



California Forest Highway Long Range Transportation Plan

A transportation policy plan to coordinate the California
Forest Highway program into the future

2010-2030

March 2010



Prepared by:



Prepared in partnership
with:



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Abbreviations and Acronyms

Caltrans	California Department of Transportation
CFLHD	FHWA, Central Federal Lands Highway Division
CFR	Code of Federal Regulations
FH	Forest Highway
FHWA	Federal Highway Administration
LRTP	Long Range Transportation Plan
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act of 1969
NFS	National Forest System
OVN	Over Night
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
STIP	Statewide Transportation Improvement Program
STP	Statewide Transportation Plan
TEA-21	Transportation Efficiency Act for the 21 st Century
TIP	Transportation Improvement Program
TMP	Travel Management Plan
U.S.	United States
USC	United States Code
USFS	U.S. Department of Agriculture, Forest Service



Chapter 1: Introduction

This 20-year transportation plan describes the California Forest Highway (FH) Program and identifies the long-range goals for the program. One purpose of this document is to help transportation planners, transportation professionals, forest professionals, community representatives, and citizens who have an interest in improving FHs understand the FH Program, thereby helping them understand the types of projects eligible for program funding as well as how to participate in the planning and decision-making processes.

This plan also describes the process for coordinated planning and decision making among the partner agencies involved in the California FH Program. The plan is the product of the Tri-Agency partnership, which consists of representatives from the California Department of Transportation (Caltrans); the United States (U.S.) Department of Agriculture, Forest Service (USFS), Region 5; and the Federal Highway Administration (FHWA), Central Federal Lands Highway Division (CFLHD). Each agency has specific roles and responsibilities as part of the planning and implementation of FH projects (see Appendix A). This long-range plan is intended to help the Tri-Agency make investment decisions for planning, safety management, preservation, and construction on FHs in California. Because funds are limited, it is essential to assess needs, set priorities, and efficiently manage and leverage funds from a variety of sources to meet transportation needs.

1.1 What Are Forest Highways?

FHs are simply a subset of California's road system, representing approximately 2,974 miles of roadway in California, as shown in Figure 1 through Figure 3. Established by the passage of the Federal Highway Act of 1921, specific roadways in national forests across the U.S. were designated as FHs due to the benefits they provide to the national forest, states, and local communities. For more information on how FHs were designated, please refer to Appendix B: California Forest Highway Program Background. California FHs are diverse, ranging from isolated county roads in rural areas such as Modoc National Forest to state roads that receive intense use from nearby metropolitan areas such as the San Bernardino National Forest. FHs are intended to provide safe and efficient transportation access to and through the National Forest System (NFS) for visitors, recreationists, resource users, and others. FHs also assist rural and community economic development, and promote tourism and travel.

1.2 How Are Forest Highways Defined?

The term "Forest Highway" refers to a forest road under the jurisdiction of, and maintained by, a public authority and open to public travel. A public authority other than FHWA, such as Caltrans, USFS, or a local government, typically has jurisdiction of a FH. To qualify for designation as a forest highway, a forest road must be a State or local government road that is open to the general public. However, it is not necessary to establish legal jurisdiction in the form of actual easements or recordable documents for a road to have designation as a forest highway.

A forest development road may have the designation of a forest highway, provided that the Forest Service assures the Federal Highway Administration that a State or local government agency will assume jurisdiction and maintenance responsibility upon completion of improvements.

A FH may be comprised of several segments, each managed by a different authority. FH maintenance and improvement projects can also receive funding from several sources. In general, FHs must be in or adjacent to the NFS; be necessary for access to protect, administer, use, and develop national forest resources; open to public travel; and provide a connection to other transportation systems (such as public roads).

The list of designated FHs is not fixed. Routes can be added or removed at any time while maintaining a net zero policy; that is, a net zero increase in the number of miles of FHs. The CFLHD Division Engineer, with concurrence from the USFS and Caltrans, designates FH routes. Figure 1 through Figure 3 show currently designated FHs in California. Further information regarding FH eligibility and designation is provided in Appendix B.

1.3 Why Are Forest Highways Important?

Accessing our NFS lands is part of our heritage, our culture, and our economy. The FH Program addresses the needs for safe and adequate transportation access to and within NFS lands for tourism, recreation, resource use, and other uses. Other transportation programs do not specifically address those needs. FHs aid rural and community economic development and promote tourism and travel. FHs are particularly important in California because of private, state, and national forests located in the northern part of the state. Meanwhile, California's population has increased, placing more people closer to NFS and other federal lands. In addition, urban and suburban development outside of federal lands is placing greater pressure on existing transportation infrastructure and resources.

1.4 What is the California Forest Highway Program?

Because FHs provide a multitude of economic, cultural, and environmental services to state residents and visitors, we need to understand the existing and long-term demands on the roadway system to meet current and future needs. The California FH Program was developed to address those needs by providing funding for improvements to FHs. Through the federal tax on gasoline, the California FH Program provides approximately \$20.7 million of federal transportation funding to California each year.

The California FH Program is, by law, a partnership of Caltrans, USFS, and CFLHD (the Tri-Agency). Roles of the Tri-Agency are defined in Appendix A.



CA 7 Mendocino Pass

Figure 1
California Forest Highway Network

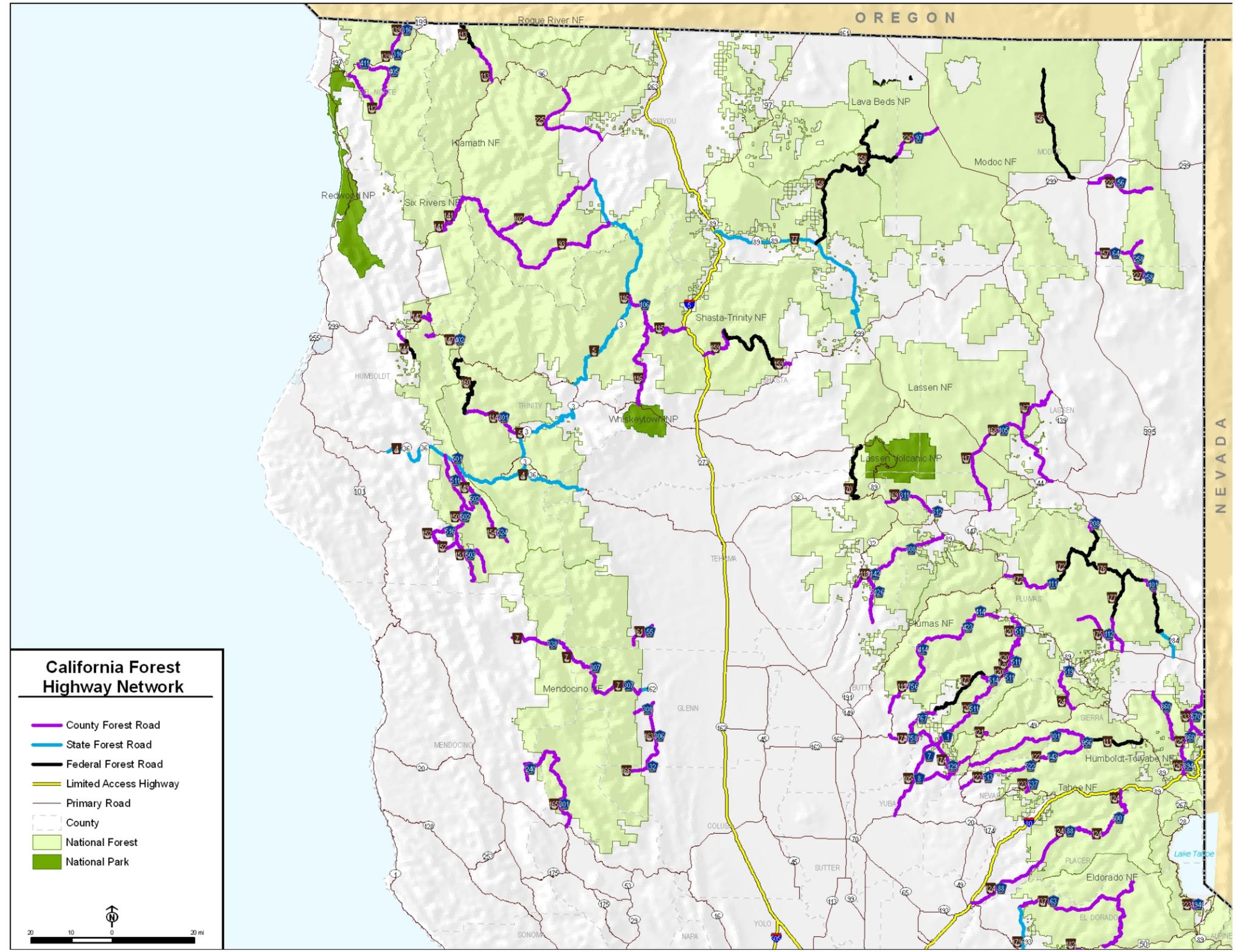


Figure 2
California Forest Highway Network

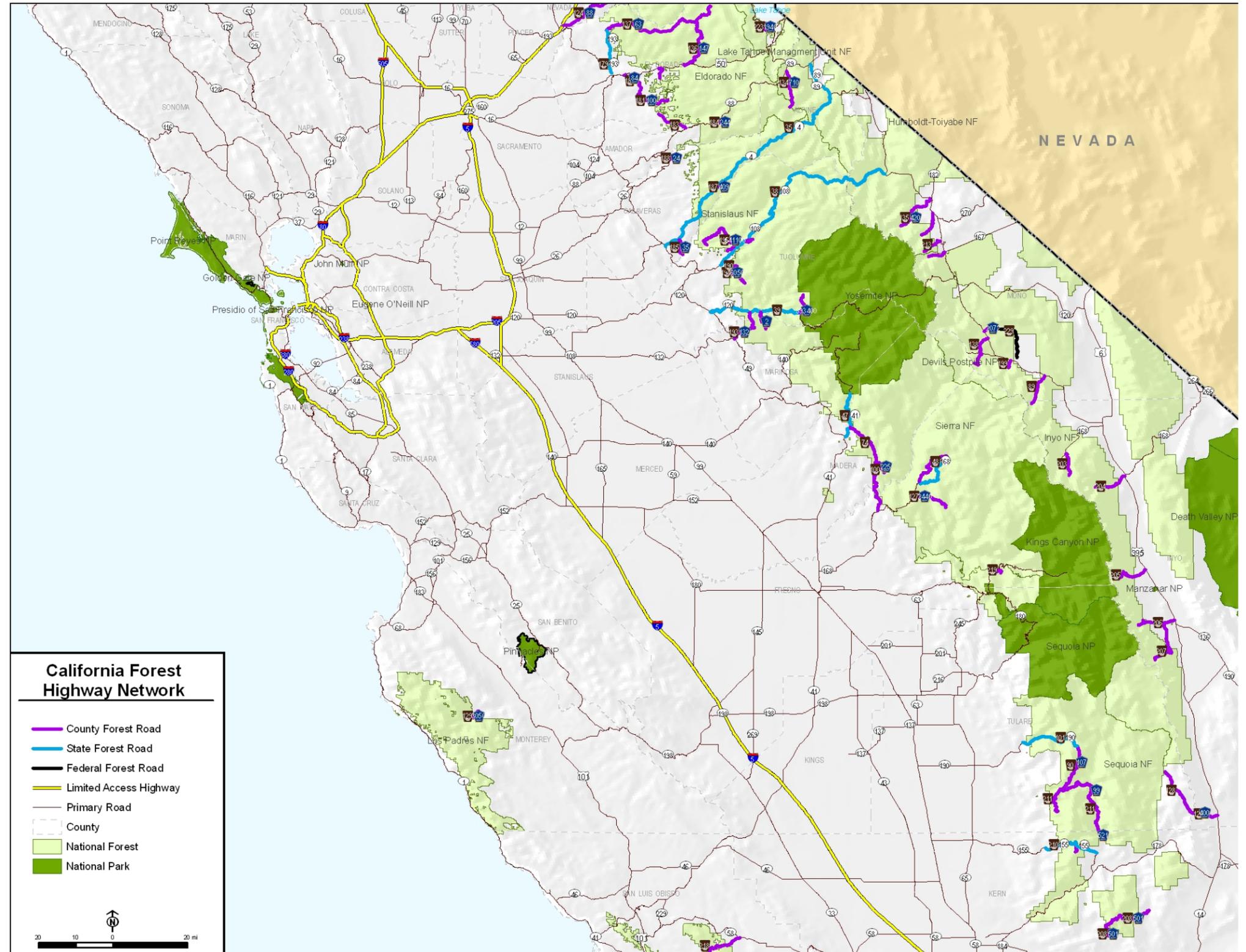
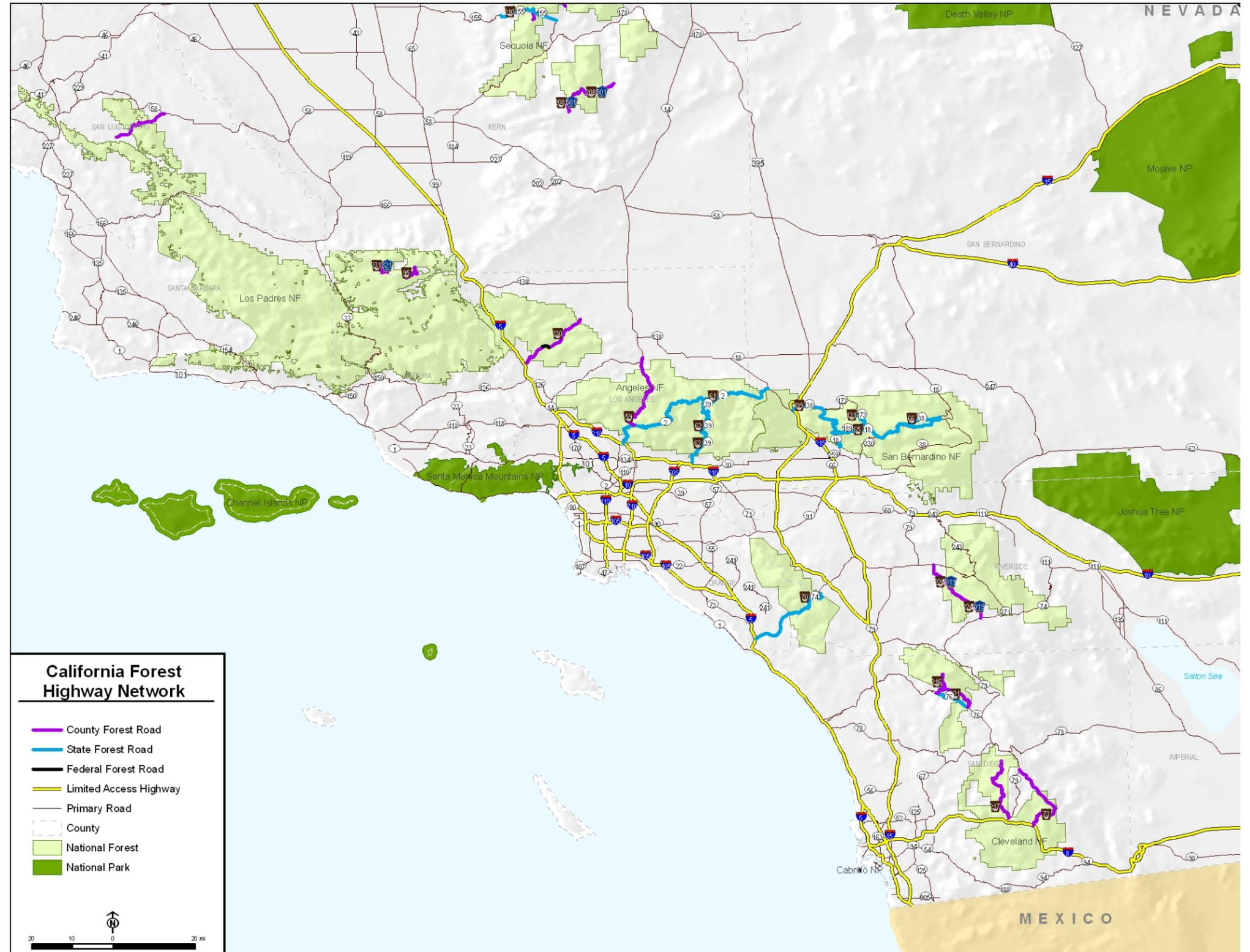


Figure 3
California Forest Highway Network



1.5 What are the Vision, Mission, and Goals of the California Forest Highway Program?

The vision, mission, goals, and objectives presented in this document are intended to guide the process for ranking and selecting projects for the California FH Program. Through a cooperative effort, the Tri-Agency partners developed these functional statements specifically for this LRTP, using the requirements set forth in 23 Code of Federal Regulations (CFR) §660, Subpart A – Forest Highways (see Appendix C). Once complete, they were distributed to counties and forest districts in an effort to solicit their comments. Based on input received during the comment period, the vision mission, goals, and objectives were revised and finalized. These guiding principles shape the development, conclusions, and recommendations of this LRTP. Nevertheless, each state and federal partner has specific vision, mission, and goals that are of unique interest to that particular agency. The individual statements of the three partnering agencies are provided in Appendix D.

Vision

The vision of the California FH Program is to advance California's FH network in a manner that facilitates responsible care for the land while providing an enhanced user experience to and within California's USFS lands.

Mission

The mission of the California FH Program is to work in partnership with CFLHD, Caltrans, USFS, and local communities to improve California's Forest Highways.

Goals and Objectives

Goals of the California FH Program represent four topical categories including access and mobility, condition and safety, funding and economic development, and natural resource protection. Each goal includes distinct objectives that serve to further the sentiment expressed by the goal. The goals and objectives are listed with a description of the purpose of each objective.

Access and Mobility: Provide sustainable access to California national forests for public utilization and enjoyment of the USFS lands and resources.

Objective 1: Provide and maintain recreational, commercial, and administrative access to USFS lands by funding appropriate improvements for transportation facilities.

Objective 2: Consider mode choice opportunities to improve mobility and access to California's national forests.

Objective 3: Provide a seamless transportation network connecting the national forest system with local communities and major highway systems.

Condition and Safety: Ensure a safe and reliable transportation network to and within California's national forests.

Objective 1: Identify risks to traveler safety and take measures to reduce them.

Objective 2: Maintain or improve the condition of the transportation facilities.

Funding and Economic Development: Utilize innovative partnerships to fund FH projects and to support economic development opportunities at the local, regional, and national level.

Objective 1: Create partnerships with other agencies or programs to provide additional funding to extend the benefits of the FH Program.

Objective 2: Reduce long-term maintenance cost.

Objective 3: Support economic development in terms of tourism and utilization of natural resources.

Natural Resource Protection: Maintain leadership in protecting and enhancing the natural environment.

Objective 1: Use transportation facilities as a tool to improve the health of USFS lands.

Objective 2: Minimize the negative impacts of transportation facilities to natural and cultural resources.

As mentioned previously, the goals are based upon the project selection criteria established in 23 CFR §660; however, the CFR criteria were modified to more clearly state the intent of project selection for the FH Program. Table 1 summarizes the relationship between the FH Long Range Transportation Plan (LRTP) goals and the criteria established in 23 CFR §660.

**Table 1
LRTP Goals and Related CFR Criteria**

Related 23 CFR 660 Criteria	LRTP Goal
<ul style="list-style-type: none"> • Development, utilization, protection, and administration of the NFS and its resources. • Continuity of the transportation network serving the NFS and its dependent communities • Mobility of the users of the transportation network and the goods and services provided. 	<p>Access and Mobility: Provide sustainable access to California national forests for public visitation and enjoyment of the USFS lands and resources.</p>
<ul style="list-style-type: none"> • Result for FHs from the pavement, bridge, and safety management systems. 	<p>Condition and Safety: Ensure a safe and reliable transportation network to and within California’s national forests.</p>
<ul style="list-style-type: none"> • Enhancement of economic development at the local, regional, and national level, including tourism and recreational travel. • Improvement of the transportation network for economy of operation and maintenance and the safety of its users. 	<p>Funding and Economic Development: Utilize innovative partnerships to fund FH projects and to support economic development opportunities at the local, regional, and national level.</p>
<ul style="list-style-type: none"> • Protection and enhancement of the rural environment associated with the USFS and its resources. 	<p>Natural Resource Protection: Maintain leadership in protecting and enhancing the natural environment.</p>

1.6 Why Do We Need Long-Range Transportation Planning?

FH long-range transportation planning is necessary to define the vision and goals for the FH network that will serve the public into the future. Long-range planning also provides a mechanism to objectively set priorities for implementing projects while working toward the ultimate vision for the FH network that the Tri-Agency is trying to achieve. To accomplish these tasks, planners and decision makers must consider a complex balance among transportation effectiveness, human safety, and environmental care. They must do so collaboratively to effectively manage and implement the California FH Program.



Mad River Road FH 149

The FH Program requires long-range transportation planning; that is, a planning process that is consistent, that involves the partner agencies, that is compatible with other transportation planning processes, and that clearly defines and offers opportunities for public input. The key objective of such a planning process is to develop and maintain a coordinated, “seamless” transportation system for public use, even though various segments of the system are under different jurisdictions. Coordinated planning will also help ensure that the most critical projects receive funding and are implemented, so that the infrastructure remains in place to access California’s forest resources and communities. Some general requirements for coordinated FH planning are set forth in 23 CFR §660, Subpart A – Forest Highways, which is provided in Appendix C of this document.

1.7 What is the California Forest Highway Long Range Transportation Plan?

The Tri-Agency prepared this LRTP to describe how the FH Program operates and to identify the long-range goals for the program for the next 20 years. As funding has become more scarce and demand on the FH transportation system continues to increase, it has become increasingly important for the Tri-Agency to work together to assess needs, set priorities, and implement projects that provide public benefits, while meeting fundamental program goals.

This LRTP describes the process and provides guidance for coordinated planning and decision making among the Tri-Agency. Such coordination is the key to wisely investing California FH funds. This LRTP is intended to help the partners make investment decisions for planning, safety management, preservation, and construction on FHs in California.

While funding for maintenance and capital improvements to FHs can come from many sources, such as cities, counties, and states, this LRTP focuses specifically on the types of projects eligible for funding through the FH Program over the next 20 years. It also provides guidance on how FH projects are selected for the FH Program (see Chapter 5, Project Selection Process).

1.8 What Is Included in This Plan?

This LRTP is presented in six chapters, including this Introduction. An explanation of the contents of each chapter follows.

Chapter 2, Agency and Planning Coordination, describes the long-range plans that are particularly related to California's FHs, including USFS National Forest Plans and Caltrans's Statewide Transportation Improvement Plan (STIP). Chapter 2 also describes other factors and regulations that influence FH planning, and describes the public involvement process for this FH LRTP.

Chapter 3, Existing Conditions and Trends, summarizes the current state of FH transportation infrastructure in terms of type, condition, use, and jurisdiction. Chapter 3 also presents recent trends in population change, forest visitation, and recreational trips to California's forests.

Chapter 4, Funding and Investment Strategies, summarizes the recent investment history for California FH projects, identifies reasonably expected funding through 2030, and discusses the funding gap between available funds and needed improvements to the FH network. Chapter 4 also identifies additional opportunities for funding through partnerships with other agencies.

Chapter 5, Project Selection Process, describes the process for selecting projects that will receive FH Program funds. It provides a step-by-step account of the Tri-Agency call for projects and the rationale for why this process is necessary for the FH Program.

Chapter 6, Plan Implementation, summarizes how this LRTP will be implemented by the Tri-Agency and includes recommended actions for the Tri-Agency. Recommendations include ongoing system monitoring and the development of a process to identify routes for designation and/or de-designation on the FH network.

Chapter 2: Agency and Planning Coordination

This LRTP is intended to link partner agencies' long-range planning efforts related to FHs. Each agency prepares its own long-range plans for managing the resources under its jurisdiction. The long-range plans that are particularly related to California's FHs include USFS National Forest Land and Resource Management Plans and Caltrans' STIP. This chapter discusses those plans, describes other factors and regulations that influence FH planning, and describes the public involvement process for this FH LRTP.

2.1 USFS National Forest Plans

The USFS has prepared a Land and Resource Management Plan (commonly referred to as a "Forest Plan") for every national forest in the country. The Forest Plans are updated periodically. In general, each Forest Plan evaluates the existing conditions of the forest lands and resources within a specific national forest, defines desired future conditions, evaluates and sets standards for visual quality (e.g., along roads and rivers), and provides direction for managing the forest resources. Forest Plans also provide direction for maintaining and preserving visual quality along scenic byways, wild and scenic rivers, and wilderness areas.

Forest plans provide the framework in which project decisions can be made on a case-by-case and site-specific basis. In relation to transportation planning, forest plans identify the types of travel that are suitable to particular parcels of land based on desired future conditions and other plan designations. Transportation decisions are directly related to the stated management objective for specific areas. If the management objective for a certain area changes, site-specific plans for road and trail management must be made separately from the forest plan to bring travel into compliance. Decisions about specific roads and trails are made through project-level analysis and decision documents in accordance with the National Environmental Policy Act (NEPA) of 1969. Appendix E contains a summary of the functions and limitations of a forest plan. The following forest plans have been completed in California to date (forests not listed are in the process of plan revision or completing their Forest Plan):

- *Angeles National Forest – 2005 Land Management Plan*
- *Cleveland National Forest – 2005 Land Management Plan*
- *Grand Sequoia National Monument –Revision to the Land Management Plan anticipated completion in 2010*
- *Inyo National Forest –Revision to the Land Management Plan anticipated completion in 2010*
- *Klamath National Forest – 1995 Land and Resource Management Plan*
- *Lake Tahoe Basin National Forest – 2006 Land and Resource Management Plan*
- *Lassen National Forest – 1993 Land and Resource Management Plan*
- *Los Padres National Forest – 2006 Land Management Plan*
- *Mendocino National Forest – 1995 National Forest Plan*
- *Modoc National Forest – 1991 Land and Resources Management Plan*
- *Plumas National Forest – 1988 Land and Resource Management Plan*
- *San Bernadino National Forest – 2006 revision of the Land Management Plan*

- *Sierra National Forest – 1995 Land and Resource Management Plan Amendment*
- *Stanislaus National Forest – 1991 Land and Resource Management Plan*

The USFS also develops Travel Management Plans (TMP). These are transportation-specific plans developed to help ensure that specific transportation corridors meet forest plan guidelines. TMP planning provides opportunities for the public and other key stakeholders to engage the USFS in discussions about transportation issues in specific areas of national forests. TMPs address only roads under USFS jurisdiction, not roads under state or county jurisdiction. The following TMPs have been completed in California (forests not listed are in the process completing their TMP):

- *Cleveland National Forest – 2008 TMP*
- *Eldorado National Forest – 2009 TMP*
- *Giant Sequoia National Monument – 2009 TMP*
- *Inyo National Forest – 2009 TMP*
- *Klamath National Forest – 2009 TMP*
- *Lassen National Forest – 2009 TMP*
- *Plumas National Forest – 2009 TMP*
- *Sierra National Forest – 2009 TMP*
- *Stanislaus National Forest – 2009 TMP*

2.2 California Transportation Plan

The California Transportation Plan (CTP) is a statewide, long-range transportation plan for California's future mobility needs. It defines goals, policies, and strategies to achieve the vision for California's future transportation system. Required by California and federal statutes, the CTP guides development and investment in the transportation system. The CTP's goals, policies, strategies, and implementation framework respond to the challenges facing California's transportation system. The CTP policies emphasize:

- Improving mobility and accessibility
- Preservation of the transportation system
- Supporting the economy
- Enhancing public safety and security
- Reflecting community values
- Enhancing the environment

The state highway system serves a diverse range of needs for the interregional movement of people and goods. System Planning serves as Caltrans' long-range transportation corridor planning activities for interregional transportation and statewide travel analysis' to improve interregional mobility and efficiency of the State's transportation system. Caltrans performs system planning in coordination with its local and regional partners. The objective is local, regional, and state consensus on route and corridor concepts, improvement priorities and strategies.

Primary system planning documents produced by Caltrans Districts include Transportation Corridor Reports, Transportation System Development Program and District System Management Plan. These documents: 1) identify, analyze, and recommend strategies and improvements for operating and improving the state highway system; 2) identify, analyze, and recommend improvements to the larger transportation system, where appropriate; and 3) provide the sound technical basis for informed discussions and decision-making. From these efforts, projects are developed for programming priorities in the State Transportation Improvement Program and the State Highway Operation and Protection Program.

2.3 Consistency with Other Plans

This FH LRTP is intended to integrate with and inform future state, county, and forest plans. Consistency between plans helps identify projects with multiple-agency benefits and potential for partnerships. Furthermore, documenting FH long-range vision, mission, and goals as well as individual projects will continue to assist local and regional planning in areas near FHs. In addition, this FH LRTP provides a means to enhance the consideration of environmental issues and impacts with the long-range transportation planning process. As part of project selection, applicants are asked to provide information regarding the need for proposed projects and potential environmental impacts. Applicants are also asked to document any pre-project coordination with resource agencies or the public. This analysis conducted during the planning stage will impart great benefits to the project, if selected, when it moves forward into the NEPA project planning process.

2.4 Other Factors that Influence Forest Highway Planning

Several factors have been influencing the federal FH Program over the last 10 years. Some of those factors are changing areas of emphasis for the program. These include inflation of construction costs, multi-modal considerations, and economic development opportunities.

2.4.1 Inflation of Construction Costs

Road and highway construction costs have shown volatility in recent years, but, overall, costs have continued to rise. From 2006 to 2008, the cost of rehabilitating some roadways increased at a rate greater than U.S. core inflation. In addition, the amount of road rehabilitation that is deferred each year has been growing as a result of funding limitations and deteriorating infrastructure conditions.

The California FH Program is affected by rising costs of construction and is simply unable to deliver as many miles of road construction today as 10 years ago. Construction cost is a factor that must be considered when deciding how California FH funds will be invested. Specifically, planners and decision makers should consider how available funds can provide more miles of improved road or more road deficiencies/conditions improved. Potential for combining or matching funds from various sources should also be evaluated.

2.4.2 Multi-Modal Considerations

States, metropolitan planning organizations (MPO), and federal land management agencies consider alternative transportation solutions in their transportation plans. Likewise, the California FH Program must consider alternative transportation modes when evaluating and developing proposed projects. Alternative transportation modes can be solutions for managing demand, providing access, and enhancing environmental quality, among other issues. Alternative transportation solutions may also provide additional funding opportunities.

Section 3039 of the Transportation Equity Act for the 21st Century (TEA-21) required the Secretary of Transportation, in coordination with the Secretary of the Interior, to:

[...] undertake a comprehensive study of alternative transportation needs in national parks and related public lands managed by Federal land management agencies in order to [...] encourage and promote the development of transportation systems for the betterment of the national parks and other units of the National Park System, national wildlife refuges, recreational areas, and other public lands in order to conserve natural, historical, and cultural resources and prevent adverse impact, relieve congestion, minimize transportation fuel consumption, reduce pollution (including noise and visual pollution), and enhance visitor mobility and accessibility and the visitor experience. (FHWA, 2001).

In response to the directive in TEA-21, FHWA and the Federal Transit Administration, in cooperation with the federal land management agencies, produced a study that assessed transit needs at in national parks and other federal lands. Volume III of that study focused on NFS lands and, in particular, on 30 high-use sites in national forests. The “Federal Lands Alternative Transportation System Study, Summary of Forest Service ATS Needs” (Cambridge Systematics, Inc., 2004) included the following California projects:

- Angeles, Los Padres, and San Bernardino National Forests Transit Routes
- Plumas National Forest Feather River Shuttle
- Sequoia National Forest Transit Improvements
- Sierra National Forest Transit Improvements
- Stanislaus National Forest Transit Improvements
- Eastern Sierra Expanded Transit System (Humboldt-Toiyabe and Inyo National Forests)
- Lake Tahoe Basin Management Unit (Tahoe, Humboldt-Toiyabe, and El Dorado National Forests)

The following excerpt is from the “Federal Lands Alternative Transportation System Study, Summary of Forest Service ATS Needs” (Cambridge Systematics, Inc., 2004).

California – Plumas National Forest Feather River Shuttle

The Plumas National Forest occupies 1,146,000 acres of scenic mountain lands in the northern Sierra Nevada. Situated just south of the Cascade Range, the Plumas is versatile in its land features, not crowded, and enhanced by a pleasant climate. Outdoor enthusiasts are attracted year-round to its many streams and lakes, beautiful deep canyons, rich mountain valleys, meadows, and lofty peaks. In order to satisfy the transportation needs of the recreational water users along Feather River, some type of mass transportation options need to be available.

A potential ATS option for the Plumas National Forest would be the continuation and expansion of the current shuttle service for Feather River. The current ad hoc parking-and-shuttle service, organized and operated voluntarily by American Whitewater, is considered successful. However, the Forest Service would like to see more permanent arrangements made to accommodate boaters on the Feather River.



Plumas National Forest California

These more permanent arrangements would likely include a long-term agreement involving the USDA Forest Service, PG&E, Plumas County, and American Whitewater on how to operate the water releases, parking, and shuttle. To accommodate Saturday boaters, the USDA Forest Service would like to see a permanent shuttle system, including a vehicle to tow boats put in place between Cresta Powerhouse and Cresta Dam. To accommodate Sunday boaters, the Forest Service would like to have a parking lot reconstructed at Rock Creek Dam. A parking lot at this location would allow boaters to drive themselves to this site and launch their boats. In addition, there is a need to improve critical access turnouts along the highway. This would allow the shuttle bus and other vehicles a safe location to park their vehicles, while loading and unloading the rafts and kayaks. The turnouts should be supplemented by trails to get boaters and their watercraft safely from the highway to the river. These turnout and trail improvements also would reduce the number of vehicles that park along the side of the highway and focus the water activity at key locations that would make the entire river more serviceable by a transit system.

2.4.3 Economic Development Opportunities

The economic impacts of tourism and recreation on federal lands have been studied in various contexts relating to impacts at the regional level; impacts to industry and recreational activities; and studies of individual parks, forests, tribal lands, and wildlife refuges. Relative to other states, California contains a large number of national forests and FHs, and a sizeable area of national forest land. National forests and FHs, therefore, make an appreciable contribution to the state's economy. In California, there are:

- 19 National forests and national grasslands (11 percent of the 175 national forests and grasslands in the U.S.)
- Approximately 20 million acres of national forest lands (11 percent of all the national forest lands within the U.S.)
- 2,974 miles of FH (10 percent of the 29,200 miles of FH in the U.S.)
- Outdoor recreation contributes \$46 billion annually to California's economy
- Outdoor recreation generates \$3.1 billion in annual state tax revenue

2.5 Public Involvement

Public involvement occurs throughout the transportation planning process, and while FH public involvement and planning are unique, they are linked to existing long-range and short-term planning efforts of Caltrans, the counties, and the national forests in California. FH planning builds upon, and is integrated with other planning efforts for consistency among the partner agencies' planning and public involvement activities, thereby providing multiple opportunities for public involvement.

Public involvement during transportation planning is perhaps best explained by distinguishing “policy level,” “plan level,” and “project level” public involvement opportunities. “Policy level” public involvement occurs during the development of a long-range transportation plan, such as the CTP, regional transportation plans (RTP), forest plans, and this FH LRTP. Such long-range policy plans provide guidance and direction for a transportation program. In short, they address “the big picture.” “Plan level” public involvement occurs during development of shorter-term plans like the Statewide Transportation Improvement Program (STIP), MPO transportation improvement programs (TIP), and the Federal Lands Highway TIP, that list specific desired improvements and often include prioritized lists of projects to be implemented over the plan’s timeframe. “Project level” public involvement occurs when specific projects are being developed through the process used to evaluate and assess projects under NEPA.

Public involvement continues to be an integral part of the planning process for this LRTP. As such, the Tri-Agency has conducted initial outreach including the development of a FH website that provides current information, by state, for each FH LRTP (<http://www.cflhd.gov/LRTP/index.cfm>). In addition to the website, two newsletters were developed and distributed to forest supervisors, state department of transportation representatives, and county public works supervisors to solicit input on the mission, goals, and objectives, the project selection process, and the draft of this FH LRTP.

The result of the project selection process outlined in this LRTP (a list of approved projects for the FH program) will be included in California’s STIP, which is subject to California’s public involvement process associated with the CTP. Because these plans include statewide lists of projects proposed for implementation, public input is used to inform the process of project selection. Therefore, there is some project-specific input at the plan level of public involvement.

The public will have further opportunity to provide input on specific proposed projects through the process used to evaluate and assess projects under NEPA. All projects that include federal funding, such as FH projects, must comply with the NEPA process. The NEPA process requires public outreach at several stages: project scoping (to present the proposed project and identify potential issues), public review of the draft environmental document (environmental assessment or environmental impact statement), and public review of the final environmental impact statement. Additional public involvement opportunities are often provided, such as public meetings at various stages of project development.

Chapter 3: Existing Conditions and Trends

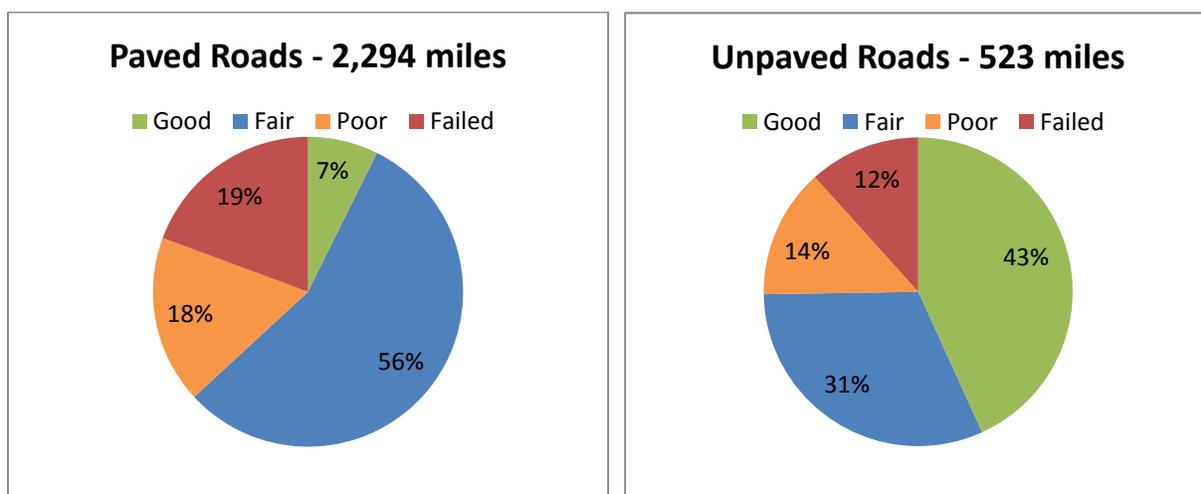
Understanding the current state of FHs is a prerequisite for planning future transportation projects. The dynamics of use, condition, and visitation are therefore considered in transportation funding decisions. Furthermore, this FH LRTP considers changes that are likely to occur in the future, such as increased traffic and visitation due to population increases. As is the nature of LRTPs, the intent is to identify future needs and plan for them proactively. The existing data in this chapter has informed the project selection process described in Chapter 5, and projects will be selected based on that process, not existing data alone.

This chapter offers a summary of the current state of FH transportation infrastructure in terms of type, condition, use, and jurisdiction. Indicators of future trends include population change, visitation, and timber harvesting activity.

3.1 Facility Inventory and Conditions

Currently, CFLHD collects information on road conditions through the Road Inventory Program every two years. Based on the data, it was determined there are 133 routes and 2,974 miles of FH roads in California. Of these, 2,450 miles (82 percent) are paved and 524 miles (18 percent) are unpaved. Figure 2 summarizes the condition of the roadway network by surface type. Road conditions are also shown in Figure 3 through Figure 5. The figures show that most of the FH roads in California are in Good or Fair condition, while 19 percent of paved roads and 12 percent of unpaved roads are in Failed condition. Although most of the roads are in Good or Fair condition, as the network continues to age and traffic volumes increase, more of these Fair roads will deteriorate to Poor condition. Surface condition is an important factor to consider when selecting projects to construct as part of the LRTP, as it has a direct effect on FH operations and safety.

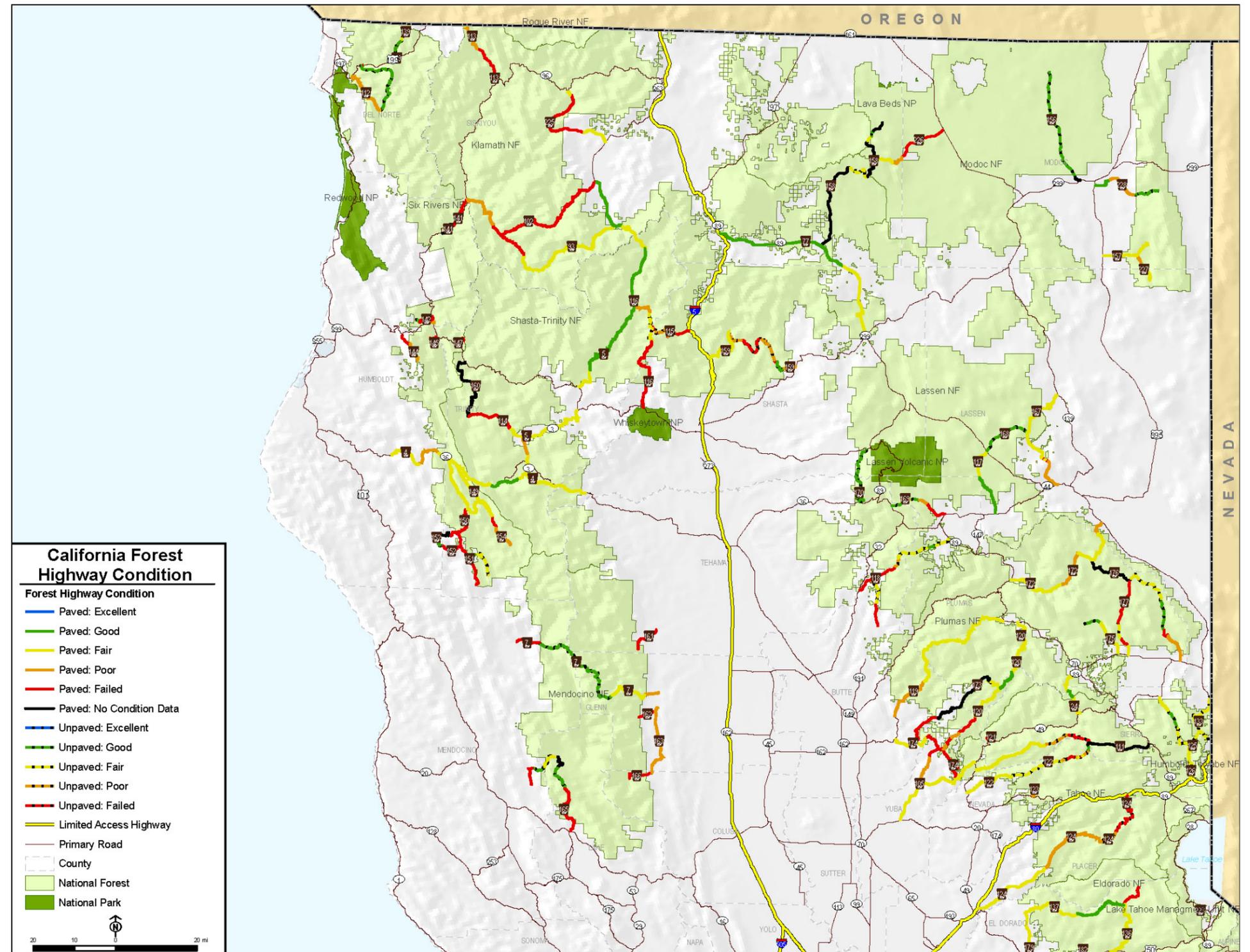
Figure 2
Roadway Condition



Source: FHWA, 2006

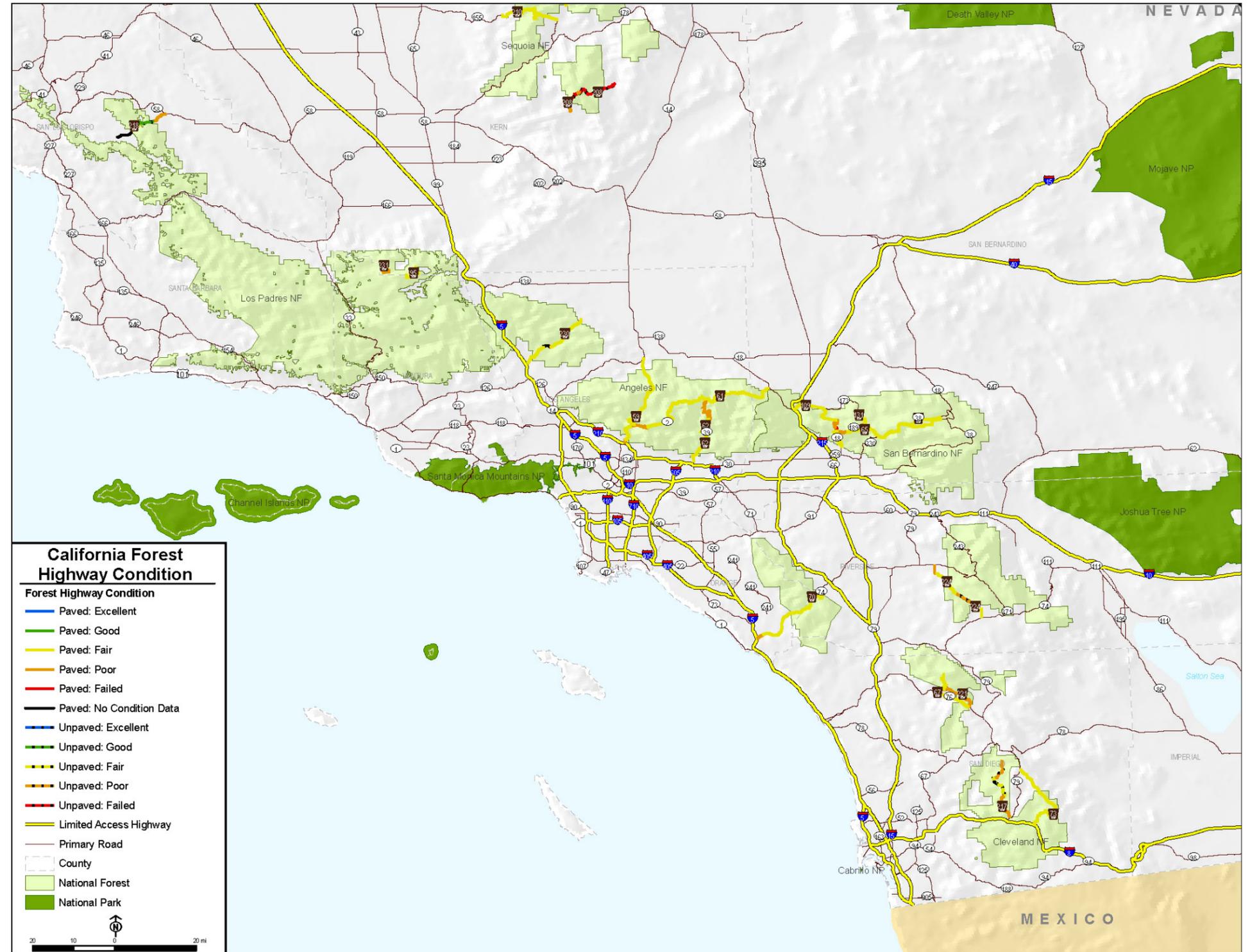
* No data for 157 miles (5% of total)

Figure 3
California Forest Highway Condition



Source: FHWA, 2008
Note: Not all roads have been rated

Figure 5
California Forest Highway Condition



There are 279 bridge structures or other structures on the California FH road network. Of the 279 structures, 41 bridges are classified as functionally obsolete and 27 are classified as structurally deficient. A functionally obsolete bridge is one that was built to standards that are not used today. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges include those that have sub-standard geometric features such as narrow lanes, narrow shoulders, or inadequate vertical clearances. A bridge is considered structurally deficient if it has a Poor general condition rating for the deck, superstructure, substructure, or culvert. Figure 6 summarizes qualitative bridge structure sufficiency ratings. The location and conditions of these bridges are shown in Figure 7 through Figure 9. Condition data for road surface and bridges are updated every two years through the Road Inventory Program (RIP). For the most updated condition information, go to <http://www.cflhd.gov/FHRoadInv/index.cfm> and select the California report.

Figure 6
Bridge Structure Sufficiency Rating

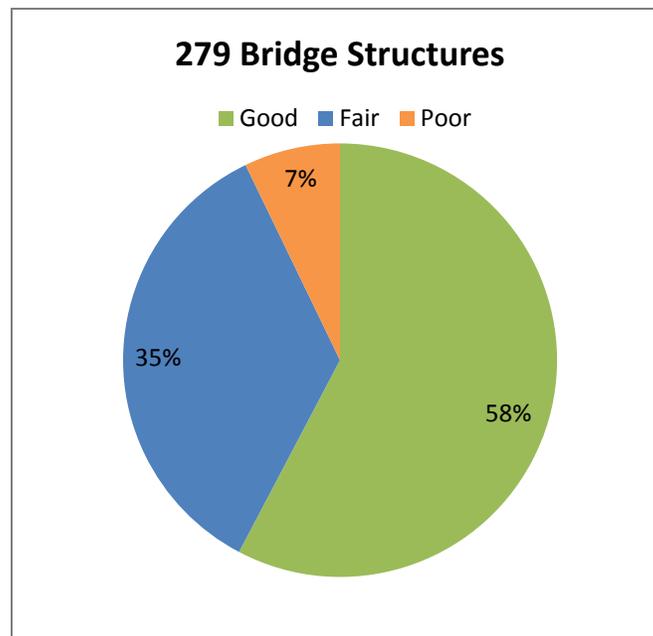
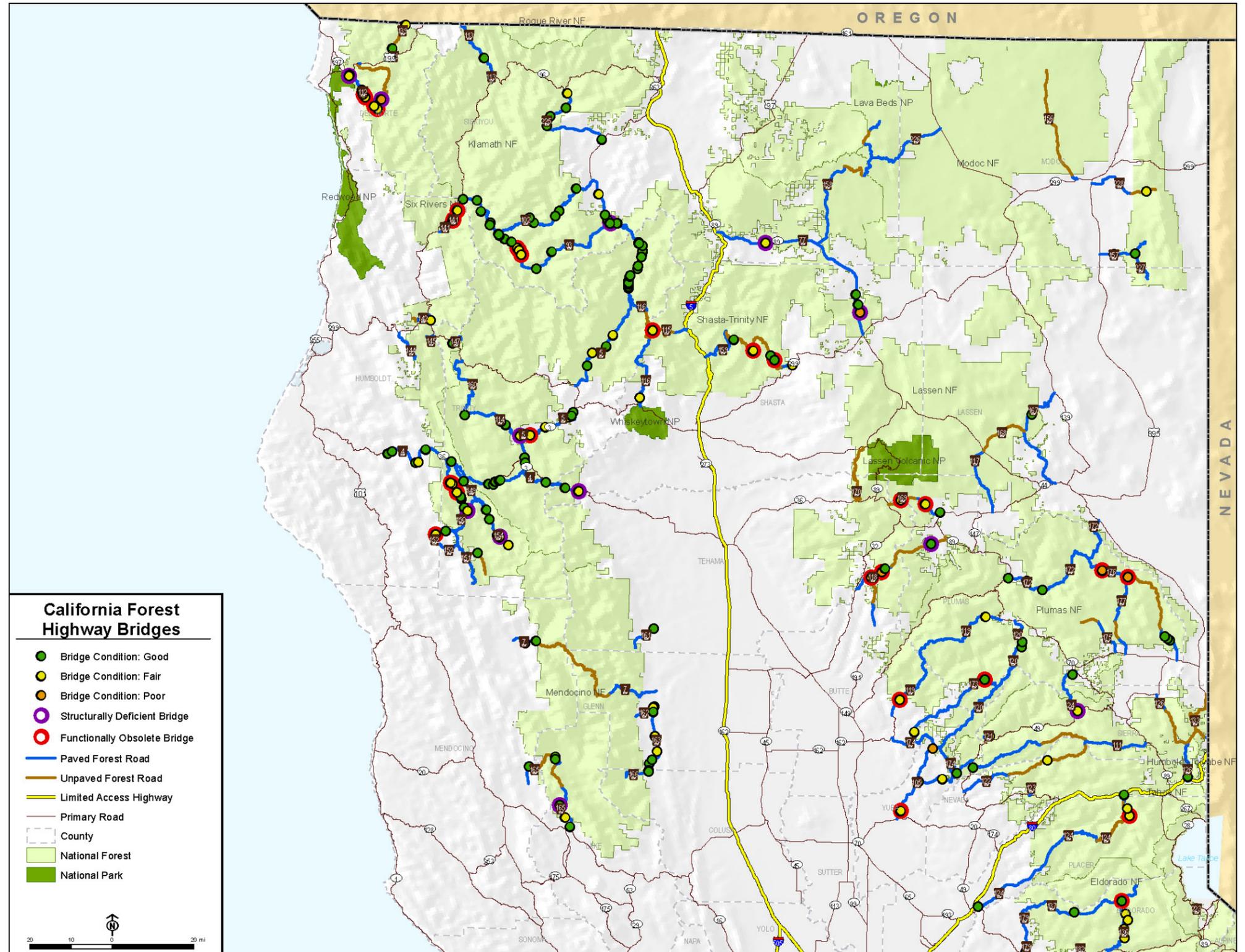


Figure 7
Forest Highway Bridge Inventory



Source: FHWA traffic

Figure 8
Forest Highway Bridge Inventory

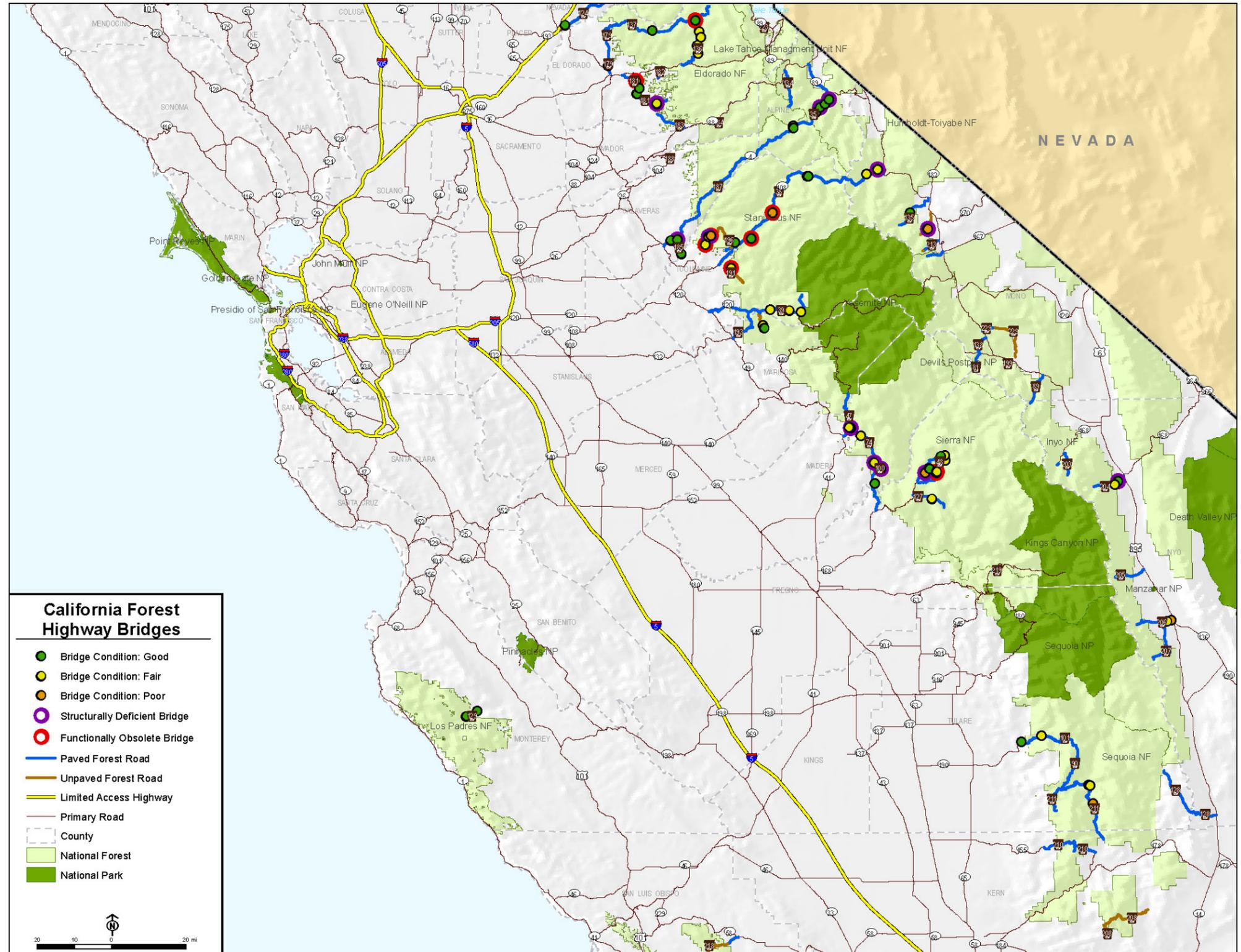
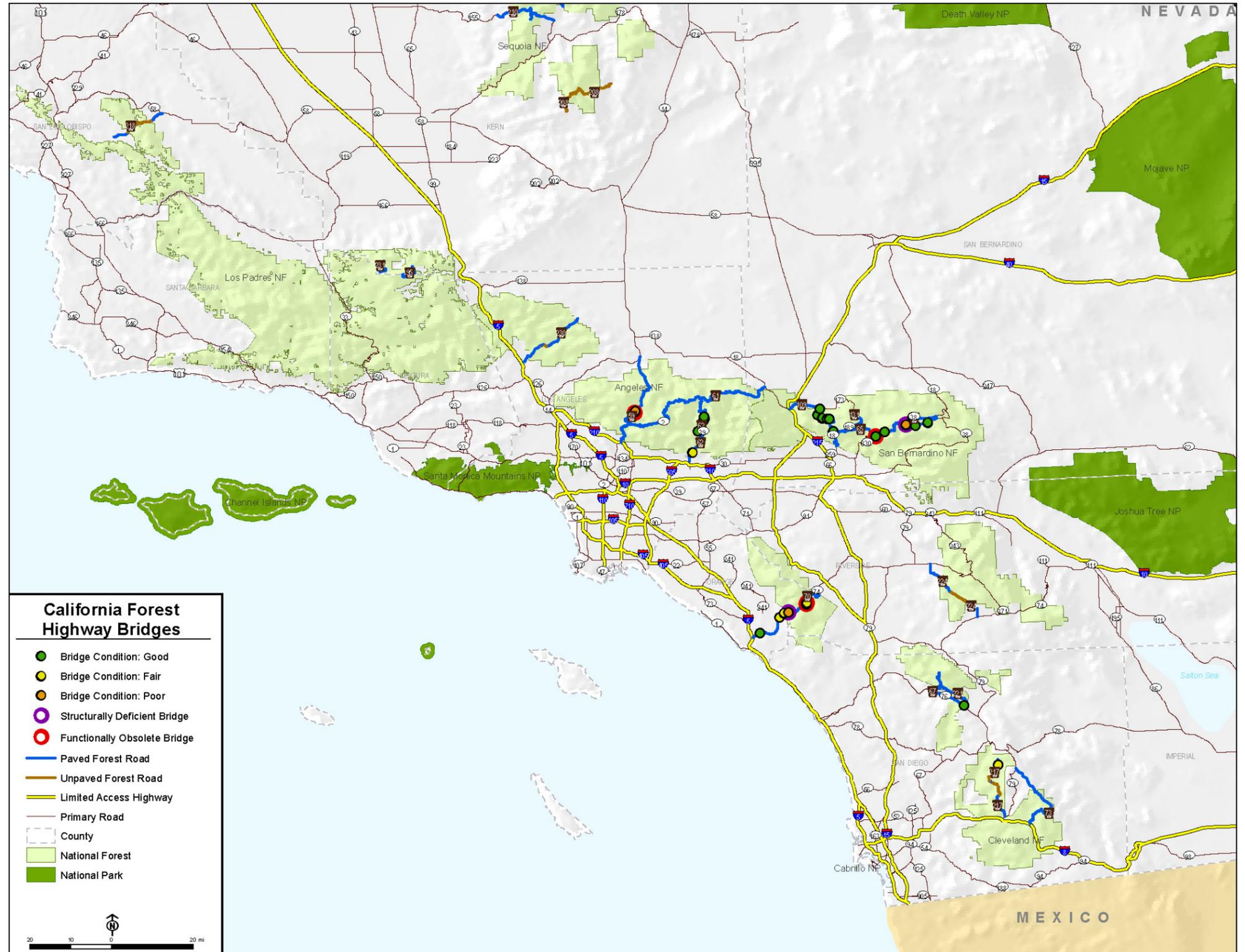


Figure 9
Forest Highway Bridge Inventory



California FHs share 22 routes and 748 miles with designated state routes. State routes typically carry higher traffic volumes than other routes, as they serve multiple trip purposes in addition to forest visitation and resource development. In addition, 1,873 miles of FH roads are shared with county routes. A list of FH routes collocated on state or county routes is included in Appendix F. It has been recognized that current average daily traffic data are still needed for county owned FH routes. The overall average daily traffic data are displayed in Figure 10 through Figure 12. Many of the FHs are also designated as national or state scenic byways. This is an important distinction, as scenic byways are eligible for additional funding and, therefore, would receive higher priority in project selection. Scenic byway routes are shown in Figure 13 through Figure 15.

Surface and structure conditions are important on routes with higher average daily traffic due to the increased exposure to the traveling public. Routes with higher traffic volume will deteriorate faster than those with lower volume in most cases; therefore, priority should be given to routes that have both poor conditions and high traffic volumes.

Because these routes are either designated state routes or county owned FH routes, there is a greater chance to leverage funds to improve these roads. State routes may qualify for other funding sources that could be used to complete FH projects. Counties may have funding for road improvements that alone would not be enough to reconstruct a road but if combined with FH funding, these routes may have a better chance at being selected for improvements due to the opportunity to leverage funds.

An important factor when selecting a project on county owned routes is that the county must be willing to accept the road preservation responsibilities once the project is completed. If a county is unable to accept these duties, the project will have a harder time getting selected; therefore, this program cannot only be a data driven program, but needs to take into account agreements between all project partners.

Figure 12
California Forest Highway Traffic Data

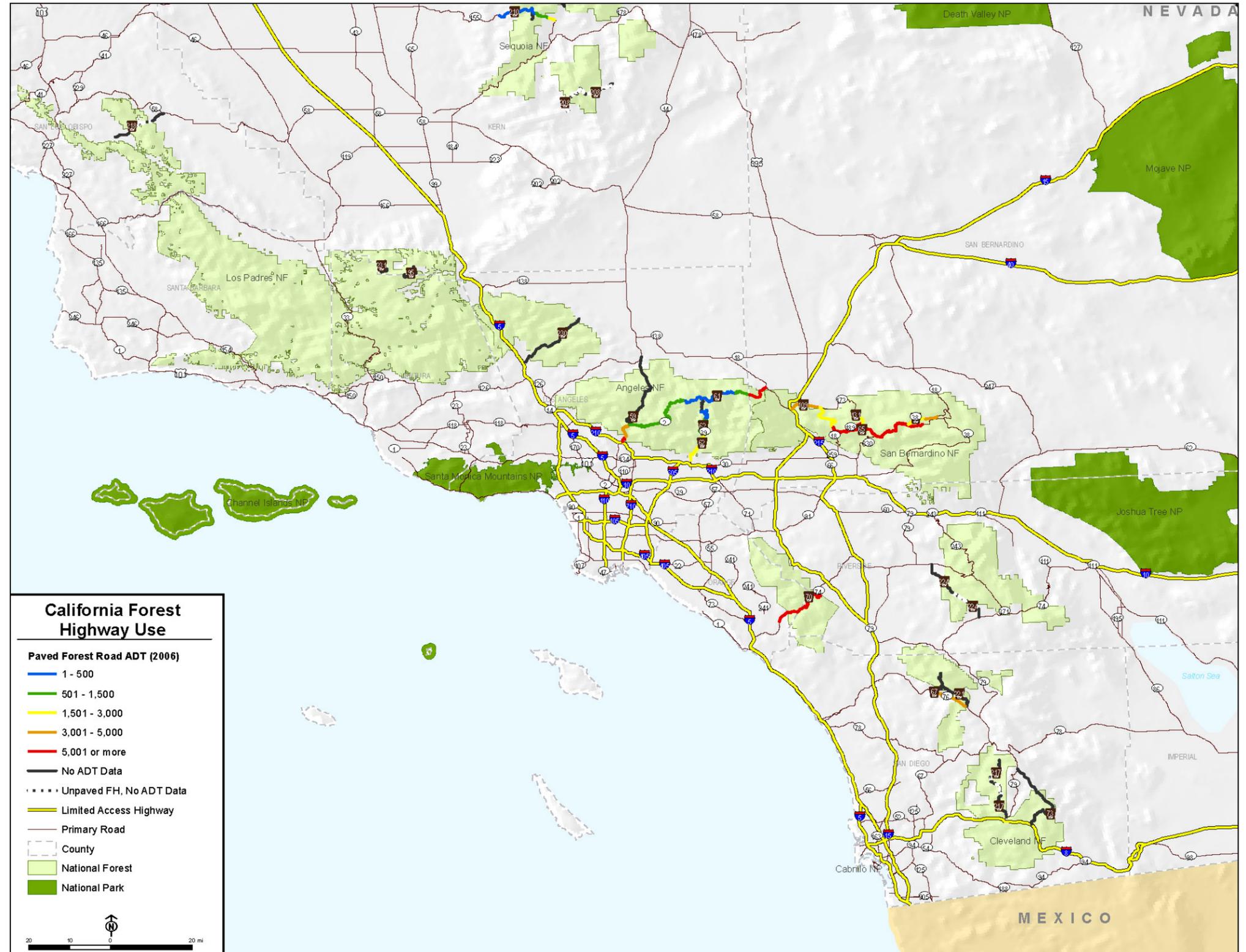


Figure 13
California Scenic Byways

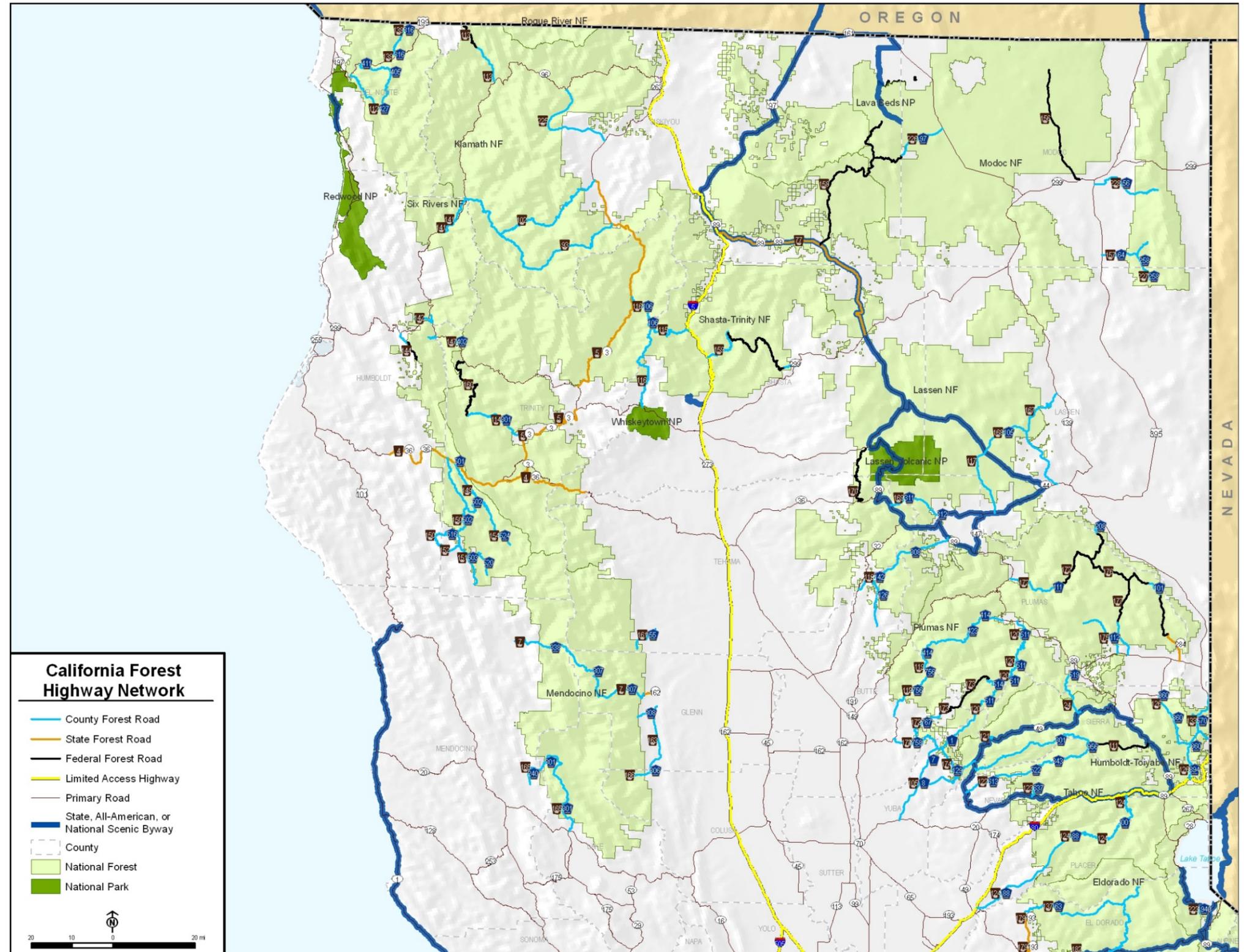


Figure 14
California Scenic Byways

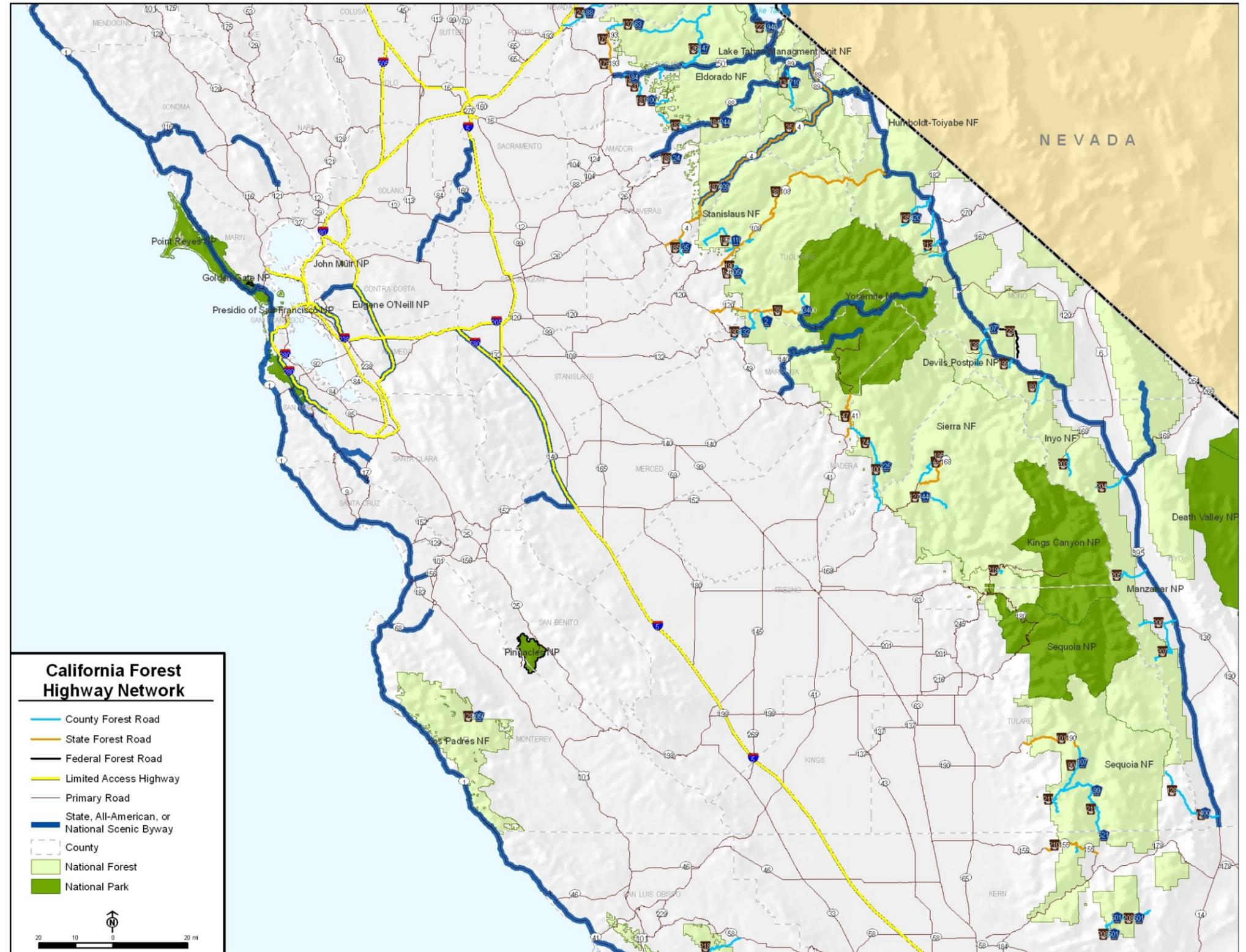


Figure 15
California Scenic Byways



3.2 California National Forest Trends

The population of California has increased 10 percent from 2000 to 2008 (U.S. Census). Generally, counties overlapping national forests have also increased in population during this period (with the exception of Sierra County, which decreased by 1 percent). Placer, Madera, Yuba, Kern, and San Bernardino counties are the top five in population growth among those with National Forests within their limits. Growth in these counties ranged from 18 to 29 percent from 2000 to 2008. Population change between 2000 and 2008 is shown in Figure 16.

According to the California Department of Finance, California's population is expected to increase by an average of 500,000 residents per year. California is anticipated to have a 29 percent population growth by 2020 to 44 million residents, and by 2030, nearly 48 million residents. While most of this growth is expected to be in metropolitan areas, rural areas adjacent to population centers may receive increased congestion and air pollution.

Visitation to California national forests has also increased in recent years. Figure 17 shows recent visitation levels and percent change between 2002 and 2006 visits. The 2006 report, *Spending Profiles for National Forest Recreation Visitors by Activity* (Stynes & White), provided the basis for the recreation discussion. Figure 18 summarizes the 2006 segment shares for recreation visits to California national forests.

The forests with the highest visitation are Inyo and Tahoe. This may be attributed to the location of the forests near tourist destinations including ski resorts. Inyo National Forest has more than 70 percent of recreational visits as non-local overnight trips. Tahoe has the second highest visitation, but the majority of the recreational trips (51 percent) are local trips. This can be attributed to the fact that the forest is located near population centers and many local residents visit the forests.

Generally, levels of timber harvesting have been steady or declining over the past decade. Between 1996 and 2006, the median annual percentage change in timber hauls was -1 percent. Figure 19 summarizes median timber harvesting for forested California counties. However, there are other resource issues that occur in and around National Forests in California, such as aggregate mining. In addition, there are livestock moves (long trailer/tractor combos) and goods movement-related activities that occur on FHs, such as deliveries to grocery stores, which, in some areas are more common than use of local road networks.

Figure 16
California Population Change by County

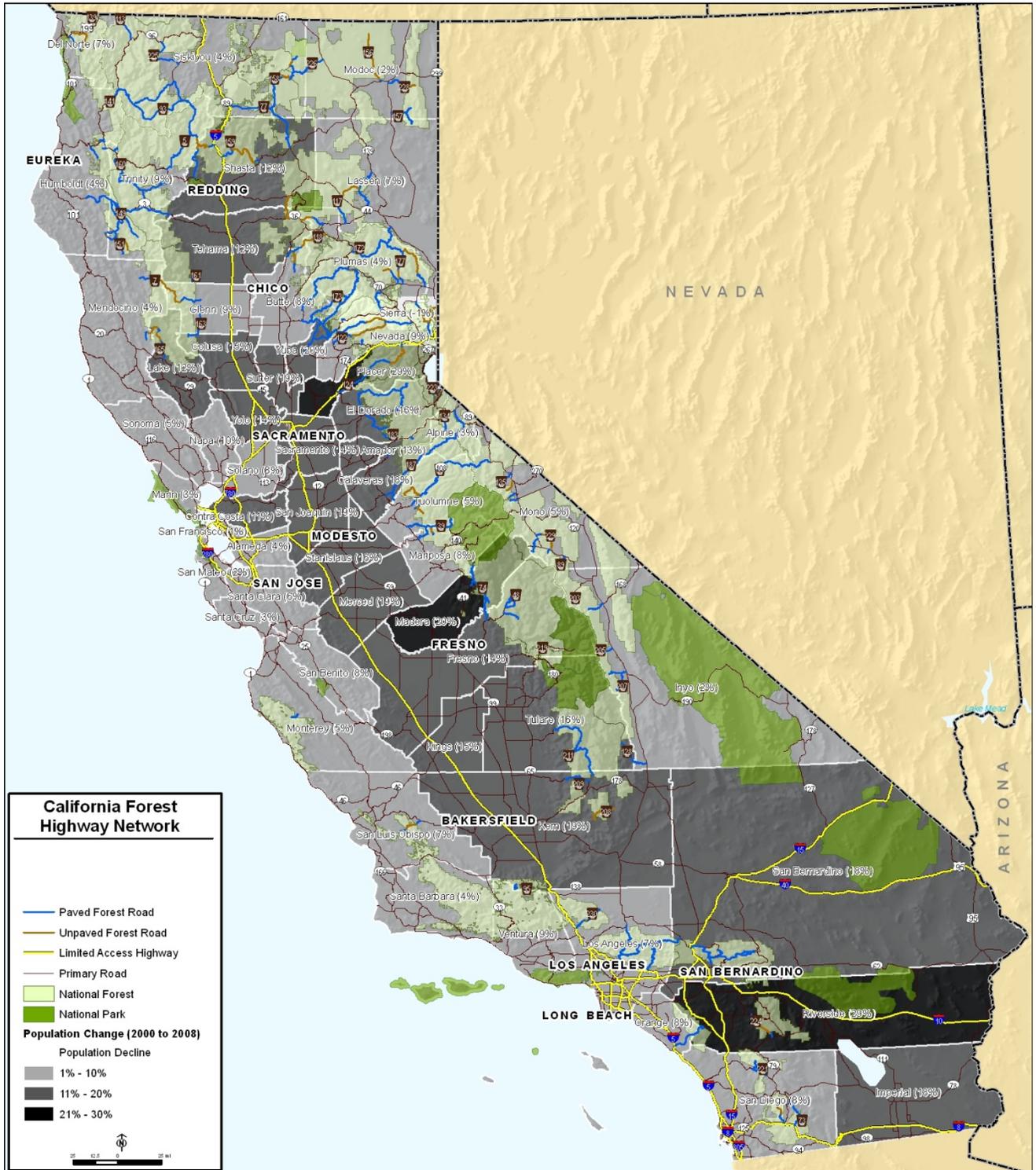
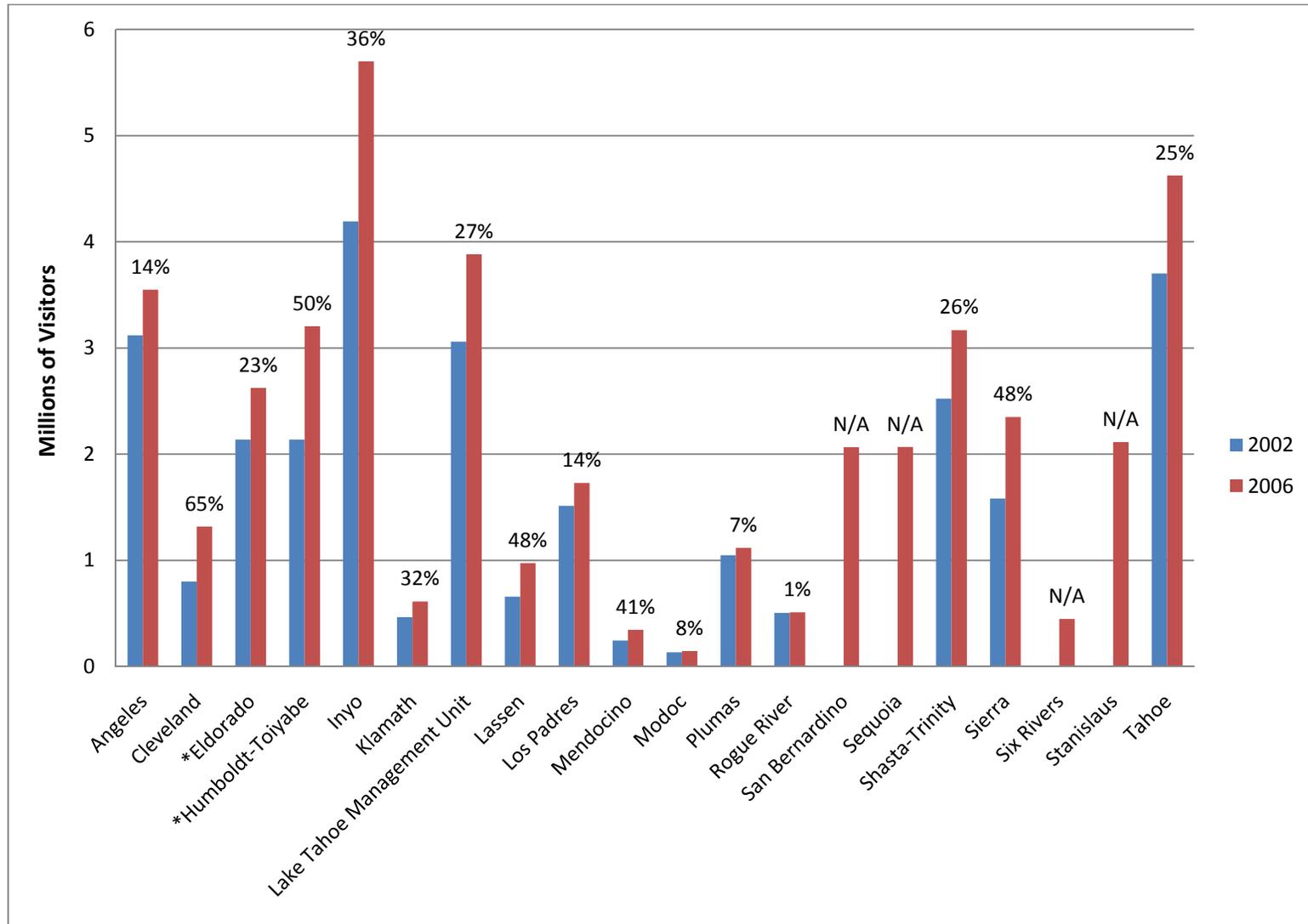


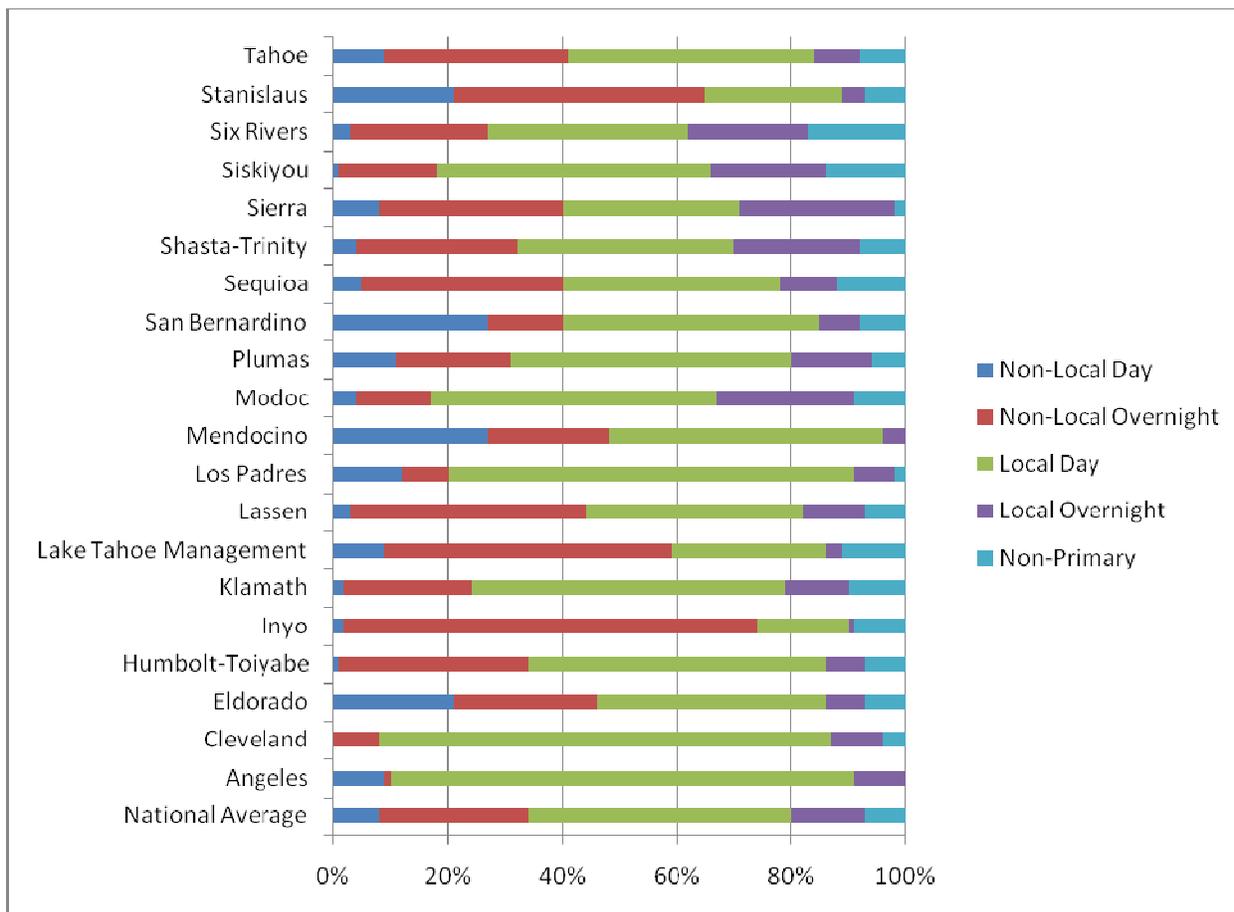
Figure 17
National Forest Visitation (2002 versus 2006)



*Baseline year for Eldorado NF is 2003; baseline year for Humboldt-Toiyabe NF is 2000
Source: USFS



Figure 18
2006 Recreational Visits



Source: USFS

Note: Local visitors were defined as living within 50 miles of the recreation site. The uses are defined as follows:

- **Non-local day trips:** Non-local residents on day trips
- **Non-local over night (OVN)-national forest:** Non-local resident staying overnight on the national forest
- **Non-local OVN:** Non-local residents staying overnight off the national forest
- **Local day trips:** Local residents on day trips
- **Local OVN-national forest:** Local residents staying overnight off the national forest
- **Local OVN:** Local residents staying overnight off the national forest
- **Non-Primary:** Visits where recreating on the national forest is not the primary trip purpose

Figure 19
California Timber Harvesting Change by County



Chapter 4: Funding and Investment Strategies

Funding for the California FH Program is anticipated to remain at current levels or experience minor increases in the next 20 years; however, with the initiatives, challenges, and changes in local funding and inflation, a funding and investment strategy is critical to the FH Program's success.

This LRTP establishes a project selection process that is designed to be objective, transparent, and capable of ranking projects that serve the program goals. As part of the proposed project selection process, projects would compete equally based on individual merit in meeting FH Program goals, regardless of project scope. Project applications that articulate how they would address several of the investment guidelines would generally compete better for funds. With limited funding available for potential projects, the California FH Program is committed to selecting projects that offer the greatest possible value to access and mobility, condition and safety, funding and economic development, and natural resource protection.

The ideal project for the California FH Program is defined as the project that:

- Provides substantial access to and within California national forests for use and enjoyment of the NFS lands and resources.
- Ensures a safe and reliable transportation network to and within California's national forests.
- Uses innovative partnerships to fund FH projects and to support economic development opportunities to the local, regional, and national level.
- Maintains leadership in protecting and enhancing the natural environment.



Lake Mary Road

This chapter summarizes the recent investment history for California FH projects, identifies reasonably expected funding through the planning horizon, and illustrates the funding gap between projected funding levels and anticipated need for FH improvements, based on current road and bridge inventory.

4.1 Recent Forest Highway Investments

Since 2003, the California FH Program has funded 13 individual construction projects totaling nearly \$100 million. These projects include a combination of 3R (repair, resurfacing, and rehabilitation), 4R (repair, resurfacing, rehabilitation, and reconstruction), bridge rehabilitation, and safety improvements for the system, with the majority of the program spend on 3R and 4R projects. Table 2 summarizes these projects. The Tri-Agency recognizes the need to provide a better balance between the types of projects in the program. Program balancing will enable the Tri-Agency to improve a wider range of needs throughout the state, while remaining consistent with the intent of the stated mission and goals of the FH Program. The project selection process, described in Chapter 5, Project Selection Process, describes the manner in which similar type projects will be compared against each other to ensure better program balancing.

Table 2
California Forest Highway Project History

Project Name	Forest Unit	County	Description	Award Amount (in millions)
Marysville Road	Plumas	Yuba	Asphalt recycling	\$3.7
Oroville-Quincy Hwy	Lassen	Butte	Grading, drainage, mechanically stabilized earth (MSE) wall, aggregate base, superpave asphalt concrete, guardrail	\$6.9
Mad River Road	Shasta-Trinity	Trinity	Grading, drainage, bridge, structural fills, drainage	\$11.4
Cecilville-Callahan	Klamath	Siskiyou	Asphalt surfacing, ditch and shoulder rehabilitation	\$4.3
Quincy-LaPorte Road	Plumas	Plumas, Sierra	Grading, drainage, base and hot asphalt concrete pavement	\$3.9
Gold Lake Road	Tahoe	Sierra	Grading, drainage, pavement cold recycle and overlay with hot asphalt concrete pavement	\$5.1
Cecilville-Callahan	Klamath	Siskiyou	Asphalt surfacing, ditch and shoulder rehabilitation	\$5.3
Oroville-Quincy Hwy	Lassen	Butte	Reconstruction, grading, drainage, MSE wall, aggregate base, superpave asphalt concrete, guardrail	\$15.5
Mad River Road	Shasta-Trinity	Trinity	Landslide repair	\$2.0
Lake Mary Road	Inyo	Mono	Pulverization, asphalt pavement, retaining walls, drainage, embankment reconstruction	\$4.6
Trinity Mountain Road	Shasta-Trinity	Trinity	Asphalt surfacing, shoulder and culverts rehabilitation	\$4.3
Hyampom Road	Shasta-Trinity	Trinity	Grading, drainage and asphalt surfacing	\$17.0
South Fork Smith River Road	Six Rivers	Del Norte	Grading, drainage, aggregate base, asphalt pavement, MSE walls, soil nail walls, and bridge construction	\$13.9
TOTAL				\$97.8

4.2 Funding Assumptions

Funding for the California FH Program may change with the authorization of new transportation legislation. The annual allocation may remain at current levels or may experience minor increases in the next 20 years. With the initiatives, challenges, and changes in local funding and inflation, a funding and investment strategy is critical to the program's success through the planning horizon.

In fiscal year 2009, the California FH program was allocated approximately \$20.7 million through the Federal Lands Highway Program, which was the maximum allocation under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Because it is unknown at this time how much the next authorization will allocate to the California FH program, two financial scenarios were developed to illustrate the gap between the needs of the network and the available funding. As shown in Table 3, the two scenarios include one that assumes the current fiscal year allocation of \$20.7 million over the next 20 years, and another assuming a 20 percent increase in current funding over the 20-year period, beginning in fiscal year 2011. It is understood that the next authorization may not match either one of these scenarios; however, these scenarios illustrate methodology that will be used in analyzing the needs versus the available funding.

Table 3
Anticipated Funding Scenarios through the Horizon Year (2030)

Forecast Scenario	Annual Allocation (in millions)	20-Year Estimate (in millions)
Fiscal Year 09 Estimate	\$20.7	\$414
20 Percent Increase	\$24.8	\$492

4.3 Funding Needs For Stated Goals

Meeting the stated goals and objectives of the FH Program will require wise decisions regarding the program's investment strategy. In order to achieve the goal of maintaining access to and within the national forest by maintaining and improving the condition of the transportation facilities, funding level expectations must be established. For illustration purposes, one possible strategy used to achieve this goal would be to base project programming and prioritization decisions on the worst condition roads and bridges.



Mad River Road

This strategy analyzed the funding that would be needed to improve portions of the FH network that are in less than good condition. Based on current road condition data, 2,423 out of a total of 2,818 miles of the roads with condition data in the California FH system are rated in fair or worse condition. Therefore, this analysis assumes that some level of improvement can be made to about 75 percent of the road segments in the system. Table 4 summarizes the funding required to improve the worst 25 percent (\$907 million), 50 percent (\$1.27 billion), and 75 percent (\$1.56 billion) of the rated roads in the California FH system, based on

an estimated fiscal year 2009 improvement cost per mile.

Table 4
Estimated Funding Required to Improve the
California Forest Highway Road Network

Rated Roads	Total Miles	Mileage Covered By Improvement	Percentage	Estimated Improvement Cost/Mile	Cost to Improve
Worst 25%	2817.91	704.48	25%		\$ 906,982,500
Failed	504.83	504.83	100.00%	\$1,500,000	\$ 757,245,000
Poor	473.25	199.65	42.19%	\$750,000	\$ 149,737,500
Worst 50%	2817.91	1408.96	50.00%		\$1,273,762,500
Failed	504.83	504.83	100.00%	\$1,500,000	\$757,245,000
Poor	473.25	473.25	100.00%	\$750,000	\$354,937,500
Fair	1445.97	430.88	29.80%	\$375,000	\$161,580,000
Worst 75%	2817.91	2,113.43	75.00%		\$ 1,537,938,750
Failed	504.83	504.83	100.00%	\$1,500,000	\$ 757,245,000
Poor	473.25	473.25	100.00%	\$750,000	\$ 354,937,500
Fair	1445.97	1,135.35	78.52%	\$375,000	\$ 425,756,250

A similar analysis was conducted for improving the FH bridges. Table 5 summarizes the fiscal year 2009 estimated cost for improving bridges throughout the system. As shown in the table, it would cost nearly \$55 million to improve the worst 25 percent of bridges in the FH network.

Table 5
Estimated Funding Required to Improve California Forest Highway Bridges

Rated Bridges	Total Number of Rated Bridges	Bridges Covered by Improvement	Total Bridge Square Feet	Estimated Improvement Cost per Square Foot	Cost To Improve
Worst 25%	279	70	1.21%		\$ 54,941,701
Failed	11	11	100.00%	\$250	\$ 8,239,478
Poor	10	10	100.00%	\$250	\$ 4,466,853
Fair	40	40	100.00%	\$250	\$ 25,788,220
Good	218	9	4.13%	\$250	\$ 16,447,151

4.4 Gap Analysis

A gap analysis was performed to illustrate the disparity between funds needed to make wholesale improvements in the FH system and what funding from known sources is likely to be available to make these improvements under either of the two funding scenarios shown in Table 3. Under the Fiscal Year 2009 funding scenario, the California FH Program will see a \$548 million funding gap over the next 20 years to improve even the worst 25 percent of the system. Under the 20 Percent Increase funding scenario, these same improvements would result in a \$470 million

funding gap. Additional improvements would result in significant shortages. Table 6 summarizes the anticipated funding gaps under the two different scenarios.

Table 6
Anticipated Funding Gap through Planning Horizon Year (2030)

Improvement Level	Estimated Improvement Cost (in millions)*	FY '09 Scenario \$414M (in millions)	20% Increase Scenario \$492M (in millions)
Worst 25%	(\$ 961.9)	(\$ 547.9)	(\$ 469.9)
Worst 50%	(\$1,328.7)	(\$ 914.7)	(\$ 836.7)
Worst 75%	(\$1,592.9)	(\$1,178.9)	(\$1,100.9)

4.5 Additional Funding/Partnering Opportunities

In addition to the funding provided through the Federal Lands Highway Program, other sources have been used for transportation improvements in past years through partnering with state and local agencies. Much of the federal funding that may be applied to FHs is available at the state and local level, which is why partnering is critical to addressing the recognized funding gap. The following funding categories address specific conditions or factors relevant to a particular project:

- Federal sources
- State sources
- Local sources

Federal Funding

SAFETEA-LU provides \$193.2 billion for highway transportation improvements. This funding is administered to states based on a formula, and is administered through the state departments of transportation. This funding focuses on transportation issues of national significance, while giving state and local transportation decision makers more flexibility in solving transportation problems. A large portion of the past federal funding has been through the Surface Transportation Program. Additional federal funding opportunities have included the Transportation Enhancements Program, High Priority Project Program, the Public Lands Highway – Discretionary Program, the Sarbanes Transit in Parks Program, and the National Scenic Byways Program. The following discussions provide additional information on these programs. Additional funding programs may be relevant and available when partnering with other Federal agencies, such as the Department of Defense, U.S. Army Corps of Engineers, or the Bureau of Indian Affairs.

Transportation Enhancements

Transportation enhancement activities offer funding opportunities to help expand transportation choices and enhance the transportation experience through 12 eligible transportation enhancement activities related to surface transportation, including pedestrian and bicycle infrastructure and safety programs, scenic and historic highway programs, landscaping and scenic beautification, historic preservation, and environmental mitigation. Transportation enhancement projects must relate to surface transportation and

must qualify under one or more of the 12 eligible categories, including bicycle and pedestrian facilities, landscaping and scenic beautification, and environmental mitigation.

High Priority Project Program

The High Priority Projects Program provides designated funding for specific projects identified in SAFETEA-LU. A total of 5,091 projects are identified, each with a specified amount of funding over the 5 years of the transportation legislation. This program can provide 80 percent of total project cost. The 20-percent match must come from non-federal sources. Federal land management agencies may provide the non-high priority projects' cost for projects on federal or Indian lands using Federal Lands Highway Program and/or federal land management agency appropriated funds.

Public Lands Highway – Discretionary Program

Public Lands Highway – Discretionary Program funds are available for transportation planning, research, engineering, and construction of highways, roads, parkways, and transit facilities within federal public lands. These funds are also available for operation and maintenance of transit facilities located on federal public lands. Funding is provided for projects designated by Congress. Certain projects not designated by Congress may also be eligible. Only state departments of transportation can submit candidate projects for this program. Eligible projects may include:

- Transportation planning for tourism and recreational travel, including National Forest Scenic Byways, Bureau of Land Management Back Country Byways, National Trail System, and similar federal programs
- Adjacent vehicle parking areas
- Interpretive signs
- Acquisition of scenic easements and scenic or historic sites
- Provision for pedestrians and bicycles

Sarbanes Transit in Parks Program

The Sarbanes Transit in Parks Program is administered by the Federal Transit Administration in conjunction with the Department of the Interior and USFS. It is a competitive grant program open to the National Wildlife Refuge System, the National Park Service, Bureau of Land Management, Bureau of Reclamation, and USFS. The program funds capital and planning expenses for alternative transportation systems such as shuttle buses and bicycle trails. The goals of the program are to conserve natural, historical, and cultural resources; reduce congestion and pollution; improve visitor mobility and accessibility; enhance visitor experience; and ensure access to all, including persons with disabilities. In addition, 10 percent of the annual allocation is available for technical assistance in alternative transportation planning where project proposals are not already well-developed. The total allocation for the Alternative Transportation for Parks and Public Lands program has been \$20 to \$27 million each year.

National Scenic Byways Program

The National Scenic Byways Program is funded through FHWA to help recognize, preserve, and enhance designated roads throughout the U.S. Designation is awarded to certain roads based on one or more archeological, cultural, historic, natural, recreational, and scenic qualities. SAFETEA-LU allocated \$175 million in funding over six years for

byways-related projects. FHWA awards funds competitively each year covering 80 percent of project cost, with the requirement that the remaining 20 percent be matched by local, state, other federal or in-kind means.

State Funding

California's STIP is a multi-year capital improvement program of transportation projects both on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources. The STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission adoption of the fund estimate in August (odd years).



CA FH 93

Local Funding

California's Regional TIP consists of a capital listing of all transportation projects proposed over a six-year period for each transportation planning region. County Transportation Commissions have the responsibility under California law of proposing county projects. FHs under county jurisdiction may fall into this program. Other local sources include local funds or in-kind donations such as right-of-way donation, utility relocation, and/or traffic control as part of the project implementation.

Chapter 5: Project Selection Process

Traditionally, the FH Program project selection has been a subjective process, conducted by the Tri-Agency partners during its annual programming meetings. This LRTP establishes a formalized project selection process, which is achieved through issuing a call for projects using a standardized project application. The Tri-Agency will evaluate completed applications based on how well each proposed project meets agreed upon goals, objectives, and selection criteria. The result of project selection is a list of prioritized projects that can be brought before the Tri-Agency partners for informed discussion and funding approval for inclusion in the FH Program and advancement into project development. This process is intended to be used as a guide for programming future projects. The Tri-Agency may alter the process as needed to be responsive to emergency needs, changes in the funding allocations, and other urgent programming needs.

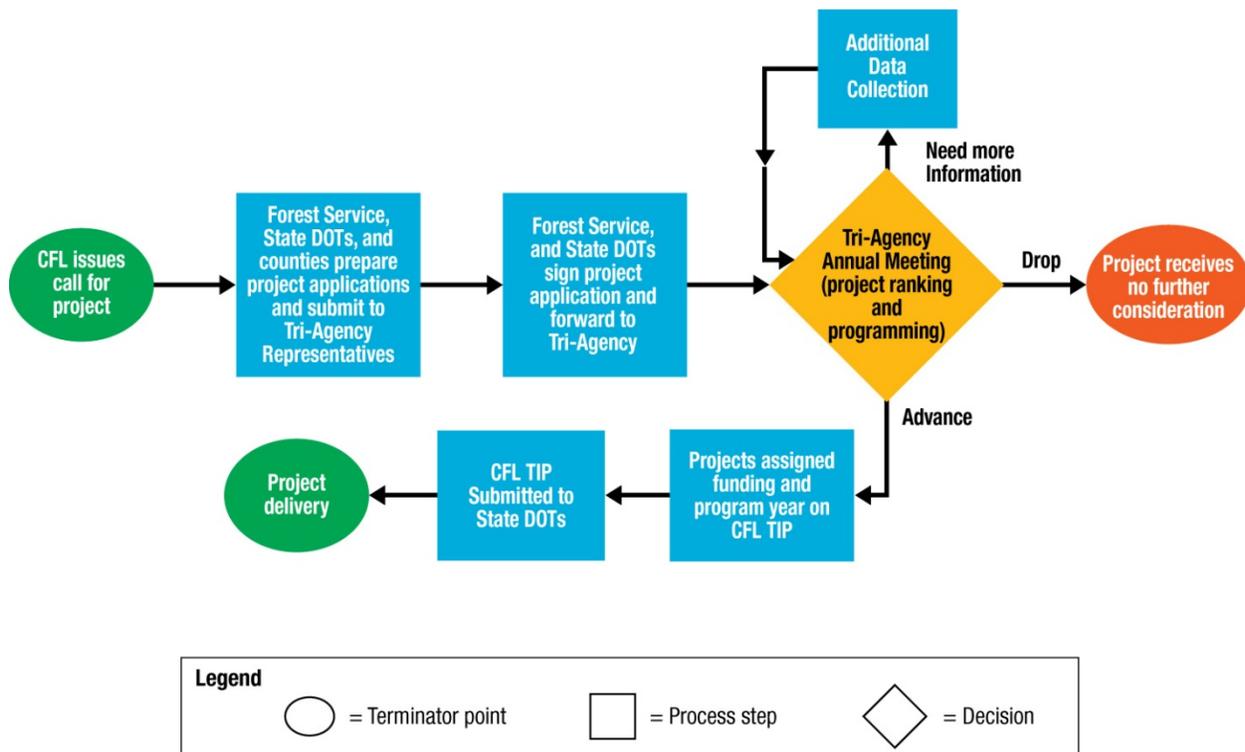
5.1 Forest Highway Call Process

On an annual basis, the Tri-Agency will determine if a call is needed to generate projects for the FH Program. In some instances, there may be some variance from this schedule if, for example, larger corridors have been previously programmed for construction over a number of years. The process consists of the following steps and is shown in Figure 20.

- Call for Projects – USFS, Caltrans, and/or counties submit applications to the Tri-Agency.
- Project Selection – Tri-Agency ranks project proposals and selects projects for programming.
- Programming – Tri-Agency includes projects in the 7-Year FH Program, assigns a program year and program amount, and then projects are added to the STIP.

The following sections describe each of these steps in more detail.

Figure 20
Project Call and Selection Process



5.1.1 Call for Projects

The purpose of the call process is to solicit potential projects in a transparent and unbiased fashion. Potential projects must be located on a designated FH. However, it is not necessary to establish legal jurisdiction in the form of actual easements or recordable documents for a road to have designation as a forest highway. A forest development road may have the designation of a FH, provided that the Forest Service assures the FHWA that a State or local government agency will assume jurisdiction and maintenance responsibility upon completion of improvements. The following steps discuss the call process and project applications in more detail.

Step 1: CFLHD issues call for project

Each local USFS office, Caltrans, and county with a FH will receive the call packet. The call packets will be made available electronically and will have instructions on how to complete the application. The call packet will also include the details on the goals of the FH program that are used to score each project. A complete call packet example is included in Appendix G.

Step 2: USFS, State DOTs, and counties prepare project applications and submit to Tri-Agency Representatives

Once the USFS, Caltrans, and counties receive their packets, it is their responsibility to complete the project applications to the best of their ability. It is the responsibility of the entity proposing a project to supply the necessary information to complete the project application. It is understood that data may not be available for all of the project application questions, but the

agency may use anecdotal information as a substitute. Any projects initiated by the county must have the project application submitted through either Caltrans or USFS to certify that the application is complete.

Step 3: USFS, and State DOTs sign project application and forward to Tri-Agency

After the USFS and Caltrans complete their project applications and review applications initiated by counties for completeness, they submit all project applications to CFLHD. CFLHD compiles all project applications and distributes to members of the Tri-Agency for their review.

5.1.2 Project Selection

Once project applications and all materials are received, the Tri-Agency partners will perform a review and independent ranking of projects based upon established selection criteria.

23 CFR §660 established a list of seven criteria (listed in Table 1) for the Tri-Agency to jointly select the projects that will be included in the FH Program. As discussed in Chapter 2, Agency and Planning Coordination, these criteria relate directly to the goals and objectives used in this LRTP. While these criteria are presented in the national regulations, the Tri-Agency has latitude to apply more weight to one or more criteria, and to develop additional guidance for the types of projects that will rank higher. Once the Tri-Agency drafted these selection criteria and weightings, a second newsletter was sent to local USFS and county offices for their input. These comments were incorporated into the scoring criteria.

As this is a 20-year long-range planning document, the needs of the system may change during this extended time. To address any changes in needs, the Tri-Agency may establish, through cooperation with the counties and USFS office, a varied weighting scheme or perhaps a set aside portion of the funding dollars to address these issues.

Consistent with the objectives developed in Chapter 1, Introduction, specific criteria were identified that will provide a measure of how well a particular project meets the FH Program's goals. Total points assigned to each goal category are a function of the relative importance that the Tri-Agency places on achieving a particular goal category relative to the mission of the FH Program. FH transportation goals and selection criteria are summarized in Table 7.

After meetings with Tri-Agency partners and comments received from counties and local USFS offices, it was determined that the Access and Mobility goal was the most important with regard to project selection. Therefore, the highest number of points was assigned to this goal, followed by Funding and Economic Development and Natural Resource Protection. Once the points for the remaining goals were assigned, points were assigned to each performance measure based on the importance of the measure to partnering agencies.

Table 7
Forest Highway Program Transportation Goals and Selection Criteria
Used for Project Ranking

Goals/Project Selection Criteria	Score
Access and Mobility	30
• Type and amount of NFS accessed	
• Average daily traffic on FH	
• Overall improvement of the FH network	
• Linkages to alternate modes	
Condition and Safety	20
• Anecdotal safety data	
• Road surface/bridge condition	
Funding and Economic Development	25
• Support of economic development	
• Percent of leveraged funds	
• Decrease in user and/or maintenance cost	
• Degree of support anticipated	
Natural Resource Protection	25
• Improvement to health of the National Forest System Lands	
• Level of conflict with environmentally sensitive resources	
• Level of coordination required	
• Context sensitive solutions and/or innovative design and construction	

Step 4: Tri-Agency Annual Meeting (project ranking and programming)

A planning work session is then scheduled for the Tri-Agency to discuss the merits of each project proposal based on the established weighted criteria. Depending on the outcome of discussion, a project may proceed in one of three ways:

- Advance – Project is programmed
- Need more information – Additional information is collected before a program decision is made
- Drop – Project receives no further consideration.

Low-ranked projects or those with insufficient information may be removed from the project list at this time. Projects of greater complexity and high ranking may require additional information before a programming decision can be made. Top ranked projects are programmed. In extreme cases, situations may arise that require action be taken to address urgent and immediate needs within the FH system. When such unanticipated acts of nature occur, the Tri-Agency retains the authority to re-prioritize and re-allocate funds to projects that must be completed to address safety concerns or immediate risks of catastrophic failure.

Each member of the Tri-Agency scores projects based on the above selection criteria. Once each of the projects is scored, each member of the Tri-Agency must rank the projects depending on the scope. For example, small safety projects will be ranked among other small safety projects, large reconstruction projects will be ranked among other large reconstruction projects, and so

forth. This is done because the overall program has \$20.7 million per year and programming will have to be flexible through a mix of a few large reconstruction projects, bridge replacements, or spot improvements.

Any projects that needed additional information prior to being programmed will have it collected during this step. This time will also be used for site visits to recommended projects that have major rehabilitation, reconstruction, or new construction. The site visit will include a road safety audit.

5.1.3 Programming

The efforts of this process culminate in a recommended list of projects to advance to the Tri-Agency program meeting for inclusion in the 7-Year FH Program. Once the Tri-Agency has approved the project list and prioritization, each project will advance to Step 5.

Step 5: Projects assigned funding and program year on CFLHD TIP

Each approved project is assigned a program year and program amount, based on funding availability and other programming considerations. As mentioned previously, there are only \$20.7 million per year, and programming will need to be flexible by having a mix of projects with different scales of scope.

Step 6: CFLHD TIP submitted to Caltrans

After funding and program years are assigned, the list of projects is sent to Caltrans for inclusion in the STIP.

Step 7: Project delivery

The final step for each project is project delivery. CFLHD prepares engineering drawing, constructs the project, and turns it over to the agency with jurisdiction.

5.2 *Unconstrained Program of Projects*

Upon finalization of this LRTP, the first call for projects under this new plan will go out to forests, counties, and the state. All applications will then go through the project selection process outlined in this chapter. Following the program meeting, the projects identified for programming will be added to the unconstrained list of projects and updated following each call. This list will be included in future updates to the LRTP once the first call is issued and projects are selected. The current 7-year FH Program list of funded projects is provided in Appendix H, and it is important to note that currently programmed project obligations will be kept.

Chapter 6: Recommendations for Future Plan Activities

This FH LRTP establishes a formalized project selection process, which is achieved through issuing a call for projects, establishing project application materials, and using agreed upon goals, objectives, and selection criteria to evaluate and rank projects. The result of project selection is a list of prioritized projects that can be brought before the Tri-Agency partners for informed discussion and funding approval for inclusion in the FH Program and advancement into project development. Several action items have been identified during the development of the California LRTP. These items are summarized in Table 8.

Table 8
California LRTP Action Items

No.	Action Item	Description
1	Improve data collection and monitoring	<p>In addition to the RIP, additional data, such as average daily traffic and crash data, should be collected to monitor all FHs, specifically on county and USFS routes where current data is not available.</p> <p>Data for resource extraction should also be collected. Typically, vehicles used for resource extraction are larger and heavier vehicles that cause more damage to the roadway. Average daily traffic and crash data are also important to determine the amount of traffic using a FH and the associated crash rates with that FH. The data gathered during these monitoring efforts may then be used in future LRTP updates to change how projects are ranked, or how project selection is determined based on the needs and performance of the FH network.</p>
2	Set performance objectives for FH program	The Tri-Agency should create performance measures and quantifiable targets to assist in ranking and selecting projects. Targets for each goal area should be established in 3-5 year strategic plans. The partner agencies will use those targets to evaluate how well the California FH Program is achieving the goals.
3	Complete system-wide designation/de-designation exercise	The USFS and Caltrans will take the lead on completing the designation exercise. USFS will draft a letter and survey to send to the forest supervisors and Caltrans representatives to determine if a highway, or portion of a highway, falls into one of three categories: definitely a FH, maybe not a FH, and potential new FH. Local and/or county government entities who wish to contribute input to this process must do so through either their Forest Ranger District or Caltrans District. USFS and Caltrans will take the lead on compiling the list and prepare it for the program meeting to discuss with Tri-Agency partners. The Tri-Agency partners can then discuss the list to determine what actions should be taken for each category. These are initial steps that will be implemented in the short term to ensure that the current FH network continues to meet the intent of the FH program.

Table 8
California LRTP Action Items

No.	Action Item	Description
4	Update LRTP every five years	This LRTP is intended to be a living document that will require some changes over time and will need to be updated in order to reflect changes in project selections, goals and objectives, or any other items that may affect the project selection process. It is anticipated that the update cycle will be every five years. The LRTP updates will take into account the current FH network, existing conditions based on road inventory data, and the list of programmed projects.
5	After first project call, evaluate project selection process	Once the initial call for projects is complete, the Tri-Agency should evaluate the project selection process. Some things to consider would be the number of project applications received, the types of projects, agencies submitting projects, location of projects, etc. These factors will help determine if there needs to be additional outreach to agencies, more description on the types of projects that are eligible, etc.
6	Consider a safety set-aside in project programming	Projects would typically cost less than \$500,000 and could consist of low cost-high return projects such as signing and delineation at crash prone locations. Part of this process could also include completing road safety audits or assessments on an on-going basis as issues arise.

APPENDIX A

Appendix A: Tri-Agency Roles

FH planning requires the involvement of federal, state, and local governments to ensure suitable outcomes for all organizations involved. The three primary agencies involved in FH planning (Caltrans, USFS, and CFLHD) have very specific roles and responsibilities as part of the planning and implementation of FH projects as listed in the following table. California counties also play a vital role in the FH Program by assuming the role of operator and maintainer of many FHs following project construction. In many cases, counties obtain right-of-way and handle utility relocations for projects on their roads, as part of their funding contribution. Typically, counties work through Caltrans during most of the project planning and design. Caltrans represents all counties as part of their role in the Tri-Agency.

Agency Roles in Forest Highway Project Development

Role/Responsibility	Caltrans/County	USFS	CFLHD
Proposes routes for FH designation	X	X	
Approves proposed routes for FH designation			X
Coordinates with local governments on proposed FH routes and projects	X	X	
Proposes projects for the FH Program	X	X	
Selects/approves projects for FH program	X	X	X
Enters in project agreement	X	X	X
Concurs with project plans and estimates*	X	X	
Inspects and approves final construction	X	X	X
Contributes cooperative funding for projects	X	X	
Obtains right of way and assumes maintenance responsibility	X		
Administers FH program funds			X
Advertises, awards, and administers construction contract			X

*CFLHD develops project plans and estimates

APPENDIX B

Appendix B: California Forest Highway Program Background

Forest Highway History

In 1891, Congress authorized the creation of Forest Reserves, now called National Forests. Forests were to be conserved to assure a permanent national timber supply; to preserve scenic and wilderness areas for recreational use by the public; and to safeguard the steady flow of streams that supplied water for domestic, farm, and industrial use.

Federal participation in forest road construction began when Congress passed the Federal-Aid Road Act in 1916. This act appropriated \$10 million (\$1 million per year for 10 years) for the "[...] survey, construction, and maintenance of roads and trails within or only partly within the national forests when necessary for the use and development of resources upon which communities within and adjacent to the national forests are dependent."

It was not until the passage of the Federal Highway Act of 1921 that two types of forest roads were defined:

- Forest Development Roads - those forest roads that are needed primarily for management of the national forests
- Forest Highways (FH) - those forest roads which must serve the national forests and also serve the communities within and adjacent to the national forests

During the first 50+ years of the program, most of the funds were expended on routes which were of primary importance to the States, Counties, or communities within or adjacent to the National Forests. Most of those routes were of statewide importance and were then, or later became, State Primary Highways.

The 1978 Surface Transportation Assistance Act changed the direction of the Forest Highway Program by redefining Forest Roads, Forest Development Roads, and Forest Highways:

- "The term "forest road or trail" means a road or trail wholly or partly within, or adjacent to, and serving the National Forest system and which is necessary for the protection, administration, and utilization of the National Forest system and the use and development of its resources.
- "The term "forest development road and trail" means a forest road or trail under the jurisdiction of the Forest Service."
- "The term "Forest Highway" means a forest road under the jurisdiction of, and maintained by, a public authority, and open to public travel."

A primary effect of these new definitions was increased Forest Highway Program emphasis on local roads with less emphasis on State Highways. This was possible because requirements that such routes be "[...] of primary importance to the States, Counties, or communities [...], and on the Federal-Aid System" had been eliminated.

Although many miles of roads have met the requirements of California Forest Highway designation, funding for their improvement has remained in short supply. Congress had authorized an amount of \$33 million for each year from 1955 to 1982. These funds were made available to Federal Highway Administration (FHWA) for expenditure in the various States according to an apportionment formula based on the area and value of the national forests in each State.

The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) combined the Forest Highway Program and Public Lands under the Public Lands Highway Program. Sixty-six (66) percent of these Public Lands funds were allocated for use on Forest Highways using the same formula as applied in FY 1987 to FY 1991. This formula used the Area/Value formula for 66 percent of the funding and the FHWA/USFS relative needs formula for the remaining 34 percent.

The 1998 TEA-21 did not alter any of the allocation formulas for 66 percent of the Public Lands funds but did increase the amount of funding for Forest Highways. The Forest Highway funds available are as follows:

Year	Total Forest Highway Funds
1998	\$129.4 Million
1999	\$162.4 Million
2000	\$162.4 Million
2001	\$162.4 Million
2002	\$162.4 Million
2003	\$162.4 Million
2004	\$162.4 Million
2005	\$171.6 Million
2006	\$184.8 Million
2007	\$184.8 Million
2008	\$191.4 Million
2009	\$198.0 Million



Allocations for the California Forest Highway Program, from 2002 to 2009, were as follows:

Year	California Forest Highway Allocations
2002	\$18.5 Million
2003	\$18.5 Million
2004	\$18.5 Million
2005	\$18.5 Million
2006	\$18.5 Million
2007	\$19.2 Million
2008	\$19.9 Million
2009	\$20.7 Million
<i>Annual Average 2002-2009</i>	<i>\$19.0 Million</i>

TEA-21 also legislated the following program changes:

- Allowed Public Lands funds to be used for the State/local share for Federal-Aid Highway funded projects.
- Reduced the administrative takedown to 1.5 percent.
- Placed an annual limitation on Public Land's funds.
- Provided full obligation limitation for future fiscal year carryover funds.
- Authorized funds, which exceed the obligation limitation for FY 1998 to 2003, to be distributed to the States as Surface Transportation Program funds. These funds lose their funding designation and are not available for obligation by Federal Land Management agencies.

Because of the legislative and regulatory changes over the past decade, there is now more county involvement in the program as the forest needs generally are on those local roads connecting the Forest to the main State highways. With these changes, the objective of the Forest Highway Program has been clarified, i.e., to construct or improve roads serving the national forest and its resources and which connect the national forest to the main State transportation network.

Forest Highway Designation

Forest Highways are designated as such if they meet certain criteria. The list of designated forest highways is not fixed. Routes can be added or removed at any time. Forest Highway route designation may be requested by Caltrans, the USFS or by a County through the State. Routes are designated by Central Federal Lands Highway (CFL) Division Engineer with concurrence of the USFS and State. Routes do not have to be designated before a project can be proposed, but a route must be designated before Forest Highway funds are expended on it.

Route designation proposals must contain information on the criteria listed below and must be coordinated with the local USFS representatives who can provide information on USFS use of the proposed route. USFS support for the proposed designation is very important.

The Forest Service Manual Chapter 7700

7741.1 - Route Designation: Forest highways are a special classification of forest roads. They are specifically designated State or local government roads that meet the criteria listed in 23 CFR 660.105. The designation of forest highways is not intended to form a "system" of roads. Instead, the purpose of the designation is to identify State and local government roads that qualify for construction and reconstruction funding under the forest highway program.

The challenge is that the Forest Highway Routes in California are not by themselves a “system” of roads, but are part of state and county road systems. Many roads in the State of California will meet the definition of a Forest Highway, the key is what roads need all or part of the Forest Highway Program to truly meet the needs of accessing the National Forests.

To be designated as a Forest Highway, a route must:

1. Be wholly or partially within, or adjacent to, and serving the National Forest System (NFS) (23 USC §101).
2. Be necessary for the protection, administration, and utilization of the NFS (23 USC §101).
3. Be necessary for the use and development of NFS resources (23 USC §101).
4. Be under the jurisdiction of a cooperator and open to public travel (23 CFR §660.105).
5. Provide a connection between NFS resources and one of the following (23 CFR §660.105):
 - a. A safe and adequate public road
 - b. Communities
 - c. Shipping points
 - d. Markets dependent on these resources
6. Serve one of the following (23 CFR §660.105):
 - a. Local needs such as schools, mail delivery, commercial supply
 - b. Access to private property within the NFS
 - c. A preponderance of NFS generated traffic
 - d. NFS generated traffic that has a significant impact on road design or construction.



APPENDIX C

Appendix C: 23 CFR 660, Subpart A—Forest Highways

Authority:

16 USC §§1608–1610; 23 USC §§101, 202, 204, and 315; 49 CFR 1.48.

Source:

59 FR 30300, June 13, 1994, unless otherwise noted.

§660.101 Purpose.

The purpose of this subpart is to implement the Forest Highway (FH) Program which enhances local, regional, and national benefits of FHs funded under the public lands highway category of the coordinated Federal Lands Highway Program. As provided in 23 U.S.C. 202, 203, and 204, the program, developed in cooperation with State and local agencies, provides safe and adequate transportation access to and through National Forest System (NFS) lands for visitors, recreationists, resource users, and others which is not met by other transportation programs. Forest highways assist rural and community economic development and promote tourism and travel.

§660.103 Definitions.

In addition to the definitions in 23 U.S.C. 101(a), the following apply to this subpart:

Cooperator means a non-Federal public authority which has jurisdiction and maintenance responsibility for a FH.

Forest highway means a forest road under the jurisdiction of, and maintained by, a public authority and open to public travel.

Forest road means a road wholly or partly within, or adjacent to, and serving the NFS and which is necessary for the protection, administration, and utilization of the NFS and the use and development of its resources.

Jurisdiction means the legal right or authority to control, operate, regulate use of, maintain, or cause to be maintained, a transportation facility, through ownership or delegated authority. The authority to construct or maintain such a facility may be derived from fee title, easement, written authorization, or permit from a Federal agency, or some similar method.

Metropolitan Planning Organization (MPO) means that organization designated as the forum for cooperative transportation decision making pursuant to the provisions of part 450 of this title.

Metropolitan Transportation Plan means the official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan planning area.

National Forest System means lands and facilities administered by the Forest Service (FS), U.S. Department of Agriculture, as set forth in the Forest and Rangeland Renewable Resource Planning Act of 1974, as amended (16 U.S.C. 1601 note, 1600–1614).

Open to public travel means except during scheduled periods, extreme weather conditions, or emergencies, open to the general public for use with a standard passenger auto, without restrictive gates or prohibitive signs or regulations, other than for general traffic control or restrictions based on size, weight, or class of registration.

Public authority means a Federal, State, county, town, or township, Indian tribe, municipal or other local government or instrumentality with authority to finance, build, operate, or maintain toll or toll-free facilities.

Public lands highway means: (1) A forest road under the jurisdiction of and maintained by a public authority and open to public travel or (2) any highway through unappropriated or unreserved public lands, nontaxable Indian lands, or other Federal reservations under the jurisdiction of and maintained by a public authority and open to public travel.

Public road means any road or street under the jurisdiction of and maintained by a public authority and open to public travel.

Renewable resources means those elements within the scope of responsibilities and authorities of the FS as defined in the Forest and Rangeland Renewable Resource Planning Act of August 17, 1974 (88 Stat. 476) as amended by the National Forest Management Act of October 22, 1976 (90 Stat. 2949; 16 U.S.C. 1600–1614) such as recreation, wilderness, wildlife and fish, range, timber, land, water, and human and community development.

Resources means those renewable resources defined above, plus other nonrenewable resources such as minerals, oil, and gas which are included in the FS's planning and land management processes.

Statewide transportation plan means the official transportation plan that is: (1) Intermodal in scope, including bicycle and pedestrian features, (2) addresses at least a 20-year planning horizon, and (3) covers the entire State pursuant to the provisions of part 450 of this title.

§660.105 Planning and route designation.

(a) The FS will provide resource planning and related transportation information to the appropriate MPO and/or State Highway Agency (SHA) for use in developing metropolitan and statewide transportation plans pursuant to the provisions of part 450 of this title. Cooperators shall provide various planning (23 U.S.C. 134 and 135) information to the Federal Highway Administration (FHWA) for coordination with the FS.

(b) The management systems required under 23 U.S.C. 303 shall fulfill the requirement in 23 U.S.C. 204(a) regarding the establishment and implementation of pavement, bridge, and safety management systems for FHs. The results of bridge management systems and safety management systems on all FHs and results of pavement management systems for FHs on

Federal-aid highways are to be provided by the SHAs for consideration in the development of programs under §660.109 of this part. The FHWA will provide appropriate pavement management results for FHs which are not Federal-aid highways.

(c) The FHWA, in consultation with the FS, the SHA, and other cooperators where appropriate, will designate FHs.

(1) The SHA and the FS will nominate forest roads for FH designation.

(2) The SHA will represent the interests of all cooperators. All other agencies shall send their proposals for FHs to the SHA.

(d) A FH will meet the following criteria:

(1) Generally, it is under the jurisdiction of a public authority and open to public travel, or a cooperator has agreed, in writing, to assume jurisdiction of the facility and to keep the road open to public travel once improvements are made.

(2) It provides a connection between adequate and safe public roads and the resources of the NFS which are essential to the local, regional, or national economy, and/or the communities, shipping points, or markets which depend upon those resources.

(3) It serves:

(i) Traffic of which a preponderance is generated by use of the NFS and its resources; or

(ii) NFS-generated traffic volumes that have a substantial impact on roadway design and construction; or

(iii) Other local needs such as schools, mail delivery, commercial supply, and access to private property within the NFS.

§660.107 Allocations.

On October 1 of each fiscal year, the FHWA will allocate 66 percent of Public Lands Highway funds, by FS Region, for FHs using values based on relative transportation needs of the NFS, after deducting such sums as deemed necessary for the administrative requirements of the FHWA and the FS; the necessary costs of FH planning studies; and the FH share of costs for approved Federal Lands Coordinated Technology Implementation Program studies.

§660.109 Program development.

(a) The FHWA will arrange and conduct a conference with the FS and the SHA to jointly select the projects which will be included in the programs for the current fiscal year and at least the next 4 years. Projects included in each year's program will be selected considering the following criteria:

- (1) The development, utilization, protection, and administration of the NFS and its resources;
- (2) The enhancement of economic development at the local, regional, and national level, including tourism and recreational travel;
- (3) The continuity of the transportation network serving the NFS and its dependent communities;
- (4) The mobility of the users of the transportation network and the goods and services provided;
- (5) The improvement of the transportation network for economy of operation and maintenance and the safety of its users;
- (6) The protection and enhancement of the rural environment associated with the NFS and its resources; and
- (7) The results for FHs from the pavement, bridge, and safety management systems.

(b) The recommended program will be prepared and approved by the FHWA with concurrence by the FS and the SHA. Following approval, the SHA shall advise any other cooperators in the State of the projects included in the final program and shall include the approved program in the State's process for development of the Statewide Transportation Improvement Program. For projects located in metropolitan areas, the FHWA and the SHA will work with the MPO to incorporate the approved program into the MPO's Transportation Improvement Program.

§660.111 Agreements.

(a) A statewide FH agreement shall be executed among the FHWA, the FS, and each SHA. This agreement shall set forth the responsibilities of each party, including that of adherence to the applicable provisions of Federal and State statutes and regulations.

(b) The design and construction of FH projects will be administered by the FHWA unless otherwise provided for in an agreement approved under this subpart.

(c) A project agreement shall be entered into between the FHWA and the cooperator involved under one or more of the following conditions:

- (1) A cooperator's funds are to be made available for the project or any portion of the project;
- (2) Federal funds are to be made available to a cooperator for any work;

(3) Special circumstances exist which make a project agreement necessary for payment purposes or to clarify any aspect of the project; or

(4) It is necessary to document jurisdiction and maintenance responsibility.

§660.112 Project development.

(a) Projects to be administered by the FHWA or the FS will be developed in accordance with FHWA procedures for the Federal Lands Highway Program. Projects to be administered by a cooperator shall be developed in accordance with Federal-aid procedures and procedures documented in the statewide agreement.

(b) The FH projects shall be designed in accordance with part 625 of this chapter or those criteria specifically approved by the FHWA for a particular project.

§660.113 Construction.

(a) No construction shall be undertaken on any FH project until plans, specifications, and estimates have been concurred in by the cooperator(s) and the FS, and approved in accordance with procedures contained in the statewide FH agreement.

(b) The construction of FHs will be performed by the contract method, unless construction by the FHWA, the FS, or a cooperator on its own account is warranted under 23 U.S.C. 204(e).

(c) Prior to final construction acceptance by the contracting authority, the project shall be inspected by the cooperator, the FS, and the FHWA to identify and resolve any mutual concerns.

§660.115 Maintenance.

The cooperator having jurisdiction over a FH shall, upon acceptance of the project in accordance with §660.113(c), assume operation responsibilities and maintain, or cause to be maintained, any project constructed under this subpart.

§660.117 Funding, records and accounting.

(a) The Federal share of funding for eligible FH projects may be any amount up to and including 100 percent. A cooperator may participate in the cost of project development and construction, but participation shall not be required.

(b) Funds for FHs may be used for:

- (1) Planning;
- (2) Federal Lands Highway research;
- (3) Preliminary and construction engineering; and
- (4) Construction.

(c) Funds for FHs may be made available for the following transportation-related improvement purposes which are generally part of a transportation construction project:

- (1) Transportation planning for tourism and recreational travel;
- (2) Adjacent vehicular parking areas;
- (3) Interpretive signage;
- (4) Acquisition of necessary scenic easements and scenic or historic sites;
- (5) Provisions for pedestrians and bicycles;
- (6) Construction and reconstruction of roadside rest areas including sanitary and water facilities; and
- (7) Other appropriate public road facilities as approved by the FHWA.

(d) Use of FH funds for right-of-way acquisition shall be subject to specific approval by the FHWA.

(e) Cooperators which administer construction of FH projects shall maintain their FH records according to 49 CFR part 18.

(f) Funds provided to the FHWA by a cooperator should be received in advance of construction procurement unless otherwise specified in a project agreement.

APPENDIX D

Appendix D: Partner Agency Mission and Goals

Although the vision, mission, and goals were developed collaboratively between Tri-Agency partners, each agency retains vision, mission, or goals that are of unique interest to the individual agency. The interests of individual Tri-Agency partners are summarized below.

Caltrans

The mission of Caltrans is to improve mobility across California. This mission is supported through strategic goals that represent relevant topics, including safety, mobility, delivery, stewardship, and service. These goals include:

- Safety: Provide the safest transportation system 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

U.S. Forest Service

The USFS mission is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations. USFS goals include:

- Effective public service – Ensure the acquisition and use of an appropriate corporate infrastructure to enable the efficient delivery of a variety of uses.
- Multiple benefits to people – Provide a variety of uses, values, products, and services for present and future generations by managing within the capability of sustainable ecosystems.
- Ecosystem health – Promote ecosystem health and conservation using a collaborative approach to sustain the nation's forests, rangelands, and watersheds.

Federal Lands Highway

The Federal Lands Highway mission is to continually improve transportation access to and through federal and tribal lands through stewardship of Federal Land Highway programs by providing balanced, safe, and innovative roadways that blend into or enhance the existing environment, and by providing technical services to the transportation community. The goals include:

- Safety – Continually improve highway safety.
- Mobility – Continually improve access and condition of transportation.
- Productivity – Continually improve economic efficiency.
- Human and Natural Environment – Protect and enhance the natural environment and communities affected by highway transportation.

APPENDIX E

Appendix E: Forest Plan Functions

The following table summarizes the functions and limitations of National Forest Land and Resource Management Plans (Forest Plans) related to a variety of topics.

What a Forest Plan Does and Does Not Do

<i>Topic</i>	<i>The Forest Plan</i> does...	<i>The Forest Plan</i> does not...
Laws, regulations, and policies	Use guidance provided by the Forest Service Handbook, Forest Service Manual, and other federal regulations and policies to create an over-arching management plan for the National Forest.	Make law, regulations, or policy. The Revised Forest Plan is not a policy-making document; it reflects agency policy and goals.
Budget for local Forest Service operations	Consider the financial feasibility of implementing Plan goals and objectives.	Determine funding levels for the National Forest (budget allocations are determined in other ways).
Travel management	Identify what kinds of travel are suitable to particular parcels of land, based on desired future conditions (DFCs) and other designations. This can vary by season.	Make the decision to open, close, or otherwise restrict use of a specific road or trail to certain modes of travel (such as ATVs or mountain bikes). If the management objective for certain parcels changes, site-specific plans for road and trail management will have to be made separately from the Forest Plan to bring travel into compliance. Decisions about specific roads and trails are made through project-level NEPA analysis and decision documents.
Timber harvests	Identify sustainable annual yields. Identify which lands are suitable for timber harvests for various objectives, including timber production.	Identify individual areas that will be offered for sale.
Timber sales	Provide direction and standards to determine where and how sales can take place, based on goals and objectives.	Approve any site-specific timber sale.
Grazing allotments	Analyze and disclose which lands are suitable for grazing. Describe the parameters or standards grazing practice shall attain.	Make decisions about what to do with vacant allotments or allotment management plans and permit renewals.



<i>Topic</i>	<i>The Forest Plan</i> does...	<i>The Forest Plan</i> does not...
Land exchanges	Identify values and considerations to be evaluated in potential exchange of land parcels. Identify landscapes where opportunities to consolidate landownership patterns should or should not be pursued to meet DFCs and objectives.	Identify or prioritize specific parcels for exchanges. Guidance for required analyses for land exchanges is in Forest Service manuals and handbooks.
Ski areas	Identify which lands have DFCs, objectives, standards, and suitability that emphasize ski-based resorts.	Approve creation of any additional infrastructure such as lifts, runs, or snowmaking facilities.
Endangered species	Provide DFCs, objectives, and standards to ensure sustainable habitat conditions for species that have been listed for protection under the Endangered Species Act.	Decide which species will be protected under the Endangered Species Act. These decisions are made by the U.S. Fish and Wildlife Service (USFWS).
Hunting and wildlife management	Describe desired conditions, objectives, and standards for managing the habitat for many game and non-game species.	Set hunting seasons, designate areas as open or closed to hunting, or set harvest levels or hunting fees. Seasons and limits are set by California Department of Fish & Game (except for migratory birds, which are set by USFWS.)
Wilderness	Recommend to Congress those areas that are capable and suitable for designation as wilderness. Allocate land to area designations that are managed for wilderness values.	Create or designate lands as Wilderness.
Wild, scenic and recreational rivers	Identify river segments eligible for further study as wild, scenic, or recreational under the nation's Wild and Scenic Rivers Act. Allocate land to river corridors that must be managed to maintain the values that provide eligibility for wild, scenic, and/or recreational rivers.	Designate those rivers as wild, scenic, or recreational. A finding of eligibility does not automatically launch further study.
Law enforcement	Emphasize cooperative partnerships and collaborative activities with stakeholder groups, local communities, and governments.	Include directives about law enforcement, specify enforcement staffing, or budget for those operations.

Source: http://www.fs.fed.us/r2/gmug/policy/plan_rev/lwg/mtg_notes/unc_notes/10102002_plans_do_dont.sht



APPENDIX F

Shared Forest Highway and State Routes

Forest Highway	State Route	Beginning Milepost	Ending Milepost	Length (miles)	Average Daily Traffic (2006)
4	SR 36	24.0	93.4	69.4	585
5	SR 3	0.0	110.3	110.3	1,035
7	SR 162	34.0	37.8	3.8	440
35	SR 89	17.6	28.8	11.3	1,478
35	SR 4	114.3	190.5	76.2	4,933
38	SR 108	27.0	99.6	72.5	3,343
39	SR 120	63.2	95.2	32.0	4,032
47	SR 41	170.6	185.9	15.3	5,769
48	SR 168	61.2	77.4	16.1	1,350
61	SR 2	23.2	87.9	64.6	3,123
62	SR 39	26.9	56.2	29.3	785
65	SR 18	2.1	48.0	45.7	13,484
66	SR 38	49.2	59.1	9.8	2,565
67	SR 76	48.1	48.1	9.6	4,100
70	SR 74	0.0	28.2	28.1	16,129
77	SR 89	206.5	241.0	56.0	2,081
101	SR 190	32.6	56.6	24.0	No Data
109	SR 138	83.7	105.5	21.7	3,337
131	SR 173	19.2	21.8	9.3	3,160
176	SR 284	0.0	8.3	8.3	560
179	SR 193	26.5	40.9	14.4	5,231
210	SR 155	37.4	57.8	20.4	1,362

Source: FHWA, 2006



APPENDIX G

Do you have a designated
Forest Highway route under your
jurisdiction **in need of improvement?**

The California Forest Highway Tri-Agency is now accepting project applications.

The enclosed packet of materials includes the following items for your review and use in submitting a project to the California Forest Highway Tri-Agency for consideration of inclusion in the 7-Year Forest Highway Program for funding:

- Description of the Forest Highway Program Project Selection Process
- Forest Highway Project Application
- Forest Highway Program Project Selection Criteria

If you are interested or intend to submit a project application, please contact the Forest Highway Program Manager at the Central Federal Lands Highway Division of FHWA with any questions or to obtain assistance with completing your application.

Don't delay!
Project applications are due
Date xx, XXXX.



Forest Highway Project Selection Process

Background:

The Forest Highway (FH) Program was established with the passage of the Federal Highway Act of 1921. Over the history of the program, each state containing National Forests, has designated Forest Highways under the direction of the Federal Land Highway Division that provide public access to National Forests and benefit the forest, states, and local communities. Currently, there are approximately 2,974 miles of roadway in California that are designated as FHs.

Purpose:

The purpose of this process is to generate candidate projects when there is a need or opportunity in the program of a particular state. Each of the proposed candidate projects will be consistent with and/or support the vision, mission, and goals of the long range transportation plan for the Forest Highway program in the state.

Process:

Step 1: CFL issues call for project

Each local USFS office, Caltrans, and county with a FH will receive the call packet. The call packets will be made available electronically and will have instructions on how to complete the application. The call packet will also include the details on the goals of the FH program that are used to score each project. A complete call packet example is included in Appendix G.

Step 2: Forest Service, State DOTs, and counties prepare project applications and submit to Tri-Agency Representatives

Once the USFS, Caltrans, and counties receive their packets, it is their responsibility to complete the project applications to the best of their ability. It is the responsibility of the entity proposing a project to supply the necessary information to complete the project application. It is understood that data may not be available for all of the project application questions, but the agency may use anecdotal information as a substitute. Any projects initiated by the county must have the project application submitted through either Caltrans or USFS to certify that the application is complete.

Step 3: Forest Service, and State DOTs sign project application and forward to Tri-Agency

After the USFS and Caltrans complete their project applications and review applications initiated by counties for completeness, they submit all project applications to CFLHD. CFLHD compiles all project applications and distributes to members of the Tri-Agency for their review.

Step 4: Tri-Agency Annual Meeting (project ranking and programming)

A planning work session is then scheduled for the Tri-Agency to discuss the merits of each project proposal based on the established weighted criteria. Depending on the outcome of discussion, a project may proceed in one of three ways:

- Advance - Project is programmed
- Need more information - Additional information is collected before a program decision is made
- Drop - Project receives no further consideration

Forest Highway Project Selection Process

Step 5: Projects assigned funding and program year on CFL TIP

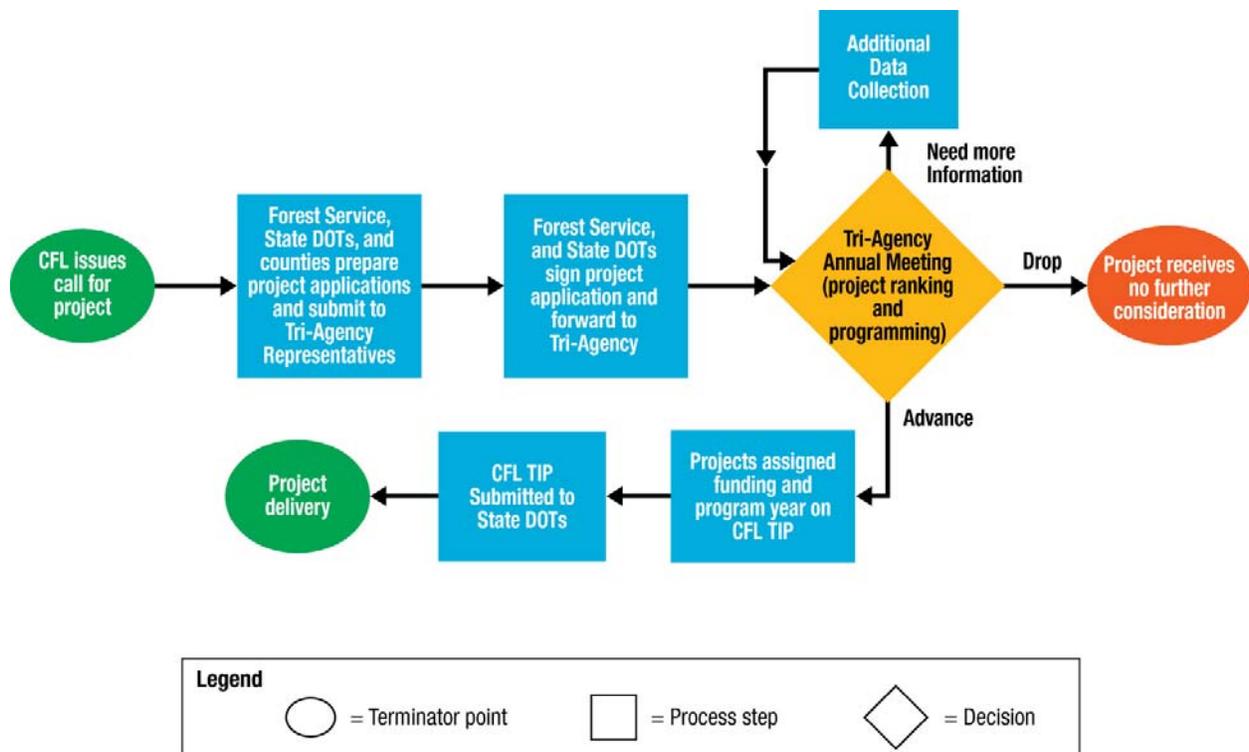
Each approved project is assigned a program year and program amount, based on funding availability and other programming considerations. As mentioned previously, there are only \$20.7 million per year, and programming will need to be flexible by having a mix of projects with different scales of scope.

Step 6: CFL TIP submitted to Caltrans

After funding and program years are assigned, the list of projects is sent to Caltrans for inclusion in the STIP.

Step 7: Project delivery

The final step for each project is project delivery. CFL prepares engineering drawing, constructs the project and turns it over to the agency with jurisdiction.



California Forest Highway Project Application Instruction Sheet

General Information:

The Tri-Agency (USFS, Caltrans, CFLHD) will review project applications and rank them based on weighted selection criteria developed as part of the Long Range Transportation Plan (LRTP). The selection criteria are directly related to the goals and objectives developed for the LRTP. The top ranked projects will be discussed at the annual Tri-Agency program meetings to develop an approved project list funded through the Forest Highway (FH) Program.

Please note that the top ranked project is not guaranteed funding and the approved list of projects will be agreed upon by the Tri-Agency. Project approval resides with the Tri-Agency. The Tri-Agency will select a balanced program made up of some large project with smaller projects used to fill in the gaps. Typical projects are those involving construction or reconstruction and are not maintenance (chipseal, potholes, etc.) projects.

For projects on County-owned routes, applications must be submitted through Caltrans or the USFS. Routes under USFS or state jurisdiction may be submitted individually. Please be sure to secure all of the appropriate signatures for the application to be considered complete. By signing the application, you and the co-signer certify the completeness of the application; this does not indicate the approval of the project.

Additional information on the Forest Highway program is located at <http://www.cflhd.gov/LRTP/>

You may provide your responses on additional sheets, as necessary. However, applications must be no longer than 10 pages to be considered.

APPLICATIONS MUST BE RECEIVED BY DATE xx, XXXX

The following information is intended to aid you in filling out the application.

Question 1:

FHWA will complete all design, NEPA clearance, and construction of the selected projects, except as otherwise agreed by Tri-Agency.

Functional classification: <http://www.fhwa.dot.gov/environment/flex/ch03.htm>

Please note that due to federal funding requirements, Right-of-way (ROW) acquisition must comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and is the responsibility of the Cooperator.

Question 3:

In the project description, include items such as roadway width, surface type, structures, approximate design speed, and any work affecting drainage structures.

Question 7:

Average Daily Traffic (ADT) – The average number of vehicles on a road during the day. To calculate the ADT, take the total traffic volume during a given time period (in 24-hour periods) and divide it by the number of days in that time period.

Seasonal Average Daily Traffic (SADT) – The average number of vehicles on a road during the day in the peak season

Recreation Visitor Day (RVD) – A recreational visitor day is 12-person hours of participation in a recreational activity, whether it is 12 hours by 1 person, or 1 hour each by 12 different people, or some combination of time and people.

% Forest Generated Traffic – The percent of traffic traveling to/from the National Forest.

% Non-Forest Generated Traffic – The percent of traffic traveling through a National Forest with a separate destination.

Question 8:

Consider whether this project fills in gaps or missing links in the transportation network or whether travel restrictions, bottlenecks, and/or load limits that prevent all-weather travel are alleviated by this project improvement.

Question 9:

Alternate mode improvements could include transit, bicycles, pedestrians, equestrians, park-and-rides, etc.

Question 10:

Identify deficient or lacking road features that contribute to safety hazards. Include engineering analysis if available. Also include crash data, animal/vehicle collisions, reported incidents, and/or anecdotal information that can be used to identify a safety issue.

Question 11:

Standard pavement condition ratings are available from CFL at http://www.cflhd.gov/FHRoadInv/_documents/cafh2008.pdf

Question 12:

Bridge condition information can be found from the National Bridge Inventory <http://nationalbridges.com/>

Question 13:

To identify whether your FH route is on a designated National Scenic Byway, click on the following link. www.byways.org

Question 14:

This estimate will be used to compare approximate construction cost relative to other projects. Projects will not be ranked based on cost.

3R –Resurfacing, Rehabilitation, and Restoration

Projects include some application or road rehabilitation (scarification, pulverization, etc. of existing Asphalt Concrete Pavement (ACP)), addition of supplemental aggregate surface course, and the placement of ACP. Minor guardrail, signing, and other appurtenances included on a case by case basis.

4R –Resurfacing, Rehabilitation, Restoration, and Reconstruction

Light 4R – Projects typically include minor widening off the roadway bench. Primarily regarding the road template and resurfacing. Projects do not include walls but can include minor guardrail, signing, and other appurtenances.

Medium 4R – Projects include widening where some walls will be included. Projects will also include earthwork to address some vertical or horizontal alignment deficiencies. Guardrail, signing, and other appurtenances are included.

Heavy 4R – Projects include major widening along a route including heavy use of cut and/or fill walls. Typical work includes major earthwork operations to address some vertical/horizontal alignment deficiencies. Work also includes aggregate surface course and ACP. Guardrail, signing, and other appurtenances included.

Question 18:

Some examples include reduction in existing road-related sedimentation, fish passage improvements, managing visitor access to appropriate camping areas, directing vehicles away from sensitive natural resources, etc.

Question 19:

To identify potential Threatened & Endangered Species in your project area, click on the following link. <http://www.fws.gov/Endangered/wildlife.html>

California Forest Highway Project Application Signature Page

Project Contact Person

The contact name below is the individual from the sponsoring agency who will serve as the agency representative for this project, and has direct knowledge of the information contained within this Forest Highway project application.

Name:	
Address:	
City:	
State:	
Phone:	
Fax:	
E-mail:	

Authorized Signature

The signature below indicates approval of this project from the sponsoring agency and authorizes this request for project selection from the Forest Highway Program.

Signature:	
Printed Name:	
Title:	
Agency/Organization:	
Date:	

Tri-Agency Certification

This application is CERTIFIED TO BE COMPLETE. By signing below, the Tri-Agency representative (Forest Service or Caltrans) will forward this application on to the Forest Highway program for project consideration.

National Forest/State:	
Name:	
Title:	
Date:	
Phone:	

California Forest Highway Project Application

Instructions:

For projects on County-owned routes, applications must be submitted through Caltrans or the U.S. Forest Service (USFS). Routes under USFS or state jurisdiction may be submitted individually.

APPLICATIONS MUST BE RECEIVED BY DATE xx, XXXX

If you are considering this application for your project and would like assistance in completing this form, please contact:

Forest Highway Program Manager
Central Federal Lands Highway Division
12300 West Dakota Ave
Lakewood, CO 80228
Phone: 720.963.3729

Additional information on the Forest Highway program can be found at <http://www.cflhd.gov/LRTP/>

Checklist of Requirements:

- Four (4) completed and signed project applications
- Signature sheet
- Forest-level map
- Project-level map indentifying termini
- Up to 10 photos of project location (optional)
- Is the project on the Forest Highway Network?
- Is the project consistent with the Forest Land Management Plan?

Send completed applications to the appropriate Tri-Agency representative:

National Forest applicants:

USFS Region 5
1323 Club Drive
Vallejo, CA 94592

County or Caltrans applicants:

Caltrans Local Assistance
P.O. Box 942873
Sacramento, CA 94273

California Forest Highway Project Application

Estimated Total Project Construction Cost (From page 5): \$_____

Total Contribution to Project (From page 6): \$_____

2. Problem Statement: Summarize the need for this project. What purpose does this roadway serve? List physical and functional deficiencies, anticipated changes in road use, or known safety problems. Describe consequences and actions that will be taken if FH funding is not received.

3. Description of proposed work: Provide a summary of the work required to complete this project.

4. Describe any other improvements planned/programmed on this Forest Highway currently or in the next 20 years. What, if any improvements have been made in the past on this road? Indicate when, if known. (Identify funding sources, if known):

5. Describe how/why this project is consistent with each approved plan as applicable. (*e.g., Forest Land Management Plan, Local Comprehensive Plan, State Regional Tourism Plan, Scenic Byway, or other Corridor Management Plan*)

Evaluation Criteria

Please provide your responses to the following questions related to each of the Forest Highway Program evaluation criteria. Your responses should be 1-2 paragraphs in length. Although the previous questions were to provide general information, they will also be used for project consideration. Please see the included instruction sheet for assistance with answering each of the questions. Items in italics below each question are intended to help describe the type of information that might be addressed for each question. Your response does not need to address each item.

California Forest Highway Project Application

Access and Mobility

6. List the type (e.g., recreation, resource extraction, local commuting) and amount of use accessed by this route. Who are the primary users of the transportation network? Does the road provide the only access to the area? What is the major traffic generator (destination) along this route?

7. Provide any available traffic data from recent counts or other documented sources (please list sources):

	Current	20 Yr Projection	Source
Average Daily Traffic			
Seasonal Average Daily Traffic			
Recreation Visitor Days (RVD)			
% Forest Generated Traffic			
% Non-Forest Generated Traffic			

8. How will the proposed project improve the continuity of the transportation network? How does this project improve and/or change the access and/or utilization of major destinations along this route in the National Forest System?

9. To what extent does this project improve or provide linkages to alternate modes? Please explain in detail. Note: This will not apply to most projects.

Condition and Safety

10. How will this project improve safety?

11. Provide existing road surface condition using standard pavement condition ratings. If aggregate road, provide inches of aggregate remaining.

California Forest Highway Project Application

12. List structure(s) included in this improvement project, if any:

National Bridge Inventory Structure #	Bridge Dimension LxW	Bridge Inventory Sufficiency Rating (1-100)	Structurally Deficient?	Functionally Obsolete?

Funding and Economic Development

13. Describe how the project supports economic development at the local, regional, or state level (Temporary economic development, i.e., construction employment will not be counted). Identify the breadth of industries that would benefit from this project. How is the local economy tied to the transportation network near this project? How will the proposed project improve the transportation network and support the community's economic goals/needs? Is the project located on a designated scenic byway? If yes, identify the scenic byway.

14. **Construction Cost Estimate:** Fill in amount for Appropriate Scope items given the Central Federal Lands unit cost listed after each item. Please check all that apply.

- Bridge replacement
Square Feet (SF) of Bridge: _____ x \$250/SF = \$_____

- Pulverize and aggregate surfacing
Number of Miles: _____ x \$75k/mile = \$_____

- 3R (i.e. Pulverize/Pave)
Number of Miles: _____ x \$375k/mile = \$_____

- Light 4R (i.e. Regrade Road Template)
Number of Miles: _____ x \$750k/mile = \$_____

- Medium 4R (i.e. Widening, Minor Walls)
Number of Miles: _____ x \$1.5M/mile = \$_____

- Heavy 4R (i.e. Major Widening, Major Wall Work)
Number of Miles: _____ x \$3.0M/mile = \$_____

- Other: _____
Unit: _____ x \$_____/unit = \$_____

ESTIMATED TOTAL COST OF PROPOSED PROJECT: \$_____
(Transfer this number to page 3)

California Forest Highway Project Application

15. Proposed Contribution to Project (include cost sharing and in-kind donations): (Cost share, leveraging commitment to build adjacent project, etc.)
What year are these contributions committed?

- Surface Transportation Program
Amount: \$ _____ Year committed: _____
- Safety set-aside
Amount: \$ _____ Year committed: _____
- Bridge Set-Aside Program
Amount: \$ _____ Year committed: _____
- Scenic Byway Program
Amount: \$ _____ Year committed: _____
- State/Local (including local bonds, or partnerships through MPOs)
Amount: \$ _____ Year committed: _____
- Earmark
Amount: \$ _____ Year committed: _____
- Enhancement
Amount: \$ _____ Year committed: _____
- In-kind donations (including ROW donations, utility relocation, traffic control, etc.)
Amount: \$ _____ Year committed: _____
- Other: (specify)
Amount: \$ _____ Year committed: _____

ESTIMATED TOTAL CONTRIBUTION TO SUPPLEMENT PROJECT:

\$ _____

(Transfer this number to page 3)

16. Describe current maintenance practices. To what extent will this project decrease user and/or maintenance cost?

17. Describe the support and/or opposition that this proposed project may receive from outside organizations and/or the public. Who are key partners in this project? What role have these partners played on this project to date? *(Also, include Forest Service/State/Community coordination efforts completed to date.)*

California Forest Highway Project Application

Natural Resource Protection

18. Please describe any opportunities this project provides to address existing environmental concerns.

19. Identify all potentially sensitive natural or cultural resource issues associated with this project from the list below. Please provide narrative explaining the extent of potential impacts resulting from the proposed project on all the following environmentally sensitive resources that apply to your project (*e.g., project will replace historic bridge, project goes through critical habitat, project involves a unique wetland complex, etc.*)

- Wetlands/Water Resources
- Threatened & Endangered Species
- Sensitive Species
- Other biological resources (fisheries, wildlife, species of concern, etc)
- Wild & Scenic River
- Non-attainment areas (air quality)
- Historic & archaeological resources
- Native American areas/concerns
- Wilderness or roadless areas
- Parks & recreation areas/wildlife refuge (Section 4(f)/6(f))
- Hazardous materials
- Other:

20. Describe any coordination that has occurred with Forest Service interdisciplinary team and/or regulatory resource agencies (*e.g., Corps of Engineers, Fish and Wildlife Service, State Fish and Game*) with regard to specific resource concerns.

21. What opportunities does this project provide for Context Sensitive Solutions and/or innovative design and/or construction practices?

Other Remarks:

APPENDIX H

**ORIGINAL 2010 FOREST HIGHWAY PROGRAM
CALIFORNIA
SEVEN YEAR PLAN**

APPENDIX 1

PROJECT	ROUTE NAME	TYPE OF WORK	\$0							
			FISCAL YEAR	FY10	FY11	FY12	FY13	FY14	FY15	FY16
			ALLOCATION	20,700,000	20,700,000	20,700,000	20,700,000	20,700,000	20,700,000	20,700,000
			*ACTUAL/PROP. BAL. BORROW/(LOANS)			\$4,000,000	\$10,400,000	(\$7,600,000)	(\$6,800,000)	\$0
**ACTUAL LOANS or (REPAYMENTS)	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
CARRYOVER & ROLLUP	\$0	\$37,600	\$137,600	\$37,600	\$37,600	\$37,600	(\$162,400)			
TOTAL AVAILABLE	\$20,700,000	\$20,737,600	\$24,837,600	\$31,137,600	\$13,137,600	\$13,937,600	\$20,537,600			
ALL ROUTES ALL ROUTES FH 138-1(1) FH 119-1(3) ALL ROUTES	STATEWIDE STATEWIDE MAMMOTH SCENIC LOOP QUINCY-OROVILLE STATEWIDE	PE-10 CE-10 9.3 KM (5.8 KM) 4R BRIDGE REPL, PLUS SPOT IMPROVEMENTS CONTINGENCIES	\$3,000,000 \$2,000,000 \$7,000,000 \$8,000,000 \$700,000	<-- Plus \$1M transfer from Town of Mammoth Lakes = \$8.0M Total <-- Shouldn't slip, has HPP funds of \$800K						
ALL ROUTES ALL ROUTES FH 169-1(1) FH 148-1(1) & 149-1(3) ALL ROUTES	STATEWIDE STATEWIDE OLD RED BLUFF ROAD TRINITY COUNTY BRIDGES STATEWIDE	PE-11 CE-11 BRIDGE REPLACEMENT 2 BRIDGES ON FH149 & 1 BRIDGES ON FH148 CONTINGENCIES	\$3,000,000 \$2,000,000 \$7,700,000 \$7,000,000 \$1,100,000	<--FY10 Backup <--FY10 Backup						
ALL ROUTES ALL ROUTES FH 148-1(2) FH 119-1(4) ALL ROUTES	STATEWIDE STATEWIDE TRINITY COUNTY BRIDGES QUINCY-OROVILLE STATEWIDE	PE-12 CE-12 2 BRIDGE REPLACEMENTS 9 MI 3R CONTINGENCIES	\$3,000,000 \$2,000,000 \$8,000,000 \$4,000,000 \$1,100,000	<--FY10 Backup <--FY10 Backup						
ALL ROUTES ALL ROUTES FH 112-1(2) FH 177-1(1) FH 149-1(4) & 150-1(1) ALL ROUTES	STATEWIDE STATEWIDE SOUTH FORK SMITH RIVER ROAD BECKWOURTH-CLOVER VALLEY TRINITY COUNTY 3R STATEWIDE	PE-13 CE-13 2 BRIDGE REPLACEMENTS 3.2KM (2.0MI) 4R 3R; 8.5MI ON FH149 & 8.4MI ON FH150 CONTINGENCIES	\$3,000,000 \$2,000,000 \$12,000,000 \$8,000,000 \$5,000,000 \$1,100,000	<--FY11 Backup <-- Another \$10 m project in future. Determine \$ break.						
ALL ROUTES ALL ROUTES FH 191-1(1) ALL ROUTES	STATEWIDE STATEWIDE BUCHANAN RD STATEWIDE	PE-14 CE-14 2.5 MI 4R & BR CONTINGENCIES	\$3,000,000 \$2,000,000 \$7,000,000 \$1,100,000							
ALL ROUTES ALL ROUTES FH 190-1(1) FH 129-1(2) ALL ROUTES	STATEWIDE STATEWIDE FISH HATCHERY ROAD ARROYO SECO ROAD STATEWIDE	PE-15 CE-15 1.8 MI 3R 11.3 KM (7 MI) 3R CONTINGENCIES	\$3,000,000 \$2,000,000 \$3,000,000 \$5,000,000 \$1,100,000							
ALL ROUTES ALL ROUTES FH 177-1(2) FH 117-1(5) ALL ROUTES	STATEWIDE STATEWIDE BECKWOURTH-CLOVER VALLEY MOONEY ROAD STATEWIDE	PE-16 CE-16 4.3 KM (2.7) 4R 12.9 KM (8 MI) 3R CONTINGENCIES		Suspend design work after 30%; Monitor rutting -->				\$3,000,000 \$2,000,000 \$10,000,000 \$4,400,000 \$1,100,000		
**ACTUAL LOANS or (REPAYMENTS): No Borrow/Loans Available in FY10			Total Expenditures	\$20,700,000	\$20,800,000	\$18,100,000	\$31,100,000	\$13,100,000	\$14,100,000	\$20,500,000
CARRYOVER->			\$0	\$0	(\$62,400)	\$6,737,600	\$37,600	\$37,600	(\$162,400)	\$37,600
			FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16