Phase II	Near Willits From 1.3 KM South of Haehl Overhead to 2.9 KM South of Reynolds Highway	Proposed	TBD	TBD		TBD	Y
1	MEN	128	22.6	23.8	Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address non-motorized needs.	Non-motorized Improvements	Philo	Proposed	TBD	TBD	ITIP	2016	Y
1	MEN	128	26.8	29.5	Purpose: improve safety for pedestrians and non-motorized vehicles. Need: address non-motorized needs.	Non-motorized Improvements	Booneville	Proposed	TBD	TBD	ITIP	2016	Y



APPENDIX F – PROGRAMMING PROCESS

FEDERAL/STATE PLANNING & PROGRAMMING PROCESS





APPENDIX G – ACRONYMS

A&MRR	Arcata and Mad River Railroad / Annie & Mary Railroad
A&MRTS	Arcata and Mad River Transit System
AB	Assembly Bill
ACMP	Aesthetic Corridor Master Plan
CCT	California Coastal Trail
CEQA	California Environmental Quality Act
CMS	Changeable Message Sign
CO ₂	Carbon Dioxide
COATS	California/Oregon Advanced Transportation Systems Showcase
CSMP	Corridor System Management Plan
CTC	California Transportation Commission
CWR	California Western Railroad (Skunk Train)
DD	Deputy Directive
DN	Del Norte County
DP	Director's Policy
DSMP	District System Management Plan
EFS	Engineered Feasibility Study
EIR	Environmental Impact Report
EO	Executive Order
FSTIP	Federal Statewide Transportation Improvement Program
FTA	Federal Transit Administration
GHG	Greenhouse Gases
HAR	Highway Advisory Radio
HBHR&CD	Humboldt Bay Harbor Recreation and Conservation District
HTA	Humboldt Transit Authority
HUM	Humboldt County
IGR	Intergovernmental Review
IIP	Interregional Improvement Program
ISTEA	Intermodal Transportation and Efficiency Act
ITIP	Interregional Transportation Improvement Program
ITS	Intelligent Transportation Systems
K-T NET	Klamath-Trinity Non-Emergency Transportation
LAK	Lake County
LTA	Lake Transit Authority
MEN	Mendocino County
MPO	Metropolitan Planning Organizations
MTA	Mendocino Transit Authority
NCRA	North Coast Railroad Authority
NEPA	National Environmental Policy Act
NSB	National Scenic Byways
NWP	Northwestern Pacific Railroad
PCBR	Pacific Coast Bike Route
PE	Professional Engineer
PV	Photovoltaic



RCT	Redwood Coast Transit
PeMS	Performance Monitoring System
RIP	Regional Improvement Program
RTIP	Regional Transportation Improvement Program
RTPA	Regional Transportation Planning Agencies
RTS	Redwood Transit Service
SAFETEALU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHOPP	State Highway Operation and Protection Program
SLR	Sea Level Rise
STAA	Surface Transportation Assistance Act
STIP	State Transportation Improvement Program
STRAHNET	Strategic Highway Network
SWITRS	Statewide Integrated Records System
TAC	Transportation Advisory Committee
TASAS	Traffic Accident Surveillance & Analysis System
TCR	Transportation Concept Report
TDM	Transportation Demand Model
TMS	Traffic Management System
TSDP	Transportation System Development Plan



APPENDIX H - REFERENCES

1. "AirNav." *AirNav*. Web. <<http://www.airnav.com/>>.
2. "Americans with Disabilities Act (ADA) Infrastructure Program." *Office of Business & Economic Opportunity*. Caltrans. Web. <http://www.dot.ca.gov/hq/bep/ada_infrastructure_program.htm>.
3. "The Benefits of Scenic Highway Designation." *Scenic Highway Designation Benefits: Caltrans Landscape Architecture Program*. Caltrans. Web. <http://www.dot.ca.gov/hq/LandArch/scenic/can_do.htm>.
4. "Business Operations: Transit Systems." *Blue Lake Rancheria- Transit Systems*. Blue Lake Rancheria. Web. <<http://www.bluelakerancheria-nsn.gov/boTransit.html>>.
5. *California Highways*. Web. <<http://www.cahighways.org/index.html>>.
6. *California Oregon Advanced Transportation Systems Showcase, Western Transportation Institute, Montana State University - Bozeman*. Rep. 2002. Print.
7. Caltrans District 1 Counts Branch Staff. "Discussion Regarding Recent Traffic Count Trends." Personal interview. Jan. 2012.
8. Caltrans Division of Transportation Planning. "District System Management Plan Guidelines." July 1991. Web. <http://onramp.dot.ca.gov/hq/tpp/offices/oasp/Documents/DSMP_July_1991.pdf>.
9. Caltrans. "Federal/State Planning & Programming Process." Web. <<http://www.dot.ca.gov/hq/transprog/gifs/FedState800.jpg>>.
10. "Caltrans Solar Project - Eureka." *Caltrans Solar Project - Eureka*. 17 Mar. 2011. Web. <http://live.deckmonitoring.com/?id=caltrans_solar_project_eureka>.
11. Caltrans Traffic Data Branch. *Vehicle Miles of Travel Report*. Rep. 2009-2011. Print.
12. Caltrans. *Transportation Concept Reports and Data Updates*. 2011. Web. <<http://www.dot.ca.gov/dist1/d1transplan/tcr.htm>>.
13. "Complete Street." *Division of Transportation Planning*. Caltrans. Web. <http://onramp.dot.ca.gov/hq/tpp/offices/ocp/Complete_Streets/>.
14. Corbett, Judith. "The Ahwahnee Principles Toward More Livable Communities." *Local Government Commission*. Web. <http://www.lgc.org/freepub/community_design/articles/ahwahnee_article/index.html>.
15. Department of Transportation, Division of Transportation System Information, Office of Performance Measures and Data Analysis, Data Integration and Reporting Branch. *1999/2000 Assembly of Statistical Reports, California Public Road and Related Data*. Rep. 2002. Print.



16. "Division of Budgets." *Division of Budgets*. California Department of Transportation. Web. <<http://onramp.dot.ca.gov/hq/budgets/>>.
17. Dow & Associates. *The Lake County Regional Transportation Plan*. Rep. 2010. Print.
18. Dow & Associates. *The Mendocino County Regional Transportation Plan*. Rep. 2011. Print.
19. Federal Highway Administration Federal Lands Highway. "National Forest Scenic Byways Program Partnership Success Stories." USDA Forest Service, Oct. 2008. Web. <<http://www.funoutdoors.com/files/02-National%20Forest%20Scenic%20Byways%20Program%20Partnership%20Successes.pdf>>.
20. Harvey, Christopher. "STAA Project Funding Plan for SR 299 Phone Call with Caltrans Project Manager, D2." Telephone interview. 16 May 2012.
21. Hostler, Jacque. "Testimony of Cher-Ae Heights Indian Community of the Trinidad Rancheria CEO." Interview. Print.
22. Humboldt Bay Harbor Recreation and Conservation District. "Humboldt Bay Management Plan." 2007. Web. <<http://www.humboldtby.org/harbordistrict/documents/stratplan>>.
23. Humboldt Transit Authority (HTA). *RTS - Redwood Transit System*. Web. <<http://www.redwoodtransit.org/>>.
24. LSC Transportation Consultants, Inc. *The Del Norte Regional Transportation Plan*. Rep. 2011. Print.
25. "Marine Highway Initiative Descriptions." Web. <http://www.marad.dot.gov/documents/MarineHighway_Initiative_Descriptions_Designated.pdf>.
26. Mineta Transportation Institute (MTI). *Tribal Corridor Management Planning: Model, Cas Study, and Guide for Caltrans District 1*. Rep. 2011. Print.
27. "The National Scenic Byways Program." *America's Byways*. US Department of Transportation - Federal Highway Administration. Web. <<http://byways.org/learn/program.html>>.
28. "North Coast Railroad Authority." *North Coast Railroad Authority*. Web. <<http://www.northcoastrailroad.org/>>.
29. North Coast Tribal Transportation Commission. "Cher-Ae Heights Indian Community of the Trinidad Rancheria." 15 Sept. 2011. Web. <<http://www.indian.senate.gov/hearings/upload/Jacque-Hostler-testimony-and-docs.pdf>>.
30. Pardi, Larry. "Arcata and Mad River Transit Service Phone Call with Transit Supervisor." Telephone interview. 26 Jan. 2012.



31. P&B Ports & Marine Inc., Winzler & Kelly, and BST Associates. *2003 Harbor Revitalization Plan*. Rep. 2003. Print.
32. Planwest Partners, Inc. *The 2008 Humboldt County Regional Transportation Plan*. Rep. 2008. Print.
33. Pratt, Gregg, and Laura Shodall. "Humboldt Transit Authority Phone Call with General Manager and Administrative and Finance Manager." Telephone interview. 26 Jan. 2012.
34. Radford, Alan, and Minor B Program Staff. "Minor Programs in District 1." Personal interview. 16 Feb. 2012.
35. "Regional Economy." *Regional Economy | North Coast Prosperity Network*. Prosperity, n.d. Web. <<http://www.northcoastprosperity.com/local-economy/regional>>.
36. Sartorious, Kathleen. "Discussion with North Region Native American Liason." Personal interview. 22 Feb. 2012.
37. Slater, Rodney E. "The National Highway System: A Commitment to America's Future." *Public Roads*. US Department of Transportation, 4 Aug. 2011. Web. <<http://www.fhwa.dot.gov/publications/publicroads/96spring/p96sp2.cfm>>.
38. "Transportation Costs." *Florida Department of Transportation*. Florida Department of Transportation. Web. <<http://www.dot.state.fl.us/planning/policy/costs>>.
39. Tyson, Patricia L. "Humboldt Bay Harbor, Recreation and Conservation District." Message to the author. 7 Feb. 2012. E-mail.
40. "US Highways from US 1 to (US 830)." Discover America - Best by Car, 14 Apr. 2012. Web. <<http://www.us-highways.com/>>.
41. Value Management Strategies, Inc. *Final Roadside Safety Audit, D1 US 101 Smith River Corridor Improvements, Del Norte County PM 35.90-46.49*. Rep. 2011. Print.
42. Wall, Mark, and Jody McNamer. "Redwood Coast Transit Phone Call with General and Service Managers." Telephone interview. 27 Jan. 2012.
43. "Welcome to the Division of Local Assistance." *Caltrans Division of Local Assistance*. California Department of Transportation. Web. <<http://www.dot.ca.gov/hq/LocalPrograms/>>.
44. Yurok Tribe. *Taking Back a Traditional Trail, Yurok Tribe Transportation Plan*. Rep. 2006. Print.