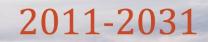


Oregon Forest Highway program into the future.

Oregon Forest Highway

LONG-RANGE TRANSPORTATION COORDINATION PLAN



Prepared by the Western Federal Lands Highway Division in partnership with U.S. Forest Service & Oregon Department of Transportation and in Cooperation with the Association Of Oregon Counties.



Abbreviations and Acronyms

ACTs	Area Commissions on Transportation
ADT	average daily traffic
AOC	Association of Oregon Counties
AOP	Aquatic Organism Passage
ATPPL	Alternative Transportation to Parks and Public Lands
CFR	Code of Federal Regulations
Coordination Plan	Oregon Forest Highway Long-Range Transportation Coordination Plan
EA	environmental assessment
EIS	environmental impact statement
FHWA	Federal Highway Administration
FR	Federal Register
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NFS	National Forest System
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
OFRI	Oregon Forest Resources Institute
OTP	Oregon Transportation Plan
OTSAP	Oregon Transportation Safety Action Plan
PIR	project identification report
RSA	road safety audit
RTP	regional transportation plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SMS	safety management system
STIP	state transportation improvement program
TEA-21	Transportation Equity Act for the 21 st Century
TIP	transportation improvement program
USC	United States Code
USFS	US Department of Agriculture, Forest Service
WFLHD	FHWA, Western Federal Lands Highway Division

Cover Photo: Mt Hood Meadows Access Road, Forest Highway 162

Table of Contents

1 Introduction			
	1.1 Wha	at Are Forest Highways?	2
	1.2 Why	/ Are Forest Highways Important?	4
	1.3 Wha	at Is the Oregon Forest Highway Program?	4
		/ Do We Need Coordinated Transportation Planning?	
		at Is Included in this Plan?	
~	\ <i>/</i>		~
2	Vision, I	Mission, and Goals of the Oregon Forest Highway Program	9
		/ear Vision and Mission	
		ls	
	2.2.1	Safety	
	2.2.2	Preservation	
	2.2.3	Economic Development	
	2.2.4	Mobility	
	2.2.5	Environmental Quality and Health	.17
3	Aaencv	and Planning Coordination	.21
-		g-Range Plans	
	3.1.1	USFS Land and Resource Management Plans	
	3.1.2	Travel Management Rule	
	3.1.3	Oregon Transportation Plan	
	3.1.4	Oregon Statewide Land Use Planning	
	3.1.5	Regional Transportation Plans	
	3.1.6	County Transportation System Plans	
	3.2 Trar	nsportation Improvement Programs	
	3.2.1	Forest Service Transportation Improvement Programs	
	3.2.2	State and Regional Transportation Improvement Programs	
	3.2.3	Federal Lands Highway Transportation Improvement Program	.27
	3.3 Fed	eral Requirements for Coordinated Transportation Planning	
	3.3.1	Federal Surface Transportation Act	
	3.3.2	Federal Lands Highway Program	.28
	3.4 Othe	er Factors that Influence Forest Highway Planning	.29
	3.4.1	Construction Costs	
	3.4.2	Safety	
	3.4.3	Multi-Modal Considerations	
	3.4.4	Fluctuations in Revenue	. 32
	3.4.5	Economic Development Opportunities	
	3.4.6	Aquatic Organism and Wildlife Conservation	
	3.4.7	Public Input	.35
4	Funding	, Investment Strategy and Project Selection Process	37
4	4.1 Fun	ding and Investment Strategy and Guidelines	.37
		/ Forest Highway Projects Are Selected	
	4.2 10%	Proposal and Selection Process Overview	
	4.2.1	Selection Criteria	
	4.2.2	Scoping – Project Identification Report	
	4.2.3	Purpose and Need	
		ancement Set-Aside	
		atic Organism Passage Funds	
	-		
5		on of Oregon Forest Highway System	.44
	5.1.1	Pavement Condition	.44
	5.1.2	Bridge Condition	.48

	5.1.3 5.1.4	Safety Congestion	48 48
6	Future F	Planning Activities	49
7	Definitio	ns	50
8	Referen	ces	52

Appendix A:	Oregon Forest Highway Inventory
Appendix B:	Oregon Forest Highway Program Background
Appendix C:	Roles of the Partner Agencies
Appendix D:	23 CFR 660, Subpart A—Forest Highways
Appendix E:	23 USC 135 (Statewide Transportation Planning) and 23 USC 204 (Federal Lands Highways Program)
Appendix F:	23 USC 971 (Forest Highway Program Management Systems)
Appendix G:	Forest Plan Functions

List of Figures

Figure 1. Oregon Forest Highways by Jurisdiction	3
Figure 2. Oregon Forest Highways Past Projects (1983-2009)	6
Figure 3. Example of Proposed Alternative Transportation System Project in Oregon: Moun Hood National Forest Aerial Transportation System	
Figure 4. Typical Forest Highway Project Selection and Development Process	39
Figure 5. Example Forest Highway Enhancement Project: Oneonta Gorge Parking/Vista	42
Figure 6. Example Oregon Forest Highway Enhancement Project: Cascade Lakes North ar South Portals	
Figure 7. Existing Condition of Oregon's Forest Highways, 2004	44
Figure 8. Oregon Forest Highways by Road Surface Type, 2004	45
Figure 9. Road Condition of Oregon Forest Highways, 2004	46
Figure 10. Average Daily Traffic (ADT) on Oregon Forest Highways, 2004	47

1 Introduction

This 20-year transportation coordination plan describes the Oregon Forest Highway Program and identifies the long-range goals for the program. This plan describes the process for coordinated planning and decision-making among the agencies responsible for the Oregon Forest Highway Program. Those agencies are:

- Oregon Department of Transportation (ODOT)
- US Department of Agriculture, Forest Service (USFS), Pacific Northwest Region (Region 6)
- Federal Highway Administration (FHWA), Western Federal Lands Highway Division (WFLHD)

The Oregon Forest Highway Program is administered by WFLHD in partnership with the USFS and ODOT, together called the Tri-Agency. The Association of Oregon Counties (AOC) attends Tri-Agency meetings and is involved in the Oregon Forest Highway Program discussions, but does not have decision-making authority. Roles of the Tri-Agency members are defined in Appendix C, Roles of the Partner Agencies.

This Oregon Forest Highway Long-Range Transportation Coordination Plan (Coordination Plan) is intended to help the Tri-Agency make investment decisions for planning, multi-modal alternatives, transportation enhancements, safety management, preservation, and construction on Forest Highways in Oregon. 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. This Coordination Plan provides a 20-year vision and mission for the Oregon Forest Highway Program, as well as goals, a funding and investment strategy, criteria, and guidance—all of which are to be used to select projects that will receive Oregon Forest Highway Program funding.

Another purpose of this document is to help transportation planners, transportation professionals, forest professionals, community representatives, and citizens who have an interest in improving Forest Highways understand the Forest Highway Program, thereby helping them to understand the types of projects eligible for program funding as well as how to participate in the planning and decision-making processes.

The Tri-Agency drafted this Coordination Plan. The plan was then made available for review and comment by other agencies and the public. Comments were sought through the Area Commissions on Transportation (ACTs – see Section 3.4.7) and agency coordination. Based upon input received during the comment period, this Coordination Plan was revised and finalized. However, this plan is intended to be a "living" document and, as such, will be reviewed and updated periodically (such as when new legislation is enacted) to remain current and relevant to the Oregon Forest Highway Program.

1.1 What Are Forest Highways?

A "Forest Highway" is a forest road under the jurisdiction of and maintained by a public authority and open to public travel. A total of approximately 31,200 miles of roadway are designated as Forest Highways in the United States. In general, Forest Highways must:

- be within or adjacent to National Forest System (NFS) lands;
- be necessary for access to protect, administer, utilize, and develop National Forest resources;
- be open to public travel; and
- provide a connection to other transportation systems (e.g., public roads, shipping points, etc.).

Forest Highways are a subset of Oregon's overall road system. They comprise 3,865 miles of roadway in Oregon, ranging from single-lane rural roads to interstate freeways. Figure 1, Oregon Forest Highways, shows the designated Forest Highways in Oregon as of 2009. Appendix A contains more information about the routes. The list of designated Forest Highways is not fixed. Routes can be added or removed at any time. Routes are designated by the WFLHD Division Engineer with concurrence from the USFS and state department of transportation. Further information regarding Forest Highway designation is provided in Appendix B– Oregon Forest Highway Program Background.

A Forest Highway is managed by a public authority other than FHWA. In Oregon, Forest Highways are managed by ODOT, the USFS, or a local (county) government. A Forest Highway may comprise several segments, each managed by a different authority, and a Forest Highway project may receive funding from several sources. Figure 1 and Appendix A indicate which public authorities have jurisdiction over the Forest Highways in Oregon.

Some examples of Forest Highways in Oregon include roads that cross the Cascade Mountains (like portions of US Highway 26 from Portland to Madras and portions of Oregon Highway 22 from Salem to Bend) and others that cross the Coast Range (like portions of Oregon Highway

126 from Eugene to Florence). Forest Highways also provide access to popular recreation areas, like the Cascade Lakes Highway and Sunriver-to-Mt. Bachelor Road in central Oregon. Some Forest Highways are direct links between communities and a forest, like Dufur Valley Road (Forest Highway 104) that leads to the east side of the Mt. Hood National Forest. Forest Highways may also



Historic Columbia River Highway

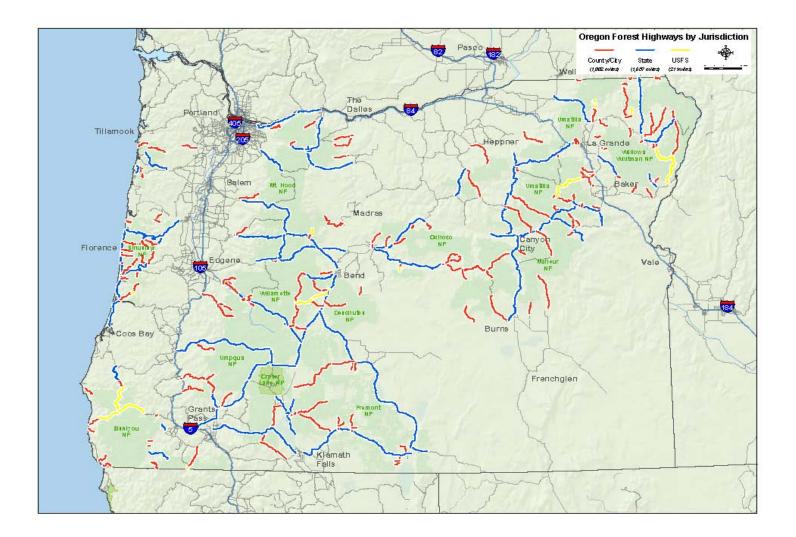


Figure 1. Oregon Forest Highways by Jurisdiction

be historic roads, such as the Historic Columbia River Highway in the Columbia River Gorge and the McKenzie Pass Highway in the central Cascades. Some Forest Highways, like the Pacific Coast Highway and Historic Columbia River Highway, are destinations unto themselves.

1.2 Why Are Forest Highways Important?

Forest Highways derive their importance from the National Forest System (NFS) lands to which they provide access. Forest Reserves, the precursors to today's National Forests, were established in 1891, through the National Forest Reserve Act. Through that act, forested lands could be kept in public ownership and managed for the good of all people, including future generations. With the establishment of the Forest Service in 1905, it was the first Chief Forester, Gifford Pinchot, who stated that the purpose of the National Forests is to provide the "greatest good for the greatest number in the long run." Pinchot's conservation philosophy is echoed in today's Forest Service mission, to "sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations."

Integral to fulfilling the Forest Service's mission, is providing access to NFS lands. Accessing those lands is part of our heritage, our culture, and our economy. We access NFS lands for recreation, resource extraction, scientific research, education, and numerous other activities. People appreciate and have concern for their NFS lands when they can reach them, spend time in them, and enjoy them.

In addition, population growth and continuing human development are increasing the demand for access to NFS lands. More people are living closer to NFS and other federal lands as urban and suburban development expands. In Oregon, Forest Highways are particularly important where approximately one-quarter of the land is NFS lands. Nearly 15.7 million acres of NFS lands (about 8.1 percent of all the NFS lands in the United States [USFS 2009]) are within Oregon's boundaries.

1.3 What Is the Oregon Forest Highway Program?

The Oregon Forest Highway Program addresses the needs for safe and adequate transportation access to and through NFS lands for visitors, recreationists, resource users, and others that are not specifically addressed by other transportation programs. It provides funding and technical assistance to resurface, restore, rehabilitate, or reconstruct designated public roads that provide access to or are within NFS lands. Nationally, 41 states have Forest Highway Programs. Oregon has the largest state Forest Highway Program in the country, with approximately 3,865 miles of designated Forest Highways.

A reliable source of funding has not always been available to Forest Highways. Though Forest Highways were first defined in the Federal Highway Act of 1921, funding needed to develop and maintain these roads was small and inconsistent because selection for funding was based on the extent to which the roads were "of primary importance to the States, Counties, or

communities... and on the Federal-Aid System." Because Forest Highways tended to be lowvolume roads, they rarely ranked high using this criterion. Passage of the Surface Transportation Assistance Act in 1978 and its amendment in 1982 established the current Forest Highway Program, providing a specific funding source for Forest Highways so they no longer had to compete against State Routes for funds. The legislation resulted in a consistent and reliable source of funding for the development and improvement of Forest Highways.

Typically Forest Highway funding is provided for the planning, design, construction, reconstruction, or improvement of designated Forest Highways, including bridges. Additionally, funds can be used to pay for any transportation project authorized in Title 23 of the United States Code (USC) such as transit facilities. See Appendix D.

Through the federal tax on gasoline, the Oregon Forest Highway Program provides approximately \$20 million of federal transportation funding to Oregon each year for Forest Highways. The Forest Highway funding is in addition to the approximately \$400 million of annual federal funding provided to ODOT for transportation projects in the state.

Projects funded by the Oregon Forest Highway Program occur on Forest Highways under various jurisdictions. Figure 2 shows Oregon Forest Highway projects that were completed between 1983 and 2009. By comparing Figures 1 and 2, one can see that some projects were done entirely on ODOT highways, others on county or USFS roads, and others on roads under the jurisdiction of more than one agency.

1.4 Why Do We Need Coordinated Transportation Planning?

The Forest Highway Program requires transportation planning that is consistent with state and local transportation planning processes, and that clearly defines and offers opportunities for public input. The main objectives of such a planning process are:

- to develop and maintain a coordinated, "seamless" transportation system for public use, even though various segments of the system are under different jurisdictions;
- to help ensure that the most-needed projects receive funding and are implemented, so that the infrastructure remains in place to access Oregon's NFS resources and communities; and
- to lay the foundation for streamlined environmental review.



Figure 2. Oregon Forest Highways Past Projects (1983-2009)

Residents and visitors in Oregon want to get to their destinations safely and experience a quality natural environment when they arrive. To provide appropriate access to NFS lands, planners and decision-makers must consider a complex balance among transportation effectiveness, human safety, and environmental care. The Tri-Agency partners need to work together to effectively manage and implement the Oregon Forest Highway Program and to wisely invest Forest Highway Program funds.

As noted in Section 1.1, roads designated as Forest Highways may be under the jurisdiction of one or more agencies, and they serve multiple purposes and a variety of users. Therefore, Forest Highway projects need to address multiple objectives. Limited funding and increased use of the Forest Highway transportation system contribute additional challenges to Forest Highway Program planning. The potential environmental effects of Forest Highway projects also need to be considered. Coordination among the Tri-Agency partners, as well as environmental resource and permitting agencies and the public, is required to implement projects efficiently and effectively, while addressing the vision, mission, and goals of the Oregon Forest Highway Program.

Some general requirements for coordinated Forest Highway planning are set forth in Title 23 of the Code of Federal Regulations (CFR) Part 660, Subpart A – Forest Highways, which is provided in Appendix D of this document. Additional requirements are listed in Title 23 of the United States Code (23 USC), which is the federal surface transportation act. ¹ Text of the statewide transportation planning requirements of Subsection 135 and 204 of 23 USC is provided in Appendix E of this document.

In 23 USC 135 (statewide planning for highways), the language related to the transportation planning requires each State to consider the concerns of Indian tribal governments and federal land management agencies that have jurisdiction over land within the boundaries of the State. In accordance with 23 USC 204, Forest Highway planning should follow a process consistent with the Statewide and Metropolitan Planning Organization (MPO) processes to ensure coordination for all public roads in a State. Also, Forest Highway planning requires consultation with Federal land management agencies, as described in Section 3.3.1.

1.5 What Is Included in this Plan?

This Coordination Plan is presented in several chapters. The major substance of the plan is contained in Chapters 2 through 6.

¹ As of this writing, the current federal surface transportation act is the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law on August 10, 2005. SAFETEA-LU authorizes the federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. SAFETEA-LU is codified in 23 USC. At the writing of this draft, Congress extended SAFETEA-LU to September 30, 2011.

Chapter 2 presents the 20-year vision, mission, and goals of the Oregon Forest Highway Program, along with background information and guidance to help the Tri-Agency achieve those goals.

Chapter 3, Agency and Planning Coordination, describes the long-range plans that are particularly related to Oregon's Forest Highways, including USFS National Forest Land and Resource Management Plans ("Forest Plans"), motor vehicle use maps, ODOT's long-range transportation plan, and county transportation system plans. Chapter 3 also describes other factors and regulations that influence Forest Highway planning, including the federal laws that require planning coordination among the Tri-Agency partners.

Chapter 4 summarizes the process for selecting projects that will receive Forest Highway Program funds and describes the funding and investment strategy.

Chapter 5, Condition of Oregon Forest Highway System, presents data about Oregon's Forest Highways that were gathered from existing management systems. All roads funded under the Forest Highway Program are required to have management systems in place to make investment decisions. Management systems are focused on the existing conditions and predicted future conditions of pavement, bridges, safety, and congestion.

Chapter 6, Future Planning Activities, outlines future actions that the Tri-Agency will undertake to implement and update this Coordination Plan.

Chapters 7 and 8 contain information to help readers better utilize this Coordination Plan and to learn more about the planning process and Tri-Agency. Chapter 7 contains definitions of terms used in this Coordination Plan. Chapter 8 includes a list of the references used to prepare this plan.

2 Vision, Mission, and Goals of the Oregon Forest Highway Program

The Tri-Agency Vision for the Oregon Forest Highway Program defines the desired or intended future state of the Program in terms of its fundamental objective and/or strategic direction set within the legislation establishing the program. The Vision is a long term view, describing how the Tri-Agency would like the world in which it operates to be.

The Mission of the Oregon Forest Highway Program defines the fundamental purpose of the Program, succinctly describing why it exists and what it does to achieve its Vision. The Mission can last for many years or for the life of the Program, or it may change as new legislation is passed.

Goals translate the Mission and Vision into an action plan. The Goals are specific and realistic statements of intended future results.

2.1 20-Year Vision and Mission

The Tri-Agency with AOC developed a 20-year vision and mission for the program, as well as a set of specific goals, that are intended to guide long-range planning and funding priorities for Forest Highway projects in Oregon.

Oregon Forest Highway Program 20-Year Vision:

Oregon will have a safe and efficient public road transportation system to and within Oregon's National Forest System lands that balances USFS management objectives with the transportation needs of visitors, recreationists, and resource users.

Oregon Forest Highway Program 20-Year Mission:

The Oregon Forest Highway Program will strive to meet USFS, community, and private goals to improve transportation access to Oregon's National Forest System lands by providing funding, planning, design, and construction services while coordinating with federal, state, and local agencies and communities.

2.2 Goals

The goals are intended to guide the process for ranking and selecting projects for the Oregon Forest Highway Program. (See Chapter 4 for a description of the project selection process.) The goals are based upon the project selection criteria established in 23 CFR 660.109 (which are listed in Section 4.2.2 of this Coordination Plan) but expand upon and refine those criteria to better address the particular needs of the Oregon Forest Highway Program.

The Oregon Forest Highway Program has five goals, which are discussed in more detail in the following sections. In evaluating and selecting projects, the Tri-Agency will consider all of the goals and try to balance the intent of each with the intents of the others.

The goals of the Oregon Forest Highway Program are:

Safety: Improve the safety of Forest Highways by identifying needs on a systematic basis and working with Forest Highway Program and other funding sources to address those needs.

Preservation: Preserve the Forest Highway infrastructure by working with other transportation partners to jointly and systematically identify and address those needs.

Economic Development: Enhance the economic health of local communities and the public value of the Forest Highway transportation system.

Mobility: Maintain or improve the ability to access the National Forest System lands while considering travel time and multiple modes of transportation.

Environmental Quality and Health: Protect and/or enhance the natural environment when designing and constructing transportation facilities.

These individual goal areas are not necessarily independent, but instead they can be interdependent. Addressing one goal can result in a secondary effect that addresses other goal areas. In addition, each goal will be accompanied by performance measures and quantifiable targets. The Tri-Agency will use those measures and targets to evaluate how well the Oregon Forest Highway Program is achieving the goals. The targets are not presented in this Coordination Plan; they will be developed and presented in short-term strategic plans, which the Tri-Agency will produce every 3 to 5 years. While this Coordination Plan provides framework for Forest Highway Program coordination over 20 years, the short-term strategic plans can be more adaptable to changes in funding, needs, and policy.

The Tri-Agency has options available to help achieve each of the above goals. In addition to the general call for projects, the Tri-Agency may issue separate calls specific to certain types of projects (such as safety projects) to encourage project sponsors to submit proposals for those types of projects. The Tri-Agency may also set aside a certain amount or percentage of Forest

Highway Program funds for certain types of projects. Such set-asides may or may not be used in conjunction with separate calls for projects.

2.2.1 Safety

Providing travelers with a safe transportation system is a high priority of the Oregon Forest Highway Program. Several processes and information sources, such as Safety Management Systems (SMS), crash data, and road safety audits (RSAs) will be used to identify safety needs and to evaluate and select safety projects. The Tri-Agency will also refer to the Oregon Transportation Safety Action Plan (OTSAP) developed by ODOT for additional guidance and information. This approach will provide the Tri-Agency with objective, quantifiable means to evaluate the safety needs on a project proposed for Forest Highway funding. More information on the OTSAP is presented in Section 3.1.3. The OTSAP may also help project proponents develop proposals for safety projects.

Safety Goal:

Improve the safety of Forest Highways by identifying needs on a systematic basis and working with Forest Highway Program and other funding sources to address those needs.

Safety Management Systems

SAFETEA-LU requires that Safety Management Systems (SMS) be developed and funded for all Federal Lands Highway Programs, including the Forest Highway Program. Implementing rules for the Forest Highway Program SMS are contained in 23 CFR 971.212. The full text of 23 CFR 971 is included in Appendix F of this Coordination Plan.

The federal lands SMS is a systematic process that will be used by the federal land management agencies and other project partners with the goal of reducing the number and severity of traffic accidents. The SMS is used so that all opportunities to improve roadway safety are identified, considered, implemented, and evaluated during all phases of transportation system planning, design, construction, maintenance, and operation by providing information for selecting and implementing effective transportation safety strategies and projects. The language in 23 USC 204 states that the Tri-Agency shall utilize SMS to ensure that safety is considered and implemented, as appropriate, throughout the transportation planning and development process and in making project selection decisions under 23 USC 204.

This Coordination Plan proposes a Forest Highway SMS designed specifically for the unique nature of the Forest Highways. The proposed Forest Highway SMS will provide the Tri-Agency

with objective, quantifiable means to evaluate the safety needs on a project proposed for Forest Highway funding. This SMS will include the compilation and submission of crash data with project proposals and road safety audits.

Compilation and Submission of Crash Data with Project Proposals

Forest Highway project proposals will be accompanied by all available crash data. A summary for at least the past 5 years should be provided, although 7 to 10 years of crash data is preferred for low-volume roads. The crash data will be considered when project selections are made. Including documented crash histories in project proposals will ensure that the safety benefits of a proposed project are given appropriate consideration.

When ranking projects, the Tri-Agency will recognize, however, that complete and welldocumented minor accident data may be lacking on some rural, low-volume routes. Such lack of data is largely because reporting of minor accidents is not required. In Oregon, crashes such as 4WD (four-wheel drive vehicle) runoffs and other accidents without serious injury on rural routes are reported on a voluntary basis.

Road Safety Audits

A road safety audit (RSA) is a formal safety performance examination of an existing or future road or intersection by an independent, multi-disciplinary, audit team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users (FHWA 2008b). An RSA is intended to answer two questions:

- What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
- What opportunities exist to eliminate or mitigate identified safety concerns?

An RSA should be completed for each proposed project except, perhaps, for pavement preservation or enhancement projects. Typically, the RSA would be done concurrent with the Project Identification Report (see Section 4.2.3), but it may be done during another phase of project development. The level of detail of the RSA will be determined according to the size and complexity of the proposed project.

RSAs also may be completed on high-use Forest Highway routes with known traffic use conflicts or safety issues to identify and document safety needs on those routes and facilitate their ongoing management. Documented safety needs could be used in future Forest Highway project proposals for those routes or be used in applications for other funding sources.

2.2.2 Preservation

Preservation is defined as maintaining the transportation system that is currently constructed such as overlays, chip seals, or additional gravel surfacing. Preservation involves making

decisions about rehabilitation in a timely and effective manner so the transportation facility does not degrade beyond repair or to the point of needing major repair.

Preservation is a priority in the Oregon Transportation Plan (OTP) and a specific investment guideline in 23 USC 135 for Statewide Planning. It is further emphasized by the requirement, under 23 USC 204, to utilize management system data (pavement, bridge, safety) in making transportation investment decisions.

Preservation Goal:

Preserve the Forest Highway infrastructure by working with other transportation partners to jointly and systematically identify and address those needs.

Pavement Management System

SAFETEA-LU requires that Pavement Management Systems (PMS) be developed and funded for all Federal Lands Highway Programs, including the Forest Highway Program. Implementing rules for the Forest Highway Program PMS are contained in 23 CFR 971.212. The full text of 23 CFR 971 is included in Appendix F of this Coordination Plan.

Pavement Management System information for the existing and future conditions of Forest Highways must be included with the project proposals where available. The Tri-Agency will consider how each proposed project will generally move the condition of the transportation facility to the desired condition.

Consideration of Alternative Funding Sources

Prior to submitting a project proposal, the proposing agencies should consider their own financial capacity to fund a preservation project. Some agencies may have funds, other than Forest Highway Program funds, available for preservation projects. Other agencies, particularly rural counties, may have very limited funds for preservation on low-volume Forest Highways. In selecting projects for programming, the Tri-Agency will endeavor to approve Forest Highway funding where the proposing agencies have demonstrated the greatest need from a condition standpoint and the least capacity from a potential funding standpoint.

Proposing agencies, as well as the Tri-Agency, should also look for opportunities to leverage funds or other resources to address needs. Funds from one source could be supplemented by Forest Highway funds to implement a more comprehensive improvement project. Another example of leveraging, a county may be proposing a utility line replacement within a Forest Highway right-of-way, and that Forest Highway may also be in need of an overlay. By coordinating the projects, they would be accomplished more efficiently. The projects could be combined and phased so the utility line is replaced prior to the overlay, minimizing impacts on travelers and the local environment while reducing costs for the individual projects (as compared to doing the two projects separately). Investment strategies are further discussed in Chapter 4.

2.2.3 Economic Development

The Oregon Forest Highway Program seeks opportunities to enhance the economy of local communities, and strives to provide the public with the best value for their tax dollars. The Tri-Agency needs to consider where to make key investments with limited Oregon Forest Highway Program funds. It also needs to consider where economic development opportunities exist. The Tri-Agency partners need to work together to provide safe, adequate access to NFS lands for recreation, tourism, resource extraction, and other economic development opportunities. The Funding and Investment Strategy and Guidelines, in Section 4.1 of this Coordination Plan, are intended to help the Tri-Agency achieve that.

Economic Development Goal:

Enhance the economic health of local communities and the public value of the Forest Highway transportation system.

Access to and Use of NFS Lands and Resources

By definition, Forest Highways must provide public access to and/or within NFS lands. Such access is critical to the use of NFS lands and their resources, such as timber, other forest products, minerals, and recreation opportunities – all of which contribute to local and regional (and even national) economies.

The Tri-Agency will consider how proposed projects would enhance access to and use of NFS lands and the potential related economic contributions. For example, a paving project may open travel to heavy trucks and provide a new route for hauling timber or mining products. Road improvements may create a shorter or safer travel route for industrial or recreation users, encouraging additional travel in an area and benefitting local businesses.

Tourism

Tourism may or may not be directly related to NFS lands. Some of Oregon's Forest Highways may be part of designated scenic byways, which are tourist destinations themselves. Economic benefits of tourism are generally related to travelers purchasing goods and services along the route.

Travelers may be encouraged to visit particular locations by providing attractions or services, or by otherwise enhancing a site. One way in which the Tri-Agency supports tourism is by setting aside funding for enhancement projects. Enhancements are road-related improvements such as, but not limited to, interpretative signs, kiosks, restrooms, viewpoints, and trailheads. Another type of enhancement project is improvements to Scenic Byway corridors. Forest Highway enhancement projects are designed to benefit the Forest Highway users. Enhancement projects must be located on, or in close proximity to, a designated Forest Highway. More information about the enhancement set-aside is in Section 4.3 of this Coordination Plan.

2.2.4 Mobility

Mobility is both the ability to get to a certain location (i.e., access) and the travel time required to make the journey. Mobility is also having a choice of the mode (car, truck, bicycle, feet, bus, etc.) for the journey that is accessible to all potential users, including the transportation disadvantaged. Many factors can affect mobility. Conditions such as narrow travel lanes, sharp curves, uneven pavement, landslide areas, lack of shoulders, and congestion can all affect travel time – or even the ability to reach a destination.

The focus for mobility in this Coordination Plan is to preserve and improve existing opportunities for access to NFS lands. The Tri-Agency will look for opportunities to improve mobility – for example, by improving reliability, travel times, or access to alternative modes of transportation. However, with limited funds from the various transportation funding sources, preserving the existing Forest Highway system is especially important.

Mobility Goal:

Maintain or improve the ability to access the National Forest System lands while considering travel time and multiple modes of transportation.

Reliability and Travel Times

As noted above, many factors can affect travel time and reliability of roadways. Sometimes, they limit or close access to an area, such as when a road is too narrow or winding for trucks to pass, or when a landslide blocks travel. Examples of improvements that can be made to improve reliability and decrease travel time include:

- Pave roads with gravel surface or overlay/improve paved surface on rough roads,
- Modify alignment to reduce sharp curves,
- Widen roadway and/or clear zone to increase sight distance,

- Manage access to roadway (e.g. combine driveways or construct frontage road) to limit conflicts from vehicles entering and leaving roadway, and
- Stabilize slide areas and other areas of instability to improve driving surface and reduce potential for road closure.

It may not always be appropriate to decrease travel times. Travel time and speed need to be considered in light of the other goals of the Forest Highway Program, particularly safety and environmental quality and health. Quality of the travel experience may also be a consideration. The Tri-Agency will evaluate project proposals against each of the goals and relevant criteria.

Alternative Transportation Modes

High levels of use at some national recreation sites have led to concerns that congestion is compromising the visitor experience and degrading natural, cultural, and historic resources. In many cases, congestion impacts are related more to the number of automobiles accommodated at the site than to the number of people visiting it. To respond to this issue, Section 3039 of TEA-21² 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 Federal lands (See Section 3.4.3 of this Coordination Plan for more discussion). The study was to identify opportunities for the application of alternative transportation systems to:

- Preserve sensitive natural, cultural, and historic resources;
- Reduce pollution;
- Relieve traffic congestion and parking shortages;
- Enhance visitor mobility and accessibility;
- Provide improved interpretation, education, and visitor information services; and
- Improve economic development opportunities for surrounding communities.

Generally, the concept of alternative modes of transportation is an urban consideration. In areas where the automobile dominates the mode of travel and the volumes of traffic cause congestion, other modes are being considered for moving people and goods. Forest Highways in Oregon are generally in rural areas and typically carry relatively low volumes of traffic, especially when compared to urban roadways. The movement of goods and people relies primarily on cars and trucks, but consideration of other transportation modes is beginning to occur.

Providing access to an alternative transportation mode may be as simple as paving roadway shoulders for bicycles and pedestrians. Providing safe, accessible crossings or paths can also encourage bicycle and pedestrian use. Congestion can be managed, for example, by installing signs to route traffic for more efficient use of the roadway system.

² TEA-21, the Transportation Equity Act for the 21st Century, is described in Section 3.3.1 of this Coordination Plan.

As discussed in Section 3.4.3, a report was issued in 2004 that includes an assessment of needs for alternative transportation systems in lands managed by the USFS (Cambridge Systematics, Inc. 2004). Although only one site in Oregon is addressed in the report, additional sites may be also benefit from the use of alternative transportation systems.

2.2.5 Environmental Quality and Health

Many of the Forest Highways in Oregon are older roads, built at a time when attention to environmental matters was not acknowledged or before environmental protection laws were enacted. While the past is the past, portions of these older roads remain today. Some Forest Highways have culverts that block fish passage; some dissect habitat for fish or wildlife species; and some cross migration corridors, leading to collisions between wildlife and vehicles. Some Forest Highways are on steep slopes with continuous slides; some have undersized culverts and contribute sediment to nearby streams and wetlands; and some Forest Highways provide ready opportunities for noxious weed invasions.

Environmental Quality and Health Goal:

Protect and/or enhance the natural environment when designing and constructing transportation facilities.

As the Tri-Agency implements the Oregon Forest Highway Program, it seeks to be a leader in environmental quality and health, and will continue to emphasize projects that are designed to be environmentally friendly. This includes improving passage for fish and/or wildlife, developing interpretive signage or other environmental education opportunities, implementing best management practices to reduce or eliminate sedimentation of streams and wetlands, implementing measures to minimize the potential for spreading invasive or noxious weeds, and using native plants for revegetation efforts on disturbed roadsides.

Making informed decisions is essential for achieving environmental quality and health. When making decisions for allocating funds for each project, the Tri-Agency sometimes programs (i.e., identifies) the amount of funding that will be made available for all of project development, that is, from preliminary design through construction. However, phased programming allows the Tri-Agency to make better-informed decisions on complex projects about whether and how much to fund a project. It also ensures that construction funding decisions are not "predecisional" (i.e. made before the NEPA process is complete) and, therefore, do not preclude analysis and selection of certain alternatives.

In phased programming, the Tri-Agency will first program funds for preliminary design and the NEPA process, during which project alternatives will be developed and evaluated. After the environmental decision document (i.e., NEPA document) is issued, the Tri-Agency will program funds for project final design and construction.

Agency Coordination

To address the requirements of Section 6001 of SAFETEA-LU (see Section 3.3.1) WFLHD will facilitate consultation among ODOT, WFLHD, and the land and natural resource management agencies early in the planning process. To ensure environmental considerations are incorporated into the selection of the Oregon Forest Highway projects, WFLHD environmental staff will work with the USFS staff at the National Forests that are proposing projects to assess project issues and to find environmental enhancement opportunities aligned with the Forest Plans that optimize future ecosystem health. Such considerations will be assessed in the review of project proposals.

Context Sensitive Solutions

FHWA has stated an objective to "improve the environmental quality of transportation decision making by incorporating context sensitive solutions principles in all aspects of planning and the project development process" (FHWA 2009a). To be "context sensitive," project planning, design, and construction must all consider the total context within which a transportation facility will exist. The facility should be appropriate for its physical setting (i.e. should "fit in") and should preserve scenic, aesthetic, historic, cultural, and environmental resources while maintaining safety and mobility. The project also should use available funds efficiently through practical design that provides a "best fit" solution for its context. Context Sensitive Solutions is a collaborative approach that involves all stakeholders, throughout the project development process, to develop a context sensitive transportation facility.

Oregon Forest Highway projects will continue to incorporate Context Sensitive Solutions throughout all phases of Forest Highway project development, that is, planning, design, and construction.

Sustainable Design and Construction

In recent years, there has been a trend toward more sustainable design and construction practices that are intended to reduce human impact on the environment while sustaining economic prosperity. Numerous programs have been developed to certify practices and developments as "green" or "sustainable." They typically include metrics for various criteria, such as reduced energy use and waste production, to measure sustainability performance (or, how "green" a project is).

At least one program has been developed to assess sustainability performance of road projects — Greenroads. Greenroads[™] is a sustainability performance metric for roadway design and construction. It can be applied to new or reconstructed/rehabilitated roadways. The program awards credits for approved sustainable choices and practices. Credits are awarded for

avoiding or reducing project impacts on the environment, improving human and wildlife health, and innovative design (Greenroads 2009). The program can be used to assess project sustainability.

In implementing proposed project, sustainability will be evaluated in all phases of Forest Highway project development. Greenroads or a similar program can serve as a guide for recommending and assessing sustainable practices and performance.

Aquatic Organism and Wildlife Passage

The Tri-Agency recognizes a need to reduce the negative effects of roadways on aquatic organisms and wildlife. As Forest Highway projects are developed, the partner agencies will work together to identify needs and opportunities to preserve or restore aquatic organism passage and wildlife corridors, and to develop appropriate crossings. Preservation and enhancement of corridors and important habitat will be considered in all phases of Forest Highway project development. Separate funding has been set aside in SAFETEA-LU for aquatic organism passage, as described in Section 4.4.

A number of other planning efforts provide guidance in this area. They include the Northwest Forest Plan, INFISH/PACFISH (USFS), Oregon Conservation Strategy (Oregon Department of Fish and Wildlife [ODFW 2006], the Oregon Wildlife Movement Strategy, the Western Governors' Association Wildlife Corridors Initiative (Western Governors' Association 2008), and the Oregon Wildlife Linkage Project. Section 3.4.6 provides some information about aquatic organism and wildlife conservation planning efforts.

Where roads interfere with aquatic organisms and/or wildlife movement, opportunities for safe crossings should be evaluated, especially for heavily traveled routes. Bridges or culverts allowing fish passage should be used where roads cross fish-bearing streams. For wildlife (mammals, reptiles, and amphibians) constructed crossings may be necessary to allow them to cross safely over or under busy roadways—particularly where there is no natural alternative and the road interferes with wildlife's desired travel routes for food, shelter, social, migratory, or other needs.



Deer crossing under roadway bridge designed for wildlife use (ODFW 2009a)



Completed fish passage project

Climate Change

Climate change and the related effects are complex. The Tri-Agency understands that addressing the issues and effects of climate change requires:

- Incorporating climate change into program and project planning.
- Coordinating with other agencies and their climate change efforts.
- Adapting to current and anticipated effects of climate change and to new response strategies as they are developed.
- Reducing greenhouse gas emissions.

Addressing climate change, along with potential mitigation and adaptation for its effects, in transportation planning is important. Considering climate change early in the planning process will aid decision-making and improve efficiency at the program level, and will inform the analysis and decisions for project design and mitigation. Climate change can be considered as part of many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life (FHWA 2009c).

Coordinated planning among the Tri-Agency partners, as well as other agencies, with regard to climate change is also important. In Oregon, ODOT and the MPOs are involved in efforts related to climate change. In 2010, those efforts include ODOT's Sustainability Program and the MPO Greenhouse Gas Emissions Task Force. The studies and results of those efforts and others can inform the Tri-Agency's planning and decision-making processes.

The Oregon Forest Highway Program needs to be adaptable so that it: 1) can address the current and anticipated effects of climate change and 2) can incorporate new strategies or methods for addressing climate change as they are developed. Rather than designing Forest Highway projects based on historical trends, the Tri-Agency needs to look forward and predict future trends. For example, climate change is affecting the frequency and intensity of storms. One effect of that is a greater quantity of stormwater runoff and more potential for roads to be flooded. By using current hydraulic and hydrologic models to estimate and predict water flows for roadways susceptible to flooding, engineers can design alternatives that are appropriate for the predicted conditions.

Numerous executive orders require federal agencies to reduce greenhouse gas emissions. Because most vehicles burn fossil fuels, they release greenhouse gases; burning less fossil fuel reduces greenhouse gas emissions. There are several ways that the Oregon Forest Highway Program can help reduce greenhouse gas emissions. Providing more opportunities for and encouraging the use of alternative transportation modes (such as walking, bicycling, and transit) can reduce the overall number of vehicle miles traveled (and thereby, the amount of fuel used and gas emissions). Reducing energy use by using sustainable construction methods and materials, such as recycled asphalt, can also reduce greenhouse gas emissions. See the "Sustainable Design and Construction" section above.

3 Agency and Planning Coordination

This Coordination Plan links the Tri-Agency partners' long-range planning efforts related to Forest Highways. Each partner agency prepares its own long-range plans for managing the resources under its jurisdiction. The long-range plans that are particularly related to Oregon's Forest Highways include: USFS Forest Plans, motor vehicle use maps, ODOT's Oregon Transportation Plan (OTP), and county transportation system plans. Those plans are described in this chapter. Projects proposed for funding under the Oregon Forest Highway Program should be consistent with each of the plans. Additional information about the roles and responsibilities of each partner agency is provided in Appendix C, Roles of the Partner Agencies. This chapter also describes other factors and regulations that influence Forest Highway planning, including the regulations that require planning coordination.

When a partner's long-range plan is being updated, WFLHD will assist the partner agency to help define the purpose and uses of important access routes in, to and through the National Forest, specifically those designated as Forest Highways. The purposes of such coordination are: to help identify projects that meet partner agency access objectives for those routes and to ensure consistency of those projects with the partner agency long-range plan.

3.1 Long-Range Plans

3.1.1 USFS Land and Resource Management Plans

The management of National Forests is guided by existing laws, regulations, agency policy, and National Forest Land and Resource Management Plans. Forest Plans may be amended to reflect new science or changed circumstances. For example, emphasis on the protection of aquatic resources in late-successional forests was increased across the Region when plans were amended by the Northwest Forest Plan (NWFP) decision in 1994, and PACFISH and INFISH decisions in 1995.

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 National Forest, defines desired future conditions, sets standards for visual quality (for example, along scenic byways, wild and scenic rivers, and wilderness areas), and provides direction for managing the forest resources.

Forest plans provide the framework in which project decisions can be made on case-by-case and site-specific bases. 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 with the plans. Decisions about specific roads and trails are made through project-level analysis and decision documents in accordance with the National Environmental Policy Act (NEPA). Appendix G contains a summary of the functions and limitations of a Forest Plan.

Northwest Forest Plan (NWFP), PACFISH and INFISH

In 1993, the President convened a conference in Portland, Oregon, to end the impasse over management of Federal forest lands in the Pacific Northwest within the range of the Northern spotted owl. With the signing of the NWFP Record of Decision in 1994, a framework and system of standards and guidelines were established, using a new ecosystem approach to address resource management. The NWFP amended the Forest Plans within the range of the northern spotted owl with additional direction for managing old-growth-dependent species and at risk fish populations. The NWFP amendment included additional standards and guidelines for transportation management in areas designated for late-successional forest habitat emphasis; key watersheds, areas that were determined to be crucial to at-risk fish and water quality and are a priority for watershed restoration; and within riparian reserves, the lands along streams and potentially unstable areas.

PACFISH and INFISH are ecologically-based interim strategies that provide additional direction to National Forests outside the range of the northern spotted owl. The PACFISH strategy, adopted in 1995, was designed to arrest the degradation and begin the restoration of aquatic habitat and riparian areas in watersheds that provide habitat for anadromous fish outside the range of the northern spotted owl. Similarly, INFISH, also adopted in 1995, provided interim direction to protect the habitat and populations of native fish outside the range of anadromous fish and east of the range of the northern spotted owl. Both strategies are considered to be an interim approach until Forest Plans are revised. As in the NWFP, the strategies include standards and guidelines for transportation management within riparian areas and guidance for key watersheds.

There are currently no similar, formalized strategies for managing terrestrial connectivity issues. The FS has informal agreements with Oregon Department of Fish and Wildlife (ODFW) and Oregon Department of Transportation (ODOT) for management of highway crossings in regard to terrestrial crossings and terrestrial connectivity issues.

Aquatic Conservation Strategy

While not an amendment to the Forest Plans, in 2005 the Pacific Northwest Region adopted the Aquatic Restoration Strategy. This restoration strategy provides guidance for watershed restoration that includes "Passive" and "Active" restoration. Passive restoration emphasizes the natural recovery of aquatic systems and the design of management activities to maintain or improve watershed conditions. Active restoration involves active intervention specifically designed to influence the natural processes needed for aquatic and watershed resources. Active restoration is emphasized in priority, focused watersheds and relies on the involvement of internal and external partnerships. Transportation management including road maintenance,

road reconstruction and in some cases decommissioning activities that improve watershed and aquatic habitat conditions are key elements of the Aquatic Restoration Strategy.

3.1.2 Travel Management Rule

The NFS transportation system is regulated under the Travel Management Rule (TMR) (36 CFR part 212, subpart B), adopted in 2005. One impetus for the new regulations was the large growth of off-road vehicle (OHV) capabilities and use and the resultant impacts on soil, water, wildlife habitat, and other recreational visitors. The TMR provides for a system of NFS roads, trails, and areas that are designated for motor vehicle use, including the class of vehicle and time of year. In designating NFS roads, trails, and areas on NFS lands for motor vehicle use, the responsible official shall consider effects on NFS natural and cultural resources, public safety, provision of recreational opportunities, access needs, conflicts among uses of NFS lands, the need for maintenance and administration of roads, trails, and areas that would arise if the uses under consideration are designated; and the availability of resources for that maintenance and administration. Designation of NFS roads on NFS lands is coordinated with appropriate Federal, State, county, and other local governmental entities and tribal governments.

Roads, trails, and areas designated as open to motor vehicles will be identified on a motor vehicle use map, which replaces the Access and Travel Management map previously in use. The motor vehicle use maps specify the classes of vehicles and, if appropriate, the times of year for which use is designated. A complete inventory of NFS system roads is included in a unit's transportation atlas. After the roads, trails, and areas are designated, motor vehicle use, including the class of vehicle and time of year, not in accordance with these designations is prohibited.

3.1.3 Oregon Transportation Plan

The OTP (ODOT 2006a) is the state's long-range, multi-modal transportation plan for Oregon's airports, bicycle and pedestrian facilities, highways and roadways, public transportation, pipelines, ports and waterway facilities, and railroads. It is a 25-year (2005 to 2030) transportation plan that promotes economic efficiency, orderly economic development, safety, and environmental quality. Required by Oregon and federal statutes, the OTP guides development and investment in the transportation system. It includes a comprehensive assessment of state, regional, and local—both public and private—transportation facilities and services. The current OTP, which was adopted by the Oregon Transportation Commission in 2006, builds on the 1992 OTP, which first established a vision of a balanced, multi-faceted transportation system leading to expanded investment in non-highway transportation options.

The OTP is based upon five fundamental themes: accessibility and mobility, economic development, equity, safety, and sustainability. The goals and policies of the OTP guide more specific multi-modal plans, modal/topic plans, facility plans, and regional and local transportation system plans. They also guide transportation strategies and investments and other decisions by state and local agencies, regional and local governments, and other transportation providers.

Agency and Planning Coordination

In 1996, the Oregon Transportation Commission authorized regionally-based transportation advisory commissions known as Area Commissions on Transportation (ACTs) in an effort to expand opportunities for local citizen involvement in ODOT's decision making, including opportunities to participate in the early stages of transportation project selection (ODOT 2008). ACTs were established throughout Oregon, although a few counties coordinate directly with ODOT instead of through ACTs.

ACTs are advisory bodies that address all aspects of transportation (surface, marine, air, and transportation safety), with primary focus on the state transportation system. There are 12 ACTs in Oregon; each represents a different region in the state (ODOT 2008). ACTs consider regional and local transportation issues if they affect the state system. They work with other local organizations such as county transportation departments and transit agencies involved in transportation-related issues.

Oregon Transportation Safety Action Plan

The Oregon Transportation Safety Action Plan (OTSAP) (ODOT 2004) is the safety element for the OTP. The OTSAP is a statewide coordinated safety plan that provides a comprehensive framework, and specific goals and objectives, for reducing highway fatalities and serious injuries on all public roads. It defines, in greater detail, system improvements, legislative needs, and financial needs, and identifies a safety agenda for the state. The OTSAP provides guidance for investment decisions that are reflected in the Statewide Transportation Improvement Program (STIP), the Highway Safety Performance Plan, and the operating budgets of implementing agencies.

After the OTSAP was adopted in 2004, SAFETEA-LU, the federal transportation program reauthorization act for 2005, required each state to develop and maintain a long-range Strategic Highway Safety Plan that identifies highway safety problems and opportunities and includes a program of projects. ODOT developed a Strategic Highway Safety Plan and amended the OTSAP (ODOT 2006b) to incorporate the federal requirements.

To comply with the federal requirements, ODOT develops and publishes a list of Highway Safety Improvement Program projects in its annual Performance Plan and Annual Evaluation documents. Those safety improvement projects are scheduled into the STIP. Such projects, if proposed on a designated Forest Highway, may be good candidates for Forest Highway Program funding because: 1) they would already be included on the STIP, demonstrating consistency with other transportation plans, and 2) there may be an opportunity to combine state funds with Forest Highway Program funds.

3.1.4 Oregon Statewide Land Use Planning

Since 1973, Oregon has maintained a statewide program for land use planning. The foundation of that program is a set of 19 Statewide Planning Goals. The goals express the state's policies on land use and related topics, such as citizen involvement, transportation, recreation, and natural resources. Most of the goals are accompanied by guidelines, which are suggestions about how a

goal may be applied by local jurisdictions. Oregon's planning laws apply to special districts and state agencies as well as local governments.

Oregon's Statewide Planning Goals are implemented through local plans. State law requires each city and county to adopt a comprehensive plan and the ordinances needed to put the comprehensive plan into effect. Proposed transportation improvements are included in the transportation element of each comprehensive plan (see Section 3.1.6). The Oregon Land Conservation and Development Commission (LCDC) reviews each comprehensive plan for consistency with the Statewide Planning Goals and approves each plan through an acknowledgement process. Once acknowledged, a comprehensive plan becomes the controlling document for land use in the area covered by that plan.

On occasion, the state planning regulations may supersede a local plan. That would occur if a local plan is not up to date or consistent with the state regulations, or if a local plan has not been acknowledged by LCDC.

3.1.5 Regional Transportation Plans

RTPs are the long-range (20-year) transportation plans prepared by the state's six designated MPOs—urban areas with populations of 50,000 or more. Oregon's MPOs are: Bend, Corvallis, Eugene-Springfield, Portland Metro, Rogue Valley, and Salem-Keizer. Of those, four are near National Forests. The Rogue River-Siskiyou National Forest borders Medford (Rogue Valley MPO), the Willamette National Forest is just east of both Eugene and Salem, and the Deschutes National Forest borders Bend.

The federal government requires MPOs to develop and maintain RTPs in exchange for access to federal funding for transportation improvements. Each RTP is developed in coordination with existing planning processes, agencies, and transportation providers in the region. RTPs are updated every 4-5 years, and public involvement occurs at various points throughout the development and update of each RTP.

3.1.6 County Transportation System Plans

Each county (and city) in Oregon develops a Transportation System Plan (TSP) and incorporates the TSP into its comprehensive plan. TSPs are updated when conditions change or on a periodic basis. Implementing rules for Goal 12, Transportation, are set forth in Oregon Administrative Rules (OAR) 660-015-0000(12). According to Goal 12:

A transportation plan shall

(1) consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrian;

(2) be based upon an inventory of local, regional and state transportation needs;

(3) consider the differences in social consequences that would result from utilizing differing combinations of transportation modes;

(4) avoid principal reliance upon any one mode of transportation;

(5) minimize adverse social, economic and environmental impacts and costs;

(6) conserve energy;

(7) meet the needs of the transportation disadvantaged by improving transportation services;

(8) facilitate the flow of goods and services so as to strengthen the local and regional economy; and

(9) conform with local and regional comprehensive land use plans.

Each plan shall include a provision for transportation as a key facility. (Oregon Department of Land Conservation and Development 2008)

3.2 Transportation Improvement Programs

3.2.1 Forest Service Transportation Improvement Programs

The Forest Service coordinates several transportation improvement programs at the regional scale through its regional offices. They are typically in the form of a capital investment program and several natural resource investment programs directed towards transportation. The programs are funded through agency appropriations in 23 U.S.C. 205, not through the highway trust fund. They are not required by law, regulation, or policy but are either best practices or are required by program direction contained within the Forest Service budget process. They can affect the Forest Highway program by either directly funding projects (partially or fully) that are Forest Highways under USFS jurisdiction or on Forest Service roads that directly link to Forest Highways.

The Pacific Northwest Region maintains a three-year capital investment program for road and bridge projects on National Forest System roads. While agency appropriations are for only one year, the region has decided that they will allocate approximately 10 percent of road appropriations for road and bridge purposes. Projects are evaluated against a set of criteria that include safety/volume of use, preservation, importance of access, mobility, potential leveraging of funds, and meeting restoration goals.

The Pacific Northwest Region also creates a three-year program of projects that are directed towards environmental restoration on National Forest roads and trails, specifically those projects that can improve watershed health. The projects are a result of a change in agency appropriations bills that began in 2008, called Legacy Roads and Trails. Projects are evaluated against a set of criteria in four major categories of work (improvements, aquatic organism passage, decommissioning/storage, and planning). An additional allocation is made for maintenance related work, primarily road drainage. The region uses the Aquatic Conservation Strategy as a base for prioritizing where funding is directed. Funds are directly allocated to the regions by the Forest Service office in Washington D.C.

3.2.2 State and Regional Transportation Improvement Programs

Oregon's Statewide Transportation Improvement Program, known as the STIP, is a four-year program developed by ODOT. The STIP includes a prioritized list of transportation projects and programs, and identifies the funding and scheduling for those projects and programs. The STIP includes projects on the federal, state, city, and county transportation systems, multimodal projects, and projects in the National Parks, National Forests, National Wildlife Refuges, and Indian tribal lands.

Regional transportation improvement programs (TIPs) are similar to the STIP, but they are prepared by the MPOs for each region. TIPs are the short-term investment programs for implementing projects envisioned in the RTPs.

3.2.3 Federal Lands Highway Transportation Improvement Program

The Federal Lands Highway Transportation Improvement Program (TIP) is similar to the STIP and MPO TIPs. It is a five-year plan and includes a prioritized list of transportation projects, along with funding and scheduling information. The TIP also identifies "regionally significant" projects. Projects defined as "regionally significant" must follow the statewide or MPO planning process. For other projects, the transportation planning process need only be consistent with statewide or MPO planning processes.

Each division of FHWA's Office of Federal Lands Highway³ develops a TIP in cooperation with the federal land management agencies. The Office of Federal Lands Highway has responsibility for approval of the TIP, which is subsequently incorporated into the STIP. The projects included in the TIP are consistent with the STIP, RTPs, and long-range transportation plans of the federal land management agencies, such as the USFS. More information about how Forest Highway projects are included on the STIP and TIP is available in Section 4.2

3.3 Federal Requirements for Coordinated Transportation Planning

3.3.1 Federal Surface Transportation Act

Congress has recognized the need for coordinated transportation planning for many years. The current and previous federal surface transportation acts required federal transportation agencies to coordinate their planning efforts with other transportation plans. Such a requirement is likely to be included in future federal surface transportation acts. This Coordination Plan was prepared, in part, to comply with such regulations.

The Transportation Equity Act for the 21st Century (TEA-21) was enacted in 1998. In TEA-21 the Federal Lands Highway program was required to develop regulations for transportation planning that were more consistent with the planning regulations for state departments of

³ The Federal Lands Highway field organization consists of three divisions: Eastern Federal Lands, Central Federal Lands, and Western Federal Lands. WFL serves Oregon, Washington, Idaho, Montana, Wyoming, and Alaska.

transportation. The Forest Highway Program has responded to that requirement mainly through the defined Tri-Agency partnership of the Federal Lands Highway divisions, USFS, and state departments of transportation.

SAFETEA-LU, enacted in 2005, was TEA-21's successor. Section 6001 of SAFETEA-LU establishes the long-range planning requirements for transportation projects. This included provisions intended to enhance the consideration of environmental issues and impacts within long-range transportation planning processes, as well as in the NEPA process. Section 6001 of SAFETEA-LU also directs the FHWA and state departments of transportation to consult with land and natural resource management agencies, to compare maps of interest with those agencies, and to discuss issues early in planning process.

To meet the federal requirements for coordinated transportation planning, the Tri-Agency partners must coordinate with one another, as well as with interested natural resource agencies (e.g., US Fish and Wildlife Service, National Oceanic and Atmospheric Administration Fisheries Service, US Army Corps of Engineers, ODFW). Working together, the agencies need to identify environmental issues and to determine environmental review and permitting requirements and schedules. The Tri-Agency considers that information when determining schedules (and, potentially, phases) for project delivery.

3.3.2 Federal Lands Highway Program

The Forest Highway Program is part of the Federal Lands Highway Program and, as such, must comply with statutes related to the Federal Lands Highway Program. Title 23 of the USC, as amended, is the federal statute related to highways. Title 23, subsection 204 includes the following language related to the Federal Lands Highway Program.

- (1) In general. Recognizing the need for all Federal roads that are public roads to be treated under uniform policies similar to the policies that apply to Federal-aid highways, there is established a coordinated Federal lands highways program that shall apply to public lands highways, park roads and parkways, refuge roads, and Indian reservation roads and bridges.
- (2) Transportation planning procedures.— In consultation with the Secretary of each appropriate Federal land management agency, the Secretary shall develop, by rule, transportation planning procedures that are consistent with the metropolitan and statewide planning processes required under sections 134 and 135.
- (3) Approval of transportation improvement program. The transportation improvement program developed as a part of the transportation planning process under this section shall be approved by the Secretary.
- (4) Inclusion in other plans. All regionally significant Federal lands highways program projects
 - *a. shall be developed in cooperation with States and metropolitan planning organizations; and*

- *b. shall be included in appropriate Federal lands highways program, State, and metropolitan plans and transportation improvement programs.*
- (5) Inclusion in state programs. The approved Federal Lands Highway transportation improvement program shall be included in appropriate State and metropolitan planning organization plans and programs without further action on the transportation improvement program.
- (6) Development of systems. The Secretary and the Secretary of each appropriate Federal land management agency shall, to the extent appropriate, develop by rule safety, bridge, pavement, and congestion management systems for roads funded under the Federal lands highways program.

In 23 USC 135 (statewide planning for highways), the language related to the transportation planning requires each State to consider the concerns of Indian tribal governments and federal land management agencies that have jurisdiction over land within the boundaries of the State. Also, each State must develop a long-range statewide transportation plan, with a minimum 20-year forecast period for all areas of the State, which provides for the development and implementation of the intermodal transportation system of the State. Relevant language from 23 USC 135 is contained in Appendix E.

Generally, Forest Highway planning should follow a process consistent with the Statewide and Metropolitan Planning Organization (MPO) processes to ensure coordination for all public roads in a State. Also, Forest Highway planning requires consultation with Federal land management agencies, as described in Section 3.3.1.

3.4 Other Factors that Influence Forest Highway Planning

Several factors have been influencing the federal Forest Highway Program over recent years. They are described in this section. Some of those factors are changing areas of emphasis for the program, and other factors are reinforcing previous activities.

3.4.1 Construction Costs

Across the country, road and highway construction costs have shown volatility in recent years, but, overall, costs have continued to rise. The cost of rehabilitating some roadways has been increasing at a rate greater than US 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. This has resulted in an increased pool of potential projects with a higher level of deterioration due to deferred maintenance.

Construction cost is a factor that should be considered when deciding how Oregon Forest Highway funds will be invested. Specifically, planners and decision-makers should consider the best use of available funds to 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.

3.4.2 Safety

Safety, always a high priority in transportation, is one of the five goal areas and a selection criteria for Forest Highway project selection. SAFETEA-LU requires each state department of transportation to develop a Strategic Highway Safety Plan to address the state's highway safety needs (see Section 3.1.3). The Oregon Forest Highway Program needs to consider how it can complement other safety planning efforts within the state. For example, if a route is designated as a critical access route or disaster evacuation route, that designation should be considered in making decisions about proposed funding and roadway improvements.

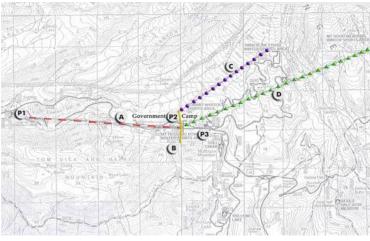
3.4.3 Multi-Modal Considerations

States, MPOs, and federal land management agencies are now considering alternative transportation solutions in their transportation plans. 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. Likewise, the Oregon Forest Highway Program should consider alternative transportation modes when evaluating and developing proposed projects.

Section 3039 of the 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 "3039 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 one site in Oregon, on the Mt. Hood National Forest near the community of Government Camp. The study identified options for an aerial tramway, bus service, and additional parking at that site (see Figure 3).

The Mt. Hood National Forest, located in north-central Oregon, encompasses approximately 1.1 million acres of NFS lands, straddling the Cascade Mountain Range. It offers a variety of yearround recreational opportunities, including wilderness hiking, camping, sightseeing, and downhill and cross-country skiing. The National Forest is less than a one-hour drive from the Portland metropolitan area, which has nearly two million residents, and attracts four to five million visitors annually.



Mt. Hood National Forest – Potential Aerial Tramway Routes

The town of Government Camp, at the base of Mt. Hood, is a focal point for recreational activity in the National Forest. It is near downhill ski areas and offers lodging, restaurants, and limited retail. Primary access to Government Camp from the Portland area is via US Highway 26, which carries a high volume of auto and truck traffic and can experience serious congestion west of Government Camp during winter periods of peak demand. US 26 also is considered a hazardous highway and was designated a "safety corridor" by ODOT in 1996. Vehicular traffic on US 26 is projected to double by 2020, and ODOT is pursuing a 10-year program of widening and safety improvement to US 26.

As a strategy to foster economic development in the town of Government Camp, while also recognizing the need to improve traffic and circulation conditions related to US 26, the Clackamas County Development Agency commissioned a study of aerial transportation opportunities in the Government Camp area. The study identified four possible aerial transportation alignments and recommended gondola technology as the most feasible, given its costs, flexibility, and operating environment. The study also identified potential areas for parking lots that would serve the gondola system. A gondola system could provide an attraction for sightseers while also serving skiers accessing the various ski areas in the vicinity. Depending upon choice of alignment(s) and parking location, the gondola system also could potentially divert traffic from US 26 in the vicinity of Government Camp and the mountain road (Highway 173) to Timberline Lodge, a historic lodge owned by the USFS that attracts nearly 1.9 visitors annually.

Source: Cambridge Systematics, Inc. 2004

Figure 3. Example of Proposed Alternative Transportation System Project in Oregon: Mount Hood National Forest Aerial Transportation System

Agency and Planning Coordination

Following the studies done under Section 3039, Congress established the Paul S. Sarbanes Transit in the Parks Program (formerly the Alternative Transportation in Parks and Public Lands [ATPPL] Program) to enhance the protection of national parks and federal lands and increase the enjoyment of those visiting them. Administered by the Federal Transit Administration in partnership with the Department of the Interior and the USFS, the program provides grants to fund capital and planning expenses for alternative transportation systems such as shuttle buses and bicycle trails in national parks and public lands. Projects carried out under this program must be consistent with other transportation policies of the Department of the Interior and other federal land management agencies.

The Transit in the Parks Program is not part of the Forest Highway Program. However, the Forest Highway Program has contributed funding for some projects that received grants under the Transit in the Parks program – another example of combining funds from different sources to implement projects.

To date, the Oregon Forest Highway Program through the enhancement set-aside has also contributed funding to a number of multi-modal efforts unrelated to the Transit in the Parks program. Examples include: the Chemult train station (inter-modal transportation facility), Historic Columbia River Highway bike path, and several other bike and pedestrian projects.

3.4.4 Fluctuations in Revenue

As many Oregonians know, there has been a shift in economic activities associated with National Forests in the state. While National Forests in Oregon continue to play a role in the state's economy, that role has shifted from timber production to recreation, and it has affected the Forest Highway Program.

Oregon counties receive payments as compensation for the effects of National Forests on county tax revenue and county roads. Historically, 25 percent of USFS timber sales receipts were paid to counties. Of that, 75 percent was dedicated to county roads and represented approximately 25 percent of all county road funds. However, timber harvest has dropped dramatically from historic levels. In the 1980's, USFS timber harvest in Oregon was over 3 billion board feet per year. That dropped in the 1990's to about 400 million board feet per year (Campbell, S. et al. 2004. Timber Resource Statistics for Oregon. PNW-RB-242. USDA Forest Service) and, since 2000, has averaged just over 200 million board feet per year with the latest data, in 2008, reporting 206 million board feet (Oregon Department of Forestry Annual Timber Harvest Report).

As the timber cut was reduced, so was funding for county roads. Although Congress has made various attempts to compensate counties for the lost revenue, the availability and amount of future federal assistance is unpredictable. It is anticipated that over half of Oregon counties could lose at least 25 percent of their total road revenues in the near future (Governor's Task Force on Federal Forest Payments and County Services, January 2009). Some counties could be hit harder, and three counties could lose about 75 percent of their total road revenue. The counties with the most NFS lands could lose the most revenue.

3.4.5 Economic Development Opportunities

The economic impacts of tourism and recreation on federal lands nationally 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. Some of the major findings and highlights are (FHWA 2009d):

- Federal lands welcome more than 550 million visitors annually.
- Visitors to federal lands spent \$39 billion in 2006, accounting for almost 7% of all tourism spending in the United States.
- Recreation activities at the local level support 373,000 jobs in the retail, dining, and hospitality sectors.
- Each year, approximately 790 miles of the nearly 300,000-mile federal public road system is improved. Road rehabilitation and maintenance impacts create new income and spending for local communities surrounding federal lands.
- From 2004-2009, it is estimated that funding for federal lands through the SAFETEA-LU transportation authorization will create over 20,000 jobs annually.

Compared to many other states, Oregon contains a large number of National Forests. National Forest System lands comprise about 25% of Oregon's land area. Oregon has more miles of Forest Highways than any other state. In Oregon, there are:

- 11 National Forests, 1 National Scenic Area, 2 National Recreation Areas, and 1 National Grassland (14 percent of the 175 National Forests and Grasslands in the United States)
- Approximately 15.7 million acres of NFS lands (8.1 percent of all the NFS lands within the United States [USFS 2009])
- 11.1 million National Forest visits (13.6 million site visits) annually (about 2 percent of all federal lands visits nationally) (USFS 2008)
- 3,865 miles of Forest Highways (12 percent of the 31,200 miles of Forest Highways in the United States)

Forests contribute to Oregon's economy. According to the Oregon Forest Resources Institute (OFRI), the direct economic contribution of people visiting publicly-owned, forest-related sites includes an estimated \$800 million in annual expenditures, and nearly 70 percent of that is generated by visitors who travel 50 or more miles to the forest site (OFRI 2005). Additional direct effects include 10,370 jobs related to forest tourism (OFRI 2005). Those would include year-round activities from traditional hiking, camping, hunting, fishing and picnicking to internationally-known downhill ski resorts.

The economic contribution of all of Oregon's forest industry is even greater than that of tourism. The forest sector is the second largest contributor to the state's economy, behind high-tech – accounting for 6.9 percent of Oregon's industrial output (OFRI 2008). Forestry products and services directly employ more than 85,000 people and are very important to Oregon's rural communities (OFRI 2008).

Considering the above information, it is apparent that Oregon's NFS lands can, and do, make an appreciable contribution to the state's economy. Projects that improve access to or through NFS lands can, therefore, encourage economic development. Forest Highways provide access to National Forests, but also serve rural communities and other public- and privately-owned forest lands. The Tri-Agency needs to consider the potential economic effects of the Forest Highway system and how Forest Highways can benefit economies in the areas they serve.

3.4.6 Aquatic Organism and Wildlife Conservation

Each year, millions of animals are killed by vehicle collisions on roadways in the US. Such collisions also cause human injury and property damage. Roads can also act as barriers to movement of both aquatic and wildlife species, affecting their ability to find food, breed, and thrive.

The most important way to protect wildlife and aquatic organisms from the effects of roadways is to establish and preserve habitat corridors where wildlife can move freely and safely. Wildlife corridors are less-developed areas set aside primarily for wildlife habitat. As part of the Oregon Conservation Strategy (Oregon Department of Fish and Wildlife [ODFW] 2006), the state has developed the Oregon Wildlife Movement Strategy, which supports the identification and development of wildlife corridors. In addition, the Western Governors' Association Wildlife Corridors Initiative (Western Governors' Association 2008) includes the following two action items:

- Make the preservation of Wildlife Corridors and Crucial Habitat priorities for transportation planning, design, and construction;
- Integrate conservation and transportation coordination, planning, and implementation across jurisdictions.

The Oregon Wildlife Linkage Project, a partnership of ODFW and ODOT, has identified priority wildlife linkage areas. Those areas are expected to be the focus of initial investment for reducing vehicle-wildlife incidents and preserving wildlife corridors. Projects will likely be implemented as a component of a safety, maintenance, or capacity projects, rather than developed solely as a wildlife corridor project (Hatch and Trask 2008).

There are many examples of successful aquatic and wildlife crossings throughout Oregon. As of 2007, ODOT had built eight terrestrial crossings and 116 aquatic crossings (Cramer 2008). Between 2003 and 2009, the USFS reconstructed over 100 aquatic organism crossings in Oregon using the Stream Simulation design method. However, wildlife passages are not always successful. They need to be located, designed, and built appropriately. As Forest Highway projects are developed, the partner agencies will work together and with other agencies, such as ODFW, to identify needs and opportunities to enhance wildlife corridors and to develop appropriate aquatic and wildlife crossings.

3.4.7 Public Input

Forest Highway planning is also influenced by information and opinions expressed by tribes, agencies, local residents, businesses, special interest groups, and others members of the public. Public involvement occurs throughout the transportation planning processes used by the counties, USFS, ODOT, and WFLHD. Although the Forest Highway public involvement and planning processes are distinct from those specific to the counties, USFS, and ODOT, they build upon and are integrated with them.

Both long-term and short-term transportation planning efforts of the partner agencies provide opportunities for public involvement. Public involvement occurs during the various stages of transportation planning, and it affects:

- transportation policy (at the "policy level" of planning),
- transportation plans (at the "plan level" of planning), and
- transportation projects (at the "project level" of planning).

"Policy level" plans are the long-range transportation planning efforts that set transportation policy in Oregon such as the OTP, Regional Transportation Plans (RTPs) prepared by the state's six MPOs, county comprehensive land use plans, Forest Plans, and this Coordination Plan. Various techniques are used to gain public input to assure that policy-makers consider a broad range of issues, allowing the public to help shape transportation policy.

Public involvement activities that occur at the "plan level" include those related to the development of county transportation system plans, motor vehicle use maps, MPO TIPs, the STIP, and the Federal Lands Highway TIP. Because those plans include 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.

Additional public involvement occurs after projects are included on the STIP, MPO TIPs, county transportation system plans, and Federal Lands Highway TIP. The "project level" planning and public involvement occurs when developing specific transportation projects, such building a new bridge, widening a roadway to add bicycle lanes, or constructing a rest area. Public input is sought to identify community interests and concerns. It also helps communities anticipate and prepare for project construction impacts.

Public involvement specific to Forest Highway projects is typically related to the NEPA process, which is the process used to evaluate and assess the potential environmental impacts of proposed projects. All projects that include federal funding, such as Forest Highway projects, must comply with NEPA process. The NEPA process requires public outreach at several stages.

Area Commissions on Transportation

Area Commissions on Transportation (ACTs) are regionally based transportation committees established in 1996 by the Oregon Transportation Commission. ACTs play a key advisory role in STIP development by establishing a public process for selecting and prioritizing projects in

Agency and Planning Coordination

their area of influence. Public input is used to inform the ACTs, ODOT, and other sponsoring agencies (e.g., counties) about how proposed projects would benefit or impact the community and the environment, and to provide other information that may be relevant to proposed projects. By considering adopted project eligibility criteria along with public input, ACTs prioritize transportation problems and solutions and recommend projects in their area to be included in the STIP.

The Tri-Agency sought input from the ACTs regarding this Coordination Plan and will request additional input when this plan is updated. ACTs will also have opportunities to provide input during the selection process for Oregon Forest Highway projects.

4 Funding, Investment Strategy and Project Selection Process

This chapter summarizes the process for selecting projects that will receive Forest Highway Program funds and describes the funding and investment strategy. In brief, when developing or reviewing a project proposal, the Tri-Agency will consider:

- the Oregon Forest Highway Program funding and investment strategy and guidelines,
- how the project meets the established criteria of 23 CFR 660, Subpart A Forest Highways,
- the purpose of and need for the project,
- how the project addresses the goals of the Oregon Forest Highway Program (see Chapter 2), and
- how the project aligns with transportation plans and other relevant planning documents.

4.1 Funding and Investment Strategy and Guidelines

Funding for the Oregon Forest Highway Program may remain at current levels or may experience minor increases in the next 20 years. In either case, the combined cost of the projects submitted in a call for projects will likely continue to exceed the amount of program funds available each year. The Tri-Agency must carefully consider the costs and benefits of each project; therefore, a funding and investment strategy is critical to the program's success over the next 20 years.

The investment strategy of the Oregon Forest Highway Program is to be able to select the "best" of the proposed projects – best combination of safety, preservation, economic development, mobility, and environmental quality – with the limited funds available. Project proposals that demonstrate how the project will address several of the investment guidelines will generally rank higher than other proposals.

The following investment guidelines will be used to refine the project selection criteria of 23 CFR 660 for use by the Oregon Tri-Agency. The "best" projects, that is, the projects that will be selected for funding through the Oregon Forest Highway Program are defined as the ones that:

- address a documented condition requiring relief (i.e., meet the stated purpose and need);
- are consistent with transportation planning for that corridor (e.g., Forest Plan, OTP, county transportation system plan);
- truly balance the objectives of transportation and land management;

- provide an opportunity for Forest Highway Program funds to be used where either other funding is less available or other funding has not yet addressed the condition; and
- leverage funds from other sources to increase project benefits. The intent here is to look into other planning efforts and, where appropriate, combine money from other sources with Forest Highway Program funds, making it possible to develop a project that provides greater benefit. Examples include:
 - combining Forest Highway funds with funds designated for recreation to provide additional pedestrian or bicycle improvements,
 - combining Forest Highway funds with funds designated for fish and wildlife to enhance habitat in addition to project mitigation, and
 - combining Forest Highway funds with funds designated for an adjacent transportation project to develop a larger project with a consistent, coordinated design and with fewer construction impacts.

When developing or reviewing project proposals, the Tri-Agency should consider how each project meets the established criteria of 23 CFR 660, the Oregon Forest Highway investment strategy and guidelines, and the goals of the Oregon Forest Highway Program. The program goals are presented in Chapter 2 of this Coordination Plan.

The Tri-Agency is able to direct, or set aside, a certain percentage of program funds to a specific type of project. The Tri-Agency may create such set-asides to meet certain goals. For example, the Oregon Tri-Agency has already emphasized enhancement projects by creating specific set-asides for such projects (see Sections 4.3) and issuing separate project calls specifically related to those set-asides.

Some Forest Highway Program funds are also set aside specifically for aquatic organism (e.g., fish) passage. However, that money was set aside by Congress in SAFETEA-LU, and the USFS directs how the funds are spent. See Section 4.4 for more information.

4.2 How Forest Highway Projects Are Selected

4.2.1 Proposal and Selection Process Overview

The process for identifying and selecting projects that will receive Forest Highway Program funding is truly a partnership between WFLHD, USFS, and ODOT with AOC. Basically, the process consists of:

- 1. WFLHD issues a call for projects.
- 2. Project proposals are prepared and submitted by the USFS and state or local agency. Project proposals are submitted on specific forms.

- 3. The Tri-Agency ranks project proposals using established criteria; low-ranking projects may be dropped at this point, depending on available funding.
- 4. If needed, a Project Identification Report (PIR) and Road Safety Audit (RSA) are prepared to scope the project and its potential impacts, issues, and cost. Projects that have limited impacts or very basic scopes of work may not need a PIR or RSA. The PIR is also used to help define the purpose of and need for the project.
- 5. Based on the scoping reports, the Tri-Agency prioritizes projects on the Forest Highway Program.
- 6. WFLHD puts the Tri-Agency-approved projects on the STIP and the Federal Lands Highway TIP.

The Forest Highway Program project development and selection process is diagrammed below in Figure 4. In Oregon, in addition to the call for projects, there are separate calls specifically for enhancement projects. This call is similar to the process identified below.

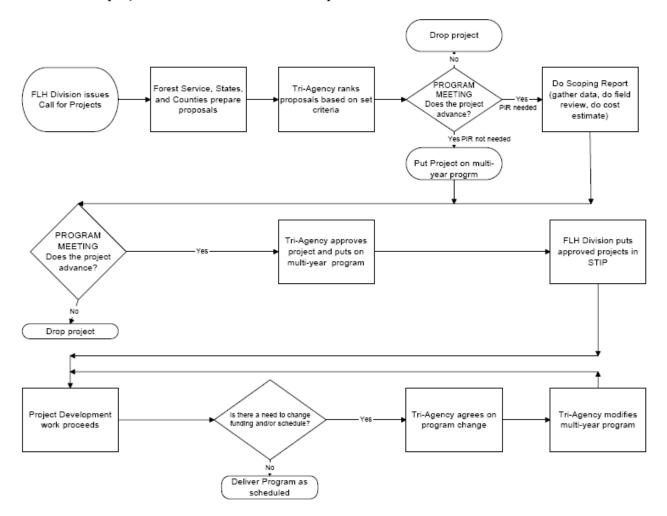


Figure 4. Typical Forest Highway Project Selection and Development Process

4.2.2 Selection Criteria

23 CFR 660, Subpart A – Forest Highways, has established a list of seven criteria for FHWA to use with the USFS and state departments of transportation to jointly select the projects that will be included in the Forest Highway Programs for the current fiscal year and at least the next 4 years. The criteria to be considered are:

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

While the criteria are presented in CFR 660, the Oregon Tri-Agency has latitude to emphasize one or more criteria, and to develop additional guidance for the types of projects that will rank higher. Chapter 2 of this Coordination Plan presents a set of goals that expand and refine the CFR 660 criteria to meet the needs of the Oregon Forest Highway Program for the next 20 years, 2011 to 2031.

Inventory results of the pavement and bridge management systems, which provide information about the existing conditions on Oregon Forest Highways and represent one of the selection criteria, are presented in Chapter 5 of this Coordination Plan.

4.2.3 Scoping – Project Identification Report

Preparing and issuing the PIR is a key step in the process of selecting and programming projects for the Oregon Forest Highway Program. The PIR is prepared for proposed projects that meet the goals, selection criteria and are within the funding amount proposed for Forest Highway programming. PIRs are not prepared for proposed projects that have limited impacts or very basic scopes of work (e.g., paving or chip seal projects). For major rehabilitation, reconstruction, or new construction, the PIR is a key part of the project programming process.

The PIR is not an environmental or NEPA decision document. It is a planning-level or scoping document to gather data, perform field reviews, prepare cost estimates for preliminary

alternatives, and inform the project selection and programming process. Stakeholder involvement at such an early stage will help identify potential issues, concerns and avoidance opportunities. Comprehensive information about the project area and environment helps streamline the environmental review process and meet coordination and Context Sensitive Solutions objectives.

The most important element of the PIR is the joint development of an initial, but quality, statement of the purpose of and need for the proposed project. Although the project purpose and need is stated on completed project proposal forms, the quality and accuracy of that purpose and need statement varies. The PIR provides a multi-discipline team with the opportunity to review and develop a more robust purpose and need statement for the project.

4.2.4 Purpose and Need

A well-defined purpose and need statement explains to the public and government officials why limited tax dollars should be spent on a specific project.

The purpose and need statement essentially tries to answer two key questions:

- What is the condition requiring relief (or, what is the problem that needs to be solved)?
- Why does the condition need to be corrected (or the problem need to be solved)?

The purpose and need statement should drive the development of project alternatives. Preliminary alternatives that are determined to not meet the purpose and need should be eliminated from further consideration.

A purpose and need statement is required for federally funded actions under 40 CFR 1502.13, and is required by other federal laws and regulations when the proposed project may affect wetlands, air quality, federal lands, and historic sites. Purpose and need statements must be included in NEPA documents.

4.3 Enhancement Set-Aside

The Oregon Forest Highway Program is one of three in the US that has funding set aside for enhancement projects. Enhancements are road-related improvements such as, but not limited to, interpretative signing, restrooms, viewpoints, trailheads, and culvert replacements for environmental mitigation. Forest Highway enhancement projects are designed to benefit the Forest Highway users. Enhancement projects must be located on, or in close proximity to, a designated Forest Highway.

The Tri-Agency issues calls for enhancement projects that are separate from the calls for major roadway improvement projects. The set-aside in Oregon is currently 10 percent per year; however, the Tri-Agency evaluates and can adjust the set-aside each year.

The Oregon Forest Highway Program has funded a wide range of enhancement projects that truly complement an existing Forest Highway, improve public safety, or enhance the

environment. Two examples – the Oneonta Gorge Parking/Vista Project on the Historic Columbia River Highway and the North and South Portals for the Cascade Lakes Scenic Byway – are illustrated below on Figures 5 and 6.

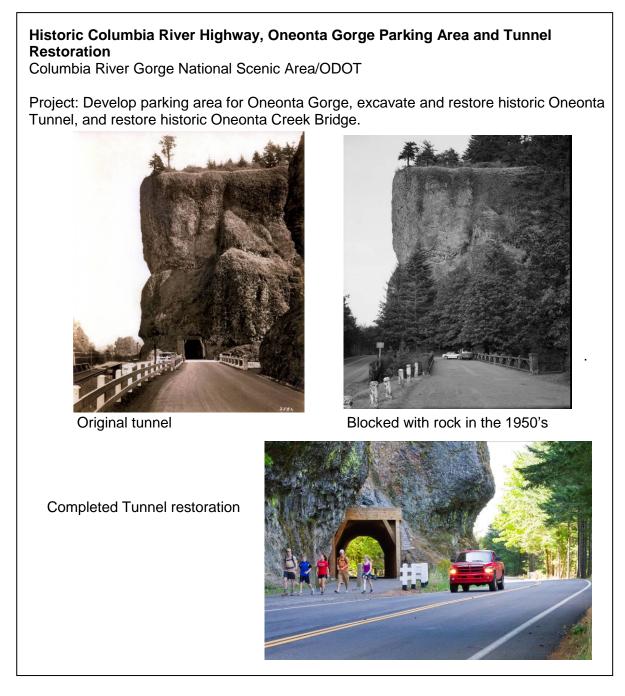


Figure 5. Example Forest Highway Enhancement Project: Oneonta Gorge Parking/Vista

Cascade Lakes Scenic Byway, North and South Portals Deschutes National Forest

Project: Improvements to the North Portal Entry site include barrier-free accessibility at the parking area and viewpoint trail, installation of an information kiosk, and replacement of existing interpretive signing with new updated signs.

At the South entry, improvements include grading, widening and paving of the pullout area, and installing a kiosk and interpretive signs.



Figure 6. Example Oregon Forest Highway Enhancement Project: Cascade Lakes North and South Portals

4.4 Aquatic Organism Passage Funds

Section 1119, part (m) of SAFETEA-LU modified the Forest Highway Program so that up to \$10 million per year is to be used by the USFS for Aquatic Organism Passage (AOP) projects on Forest Highways and specific Forest Service roads. Though funded through the Forest Highway Program, the Tri-Agency does not oversee allocation of the AOP funds.

In accordance with federal regulations, the USFS creates a prioritized list of AOP projects each year. The Secretary of Agriculture has sole discretion over the AOP funds; the Tri-Agency does not decide how they are obligated. (FHWA 2009b).

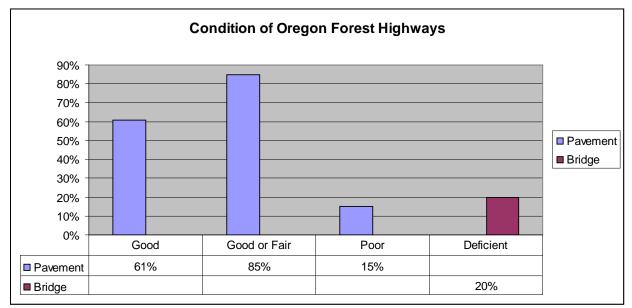
5 Condition of Oregon Forest Highway System

The designated Forest Highways are not intended to be a system of roads; they are part of the overall system of roads in Oregon. All roads receiving Forest Highway Program funding are required to have management systems in place to guide investment decisions. Management systems are focused on pavement, bridges, safety, and congestion. Generally, a management system documents the existing condition of the asset (road or bridge) and predicts a future condition.

5.1.1 Pavement Condition

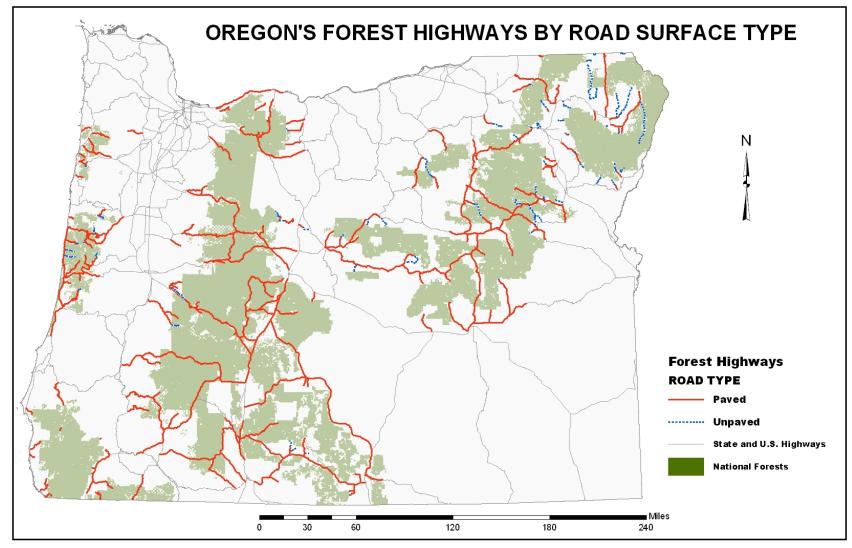
Based on current data, 3,424 miles of the 3,865 total miles of Forest Highways in Oregon are paved. Of the paved miles, 61 percent were in good condition, 85 percent were in good or fair condition, and 15 percent were in poor condition based on a 2004 condition inventory.

Figure 7 shows the condition of Oregon's paved Forest Highways, based on the 2004 data. Figure 8 shows Oregon's Forest Highways by surface type. Figure 9 shows Oregon's Forest Highways by road condition.



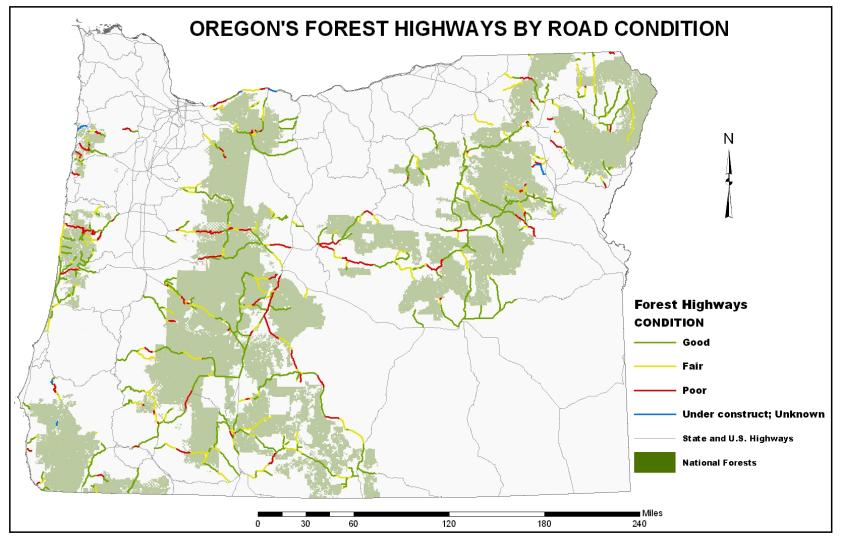
Source: Federal Lands Highway Roadway Inventory, 2004

Figure 7. Existing Condition of Oregon's Forest Highways, 2004



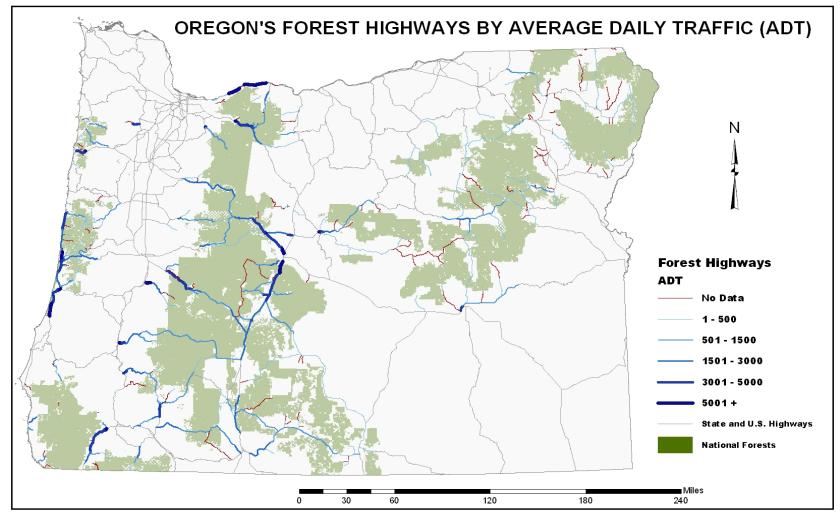
Source: Federal Lands Highway Roadway Inventory, 2004

Figure 8. Oregon Forest Highways by Road Surface Type, 2004



Source: Federal Lands Highway Roadway Inventory, 2004

Figure 9. Road Condition of Oregon Forest Highways, 2004



Source: Federal Lands Highway Roadway Inventory, 2004

Figure 10. Average Daily Traffic (ADT) on Oregon Forest Highways, 2004

5.1.2 Bridge Condition

In 2004, there were 612 bridges on Forest Highways in Oregon. Of those, 123 (or 20 percent) were identified as in deficient condition (see Figure 7). Recent events have focused public attention on bridge conditions. Each bridge on an Oregon Forest Highway is inspected at set intervals and is included in the National Bridge Inventory System.

5.1.3 Safety

Safety is always a high priority in transportation. FHWA, state departments of transportation, and the USFS continue to emphasize safety at national, regional, and local levels. SAFETEA-LU requires ODOT to develop a Strategic Safety Plan to address the state's highway safety needs.

Most Oregon Forest Highways are in rural areas. Although crash data specific to Oregon Forest Highways are not available, national and ODOT crash data indicate that, although fewer traffic accidents (crashes) occur on rural roads, those that occur are often more serious than crashes in urban areas. According to the US Government Accountability Office (GAO), about 60 percent of national traffic fatalities in 1999 occurred on rural roads, even though only about 40 percent of vehicle miles traveled were on rural roads (US GAO 2001). When adjusted for miles traveled, the fatality rate from crashes on rural roads was nearly 2.5 times greater than the rate on urban roads (US GAO 2001). In particular, all rural roads other than interstates had a relatively high number of accident fatalities when adjusted for miles traveled.

In Oregon, about 70 percent of traffic accident fatalities in 2009 occurred on rural roads (ODOT 2009a). The Oregon fatality rate from crashes on rural highways was more than 2.3 times higher than the fatality rate on urban highways (ODOT 2009b).

5.1.4 Congestion

Congestion is usually not an issue on Forest Highways in Oregon, although there are some exceptions. The average daily traffic volumes (ADT) of Oregon Forest Highways are shown on Figure 10.

As shown on Figure 10, traffic volumes exceed 5,000 ADT on parts of Oregon's Forest Highway system. With such heavy traffic volumes, some of Oregon's Forest Highways experience traffic congestion. For highways around Mt. Hood and the Historic Columbia River Highway, regional transportation planning efforts are underway to study congestion and the possible remedies, including alternative modes. Alternative transportation modes, such as improved bicycle access and facilities, are also being considered to reduce traffic congestion near Mt. Bachelor in central Oregon.

6 Future Planning Activities

This Coordination Plan formalizes the Forest Highway Program project selection process, which begins with issuing a call for projects, and then uses agreed-upon goals and criteria to evaluate, rank, and select projects that will receive Forest Highway Program funding and be advanced for development. To help the Tri-Agency meet the goals and objectives of the Oregon Forest Highway Program, this Coordination Plan also outlines planning activities occurring within the 20-year timeframe for the plan, which are described below.

Action: Develop and Update Short-Term Strategic Plans

The Tri-Agency will develop strategic plans and update them every 3 to 5 years. The strategic plans will contain quantifiable targets related to the goals and performance measures in this Coordination Plan. The Tri-Agency will use the performance measures and targets for ranking and selecting projects, and to evaluate how well the Oregon Forest Highway Program is achieving its goals and mission. In setting targets, the Tri-Agency will consider the condition of the Forest Highway network; economic, social, and environmental changes and trends; and other information that may signify needs relevant to project ranking and selection.

Action: Periodically Review and Update the Forest Highway Network

The Tri-Agency will periodically review the Oregon Forest Highway network to determine whether routes continue to meet the criteria for being designated as Forest Highways. Routes may be added or dropped from the network, as the Tri-Agency deems appropriate.

Action: Periodically Review and Update this Coordination Plan

This Coordination Plan is intended to be a "living" document and, therefore, will need to be reviewed at least every time new transportation legislation is enacted and updated as needed. Updates will be done to reflect changes in policy, rules or regulations, needs, objectives, or other things that may affect the project review and selection process. The Tri-Agency will review this Coordination Plan whenever new federal surface transportation legislation is enacted and will update this plan, as needed, to provide consistency with the act and implementing rules.

Action: Seek Public Input During Coordination Plan Update Process

The Tri-Agency will make the updated plan available for review and comment by the public and other agencies. Comments will be sought through the Area Commissions on Transportation (see Section 3.4.7) and agency coordination. Public input will be considered prior to adopting the updated Coordination Plan.

7 Definitions

Federal land management agencies – United States government agencies responsible for management of public lands, including: US Department of Agriculture, Forest Service (USFS); US Department of the Interior (USDI), Bureau of Land Management (BLM); USDI, Fish and Wildlife Service (USFWS); and USDI National Park Service.

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

Forest road – a road 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.

Jurisdiction – 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) – an organization designated as the forum for cooperative transportation decision-making pursuant to the provisions of 23 CFR 450.

National Forest System (NFS) – lands and facilities administered by the US Department of Agriculture, Forest Service (USFS), as set forth in the Forest and Rangeland Renewable Resource Planning Act of 1974, as amended (16 USC 1601 note, 1600–1614). NFS lands include National Forests and National Grasslands; they do not include lands and facilities administered by other federal land management agencies, such as the Bureau of Land Management.

Public Roads or Roads Open to public travel – 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 – 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.

Road safety audit (RSA) – a formal safety performance examination of an existing or future road or intersection by an independent, multi-disciplinary, audit team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users.

Statewide transportation plan – 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 23 CFR 450.

Tri-Agency – the group of agencies that administer the Oregon Forest Highway Program. This group includes the Western Federal Lands Highway Division of the Federal Highway Administration, the US Department of Agriculture Forest Service, and the Oregon Department of Transportation.

8 References

Note: The web links identified below may have changed since the time they were accessed.

- Cambridge Systematics, Inc. 2004 (January). "Federal Lands Alternative Transportation Systems Study – Volume 3 – Summary of USDA Forest Service ATS Needs." Prepared for Federal Highway Administration and Federal Transit Administration in association with US Department of Agriculture, Forest Service. Accessed online December 14, 2008, at: http://www.fta.dot.gov/documents/Fed_Lands_Forest_Service_SupplementATS_Needs.pdf
- Cramer, Patricia. 2008 (October 20). "Wildlife Crossings: Successful Projects and Recent Advances." Presentation at Pacific Northwest Wildlife Connections Workshop, Portland Oregon. Accessed online February 7, 2009, at: http://www.dfw.state.or.us/conservationstrategy/docs/pac_nw_wl_connections_ws_102008
- Campbell, S., et al. 2004. "Timber Resource Statistics for Oregon" PNW-RB-242. USDA Forest Service. Accessed online June 17, 2010, at: http://www.fs.fed.us/pnw/pubs/pnw_rb242.pdf
- Federal Highway Administration (FHWA). 2001 (last update April 9). "TEA-21, Moving Americans into the 21st Century." Accessed online December 9, 2008, at: http://www.fhwa.dot.gov/tea21/index.htm
- Federal Highway Administration (FHWA). 2008a (February 14). Memorandum regarding Fiscal Year 2008 funds information for the Forest Highway portion of Public Lands Highways Funds from John R. Baxter, PE, Associate Administrator for Office of Federal Lands Highway. Accessed online December 7, 2009, at: http://flh.fhwa.dot.gov/programs/plh/fh/documents/fy2008-funds.pdf
- Federal Highway Administration (FHWA). 2008b (last update December 9). "Road Safety Audits." Accessed online January 29, 2009, at: http://safety.fhwa.dot.gov/rsa/
- Federal Highway Administration (FHWA). 2009a. "FHWA and Context Sensitive Solutions (CSS)" Accessed online December 22, 2009, at: http://www.fhwa.dot.gov/context.cfm
- Federal Highway Administration (FHWA). 2009b (last modified January 5, 2009). "Guidance for Federal Lands Highway Programs" regarding Section 1119, part (m) of SAFETEA-LU legislation (Public Law 109-59). Accessed online January 3, 2010, at http://flh.fhwa.dot.gov/policy/safetea-lu/guidance.htm
- Federal Highway Administration (FHWA). 2009c (last modified October 6, 2009). "Highways & Climate Change" webpage last modified on October 26, 2009. Accessed online January 3, 2010, at: http://www.fhwa.dot.gov/hep/climate/index.htm

- Federal Highway Administration (FHWA). 2009d (October 2009). "Benefits of the Federal Lands Highway Program". Accessed online July 14, 2010, at http://flh.fhwa.dot.gov/programs/documents/flhp-benefits.pdf
- Governor's Task Force on Federal Forest Payments and County Services. Final Report (January 2009). Accessed online June 17, 2010 at: http://governor.oregon.gov/Gov/docs/toffp/final_report_020309_am_nobkmk.pdf
- Greenroads. 2009. Greenroads website. Accessed online December 22, 2009, at: http://www.greenroads.us
- Hatch, Audrey and Mindy Trask. 2008 (October 20). "Oregon's Wildlife Movement Strategy; Oregon's Wildlife Linkage Project Update." Presentation at Pacific Northwest Wildlife Connections Workshop, Portland, Oregon. Accessed online February 7, 2009, at: http://www.dfw.state.or.us/conservationstrategy/docs/pac_nw_wl_connections_ws_102008
- Metro. 2009. "2035 Regional Transportation Plan Update." Accessed online February 7, 2009, at: http://www.oregonmetro.gov/index.cfm/go/by.web/id=25038
- Oregon Department of Forestry. "2008 Annual Timber Harvest Report", 25-Year Harvest History Data [1984-2008]. Accessed online June 16, 2010, at: http://www.oregon.gov/odf/state_forests/frp/charts.shtml
- Oregon Department of Fish and Wildlife (ODFW). 2006 (February). "Oregon Conservation Strategy." Accessed online February 6, 2009, at: http://www.dfw.state.or.us/conservationstrategy/
- Oregon Department of Fish and Wildlife (ODFW). 2009a (last update January 2). "Workshop Presentations, Pacific Northwest Wildlife Connections Workshop 2008." Photo retrieved from presentation titled: "Providing Safe Passage for Wildlife and Maintaining Wildlife Connectivity" presented by Kerry Rappold, City of Wilsonville, and Leslie Bliss-Ketchum, Portland State University. Accessed online February 8, 2009, at: http://www.dfw.state.or.us/conservationstrategy/events.asp
- Oregon Department of Fish and Wildlife (ODFW). 2009b (last update January 2). "Wildlife Connectivity. " Accessed online February 8, 2009, at: http://www.dfw.state.or.us/conservationstrategy/wildlife_connectivity.asp
- Oregon Department of Land Conservation and Development. 2008 (last update November 5). "Statewide Planning Goals." Accessed online December 14, 2008, at: http://www.lcd.state.or.us/LCD/goals.shtml

- Oregon Department of Transportation (ODOT), Transportation Safety Division. 2004. "2004 Oregon Transportation Safety Action Plan, an Element of the Oregon Transportation Plan." Accessed online February 8, 2009, at: http://www.atssa.com/galleries/defaultfile/OregonTransportation_Safety_Action_Plan.pdf
- Oregon Department of Transportation (ODOT). 2006a (adopted September 20). "Oregon Transportation Plan." Accessed online December 14, 2008, at: http://www.oregon.gov/ODOT/TD/TP/ortransplanupdate.shtml
- Oregon Department of Transportation (ODOT), Transportation Safety Division. 2006b. "2006 Amendment One: Oregon Transportation Safety Action Plan, an Element of the Oregon Transportation Plan." Accessed online February 8, 2009, at: http://www.oregon.gov/ODOT/TS/docs/TSAP_0806.pdf
- Oregon Department of Transportation (ODOT). 2009a. "Crash Summaries by Year by Functional Classification by Severity." Accessed online November 16, 2009, at: http://www.oregon.gov/ODOT/TD/TDATA/car/docs/CAR_Publications.shtml
- Oregon Department of Transportation (ODOT). 2009b. "Table IV: 2008 Crash Rates by Jurisdiction and Functional Classification" Accessed online November 16, 2009, at: http://www.oregon.gov/ODOT/TD/TDATA/car/docs/CAR_Publications.shtml
- Oregon Department of Transportation (ODOT). 2009c. "Statewide Transportation Improvement Program." Accessed online December 28, 2009, at: http://www.oregon.gov/ODOT/HWY/STIP/
- Oregon Department of Transportation (ODOT). 2008 (last update March 10). "Area Commissions on Transportation." Accessed online December 16, 2008, at: http://www.oregon.gov/ODOT/COMM/act_main.shtml#Oregon_ACTs
- Oregon Forest Resources Institute (OFRI). 2008. "How Much of Oregon's Economy Grows on Trees?" Source of information cited as: "2004 Forest Sector Contributions and Potential, OFRI." Fact sheet accessed online December 28, 2009, at: http://www.oregonforests.org/assets/pdfs/Fact_economy_web.pdf
- Oregon Forest Resources Institute (OFRI). 2005 (October). "Assessment Highlights, Forest Tourism – second of three economic assessments in Phase II of the study: Oregon Forest Sector Contributions & Potential." Prepared for the Oregon Forest Resources Institute. Accessed online December 28, 2009, at: http://www.oregonforests.org/assets/pdfs/ForestTourism_highlights.pdf
- US Department of Agriculture, Forest Service (USFS). 2008 (last update November 6). "National Visitor Use Monitoring Program." Accessed online February 5, 2009, at: http://www.fs.fed.us/recreation/programs/nvum/

- US Department of Agriculture, Forest Service (USFS). 2009 (September 30). "Table 1 National and Regional Areas Summary" and "Table 4 – Areas by State." Accessed online August 26, 2010, at http://www.fs.fed.us/land/staff/lar/
- US Government Accountability Office. 2001 (July 16). "GAO-01-836R Federal Highway Funding."
- Western Governors' Association. 2008 (June 29). "WGA Wildlife Corridors Initiative Report." Accessed online February 5, 2009, at: http://www.westgov.org/wga/publicat/wildlife08.pdf

Appendix A: Oregon Forest Highway Inventory

The table below lists the designated Forest Highway for the State of Oregon as of October 27, 2009

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
1	Three Rivers Highway	From the intersection of SH-22 and SH-18 at Valley Junction, northwesterly 25.0 miles on SH-22 to the intersection with US-101 at Hebo.	Polk Yamhill Tillamook	25.0	25.0	State
5	Oregon Coast Highway	From the Junction of US 101 and Slab Creek Road (CR-982, FH- 207) approximately 1 mile south of Neskowin, southerly 7.4 miles on Oregon Coast Highway (US-101) to the intersection of SH-18 and US 101 approximately 1.5 miles North of Lincoln City. Then from the intersection of US-101 and SH-34 (FH-6) in Waldport, southerly 55.0 miles on Oregon Coast Highway (US-101) to the north end of the Umpqua River Bridge at Reedsport and the junction with FH-9 (US- 101).	Tillamook Lincoln Lane Douglas	62.4	7.4 55.0	State State
6	Alsea	From the intersection of SH-34 and US-101 (FH-5) in Waldport, easterly and northeasterly 56.6 miles on SH-34 to the intersection with US-20 at Philomath.	Lincoln Benton	56.6	56.6	State
7	Siuslaw	From the intersection of SH-126 and US-101 (FH-5) in Florence, easterly 14.5 miles on SH-126 to the intersection with SH-36 at Mapleton, then northeasterly 13.2 miles on SH-36 to the intersection with Lower Deadwood Creek Road (CR-5140, FH-202).	Lane	27.7	14.5 13.2	State State
9	Oregon Coast Highway	From the north end of the Umpqua River Bridge in Reedsport and junction with US-101 (FH-5), southerly 22.0 miles on US-101 to the north end of the Haynes Inlet Bridge in North Bend.	Douglas Coos	22.0	22.0	State
13	Oregon Caves	From the intersection of SH-46 and US-199 (FH-166) in Cave Junction, easterly 20.3 miles on SH-46 to the northwest boundary of the Oregon Caves National Monument.	Josephine	20.3	20.3	State
14	Applegate Road	From the intersection of Applegate Road (CR-859) and SH-238 near Ruch, southwesterly 18.8 miles on Applegate Road (CR-859) to the intersection with Applegate Road/Elliot Creek Road (FDR-1040) and Carberry Creek Road (CR-777), then southerly 1.2 miles on Applegate Road/Elliot Creek Road (FDR-1040) to the end of pavement at the CA state line.	Jackson	20.0	18.8 1.2	County USFS

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
16	Tiller Trail	From the intersection of 5th Street and I-5 (exit 98 northbound offramp) at Canyonville, northeasterly 0.1 miles on 5th Street to the intersection with Main Street, then northwesterly 0.1 miles on Main Street to the intersection with 3rd Street, then northeasterly 0.1 miles on 3rd Street to the junction with CR-1, then easterly 38.1 miles on CR-1 to the junction with SH-227 at the Douglas-Jackson county line, then southerly 11.1 miles on SH-227 to the intersection with SH-62 approximately 2 miles north of Shady Cove.	Douglas Jackson	49.5	0.1 0.1 0.1 38.1 11.1	City City City County State
17	Crater Lake (W)	From the intersection of SH-99 and I-5 (exit 45B), northerly 1.9 miles on SH-99 to the intersection with SH-234, then northeasterly 17.8 miles on SH-234 to the intersection with SH-62, then northeasterly 41.4 miles on SH-62 to the intersection with SH-230 near Union Creek.	Jackson	61.1	1.9 17.8 41.4	State State State
18	Crater Lake (E)	From the south boundary of Crater Lake National Park, southeasterly 20.4 miles on SH-62 to the intersection with US-97 (FH-19).	Klamath	20.4	20.4	State
19	Dalles- California Hwy	From the south city limits of Bend, southerly 72.4 miles on US-97 to the intersection with SH-138 approximately 9 miles south of Chemult. Then from the intersection of US-97 and Kirk Shellock Draw Road (FDR-43), southerly 26.4 miles on US-97 to the intersection with Algoma Road at Barkley Spur and the south boundary of the Winema National Forest.	Deschutes Klamath	98.8	72.4 26.4	State State
21	Willamette Hwy	From the intersection of SH-58 and Jasper-Lowell Road (CR-6220, FH-67) approximately 1 mile south of Lowell at Dexter Reservoir, southeasterly 73.2 miles on SH-58 to the intersection with US-97 (FH-19) approximately 8 miles north of Chemult.	Lane Klamath	73.2	73.2	State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
22	McKenzie	From the intersection of SH-126 and Blue River Road (CR-1102) in	Lane	70.0	15.1	State
	Hwy	Blue River, easterly 15.1 miles on SH-126 to the intersection with	Linn		36.5	State
		SH-242, then northeasterly 36.5 miles on SH-242 to the intersection	Deschutes		0.8	State
		with US-20/SH-126 in Sisters, then southeasterly 0.8 miles on US-20/SH-126 to the intersection with SH-126, then easterly 17.6 miles on SH-126 to west city limits of Redmond.			17.6	State
23	Santiam	From the eastern city limits of Sweet Home, easterly 40.3 miles on	Linn	88.6	40.3	State
	Hwy	US-20 to the intersection with SH-126, then easterly and	Jefferson		29.4	State
		southeasterly 29.4 miles on US-20/SH-126 to the junction with US-20 and intersection with SH-126 at Sisters, then southeasterly 18.9 miles on US-20 to the intersection with US-97 just north of Bend.	Deschutes		18.9	State
24	North	From the intersection of SH-22 and North Fork Road (FH-65) in	Marion	58.5	58.5	State
	Santiam Hwy	Mehama, southeasterly 58.5 miles on SH-22 to the intersection with US-20/SH-126 at Santiam Junction.	Linn			
25	Mt. Hood	From the intersection of US-26 and Salmon River Road (FDR-2618) just west of Zig Zag, southeasterly 14.6 miles on US-26 to the intersection with SH-35 (FH-49) near Barlow Pass.	Clackamas	14.7	14.7	State
26	Wapinitia	From the intersection of SH-216 and US-26 (FH-42) at the Mt. Hood National Forest and Warm Springs Indian Reservation boundary, easterly 26.0 miles on SH-216 to the intersection with US-197 approximately 2 miles west of Maupin.	Wasco	26.0	26.0	State
27	Prineville- Ochoco	From the intersection of US-26 and SH-126 in Prineville, northeasterly 48.0 miles on US-26 to the intersection with SH-207 in Mitchell.	Crook Wheeler	48.0	48.0	State
29	Fremont	From the intersection of SH-31 and US-97 (FH-19) approximately 2 miles south of La Pine, southeasterly 120.6 miles on SH-31 to the intersection with US-395 (FH-31) in Valley Falls.	Deschutes Klamath Lake	120.6	120.6	State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
30	Lakeview- Klamath	From the intersection of SH-140 and SH-39 approximately 5 miles east of Klamath Falls, northeasterly 90.8 miles on SH-140 to the intersection with US-395 in Lakeview.	Klamath Lake	90.8	90.8	State
31	Lakeview Burns	From the intersection of US-395 and SH-140 approximately 5 miles north of Lakeview, northerly 17.8 miles on US-395 to the intersection with SH-31 (FH-29) in Valley Falls.	Lake	17.8	17.8	State
32	Heppner- Spray	From the intersection of SH-207 and SH-19 approximately 3 miles east of Spray, northerly 26.1 miles on SH-207 to the intersection with Sunflower Flat Road (FDR-22, FH-110) approximately 6 miles southeast of Hardman.	Wheeler Morrow	26.1	26.1	State
33	Pendleton- John Day	From the intersection of US-395 (FH-34) and Middle Fork Lane (CR-20, FH-115), northerly 36.5 miles on US-395 to the intersection with Albee Road (CR-1413) approximately 8 miles north of Ukiah.	Grant Umatilla	36.5	36.5	State
34	Pendleton- John Day (South Section)	From the intersection of US-395 (FH-33) and Middle Fork Lane (CR-20, FH-115), southerly 41.6 miles on US-395 to the intersection with US-26 (FH-36) in Mt. Vernon.	Grant	41.6	41.6	State
35	Burns-John Day	From the intersection of US-20/395 and Hines Logging Road (Burns-Izee Road, CR-127, FDR-47, FH-126), northeasterly 6.2 miles on US-395/20 to the junction with US-395 and intersection with US-20 (FH-235) approximately 3 miles northeast of Burns, then northerly 67.6 miles on US-395 to the intersection with US-26 (FH-36) in John Day.	Harney Grant	73.8	6.2 67.6	State State
36	John Day	From the intersection of US-26 and Fields Creek Road (FDR-21) approximately 9 miles west of Mt. Vernon, easterly 77.6 miles on US-26 to the intersection with East Camp Creek Road (FDR-16) approximately 10 miles southeast of Unity.	Grant Baker	77.6	77.6	State
37	Weston- Elgin	From the intersection of SH-204 and SH-11 near Weston, southeasterly 41.9 miles on SH-204 to the intersection with SH-82 in Elgin.	Umatilla Union	41.9	41.9	State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
38	Enterprise- Lewiston	From the WA state line, southerly 43.1 miles on SH-3 to the intersection with SH-82 in Enterprise.	Wallowa	43.1	43.1	State
39	Little Sheep Creek	From the intersection of Hwy-350 and SH-82 in Joseph, easterly and northeasterly 29.4 miles on Hwy-350 to the intersection with the east end of the Imnaha River bridge in Imnaha.	Wallowa	29.4	29.4	State
42	Warm Springs	From the intersection of US-26 (FH-25) and SH 35 (FH-49) near Barlow Pass, southeasterly 13.8 miles on US-26 to the intersection with SH-216 (FH-26) at the Mt. Hood National Forest and Warm Springs Indian Reservation boundary.	Clackamas Wasco	13.8	13.8	State
43	Diamond Lake	From the intersection of SH-230 and SH-62 (FH-17) north of Union Creek, northeasterly 23.8 miles on SH-230 to the intersection with SH-138 (FH-47) near the south end of Diamond Lake.	Jackson Douglas	23.8	23.8	State
46	Cascade Lakes	From the intersection with of Crescent Cutoff Road (CR-61, FH-90) with the Cascade Lakes Highway (CR-46, FDR-46), northerly 48.2 miles on Cascade Lakes Highway (CR-46, FDR-46) to the junction with Century Drive (Hwy-372) at the entrance to the West Village Lodge at Mt. Bachelor Ski Resort, then easterly 18.0 miles on Century Drive (Hwy-372) to the east boundary of the Deschutes National Forest approximately 3 miles southwest of Bend.	Klamath Deschutes	66.2	48.2 18.0	County State
47	North Umpqua	From the intersection of SH-138 and SH-99 in Roseburg, easterly 73.6 miles on SH-138 to the intersection with FDR-60 and junction with SH-138. Then southerly 12.3 miles on SH-138 to the Crater Lake National Park north entrance road approximately 1.5 miles north of the Crater Lake National Park north entrance station. Then from the intersection of SH-138 and the Crater Lake National Park north entrance road, easterly 14.9 miles on SH-138 to the intersection with US-97 (FH-19) approximately 9 miles south of Chemult.	Douglas Klamath	100.8	73.6 12.3 14.9	State State State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
48	Klamath	From the intersection of Loosely Road (CR-1332) and SH-62 (FH- 18) approximately 3 miles south of Fort Klamath, westerly 1.5 miles on Loosely Road (CR-1332) to the intersection with Weed Road (CR-1333), then 0.5 miles north on Weed Road (CR-1333) to the intersection with Sevenmile Road (CR-1349), then westerly 4.7 miles on Sevenmile Road (CR-1349) to the junction with Westside Road (FDR-34/CR-531) just east of the Seven Mile Creek Bridge, then southerly 16.8 miles on Westside Road (FDR-34/CR-531) to the intersection with SH-140 (FH-53), approximately 2 miles northwest of Odessa.	Klamath	23.5	1.5 0.5 4.7 16.8	County County County County
49	Mt. Hood Loop	From the intersection of SH-35 and US-26 (FH-25, 42) approximately 6 miles east of Government Camp near Barlow Pass, easterly and northerly 32.5 miles on SH-35 to the intersection with the Odell Highway (Hwy-282) junction approximately 7 miles south of Hood River.	Clackamas Hood River	32.5	32.5	State
50	Timberline	From the intersection of Timberline Road (Hwy-173) and US-26 (FH- 25) approximately 0.3 miles east of Government Camp, northeasterly 5.9 miles on Timberline Road (Hwy-173) to the Timberline Lodge parking area.	Clackamas	5.9	5.9	State
51	Belknap Springs	From the intersection of SH-126 (FH-22) and SH-242 (FH-22) approximately 4 miles east of McKenzie Bridge, northerly 19.8 miles on SH-126 to the intersection with US-20 (FH-23).	Lane Linn	19.8	19.8	State
52	Ukiah- Hilgard	From the intersection of SH-244 and US-395 (FH-33) near Ukiah, northeasterly 47.0 miles on SH-244 to the intersection with I-84 (exit 252) at Hilgard.	Umatilla Union	47.0	47.0	State
53	Lake of the Woods	From the intersection of SH-140 and SH-62 near White City, easterly 68.8 miles on SH-140 to the intersection with SH-66 approximately 2 miles southwest of Klamath Falls.	Jackson Klamath	68.8	68.8	State
55	Clackamas	From the intersection of SH-224 and SH-211 at Estacada, southeasterly 25.7 miles on SH-224 to the intersection with FDR-57 and FDR-46 at Oak Grove Fork.	Clackamas	25.7	25.7	State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
58	Happy Camp	From the intersection of Happy Camp Road (CR-5828), Waldo Road, and Takilma Road (CR-5820) approximately 4 miles east of US-199 at O'Brien, southeasterly 11.5 miles on Happy Camp Road (CR-5828) to the CA state line.	Josephine	11.5	11.5	County
59	Agness Road	From the intersection of Agness Road/Jerrys Flat Road (CR-595) and US-101 at Gold Beach, easterly 9.7 miles on Agness Road/Jerrys Flat Road (CR-595) to the intersection with FDR-090 and a junction with FDR-33 at the Siskiyou National Forest boundary. Then north easterly 19.0 miles on Agness Road (FDR- 33) to the junction with Agness- Illahe Road (FH-156) and Powers- Agness Road(FH-60, FDR-33).	Curry Coos	30.7	9.7 21.0	County USFS
60	Powers- Agness	From the intersection of Powers Highway (Hwy-242) and SH-42 approximately 3 miles southeast of Myrtle Point, southerly 18.9 miles on Powers Highway (Hwy-242) to the junction with Powers South Road (CR-90) and intersection with Railroad Avenue in Powers, then southerly 4.0 miles on Powers South Road (CR-90) to the junction with FDR-33 at the north boundary of the Siskiyou National Forest. Then southerly 30.9 miles. on Agness Road (FDR- 33) to the junction with Agness- Illahe Road (FH-156) and Agness Road (FH-59, FDR-33).	Coos Curry	51.8	18.9 4.0 28.9	State County USFS
61	Larch Mtn.	From the intersection of Larch Mountain Road (CR-958) and SE Louden Road (CR-1982), easterly then southerly 10.8 miles on Larch Mountain Road (CR-958) to the Larch Mountain Picnic Area.	Multnomah	10.8	10.8	County
62	Lolo Pass	From the intersection of East Lolo Pass Road (FDR-18) and US-26 (FH-25) in Zig Zag, northeast 4.1 miles on East Lolo Pass Road (FDR-18) to the Mt. Hood National Forest boundary sign via the intersection with Barlow Trail Road.	Clackamas	4.1	4.1	County
65	Little North Santiam	From the intersection of North Fork Road and SH-22 (FH-24) approximately 1 mile east of Mehama, easterly 15.2 miles on North Fork Road to the junction with FDR-2207 at the west boundary of the Willamette National Forest.	Marion	15.2	15.2	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
66	Quartzville Drive	From the intersection of Quartzville Road and US-20 (FH-23) approximately 1.5 miles east of Sweethome near the east end of Foster Lake, northerly 1.1 miles on Quartzville Road (CR-932) to a junction with Quartzville Road (CR-912) and North River Drive (CR- 931), then northeasterly 10.0 miles on Quartzville Road (CR-912) along the north side of Green Peter Lake to the intersection with Whitcomb Creek Park Road.	Linn	11.1	1.1 10.0	County County
67	Jaspar- Lowell/Big Falls	From the intersection of Pioneer Road and SH-58 at Dexter Lake, northerly 0.9 miles on Pioneer Road (CR-6220) to the intersection with Moss Street (Jasper-Lowell Road, CR-6220) and Pengra Road (CR-6227), then northerly 1.8 miles on Moss Street (Jasper-Lowell Road, CR-6220) to the intersection with Big Fall Creek Road and junction with Place Road in Unity, then easterly and northeasterly 9.8 miles on Big Fall Creek Road (CR-6240) along the north side of Fall Creek Reservoir to the junction with FDR-18 at the west boundary of the Willamette National Forest.	Lane	12.5	0.9 1.8 9.8	County County County
68	Westfir - Oakridge	From the intersection of Westfir-Oakridge Road (CR-6128) and SH- 58 (FH-21) approximately 2 miles west of Oakridge and 0.2 miles west of Oakridge Airport Road, westerly, northerly, and easterly 3.1 miles on Westfir Oakridge Road (CR-6128) via Hemlock to the junction with North Fork Road (FDR-19) and intersection with Westoak Road just in Westfir.	Lane	3.1	3.1	County
69	Little River Road	From the intersection of CR-17A and SH-138 (FH-47) at Glide, southeasterly 1.2 miles on CR-17A to the junction with CR-17C and intersection with CR-17, then southeasterly 15.2 miles on CR-17C via Wolf Creek to the junction with FDR-27 and intersection with FDR-2703 near the north boundary of the Umpqua National Forest.	Douglas	16.4	1.2 15.2	County County
70	CR-46	From the intersection of CR-46 and CR-1 (FH-16) in Tiller, northeasterly 6.2 miles on CR-46 to the junction with FDR-28 and intersection with FDR-2810.	Douglas	6.2	6.2	County
71	CR-36	From the intersection of CR-36 and I-5 (exit 88) in Azalea, northeasterly then easterly 19.2 miles on CR-36 to a junction with FDR-32 and intersection with FDR-3232.	Douglas	19.3	19.3	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
74	Dead Indian Memorial Highway	From the intersection of Dead Indian Memorial Highway (CR-533) and SH-140 approximately 2 miles northeast of Lake of the Woods, southwesterly 8.2 miles on Dead Indian Memorial Highway (CR-533) to the intersection with Clover Creek Road (CR-603) and junction with Dead Indian Highway (CR-722).	Klamath	8.2	8.2	County
76	Sprague River Road	From the intersection of Hwy-422-spur and US-97 (FH-19) approximately 1 mile southwest of Chiloquin, northeasterly 1.0 miles on Hwy-422-spur to the intersection with Chocktoot Street, then southeasterly 0.3 miles on Chocktoot Street to the intersection with 1st Avenue, then northeasterly 0.4 miles on 1st Avenue to the junction with Sprague River Road and intersection with Pine Ridge Road, then easterly and southeasterly 33.2 miles on Sprague River Road (CR-858, FDR-58) to the intersection with SH-140 approximately 5 miles southwest of Beatty.	Klamath	34.9	1.0 0.3 0.4 33.2	State State County County
77	Williamson River Road	From the intersection of Williamson River Road (CR-600) and Sprague River Road (CR-858) approximately 5 miles northeast of Chiloquin, northeasterly 24.3 miles on Williamson River Road (CR- 600) to the intersection with FDR-4648 and CR-3320 and junction with FDR-46.	Klamath	24.3	24.3	County
78	Godowa Springs Road	From the intersection of Godowa Springs Road (CR-1193) and SH- 140 (FH-30) in Beatty, northerly 9.2 miles on Godowa Springs Road (CR-1193) to the junction with FDR-3462 at the south boundary of the Fremont National Forest.	Klamath	9.2	9.2	County
79	Sycan Road	From the intersection of Sycan Road (CR-1191) and Godowa Springs Road (CR-1193) 2.5 miles north of SH-140 in Beatty, easterly then northeasterly 4.8 miles on Sycan Road (CR-1191) to the intersection with FDR-3450 and FDR-3445.	Klamath	4.8	4.8	County
80	Ivory Pine Road	From the intersection of Ivory Pine Road (CR-1257) and SH-140 (FH-30) approximately 3 miles west of Bly, northerly 12.5 miles on Ivory Pine Road (CR-1257) to a junction with FDR-30 and intersection with FDR-27.	Klamath	12.5	12.5	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
81	Campbell Road/CR- 1210	From the intersection of Campbell Road (CR-1210) and Ivory Pine Road (CR-1257, FH-80) approximately 2 miles north of SH-140 (FH- 30), easterly 3.0 miles on Campbell Road (CR-1210) to the intersection with FDR-3411.	Klamath	3.0	3.0	County
82	CR-1-13, 1- 11, 1-11G	From the intersection of Tunnel Hill Road (CR-1-13) and SH-140 (FH-30) approximately 7 miles west of Lakeview, southerly 3.1 miles on Tunnel Hill Road (CR-1-13) to the junction and intersection with West Side Road (CR-1-11), then southerly, westerly, and southerly 4.9 miles on West Side Road (CR-1-11) to the intersection with Horseshoe Lane (CR-1-11G), then westerly 1.5 miles on Horseshoe Lane (CR-1-11G) to the junction with FDR-4020 at the east boundary of the Fremont National Forest.	Lake	9.5	3.1 4.9 1.5	County County County
83	CR-1-11D	From the intersection with Dog Lake Lane (CR-1-11D) and West Side Road (CR-1-11, FH-82) approximately 4 miles south of SH- 140, westerly 3.1 miles on Dog Lake Lane (CR-1-11D) via an intersection with CR-1-12 to the junction with FDR-4812 at the east boundary of the Fremont National Forest.	Lake	3.2	3.2	County
84	Thomas Creek Road	From the intersection of Thomas Creek Road (CR-2-16) and SH-140 (FH-30) approximately 3 miles west of Lakeview, northerly, westerly, and northerly 5.5 miles on Thomas Creek Road (CR-2-16) to the intersection with Dairy Creek Lane (CR-2-16A), then westerly 3.3 miles on Dairy Creek Lane (CR-2-16A) to the junction with FDR-28 at the east boundary of the Fremont National Forest.	Lake	8.8	5.5 3.3	County County
85	Warner Hwy	From the intersection of SH-140 and US-395 (FH-31) approximately 5 miles north of Lakeview, southeasterly 12.9 miles on SH-140 to the east boundary of the Fremont National Forest.	Lake	12.9	12.9	State
86	Silver Lake Road CR- 676	From the intersection of Silver Lake Road (CR-676, FDR-76), CR- 3104, and US-97 in Chinchalo, easterly then northeasterly 35.6 miles on Silver Lake Road (CR-676, FDR-76) to the junction with Bear Flat Road (CR-4-10) at the Klamath-Lake County Line, then easterly 14.8 miles on Bear Flat Road (CR-4-10) to the intersection with SH-31(FH-29) approximately 2 miles northwest of Silver Lake.	Klamath Lake	50.4	35.6 14.8	County/USFS County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
88	CR-4-11	From the intersection of Silver Creek Marsh Road (CR-4-11) and SH-31 (FH-29) at Silver Lake, southerly 5.7 miles on Silver Creek Marsh Road (CR-4-11) to the junction with FDR-27 at the north boundary of the Fremont National Forest.	Lake	5.7	5.7	County
89	CR-4-12	From the intersection of East Bay Road (CR-4-12) and SH-31 at Silver Lake, southerly 5.7 miles on East Bay Road (CR-4-12) to the junction with FDR-28 at the north boundary of the Fremont National Forest.	Lake	5.7	5.7	County
90	Crescent Cutoff	From the intersection of Crescent Cutoff Road (CR-61) and SH-58 (FH-21) approximately 3 miles southeast of Crescent Lake Junction near Odell Butte, easterly 3.2 miles on Crescent Cutoff Road (CR-61) to the intersection of Crescent Cutoff Road (CR-61) and Cascade Lakes Highway (CR-46, FDR-46). Then easterly 8.8 miles on Crescent Cutoff Road (CR-61) to the intersection with US-97 (FH-19) in Crescent.	Klamath	12.0	3.2 8.8	County County
92	South Century Drive	From the intersection of South Century Drive (CR-42, FDR-42) and Cascade Lakes Highway (CR-46, FDR-46) northwest of Wickiup Reservoir, easterly 9.2 miles on South Century Drive (FDR-42, CR-42) to the junction with South Century Drive (CR-42) and intersection with Burgess Road (CR-43), then northeasterly 14.7 miles on South Century Drive (CR-42) to the junction with South Century Drive and intersection with Vandervert Road (CR-42), then northerly 2.0 miles on South Century Drive to the intersection with South Century Drive (CR-40) and Spring River Road (CR-40), then easterly 2.1 miles on South Century Drive (CR-40) to the intersection with US-97 (FH-19) in Sunriver.	Deschutes	28.0	9.2 14.7 2.0 2.1	USFS County County County
93	Paulina Lake Road	From the intersection of Paulina Lake Road (CR-21, FDR-21) and US-97 (FH-19) approximately 6 miles north of La Pine, easterly 17.6 miles on Paulina Lake Road (CR-21, FDR-21) to the East Lake Resort.	Deschutes	17.6	17.6	County
94	Spencer Wells Road	From the intersection of Spencer Wells Road and US-20 approximately 3.5 miles west of Millican, southerly 5.8 miles on Spencer Wells Road (CR-23) to the junction with CR-25, then southerly 0.8 miles on CR-25 to the junction with FDR-25 at the Deschutes National Forest Boundary.	Deschutes	6.6	5.8 0.8	County County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
97	Metolius River Road	From the intersection of Camp Sherman Road (CR-14) and US- 20/SH-126 (FH-23), northerly 2.6 miles on Camp Sherman Road (CR-14) to the junction with Metolius River Road (FDR-14) and intersection with FDR-1419, then easterly and northerly 5.8 miles on Metolius River Road (FDR-14) to the intersection with FDR-900.	Jefferson	8.4	2.6 5.8	County USFS
99	Mill Creek Road/Steins Pillar	From the intersection of Mill Creek Road (CR-122) and US-26 (FH- 27) at the east end of the Ochoco Reservoir approximately 9 miles east of Prineville, northeasterly 5.1 miles on Mill Creek Road (CR- 122) to a junction with FDR-33, then northeasterly 3.3 miles on FDR-33 to the private land and Ochoco National Forest boundary at cattleguard, approximately 0.5 miles northeast of the intersection with FDR-3360.	Crook	8.4	5.1 3.3	County County
100	Ochoco Ranger Station Road	From the intersection of CR-123 and US-26 (FH-27) approximately 16 miles east of Prineville, northeasterly 8.2 miles on CR-123 to the intersection with FDR-2610 at the Ochoco campground entrance.	Crook	8.2	8.2	County
101	Johnson Creek Road	From the intersection of Johnson Creek Road (CR-8) and US-26 in Mitchell, southerly 7.6 miles on Johnson Creek Road (CR-8) to the junction with FDR-22 at the northern boundary of the Ochoco National Forest.	Wheeler	7.6	7.6	County
102	Cody Road	From the intersection of Tygh Valley Road, US-197, and SH-216 at Tygh Valley, southerly 0.4 miles on Tygh Valley Road to the intersection with Church Street, then southerly 0.1 miles on Church Street to the intersection with Wamic Market Road (CR-12), then westerly and southwesterly 6.0 miles on Wamic Market Road (CR- 12) to the junction with Rock Creek Dam Road (CR-12) approximately 0.7 miles southwest of Wamic, then westerly 4.0 miles on Rock Creek Dam Road (CR-12) to the junction with FDR- 48 at cattleguard at the east boundary of the Mt. Hood National Forest.	Wasco	10.5	0.4 0.1 6.0 4.0	County County County County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
103	Friend Road	From the intersection of Dufur Gap Road (CR-176) and US-197 approximately 3 miles south of Dufur, southerly 4.5 miles on Dufur Gap Road (CR-176) to the intersection with Friend Road (CR-176), then westerly 10.6 miles on Friend Road (CR-176) to the junction with FDR-2730 at cattleguard at the east boundary of the Mt. Hood National Forest.	Wasco	15.1	4.5 10.6	County County
104	Dufur Market Road	From the intersection of 1st Street and US-197 in Dufur, westerly 0.5 miles on 1st Street to the intersection with Heimrick Street and Main Street, then southerly 0.4 miles on Heimrick Street (CR-1) to the intersection with Dufur Valley Road (CR-1), then westerly 11.9 miles on Dufur Valley Road (CR-1) via Ramsey Hall to the junction with FDR-44 at the east boundary of the Mt. Hood National Forest.	Wasco	12.8	0.5 0.4 11.9	City City County
105	Cooper Spur Road	From the intersection of Cooper Spur Road (CR-428, FDR-3510) and SH-35 (FH-49) near Polallie Campground, northwesterly on Cooper Spur Road (CR-428, FDR-3510) for 3.5 miles to the intersection with Cloud Cap Road (FDR-3511).	Hood River	3.5	3.5	County
106	Lost Lake Road	From the intersection of Lost Lake Road (CR-501) and Hood River Highway (Hwy-281) in Dee, southwesterly 9.6 miles on Lost Lake Road (CR-501) to the junction with FDR-13 at the north boundary of the Mt. Hood National Forest.	Hood River	9.4	9.4	County
107	Mill Creek Road	From the Washington-Oregon state line approximately 6.5 miles west of the Umatilla-Wallowa county line, southeasterly 2.9 miles on CR-582 to the junction with FDR-65 near Tiger Creek.	Umatilla	2.9	2.9	County
108	East Birch Creek	From the intersection of SW Birch Street and US-395 in Pilot Rock, southerly 0.5 miles on SW Birch Street to the junction with East Birch Creek Road (CR-1375), then southerly and easterly 16.5 miles on East Birch Creek Road (CR-1375) to the intersection with Rocky Ridge Road (FDR-5427), approximately 2.5 miles west of Indian Lake.	Umatilla	17.0	0.5 16.5	County County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
109	Willow Creek Road	From the intersection of Willow Creek Road (CR-678) and Balm Fork Road (CR-785) approximately 1.5 miles southeast Heppner, southeasterly 18.1 miles on Willow Creek Road (CR-678) to the junction with FDR-53 at the north boundary of Umatilla National Forest, then southerly 3.6 miles on FDR-53 to the intersection with CR-603 (FDR-21). FH-109 is part of the Blue Mountain Scenic Byway.	Morrow	21.7	18.1 3.6	County USFS
110	Monument- Sunflower Flat	From the intersection of Top Road (CR-3) and Kimberly-Long Creek Highway (Hwy-402) 1 mile west of Monument, northwesterly 19.7 miles on Top Road (CR-3) to the junction with Sunflower Flat Road (CR-670, FDR-22) at the Morrow-Grant county line, then northwesterly 10.0 miles on Sunflower Flat Road (CR-670, FDR- 22) to the intersection with SH-207 (FH-32) approximately 6 miles southeast of Hardman.	Grant Morrow	29.7	19.7 10.0	County County
111	Ukiah- Granite Road	From the intersection of Camas Street and SH-244 (FH-52) in Ukiah, southerly 0.2 miles on Camas Street to a junction with CR- 1475 at the Camas Creek bridge, then southerly 5.0 miles on CR- 1475 to the junction with FDR-52 at cattleguard at the north boundary of Umatilla National Forest.	Umatilla	5.2	0.2 5.0	County County
113	Sumpter- Granite Road	From the intersection of Sumpter-Granite Road (Hwy-410) and SH-7 (FH-148) approximately 2.5 miles southeast of Sumpter, northwesterly 3.7 miles on Sumpter-Granite Road (Hwy-410) to the junction with CR-520 at the west city limits of Sumpter, then westerly 6.3 miles on CR-520 to the junction with CR-24 at the Baker-Grant County Line, then northwesterly 9.3 miles on CR-24 to the junction with FDR-73 and FDR-10 (FH-225) at Granite. FH-113 is part of the Elkhorn Drive Scenic Byway.	Baker Grant	19.3	3.7 6.3 9.3	State County County
114	Greenhorn	From the intersection of CR-503 and SH-7 (FH-148) in Tipton, northwesterly 8.3 miles on CR-503 to Greenhorn at the Baker-Grant county line.	Baker	8.3	8.3	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
115	Middle Fork John Day	From the intersection of Middle Fork Lane (CR-20) and US-395 (FH- 33, FH-34) approximately 13 miles north of Long Creek, southeasterly 40.1 miles on Middle Fork Lane (CR-20) via Galena to the intersection with SH-7 (FH-148) in Bates approximately 1 mile north of US-26 (FH-36) at Austin Junction.	Grant	40.1	40.1	County
116	Keeney Fork Road	From the intersection of Main Street, US-395 (FH-34) and Kimberly Long Creek Highway (SH-402) in Long Creek, easterly 0.3 miles on Main Street to the junction with Keeney Fork Road (CR-18), then easterly and southeasterly 31.8 miles on Keeney Fork Road (CR- 18) via Keeney Camp to the intersection with US-26 (FH-36) approximately 4 miles west of Prairie City.	Grant	32.1	0.3 31.8	City County
118	Logan Valley Road	From the T-intersection of Summit Prairie Road/Logan Valley Road (CR-62), South Bridge Street, and Bridge Street (CR-60) in southeast Prairie City, southeasterly 22.5 miles on Summit Prairie Road/Logan Valley Road (CR-62) to the intersection with Summit Creek Road (FDR-16) at cattleguard at Summit Prairie.	Grant	22.5	22.5	County
119	Canyon Creek Road	From the intersection of Canyon Creek Road (CR-65) and US-395 (FH-35) approximately 11 miles south of John Day, southeasterly 7.3 miles on Canyon Creek Road (CR-65) to the junction with FDR-15 at cattleguard at the Malheur National Forest boundary.	Grant	7.3	7.3	County
120	Prineville- Logdell Hwy	From the intersection of SE Combs Flat Road/Paulina Highway (Hwy-380) and US-26 (FH-27) in Prineville, southeast 55.5 miles on Paulina Highway (Hwy-380) via Post to the intersection with Paulina-Suplee Road (CR-112) at the east end of Beaver Creek Bridge in Paulina, then easterly and southeasterly 18.9 miles on Paulina-Suplee Road (CR-112) via Suplee to the junction with Izee- Paulina Lane (CR-63) at the Crook-Grant County line, then easterly and northeasterly 43.5 miles on Izee-Paulina Lane (CR-63) to the intersection with US-395 (FH-35) approximately 17 miles south of John Day.	Crook Grant	117.9	55.5 18.9 43.5	State County County
121	Burns-Izee (North Section)	From the intersection of Burns-Izee Road (CR-68) and Izee-Paulina Lane (CR-63, FH-120) approximately 1.5 miles southeast of Izee, southerly 7.0 miles on Burns-Izee Road (CR-68) to the junction with FDR-47 at cattleguard at the north boundary of the Malheur National Forest.	Grant	7.0	7.0	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
122	Weberg Road	From the intersection of South Weberg Road (CR-318) and Southeast Paulina-Suplee Road (CR-112, FH-120) approximately 1 mile west of the Crook-Grant County Line in Suplee, southerly 5.9 miles on South Weberg Road (CR-318) to the junction with CR-69 at the Crook-Grant County Line, then southeasterly 1.8 miles on CR- 69 to the intersection with FDR-41, 0.5 miles north of the Ochoco National Forest boundary.	Crook Grant	7.7	5.9 1.8	County County
123	Puett Road	From the intersection of Puett Road (CR-135) and Beaver Creek Road (CR-113, FH-124) approximately 5 miles northeast of Paulina, easterly then northerly 12.9 miles on Puett Road (CR-135) to the junction with FDR-58 at the south boundary of the Ochoco National Forest.	Crook	12.9	12.9	County
124	Beaver Creek Road	From the intersection of South Beaver Creek Road (CR-113) and Paulina-Suplee Road (CR-112, FH-120) approximately 4 miles east of Paulina, northerly 6.6 miles on Beaver Creek Road (CR-113) to the junction with FDR-58 near Miller Ranch, then easterly 6.2 miles on FDR-58 to Rager Ranger Station Visitor office.	Crook	12.8	6.6 6.2	County County
125	Newsome Creek	From the intersection of South Newsome Creek Road (CR-224, FDR-16) and Paulina Highway (Hwy-380, FH-120) approximately 1 mile east of Post, southerly 4.4 miles on Newsome Creek Road (CR-224, FDR-16) to the junction with South Kloohman Creek Road (CR-224, FDR-16) and intersection with Newsome Creek Road (FDR-1610), then southerly 2.2 miles on South Kloohman Creek Road (CR-224, FDR-16) to the north boundary of private land in the Ochoco National Forest at cattleguard near the Hammer Creek Trailhead.	Crook	6.6	4.4 2.2	County USFS

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
126	Burns-Izee Road (South Section)	From the intersection of Hines Logging Road (CR-127) and US- 395/US-20 (FH-35) approximately 1 mile south of Hines, westerly then northwesterly 23.2 miles on Hines Logging Road (CR-127) to the junction with Izee Road (CR-127) and intersection with FDR-43, then northerly 1.3 miles on Izee Road (CR-127) to the junction with FDR-47 at cattleguard at the south boundary of the Malheur National Forest near Campbell Ranch.	Harney	24.5	23.2	County County
127	Fort Harney Road	From the intersection of Rattlesnake Road (CR-102) and US-20 (FH-235) approximately 13 miles east of Burns, northerly 8.4 miles on Rattlesnake Road (CR-102) to a junction with FDR-28 at cattleguard about 4.2 miles north of the Fort Harney Site.	Harney	8.4	8.4	County
128	Pine Creek Road	From the intersection of Pine Creek Road (CR-310) and US-20 (FH- 235) approximately 27 miles east of Burns, northerly 17.6 miles on Pine Creek Road (CR-310) to the intersection with Van-Drewsey Road, then northwesterly 8.5 miles on Van-Drewsey Road (CR- 306) to the junction with FDR-15 at cattleguard at the south boundary of the Malheur National Forest about 1.5 miles north of Van.	Harney	26.1	17.6 8.5	County County
129	North Fork Burnt River	From the intersection of Big Flat Road (CR-535) and SH-245 approximately 6 miles northeast of Unity, northwesterly 7.3 miles on Big Flat Road (CR-535) to a junction with North Fork Burnt River Road (CR-529) at the Wallowa-Whitman National Forest boundary, then northwesterly 8.9 miles on North Fork Burnt River Road (CR- 529) to the intersection with SH-7(FH-148) and Gene Hale Road (CR-507, FH-216) in Whitney.	Baker	16.2	7.3 8.9	County County
130	Cracker Creek Road	From the intersection of Cracker Creek Road (CR-553) and Hwy- 410 (FH-113) in Sumpter, northerly 6.3 miles on Cracker Creek Road (CR-553) to the gate at the north side of Bourne.	Baker	6.3	6.3	County
131	Auburn Road	From the intersection of Old Auburn Road (CR-722) and SH-7 approximately 6 miles south of Baker City, westerly 5.2 miles on Old Auburn Road (CR-722) to the junction with FDR-7220 at cattleguard at the east boundary of the Wallowa-Whitman National Forest.	Baker	5.2	5.2	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
133	Anthony Lake	From the intersection of 4th Street and US-30 in Haines, southwesterly 0.5 miles on 4th Street to the junction with Anthony Lakes Highway and intersection with Anderson Street, then northwesterly 7.9 miles on Anthony Lakes Highway to the intersection with Anthony Lakes Highway (CR-1146), then westerly approximately 6.3 miles on Anthony Lakes Highway (CR-1146) to the junction with FDR-73 near the east boundary of the Wallowa- Whitman National Forest, then west and south 34.0 miles on Anthony Lake Road (FDR-73) to the junction of county road (CR- 24) at the city of Granite, approximately 30 miles west of Baker City.	Baker Union Grant	48.7	0.5 7.9 6.3 34.0	City County County USFS
134	Wolf Creek Road	From the intersection of Wolf Creek Road (CR-104) and I-84 (exit 283) approximately 2 miles north of North Powder, westerly and northwesterly 8.6 miles on Wolf Creek Road (CR-104) to the junction with FDR-4315 at cattleguard at the south boundary of the Wallowa-Whitman National Forest.	Union	8.6	8.6	County
135	Moss Springs Road	From the intersection of French Street and SH-237 at Cove, southeasterly 0.1 miles on French Street to the intersection with Hill Street, then easterly 0.2 miles on Hill Street to the intersection with 2nd Street, then southerly 0.2 miles on 2nd Street to the intersection with Mill Creek Lane (CR-65) and Leopard Drive, then easterly 3.2 miles on Mill Creek Lane (CR-65) to the junction with FDR-6220 at cattleguard at the west boundary of the Wallowa- Whitman National Forest.	Union	3.7	0.1 0.2 0.2 3.2	City City City County
136	Collins Road	From the intersection of Big Creek Road (CR-71) and SH-203 at Medical Springs, southeasterly 2.0 miles on Big Creek Road (CR- 71) to the junction with Collins Road (CR-715) at the Union-Baker county line, then southeasterly 1.7 miles on Collins Road (CR-715) to the junction with FDR-70 at cattleguard.	Union Baker	3.7	2.0 1.7	County County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
137	Sparta Hill	From the intersection of Sparta Lane (CR-852) and SH-86 approximately 20 miles east of Baker City near Colvard Station, northerly 4.7 miles on Sparta Lane (CR-852) to the junction with East Eagle Lake Road (CR-891), then northerly 2.5 miles on East Eagle Lake Road (CR-891) to the junction with FDR-70 at cattleguard at the south boundary of the Wallowa Whitman National Forest.	Baker	7.2	4.7 2.5	County County
138	Eagle Creek Drive	From the intersection of New Bridge Road (CR-1140) and SH-86 at Richland, northerly 2.4 miles on New Bridge Road (CR-1140) to the junction with Eagle Creek Drive (CR-969) at New Bridge, then northerly 5.3 miles on Eagle Creek Drive (CR-969) to the junction with FDR-7735 at cattleguard.	Baker	7.7	2.4 5.3	County County
140	Zumwalt Road	From the intersection of Zumwalt Road (CR-697) and Crow Creek Road (CR-765, FH-141) approximately 7.5 miles east of Enterprise, northeasterly 23.7 miles on Zumwalt Road (CR-697) to the junction with FDR-46 at the south boundary of Wallowa-Whitman National Forest.	Wallowa	23.7	23.7	County
141	Crow Creek Road	From the intersection of Crow Creek Road (CR-765), Dobbin Road, and SH-82 approximately 2 miles southeast of Enterprise, northeasterly 21.6 miles on Crow Creek Road (CR-765) to the junction with FDR-4620 at the south boundary of the Wallowa- Whitman National Forest.	Wallowa	21.6	21.6	County
142	Lostine River	From the intersection of Resort Street (Lostine River Road, CR-551) and SH-82 at Lostine, southerly 6.8 miles on Resort Street (Lostine River Road, CR-551) to the junction with FDR-8250 near the north boundary of the Wallowa-Whitman National Forest.	Wallowa	6.8	6.8	County
143	Whiskey Creek	From the intersection of Sled Springs Road (CR-787) and Troy Road (CR-786, FH-232) approximately 4 miles northeast of Wallowa, easterly 4.7 miles on Sled Springs Road (CR-787) to the junction with Whiskey Creek Road (FDR-3021), then northerly 5.0 miles on Whiskey Creek Road (FDR-3021) to the intersection with FDR-3030, then northwesterly 1.2 miles on FDR-3030 to the south boundary of the Wallowa-Whitman National Forest.	Wallowa	10.9	4.7 5.0 1.2	County USFS USFS

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
144	North Fork Clarks Creek	From the intersection of Hindman Road (CR-59) and SH-82 approximately 5 miles east of Elgin, southerly and southeasterly 8.6 miles on Hindman Road (CR-59) to the junction with FDR-62 at the north boundary of the Wallowa-Whitman National Forest.	Union	8.6	8.6	County
146	Palmer Junction Road	From the intersection of Middle Road (CR-42) and SH-204 (FH-37) 1.0 mile west of Elgin, northerly 0.4 miles on Middle Road (CR-42) to the intersection with Hartford Lane (CR-42), then easterly 0.2 miles on Hartford Lane (CR-42) to the intersection with Middle Road (CR-42), then northerly 2.0 miles on Middle Road (CR-42) to the intersection with Gordon Creek Road (CR-42), then easterly 0.7 miles on Gordon Creek Road (CR-42) to the intersection with Palmer Junction Road (CR-44 southbound, CR-42 northbound), then northerly and northeasterly 10.1 miles on Palmer Junction Road (CR-42) to the intersection with Moses Creek Lane (CR-42), then easterly 0.4 miles on Moses Creek Lane (CR-42) to the intersection with Bowman Loop (CR-83), then northerly 1.4 miles on Bowman Loop (CR-83) to the junction with FDR-63 at cattleguard. Then northerly 5.3 miles on FDR-63 to the Umatilla National Forest Boundary.	Union	20.5	0.4 0.2 2.0 0.7 10.1 0.4 1.4 5.3	County County County County County County USFS
147	Wenaha	From the intersection of Eden Road (CR-530) and CR-500 at Troy, westerly 4.0 miles on Eden Road (CR-530) to the junction with FDR-62 at the east boundary of the Umatilla National Forest.	Wallowa	4.0	4.0	County
148	Whitney- Tipton	From the intersection of SH-7 and US-26 (FH-36) at Austin Junction, northeasterly and easterly 41.9 miles on SH-7 to the junction with SH-245 (FH-242) approximately 9.0 miles south of Baker City.	Grant Baker	41.9	41.9	State
149	Clover Creek Road	From the intersection of Clover Creek Road (CR-603) and SH-66 approximately 1 mile northeast of Keno, northwesterly 21.6 miles on Clover Creek Road (CR-603) to the intersection with Dead Indian Memorial Highway (CR-533,FH-74).	Klamath	21.6	21.6	County
150	Silver Creek	From the intersection of Silver Creek Road (CR-138) and US-20 approximately 2 miles west of Riley, northerly and northwesterly 14.7 miles on Silver Creek Road (CR-138) to the intersection with FDR-45 and FDR-4130.	Harney	14.7	14.7	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
152	Grouse Creek	From the junction of Grande Ronde River Road (CR-569) and Washington CR-100 approximately 5 miles northeast of Troy at the Washington/Oregon state line, southwesterly 1.4 miles on Grande Ronde River Road (CR-569) to a junction with Grouse Creek Road (CR-812), then northeasterly 1.2 miles on Grouse Creek Road (CR- 812) to a junction with Washington CR-111 at the Washington/Oregon state line.	Wallowa	2.6	1.4 1.2	County County
153	Hunter Creek	From the southern intersection of Hunter Creek Loop Road and US- 101 approximately 3 miles south of Gold Beach, easterly 0.1 miles on Hunter Creek Loop Road to the junction with Hunter Creek Road (CR-635), then southeasterly 4.8 miles on Hunter Creek Road (CR-635) to the junction with FDR-3680 (CR-635) and intersection with CR-665.	Curry	4.9	0.1 4.8	County County
154	Grande Ronde River	From the intersection of Grande Ronde River Road (CR-149) and SH-244 (FH-52) southwest of La Grande at Starkey, southerly 4.1 miles on Grande Ronde River Road (CR-149) to the junction with FDR-51 at the Wallowa-Whitman National Forest boundary.	Union	4.1	4.1	County
155	Blaine Road	From the intersection of Blaine Road (CR-858) and US-101 in Beaver, easterly 14.3 miles on Blaine Road (CR-858) to the range line between R7W and R8W, T4S at the Rocky Bend Campground.	Tillamook	14.3	14.3	County
156	Agness- Illahe Road	From the intersection of Agness-Illahe Road (CR-375) and FDR-33 approximately 3 miles north of Agness, northerly 3.3 miles on Agness-Illahe Road (CR-375) along the west side of the Rogue River through Illahe to the Foster Bar Boating Site entrance road.	Curry	3.3	3.3	County
157	Burgess Road	From the intersection of Burgess Road (CR-43) and South Century Drive (CR-42, FH-97) west of Pringle Falls, easterly, southeasterly, and easterly 11.0 miles on Burgess Road (CR-43) to the intersection with US-97 approximately 3 miles northeast of La Pine.	Deschutes	11.0	11.0	County
158	Chiloquin Highway	From the intersection of Chiloquin Highway (Hwy-422-spur) and SH- 62 (FH-18) approximately 1.3 miles south of Klamath Agency, easterly and southeasterly 4.3 miles on Chiloquin Highway (Hwy- 422-spur) to the junction with Chocktoot Street (FH-76).	Klamath	4.3	4.3	State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
159	Elk Creek Road	From the intersection of Elk Creek Road (CR-941) and SH-62 (FH- 17) approximately 3 miles east of Trail, northeasterly 13.7 miles on Elk Creek Road (CR-941) to the intersection with FDR-66.	Jackson	13.7	13.7	County
160	Sweet Creek Road	From the intersection of South Bank Mapleton West Road (CR- 5036) and SH-126 (FH-57) east of Mapleton, southwesterly 3.2 miles on South Bank Mapleton West Road (CR-5036) to the intersection with Sweet Creek Road (CR-5036) and Bernhardt Creek Road (CR-5034), then southerly 7.4 miles on Sweet Creek Road (CR-5036) to the junction with FDR-48 at the Siuslaw National Forest boundary.	Lane	10.6	3.2 7.4	County County
161	Upper Imnaha Road	From the intersection of Upper Imnaha Road (CR-727) and Hwy-350 (FH-39), southerly 30.4 miles on Upper Imnaha Road (CR-727) to the intersection with FDR-39.	Wallowa	30.4	30.4	County
162	Mt Hood Meadows Access Road	From the intersection of Mt. Hood Meadows Access Road (FDR- 3555) and SH-35 (FH-49), northwesterly 1.7 miles on Mt. Hood Meadows Access Road (FDR-3555) to the Mt. Hood Meadows Ski Resort parking area.	Hood River	1.7	1.7	USFS
163	Historic Columbia River Highway	From the junction with the off-ramp from I-84 (Exit 18- Lewis & Clark State Park, Oxbow Regional Park) and Jordan Road, then westerly and then southerly 0.7 miles on Jordan Road, to the intersection with the Historic Columbia River Highway at the Sandy River Bridge. Then southerly and easterly 21.8 miles on the Historic Columbia River Highway to the junction of I-84 at Dodson (Exit 35- Historic Highway, Ainsworth State Park). Then easterly 2.2 miles along the Dodson-Warrendale Frontage Road to the junction with I-84, then 6.0 miles easterly on I-84 and ending at the junction with I- 84 at Cascade Locks (Exit 44-State Route 30, Cascade Locks, Stevenson). Then resuming at the intersection with Forest Lane Overpass (I-84 MP 46.35) and Wyeth/Bensch Road, then 4.7 miles easterly on Wyeth/Bensch Road to the junction with I-84 at Wyeth (Exit 51-Wyeth). Then easterly 11.0 miles on I-84 to the west Hood River exit (Exit 62- W. Hood River, Westcliff Drive).	Multnomah Hood River	46.4	0.7 21.8 2.2 6.0 4.7 11.0	State State State County State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
164	Sand Lake Road	From the intersection of Sandlake Road (CR-871) and US-101, approx 4 mi. north of Beaver, westerly 4.4 miles on Sandlake Road (CR-871) to the intersection with the Sandlake Road (Three Capes Scenic Loop, CR-871) and junction with Cape Lookout Road (Three Capes Scenic Loop), then southerly 1.0 miles on Sandlake Road (Three Capes Scenic Loop, CR-871) to the intersection with Galloway Road (CR-872), then westerly and southwesterly 2.3 miles on Galloway Road (CR-872) to the entrance of Sand Lake Recreation Area.	Tillamook	7.7	4.4 1.0 2.3	County County County
165	Eight Dollar Mountain Road	From the intersection of Eight Dollar Mountain Road (CR-5240) and US-199 (FH-166) approximately 4 miles southwest of Selma, northwesterly 1.0 miles on Eight Dollar Mountain Road (CR-5240) to the junction with FDR-016 at cattleguard.	Josephine	1.0	1.0	County
167	Brice Creek Road	From the intersection of Brice Creek Road (CR-2470), Row River Road (CR-2400, FH-209), and Laying Creek Road (CR-2400, FDR- 17) in Disston, southeasterly 8.1 miles on Brice Creek Road (CR- 2470) to the junction with Change Creek Road (FDR-22) and intersection with Champion Creek Road (FDR-2473).	Lane	8.1	8.1	County
168	Five Rivers Road	From the intersection of Five Rivers Road (CR-807) and SH-34 (FH- 6) approximately 18 miles east of Waldport, southerly 10.5 miles on Five Rivers Road (CR-807) to the junction with Five Rivers Road (CR-5141) at the Lincoln-Lane County Line, then southerly 5.7 miles on Five Rivers Road (CR-5141) to the junction with FDR-32 at the Siuslaw National Forest boundary.	Lincoln Lane	16.2	10.5 5.7	County County
169	Yachats River Road	From the intersection of Yachats River Road (CR-804) and US-101 (FH-5) at Yachats, easterly 10.7 miles on Yachats River Road (CR-804) to the junction with FDR-54.	Lincoln	10.7	10.7	County
170	Buck Creek Road	From the intersection of Buck Creek Road (CR-900), Five Rivers Road (CR-807, FH-168), and FDR-37 approximately 15 miles east of Yachats, westerly 2.5 miles on Buck Creek Road (CR-900) to the junction with FDR-3705 at the Siuslaw National Forest boundary.	Lincoln	2.5	2.5	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
171	North Beaver Creek Road	From the intersection of North Beaver Creek Road (CR-602) and US-101 at milepost 148.96 approximately 1.5 miles north of Seal Rock, easterly 3.9 miles on North Beaver Creek Road (CR-602) to the intersection with FDR-51.	Lincoln	3.9	3.9	County
173	Burnt Woods - Harlan Hilltop Roads	From the intersection of Burnt Woods-Harlan Road (CR-547) and US-20 approximately 17 miles west of Philomath, southerly 7.8 miles on Burnt Woods-Harlan Road (CR-547) to the intersection with Harlan Road (CR-538) and Mary's Peak Road (CR-618, FH-174), then westerly 1.0 miles on Harlan Road (CR-538) to the intersection with Grant Creek Road (CR-610), then westerly 0.2 miles on Grant Creek Road (CR-610) to the intersection with FDR-31.	Lincoln	9.0	7.8 1.0 0.2	County County County
174	Mary's Peak Road	From the intersection with Mary's Peak Road (CR-618), Harlan Road (CR-538, FH-173), and Burnt Woods-Harlan Road (CR-547, FH-173) at Harlan, southeasterly 3.5 miles on Mary's Peak Road (CR-618) to a junction with Mary's Peak Road (CR-612), then southerly 0.7 miles on Mary's Peak Road (CR-612) to a junction with FDR-30.	Lincoln	4.2	3.5 0.7	County County
175	Bear Creek Road	From the intersection of Bear Creek Road (CR-106) and SH-18 (FH- 2) approximately 4.0 miles east of Otis, southerly 3.3 miles on Bear Creek Road (CR-106) to the junction with FDR-17 and intersection with Schooner Creek Road.	Lincoln	3.3	3.3	County
177	Kitson Springs Road	From the intersection of Kitson Springs Road (CR-6178) and SH-58 (FH-21) at Oakridge, southeasterly 4.6 miles on Kitson Springs Road (CR-6178) past Hills Creek Dam to the junction with FDR-23.	Lane	4.6	4.6	County
178	Salmon Creek Road	From the intersection of Fish Hatchery Road and SH-58 (FH-21) at Oakridge, northerly 1.4 miles on Fish Hatchery Road (CR-6170) to the intersection with 1st Street and Salmon Creek Road, then westerly 0.3 miles on 1st Street to the intersection with Elm Street in Oakridge.	Lane	1.7	1.4 0.3	County County/City

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
179	High Prairie Road	From the intersection of Oak Street and 1st Street in Oakridge, northerly 0.1 miles on Oak Street to the intersection with 2nd Street, then easterly 0.1 miles on 2nd Street to the intersection with Westoak Road, then northeasterly 0.3 miles on Westoak Road to the intersection with High Prairie Road (CR-6153), then northeasterly 6.1 miles on High Prairie Road (CR-6153) to the junction with High Mountain Loop Road (CR-6157) and intersection with Huckleberry Road (CR-6161).	Lane	6.6	0.1 0.1 0.3 6.1	County County County County
180	Winberry Creek Road	From the intersection of Winberry Creek Road (CR-6245) and Big Fall Creek Road (CR-6240, FH-67) at Fall Creek Reservoir, southeasterly 5.6 miles on Winberry Creek Road (CR-6245) to the junction with FDR-1802 at cattleguard.	Lane	5.6	5.6	County
181	West Boundary Road	From the intersection of West Boundary Road (CR-6270) and Jasper-Lowell Road (CR-6220, FH-67) at Lowell, southeasterly 16.0 miles on West Boundary Road (CR-6270) along the north shore of Lookout Point Reservoir to a junction with FDR-5821.	Lane	16.0	16.0	County
182	Horse Creek Road	From the intersection of Horse Creek Road (CR-1130) and SH-126 (FH-22) at McKenzie Bridge, southerly and southeasterly 4.3 miles on Horse Creek Road (CR-1130) to the junction with FDR-2638.	Lane	4.3	4.3	County
186	Jordan Road	From the intersection of SW Peck Road and Fraizer Drive, westerly 0.6 miles on SW Peck Road to junction with Jordan Road (CR-C-10), then westerly 11.0 miles on Jordan Road (CR-C-10) to the intersection with Grahm Road (CR-64), then westerly 3.9 miles on Grahm Road (CR-64) to the junction with Montgomery Road (CR-64) and intersection with Grandview Loop Road, then northwesterly 10.9 miles on Montgomery Road (CR-64) to the Monte Campground entrance.	Jefferson	26.4	0.6 11.0 3.9 10.9	County
188	McKay Road	From the intersection of Main Street, SH-27, and 3rd Street (US-26, FH-27) in Prineville, northerly 2.1 miles on Main Street to the junction with McKay Road (CR-102) at the Prineville city limit, then north and northwesterly 10.4 miles on McKay Road (CR-102) to the junction with FDR-27 at the Ochoco National Forest Boundary.	Crook	12.5	2.1 10.4	City County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
189	Elk River Road	From the intersection of Elk River Road (CR-208) and US-101 2.5 miles north of Port Orford, southeasterly 7.6 miles on Elk River Road (CR-208) to the junction with FDR-5325 at the Elk River State Fish Hatchery.	Curry	7.6	7.6	County
191	North Bank Chetco Road	From the intersection of North Bank Chetco Road (CR-784) and US- 101 at Brookings, northeasterly 8.1 miles on North Bank Chetco Road (CR-784) to the junction with FDR-1376 near the Siskiyou National Forest boundary.	Curry	8.1	8.1	County
193	Winchuck River Road	From the intersection of Winchuck River Road (CR-896) and US- 101 approximately 1 mile north of the Oregon/California border, easterly 7.4 miles on Winchuck River Road (CR-896) to the junction with FDR-1107.	Curry	7.4	7.4	County
194	Taylor Creek Road	From the intersection of Taylor Creek Road (CR-2468) and Galice Road (CR-2400) approximately 15 miles northwest of Grants Pass, southwesterly 1.4 miles on Taylor Creek Road (CR-2468) to the junction with Briggs Valley Road (FDR-25) near the Siskiyou National Forest boundary.	Josephine	1.4	1.4	County
195	Illinois River Road	From the intersection of Illinois River Road (CR-5070) and US-199 (FH-166) at Selma, westerly 2.6 miles on Illinois River Road (CR-5070) to the junction with FDR-4103 at the Siskiyou National Forest boundary.	Josephine	2.6	2.6	County
196	North Fork Smith River Road	From the intersection of Smith River Road (CR-48) and US-101 (FH- 5) at Reedsport, northeasterly 13.4 miles on Smith River Road (CR-48) to the junction with Smith River Road (FDR-48), then southerly and easterly 1.7 miles on Smith River Road (FDR-48) to the intersection with North Fork Road (CR-48A, FDR-48), then northerly 10.4 miles on North Fork Road (CR-48A, FDR-48) to the intersection with FDR-23.	Douglas	25.5	13.4 1.7 10.4	County USFS County
197	Canary Road	From the intersection of Canary Road (CR-5320) and US-101 (FH- 5) approximately 3 miles south of Florence, easterly 5.1 miles on Canary Road (CR-5320) to the junction with Maple Creek Road (CR-5320) and intersection with South Canary Road (CR-5330), then easterly 0.6 miles on Maple Creek Road (CR-5320) to the intersection with FDR-24 and junction with Maple Creek Road (CR- 5326).	Lane	5.7	5.1 0.6	County County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
198	North Fork Siuslaw Road	From the intersection of North Fork Siuslaw Road (CR-5070) and SH-126 (FH-7) in Florence, northeasterly 11.4 miles on North Fork Siuslaw Road (CR-5070) to the intersection with Upper North Fork Road (CR-5084, FH-199).	Lane	11.4	11.4	County
199	Upper North Fork Road	From the intersection of Upper North Fork Road (CR-5084) and North Fork Siuslaw Road (CR-5070, FH-198) approximately 12 miles northeast of Florence, northerly 6.7 miles on Upper North Fork Road (CR-5084) to the junction with Big Creek Road (CR- 5082).	Lane	6.7	6.7	County
200	Herman Cape Road	From the intersection of Herman Cape Road (CR-5209) and US- 101(FH-5) approximately 5.5 miles north of Florence, easterly 1.0 miles on Herman Cape Road (CR-5209) to a junction with FDR-789 at the Siuslaw National Forest boundary.	Lane	1.0	1.0	County
201	Indian Creek Road	From the intersection of Indian Creek Road (CR-5130) and SH-36 (FH-7) approximately 2 miles southwest of Deadwood, northwesterly 12.4 miles on Indian Creek Road (CR-5130) to the junction with FDR-5800.	Lane	12.4	12.4	County
202	Lower Deadwood Creek Road	From the intersection of Lower Deadwood Creek Road (CR-5140, FDR-5700) and SH-36 (FH-7) at Deadwood, northerly 11.7 miles on Deadwood Creek Road (CR-5140, FDR-5700) to the junction with FDR-63.	Lane	11.7	11.7	County
203	Big Creek Road	From the intersection of Big Creek Road (CR-5082) and US-101 (FH-5) approximately 10 miles south of Yachats, easterly 9.0 miles on Big Creek Road (CR-5082) to the intersection with FDR-5800.	Lane	9.0	9.0	County
204	Ten Mile Road	From the intersection of Ten Mile Road (CR-5210) and US-101 (FH- 5) approximately 6 miles south of Yachats, easterly 8.3 miles on Ten Mile Road (CR-5210) to the junction with FDR-56.	Lane	8.3	8.3	County
205	Lobster Valley Road	From the intersection of Lobster Valley Road (CR-58150), Hwy-201 and CR-58190 approximately 8 miles southwest of Alsea, westerly and northwesterly 11.3 miles on Lobster Valley Road (CR-58150) to the junction with CR-808 at the Lincoln-Benton county line.	Benton	11.3	11.3	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
206	Preacher Creek Road	From the intersection of Preacher Creek Road (CR-59151) and Lobster Valley Road (CR-58150, FH-205) southerly 0.3 miles on Preacher Creek Road (CR-59151) to the junction with FDR-35 near the Lane-Benton county line.	Benton	0.3	0.3	County
207	Slab Creek Road	From the intersection of Slab Creek Road (CR-982) and US-101 approximately 1 mile south of Neskowin, southeasterly 4.6 miles on Slab Creek Road (CR-982) to the junction and intersection with FDR-12 at the south end of the Neskowin Creek bridge.	Tillamook	4.6	4.6	County
208	Meadow Lake Road	From the intersection of Meadow Lake Road (CR-2), Main Street, and South Yamhill Street (SH-47) just east of Yamhill River at Carlton, westerly 10.9 miles on Meadow Lake Road (CR-2) to the junction with Nestucca River Road.	Yamhill	10.9	10.9	County
209	Row River Road	From the intersection of Row River Road (CR-2400) and I-5 (exit 174) in Cottage Grove, southeasterly 19.1 miles on Row River Road (CR-2400) to a junction with Brice Creek Road (CR-2470) and intersection with FDR-17 at Disston.	Lane	19.1	19.1	County
210	Sharps Creek Road	From the intersection of Sharps Creek Road (CR-2460) and Row River Road (CR-2400, FH-209) at Culp Creek southeast of Cottage Grove, southeasterly and easterly 18.6 miles on Sharps Creek Road (CR-2460) to the intersection with Champion Creek Road (FDR-2212).	Lane	18.6	18.6	County
211	Lower Imnaha Road	From the intersection of Lower Imnaha Road (CR-735), Hwy-350, and Hat Point Road (FDR-4240) at Imnaha, northerly 6.3 miles on Lower Imnaha Road (CR-735) to the Fence Creek culvert.	Wallowa	6.3	6.3	County
212	Hurricane Creek Road	From the intersection of Hurricane Creek Road (CR-774) and Airport Lane approximately 2 miles west of Joseph, southeast 1.7 miles on Hurricane Creek Road (CR-774) to a junction with FDR-8205 at the Wallowa-Whitman National Forest boundary.	Wallowa	1.7	1.7	County
213	Horse Creek Road	From the junction of Horse Creek Road (CR-699) and Washington CR-209 at the state line, southerly 4.3 miles on Horse Creek Road (CR-699) miles to Road Gulch creek.	Wallowa	4.3	4.3	County
214	South Fork Burnt River Road	From the intersection of South Fork Burnt River Road (CR-600) and US-26 in Unity, southwesterly 6.5 miles on South Fork Burnt River Road (CR-600) to a junction with FDR-6005 at the Wallowa-Whitman National Forest boundary.	Baker	6.5	6.5	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
215	Rice Road	From the intersection of Rouse Lane (CR-575) and US-26 approximately 3.5 miles northeast of Unity, northerly 7.5 miles on Rouse Lane (CR-575) to the intersection with Whitney Road (CR-529 and CR-535).	Baker	7.5	7.5	County
216	Camp Creek Road	From the intersection of Gene Hale Road (CR-507), SH-7 (FH-148), and Whitney Road (CR-529, FH-129) at Whitney, northwesterly 1.5 miles on Gene Hale Road (CR-507) to the intersection with Camp Creek Road (FDR-19) and CR-523.	Baker	1.5	1.5	County
217	Sawmill Gulch Road	From the intersection of Sawmill Gulch Road (CR-523) and Hwy-410 approximately 1 mile south of Sumpter, southwesterly 0.6 miles on Sawmill Gulch Road (CR-523) to a junction with FDR-1055 at the Wallowa-Whitman National Forest boundary.	Baker	0.6	0.6	County
218	Hudspeth Lane	From the intersection of Hudspeth Lane (CR-667) and SH-7 near the west side of Phillips Lake, southerly 1.2 miles on Hudspeth Lane (CR-667) to the junction with FDR-1170 at a cattleguard.	Baker	1.2	1.2	County
219	West Carson Road	From the intersection of West Carson Lane (CR-983) and Hwy-413 approximately 5 miles northwest of Halfway, westerly 0.6 miles on West Carson Lane (CR-983) to the junction with FDR-7710 at cattleguard.	Baker	0.6	0.6	County
220	East Pine Creek Road	From the intersection of East Pine Creek Road (CR-1009), Fish Lake Road (CR-1009), and Clear Creek Road (CR-999) approximately 3.5 miles north of Halfway, northeasterly 3.8 miles on East Pine Creek Road (CR-1009) to a private-land boundary within the Wallowa-Whitman National Forest.	Baker	3.8	3.8	County
221	Peer-Hope Road	From the intersection of Clear Creek Road (CR-999), East Pine Creek Road (CR-1009), and Fish Lake Road (CR-1009) approximately 3.5 miles north of Halfway, northerly 1.8 miles on Clear Creek Road (CR-999) to a junction with FDR-66 at the Wallowa-Whitman National Forest boundary.	Baker	1.8	1.8	County
222	Deer Creek Road	From the intersection of Deer Creek Road (CR-656) and SH-7 at McEwen, northerly 2.3 miles on Deer Creek Road (CR-656) to a junction with FDR-6550 at the Wallowa-Whitman National Forest boundary.	Baker	2.3	2.3	County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
223	Alder Creek Road	From the intersection of Larch Creek Road (CR-654) and SH-7 at McEwen, northerly 1.9 miles on Larch Creek Road (CR-654) to the junction with FDR-7240 at cattleguard.	Baker	1.9	1.9	County
224	West Branch Bridge Creek	From intersection with West Bridge Creek Road (CR-12) and US-26 approximately 8 miles west of Mitchell, southerly 5.2 miles on West Bridge Creek Road (CR-12) to the junction with FDR-2210 at the north boundary of the Ochoco National Forest.	Wheeler	5.2	5.2	County
225	FDR-10	From the intersection of CR-24 (FDR-10), CR-24 (FH-113), and FDR-73 at Granite, northwesterly and southwesterly 3.4 miles on CR-24 (FDR-10) to the intersection with Congo Gulch Road (FDR-10) and junction with FDR-13.	Grant	3.4	3.4	County/USFS
229	Mt. Harris Loop	From the intersection of Mt. Harris Loop Road (CR-62) and Grays Corner Road (CR-52) approximately 10 miles northeast of La Grande, easterly 4.1 miles on Mt. Harris Loop Road (CR-62) to the intersection with FDR-62 at the Wallowa-Whitman National Forest boundary.	Union	4.1	4.1	County
230	Fox Hill- Robbs Hill Loop	From the intersection of Robbs Hill Road (CR-7) and Frontage Road at I-84 (exit 256 east bound, exit 257 west bound) near Perry, easterly and northerly 5.6 miles on Robbs Hill Road (CR-7) to the junction with Fox Hill Road and intersection with FDR-3120, then southeasterly 3.3 miles on Fox Hill Road to the junction with Blackhawk Trail Lane.	Union	8.9	5.6 3.3	County County
231	North Powder River Tucker Flat Road	From the intersection of North Powder River Road (CR-101) and I- 84 (exit 285), southwesterly and northwesterly 7.8 miles on North Powder River Road (CR-101) to the junction with Tucker Flat Road (CR-102), then northeasterly and northwesterly 3.0 miles on Tucker Flat Road (CR-102) to a junction with FDR-4330.	Union	10.8	7.8 3.0	County County
232	Troy Road	From the intersection of Troy Road (CR-786) and Sled Springs Road (CR-787, FH-143) approximately 4 miles northeast of Wallowa, northerly 4.7 miles on Troy Road (CR-786) to a junction with Troy Road (CR-500), then northerly 22.2 miles on Troy Road (CR-500) to a junction with Wallupa Road (CR-501).	Wallowa	26.9	4.7 22.2	County County

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
233	Tucker Downs Road	From the intersection of Tucker Downs Road (CR-633) and Hwy- 350 approximately 5 miles east of Joseph, southerly 4.7 miles on Tucker Downs Road (CR-633) to a junction with FDR-3920 at McCully Creek.	Wallowa	4.7	4.7	County
234	Old Scenic Highway 101	From the intersection of Old US-101 (CR-130) and SH-18 in Otis, northeasterly 3.5 miles on Old US-101 (CR-130) to the junction with FDR-12 at the Tillamook/Lincoln county line.	Lincoln	3.5	3.5	County
238	Alsea- Deadwood	From the intersection of Alsea-Deadwood Highway (Hwy-501) and SH-34 at Alsea, southwesterly 9.4 miles on Alsea-Deadwood Highway (Hwy-501) to the intersection with Lobster Valley Road (CR-58150) and Hazel Glen Road.	Benton	9.4	9.4	State
239	Rogue River Loop	From the intersection of Rogue River Loop Road (Hwy-260) and Shan Creek Road (FDR-2706) approximately 12 miles west of Grants Pass, southeasterly 5.5 miles on Rogue River Loop Road (Hwy-260) to the intersection with US-199.	Josephine	5.5	5.5	State
240	Medical Springs	From the intersection of SH-203 and SH-237 in Union, southeasterly 19.8 miles on SH-203 to Bazine Creek Road (FDR-7746) in Medical Springs.	Union	19.8	19.8	State
241	Halfway- Cornucopia	From the intersection of Hwy-413 and Jim Fisk Creek Road in Cornucopia, southeasterly 11.0 miles on Hwy-413 to the intersection with Record Street (Hwy-414) in Halfway.	Baker	11.0	11.0	State
242	Dooley Mountain	From the intersection of SH-245 and Bridgeport Road approximately 25 miles south of Baker City, northerly 15.5 miles on SH-245 to the intersection with SH-7 in Salisbury.	Baker	15.5	15.5	State
243	Crescent Lake	From the intersection of Hwy-429 and SH-58 at Crescent Lake Junction, southwesterly 2.4 miles on Hwy-429 to a junction with Lava Odell Road (FDR-6005) and an intersection with Resort Road at Crescent Lake.	Klamath	2.4	2.4	State

FH No.	Name	Description	County(ies)	Total Length (Miles)	Segment Length (Miles)	Jurisdiction
244	Sunriver to Mt. Bachelor	From the intersection of South Century Drive (CR-40, FH-92) and Spring River Road (CR-4192) in Sunriver, westerly 2.0 miles on Spring River Road (Cr-4192) to the Deschutes National Forest boundary, then from the intersection of Conklin Road (FDR-40), Conklin Road (FDR-41), and Spring River Road (CR-40) approximately 2 miles west of Sunriver, westerly 1.8 miles on Conklin Road (FDR-40) to the intersection with FDR-45 and FDR- 4220, then northwesterly 11.5 miles on FDR-45 to the intersection with Century Drive (Hwy-372).	Deschutes	15.3	2.0 1.8 11.5	County County County
245	Looking- glass - Troy	From the intersection of FDR-62 and FDR-63, northerly 1.59 miles on Lookingglass-Troy Road (FDR-62) to the Umatilla National Forest boundary.	Union	1.6	1.6	USFS
246	Bear Camp Road	From the junction of Agness Road (FH-59, FDR-33) and FDR-23, northeasterly 24.4 miles on Bear Camp Road (FDR-23) to junction with BLM road 34-8-36 at the Forest Boundary.	Curry Josephine	24.4	24.4	USFS
247	Skyliners Road	From the Bend City limits westerly 8.37 miles on Skyliners Road (CR-3535) to the intersection with FDR-4603.	Deschutes	8.4	8.4	County
248	Wallowa Mountain Loop Road	From the intersection of Wallowa Mountain Road (CR-4602) and Imnaha Highway (SH-350, FH-39) approximately 8 miles west of Joseph, southerly 5.0 miles on Wallowa Mountain Road (CR-4602) (Formerly designated as FH-139, Little Sheep Creek South) to the junction with FDR-39 at cattleguard at the north boundary of the Wallowa-Whitman National Forest. Then southerly 48.7 miles on Wallowa Mountain Loop Road/ Hell Canyon National Scenic Byway (FDR-39) to junction of SH-86, approximately 20 miles east of Halfway.	Wallowa Baker	53.7	5.0 48.7	County USFS

Total Miles 3,865.0 3,865.0

Appendix B: Oregon Forest Highway Program Background

Forest Highway Program 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 (STAA) 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 for 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. Those 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 1982 STAA increased the annual funding for FH from \$33 million to \$50 million. The act also directed FHWA and the USFS to jointly develop new regulations for the administration of the Forest Highway Program. The regulations, which were issued on March 11, 1982, contained specific requirements for the designation of Forest Highway routes and for the selection of projects for Forest Highway Program funding. In addition, the 1982 STAA changed the method of distributing the funds, specifying that:

On October 1 of each fiscal year, the Secretary shall allocate the sums authorized to be appropriated for such fiscal year for forest highways according to the relative needs of the various elements of the National Forest system as determined by the Secretary, taking into consideration the need for access as identified by the Secretary of Agriculture through renewable resource and land use planning, and the impact of such planning on existing transportation facilities.

This temporarily changed the distribution of Forest Highway funds from an apportionment formula to an allocation based on needs. To assist in implementing this change, FHWA undertook an inventory and needs study in 1983 to determine the costs to improve the newly designated Forest Highways in each state.

In addition, various task groups made up of USFS and FHWA personnel identified other factors that could be used to determine Forest Highway Program fund allocation. Those factors were: value of forest resources, recreational visitor days (RVDs), volume of timber harvested, and acres of National Forest. Using those factors along with costs from the inventory, FHWA and USFS developed a new formula to be used in allocating funds. The formula was used to allocate Federal Fiscal Year (FY) 1984 Forest Highway Program funds.

Before the new formula was formally adopted, a provision was added to the 1982 STAA that required the Forest Highway funds to be allocated using the area/value formula for 66 percent of the annual authorization and the new FHWA/USFS formula for the remaining 34 percent. That provision was used to allocate Forest Highway Program funds in FY 1985 and FY 1986.

The 1987 Surface Transportation and Uniform Relocation Assistance Act (STURAA) increased the annual Forest Highway Program authorization from \$50 million to \$55 million for FY 1987

through FY 1991. The funds were allocated the same as in FY 1985 and FY 1986, using the area/value formula for 66 percent of the annual authorization and the FHWA/USFS formula for the remaining 34 percent.

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 the Public Lands Highway Program funds was allocated for use on Forest Highways using the same formula applied in FY 1987 through FY 1991. The formula used the area/value formula for 66 percent of the funding and the FHWA/USFS formula for the remaining 34 percent.

The 1998 Transportation Equity Act for the 21st Century (TEA-21) did not alter any of the allocation formulas for 66 percent of the Public Lands Highway Program funds, but it did increase the amount of funding for Forest Highways. The Forest Highway Program funds available were as shown in the table below.

Year	TEA-21 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

The remaining 34 percent of the Public Lands Highway funds are designated as discretionary Public Lands Highway funds. There is no legislatively prescribed formula for the distribution of those discretionary funds.

The discretionary Public Lands Highway funds available were as shown in the table below.

Year	TEA-21 Public Lands Highway Funds
1998	\$ 66.6 Million
1999	\$ 83.6 Million
2000	\$ 83.6 Million
2001	\$ 83.6 Million
2002	\$ 83.6 Million
2003	\$ 83.6 Million

Public Lands Highway Program discretionary funds are sometimes used to supplement Forest Highway Program funding of Forest Highway projects. There are legislative requirements for Public Lands Highways. To be eligible for discretionary Public Lands Highway Program funds, a proposed project must be:

- 1. A forest road under the jurisdiction of and maintained by a public authority and open to public travel.
- 2. A highway through inappropriate or unreserved public lands, non-taxable Indian lands, or other Federal reservations under the jurisdiction of and maintained by a public authority and open to public travel.

Approval to use discretionary Public Lands Highway funds is at the discretion of the Secretary of Transportation and has been delegated to the FHWA. The discretionary Public Lands Highway Program is administered by the state highway agency. The projects are proposed by the state and sent through the FHWA Federal-Aid Division Office. The project list is then forwarded to FHWA Headquarters in Washington, DC, where FHWA staff prioritizes the projects. Recommendations are made to the Federal Highway Administrator, who makes the final selection and approves projects for funding.

Discretionary Public Lands Highway Program funds do not require local matching funds, but supplemental funding of projects is encouraged. The discretionary funds are available for preliminary engineering and construction, but not for right-of-way acquisition. TEA-21 stated that, if a state received these funds, there would be no reduction in Federal-Aid highway funding to that state. Funds must be obligated in the fiscal year approved or they are withdrawn and redistributed.

TEA-21 also legislated the following program changes:

- 1. Allowed Public Lands funds to be used for the state/local share for Federal-Aid Highway funded projects.
- 2. Reduced the administrative takedown to 1.5%.
- 3. Placed an annual limit on Public Lands Highway funds.
- 4. Provided full obligation limitation for future fiscal year carryover funds.
- 5. Authorized funds, which exceed the obligation limitation for FY 1998 to 2003, to be distributed to the states as Surface Transportation Program funds. Those funds lose their funding designation and are not available for obligation by federal land management agencies.

In 2004 the Safe, Accountable, Flexible, Efficient Transportation Equity Act- A Legacy for Users (SAFETEA-LU) was passed. It continued the Forest Highway Program allocation procedure established in ISTEA and currently found in 23 USC 202(b)(2), as amended by section 1119(d) of SAFETEA-LU. SAFETEA-LU also added three new eligible activities for Forest Highway Program funds: Maintenance, Hunting and Fishing Access Signs, and Aquatic Organism Passage projects.

SAFETEA-LU Forest Highway Funds
\$162.4 Million
\$171.6 Million
\$184.8 Million
\$184.8 Million
\$191.4 Million
\$198.0 Million

The Forest Highway funds available in SAFETEA-LU were as shown in the following table.

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

Year	SAFETEA-LU Oregon Forest Highway Allocations
2002	\$19,475,454
2003	\$18,562,728
2004	\$20,030,830
2005	\$19,500,000
2006	\$19,141,638
2007	\$21,127,410
2008	\$21,990,447
2009	\$22,986,058
2010	\$22,986,058
Annual Average, 2002-2010	\$20,644,514

Because of the legislative and regulatory changes over the past decade, there is now more county involvement in the program. Providing access to National Forests often places transportation needs on the local roads connecting National Forests to the main state highways. Therefore, 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 the state department of transportation, by the USFS, or by a county through the state. Routes are designated by the FHWA, Western Federal Lands Highway Division Engineer with concurrence of the USFS and state department of transportation. 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 Oregon are not by themselves a "system" of roads, but are part of the state's road system. Also, Oregon Forest Highways are ideally part of a seamless system of travel from, for example, an urban area, interstate highway, or state highway to the heart of a National Forest. Many roads in the State of Oregon 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 S660.105):
 - 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.

The Tri-Agency periodically conducts a network analysis for the all the designated Forest Highway routes within the state. This analysis evaluates each route to assure it continues to meet the designation criteria above. The following additional guidance has been developed as part of this analysis:

- Preponderance of traffic as a designation criterion is important when the other criteria do not apply. Preponderance is not rigidly defined as a percentage of total traffic. It is intended to address situations where National Forest System traffic constitutes a significant portion of the road use, such as in a major resort or ski area.
- Forest Highway designation is appropriate when the National Forest System traffic volumes and types have a substantial impact on the road design and construction.
- Forest Highway designations should be designed so that the Forest Highway related traffic gets all the way to the primary highway. Forest Highway termini should begin (or end) at the next highest functional level classification when applicable.
- A Forest Highway designation may include segments inside of the urbanized area boundary (urban functional classification), however, urban sections are generally not eligible for Forest Highway funding unless the use from National Forest generated traffic is causing the need for the project. Project proponents would need to clearly convey what the Forest Highway funds would be used for in the urban sections by stating how the Forest Highway traffic generated from the forest use or resource extraction brings about the need for the proposed project. For example, log or chip truck traffic may require modifications to an intersection or the addition of a left turn lane. Enhancement type projects serving National Forest visitors (gateways, restroom, kiosks , etc.) would also be an example of an eligible project for Forest Highway funding within an urbanized area.
- Generally Forest Highway Routes do not allow designation or funding for interstate construction.
- Generally the Forest Highway Routes prefer the through routes to be designated versus designating a segment at each end. The goal is to designate logical routes that are seamless to the Forest related traffic.
- Forest Highway routes that connect to a Public Forest Service Road or major USFS arterial are preferred to validate the transportation system need.
- Generally the goal is to avoid duplication of access to similar areas of the forest. Consider the following in designation:
 - Does your route proposed a duplicate access?
 - Is there a currently designated route that could be dropped, after the new route is designated?
 - What other public roads serve the same or area designation?
 - Are both routes providing valuable access to the Forest?

A clear understanding of the kind of forest related traffic using the route (mining, recreation, forest, grazing) is essential.

Appendix C: Roles of the Partner Agencies

In each state, the Forest Highway Program is jointly administered by the USFS, FHWA, and the state department of transportation. Forest Highway projects are selected and developed under tri-agency partnerships, with input from local counties. There are 41 tri-agency partnerships involving the USFS regions, FHWA Federal Lands Highway Divisions and the state departments of transportation.

A Memorandum of Agreement (October 1996) defines the roles and responsibilities of each partner in the Oregon Tri-Agency. The partners' roles are summarized below.

Role of the Oregon Department of Transportation

- 1. Proposes routes for Forest Highway designation.
- 2. Reviews routes proposed by the USFS for Forest Highway designation.
- 3. Identifies needs and provides information on State Forest Highway routes and projects.
- 4. Represents the counties' interests in proposing Forest Highway routes and projects.
- 5. Proposes projects for inclusion in the Forest Highway Program.
- 6. Jointly selects, with FHWA and the USFS, projects for the Forest Highway Program.
- 7. Appoints a member to the Interagency Project Team to study location alternatives and to obtain environmental clearance for a project.
- 8. Obtains necessary right-of-way (for State Forest Highway projects) at State expense and maintains completed construction.
- 9. If applicable, enters into a project agreement with FHWA.
- 10. Concurs in Forest Highway project Plans, Specifications, and Estimates (PS&Es) on State routes.
- 11. Inspects and approves final construction on State routes.
- 12. May contribute cooperative funds to assist the construction or improvement of a Forest Highway Project.

Role of the Forest Service

- 1. Identifies needs and provides forest resource information as required for route and project support.
- 2. Proposes routes for Forest Highway designation.
- 3. Reviews routes proposed by the State for designation.

- 4. Coordinates with the State and counties on proposed Forest Highway routes and projects.
- 5. Proposes projects for inclusion in the Forest Highway Program.
- 6. Jointly selects projects for inclusion in the Forest Highway Program with FHWA and the State.
- 7. Appoints a member to the Interagency Project Team to study location alternatives and to obtain environmental clearance for a project.
- 8. If applicable, enters into a project agreement with FHWA.
- 9. Concurs in project PS&Es.
- 10. Inspects and approves final construction.
- 11. May contribute cooperative funds to assist in the construction or improvement of a Forest Highway Project.

Role of Western Federal Lands Highway Division

- 1. Administers program funds.
- 2. Reviews and designates proposed Forest Highway routes.
- 3. Develops PIR.
- 4. Jointly selects projects for the Forest Highway Program with the State and USFS.
- 5. Approves the program of projects.
- 6. Drafts project agreement.
- 7. Appoints a member to the Interagency Project Team to study location alternatives and to obtain environmental clearance for a project.
- 8. Designs the project and approves the PS&Es.
- 9. Advertises, awards, and administers the construction contract.
- 10. Makes final acceptance of Forest Highway construction projects.

Role of the County

While counties do not have a direct role in the decision-making process of the Forest Highway Program, they are involved in the program because many of the present Forest Highway needs are on roads under the jurisdiction of and maintained by counties. The county:

1. Works with the local forest engineer and State Highway representatives in identifying candidate Forest Highway routes and projects and coordinates with the local forest engineer and State to ensure that they support the proposed route or project. The State Highway agency will propose the county project or route to the Tri-Agency group.

- 2. May contribute cooperative funds to assist in construction or improvement of a Forest Highway project.
- 3. Role will expand to include the following when a project on a county road is selected for Forest Highway funding:
 - a. Enters into a project agreement with FHWA.
 - b. Cooperates with FHWA and USFS in the development of the project.
 - c. Appoints a member to the Interagency Project Team to study location alternatives and to obtain environmental clearance for a project.
 - d. Concurs in the project PS&Es.
 - e. Inspects and approves final construction.
- 4. Accepts jurisdiction of and maintains the project when construction is completed.

Appendix D: 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 Highways Program. As provided in 23 USC 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 USC 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 USC 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 USC 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 USC 134 and 135) information to the Federal Highway Administration (FHWA) for coordination with the FS.

(b) The management systems required under 23 USC 303 shall fulfill the requirement in 23 USC 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 USC 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 E: 23 USC 135 (Statewide Transportation Planning) and 23 USC 204 (Federal Lands Highways Program)

The text below is excerpted from Title 23, Chapter 1, subsection 135 and Chapter 2, subsection 204. The entire text of Title 23 is available online at: http://www.fhwa.dot.gov/safetealu/legis.htm

Sec 135. Statewide transportation planning

(a) General Requirements.-

(1) Development of plans and programs.— To accomplish the objectives stated in section 134 (a), each State shall develop a statewide transportation plan and a statewide transportation improvement program for all areas of the State, subject to section 134.

(2) Contents.— The statewide transportation plan and the transportation improvement program developed for each State shall provide for the development and integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system for the State and an integral part of an intermodal transportation system for the United States.

(3) Process of development. — The process for developing the statewide plan and the transportation improvement program shall provide for consideration of all modes of transportation and the policies stated in section 134 (a), and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems to be addressed.

(b) Coordination With Metropolitan Planning; State Implementation Plan. - A State shall -

(1) coordinate planning carried out under this section with the transportation planning activities carried out under section 134 for metropolitan areas of the State and with statewide trade and economic development planning activities and related multi-state planning efforts; and

(2) develop the transportation portion of the State implementation plan as required by the Clean Air Act (42 U.S.C. 7401 et seq.).

(c) Interstate Agreements.—

(1) In general.— The consent of Congress is granted to two or more States entering into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under this section related to interstate areas and localities in the States and establishing authorities the States consider desirable for making the agreements and compacts effective.

(2) Reservation of rights.— The right to alter, amend, or repeal interstate compacts entered into under this subsection is expressly reserved.

(d) Scope of Planning Process.-

(1) In general.— Each State shall carry out a statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will—

(A) support the economic vitality of the United States, the States, non-metropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;

(B) increase the safety of the transportation system for motorized and non-motorized users;

(C) increase the security of the transportation system for motorized and non-motorized users;

(D) increase the accessibility and mobility of people and freight;

(E) protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

(F) enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;

(G) promote efficient system management and operation; and

(H) emphasize the preservation of the existing transportation system.

(2) Failure to consider factors.— The failure to consider any factor specified in paragraph (1) shall not be reviewable by any court under this title or chapter 53 of title 49, subchapter II of chapter 5 of title 5, or chapter 7 of title 5 in any matter affecting a statewide transportation plan, the transportation improvement program, a project or strategy, or the certification of a planning process.

(e) Additional Requirements.— In carrying out planning under this section, each State shall consider, at a minimum—

(1) with respect to non-metropolitan areas, the concerns of affected local officials with responsibility for transportation;

(2) the concerns of Indian tribal governments and Federal land management agencies that have jurisdiction over land within the boundaries of the State; and

(3) coordination of transportation plans, the transportation improvement program, and planning activities with related planning activities being carried out outside of metropolitan planning areas and between States.

(f) Long-Range Statewide Transportation Plan. -

(1) Development. — Each State shall develop a long-range statewide transportation plan, with a minimum 20-year forecast period for all areas of the State, that provides for the development and implementation of the intermodal transportation system of the State.

(2) Consultation with governments. –

(A) Metropolitan areas.— The statewide transportation plan shall be developed for each metropolitan area in the State in cooperation with the metropolitan planning organization designated for the metropolitan area under section 134.

(B) Non-metropolitan areas. — With respect to non-metropolitan areas, the statewide transportation plan shall be developed in consultation with affected non-metropolitan officials with responsibility for transportation. The Secretary shall not review or approve the consultation process in each State.

(C) Indian tribal areas. — With respect to each area of the State under the jurisdiction of an Indian tribal government, the statewide transportation plan shall be developed in consultation with the tribal government and the Secretary of the Interior.

(D) Consultation, comparison, and consideration.-

(i) In general.— The long-range transportation plan shall be developed, as appropriate, in consultation with State, tribal, and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation.

(ii) Comparison and consideration. — Consultation under clause (i) shall involve comparison of transportation plans to State and tribal conservation plans or maps, if available, and comparison of transportation plans to inventories of natural or historic resources, if available.

(3) Participation by interested parties. -

(A) In general. - In developing the statewide transportation plan, the State shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, private providers of transportation, representatives of users of public transportation, representatives of users of public transportation facilities, representatives of the disabled, providers of freight transportation services, and other interested parties with a reasonable opportunity to comment on the proposed plan.

(B) Methods. - In carrying out subparagraph (A), the State shall, to the maximum extent practicable-

(i) hold any public meetings at convenient and accessible locations and times;

(ii) employ visualization techniques to describe plans; and

(iii) make public information available in electronically accessible format and means, such as the World Wide Web, as appropriate to afford reasonable opportunity for consideration of public information under subparagraph (A).

Sec. 204. Federal Lands Highways Program

(a) Establishment.--

(1) In general.--Recognizing the need for all Federal roads that are public roads to be treated under uniform policies similar to the policies that apply to Federal-aid highways, there is established a coordinated Federal lands highways program that shall apply to public lands highways, park roads and parkways, refuge roads, and Indian reservation roads and bridges.

(2) Transportation planning procedures.--In consultation with the Secretary of each appropriate Federal land management agency, the Secretary shall develop, by rule, transportation planning procedures that are consistent with the metropolitan and statewide planning processes required under sections 134 and 135.

(3) Approval of transportation improvement program.--The transportation improvement program developed as a part of the transportation planning process under this section shall be approved by the Secretary.

(4) Inclusion in other plans.--All regionally significant Federal lands highways program projects--

(A) shall be developed in cooperation with States and metropolitan planning organizations; and

(B) shall be included in appropriate Federal lands highways program, State, and metropolitan plans and transportation improvement programs.

(5) Inclusion in state programs.--The approved Federal lands highways program transportation improvement program shall be included in appropriate State and metropolitan planning organization plans and programs without further action on the transportation improvement program.

(6) Development of systems.--The Secretary and the Secretary of each appropriate Federal land management agency shall, to the extent appropriate, develop by rule safety, bridge, pavement, and congestion management systems for roads funded under the Federal Lands Highway Program.

Appendix F: 23 CFR 971 (Forest Highway Program Management Systems)

Subpart A- Definitions

§ 971.100 Purpose§ 971.102 Applicability§ 971.103 Definitions

Subpart B- Forest Highway Program Management Systems

§ 971.200 Purpose.
§ 971.202 Applicability.
§ 971.204 Management systems requirements.
§ 971.206 Funds for establishment, development, and implementation of the systems.
§ 971.208 Federal lands pavement management system (PMS).
§ 971.210 Federal lands bridge management system (BMS).
§ 971.212 Federal lands safety management system (SMS).
§ 971.214 Federal lands congestion management system (CMS).

Source: 69 FR 9480, Feb. 27, 2004, unless otherwise noted.

Subpart A-Definitions

§ 971.100 Purpose.

The purpose of this subpart is to provide definitions for terms used in this part.

§ 971.102 Applicability.

The definitions in this subpart are applicable to this part, except as otherwise provided.

§ 971.104 Definitions.

Alternative transportation systems means modes of transportation other than private vehicles, including methods to improve system performance such as transportation demand management, congestion management, and intelligent transportation systems. These mechanisms help reduce the use of private vehicles and thus, improve overall efficiency of transportation systems and facilities.

Elements mean the components of a bridge that are important from a structural, user, or cost standpoint. Examples are decks, joints, bearings, girders, abutments, and piers.

Federal lands bridge management system (BMS) means a systematic process used by the Forest Service (FS), the Fish and Wildlife Service (FWS), and the National Park Service (NPS) for

collecting and analyzing bridge data to make forecasts and recommendations, and that provides the means by which bridge maintenance, rehabilitation, and replacement programs and policies may be efficiently and effectively considered.

Federal lands congestion management system (CMS) means a systematic process used by the FS, FWS, and NPS for managing congestion that provides information on transportation system performance, and alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet Federal, State, and local needs.

Federal Lands Highway Program (FLHP) means a federally funded program established in 23 U.S.C. 204 to address transportation needs of Federal and Indian lands.

Federal lands pavement management system (PMS) means a systematic process used by the FS, FWS, and NPS that provides information for use in implementing cost-effective pavement reconstruction, rehabilitation, and preventive maintenance programs and policies, and that results in pavement designed to accommodate current and forecasted traffic in a safe, durable, and cost-effective manner.

Federal lands safety management system (SMS) means a systematic process used by the FS, FWS, and NPS with the goal of reducing the number and severity of traffic accidents by ensuring that all opportunities to improve roadway safety are identified, considered, implemented, and evaluated as appropriate, during all phases of highway planning, design, construction, operation and maintenance, by providing information for selecting and implementing effective highway safety strategies and projects.

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

Forest Highway Program means the public lands highway funds allocated each fiscal year, as is provided in 23 U.S.C. 202, for projects that provide access to and within the National Forest system, as described in 23 U.S.C. 202(b) and 23 U.S.C. 204.

Forest Highway Program transportation improvement program (FHTIP) means a staged, multiyear, multimodal program of transportation projects in a State area consistent with the FH transportation plan and developed through the tri-party FH planning processes pursuant to 23 U.S.C. 204, and 23 CFR 660 subpart A.

Forest Service transportation plan means the official FH multimodal, transportation plan that is developed through the tri-party FH transportation planning process pursuant to 23 U.S.C. 204.

Highway safety means the reduction of traffic accidents on public roads, including reductions in deaths, injuries, and property damage.

Intelligent transportation system (ITS) means electronics, communications, or information processing, used singly or in combination, to improve the efficiency and safety of a surface transportation system.

Life-cycle cost analysis means an evaluation of costs incurred over the life of a project allowing a comparative analysis between or among various alternatives. Life-cycle cost analysis promotes consideration of total cost, including maintenance and operation expenditures. Comprehensive life-cycle cost analysis includes all economic variables essential to the evaluation including user costs such as delay, safety costs associated with maintenance and rehabilitation projects, agency capital costs, and life-cycle maintenance costs.

Metropolitan planning area means the geographic area in which the metropolitan transportation planning process, required by 23 U.S.C. 134 and 49 U.S.C. 5303–5306, must be carried out.

Metropolitan planning organization (MPO) means the forum for cooperative transportation decision-making for the metropolitan planning area pursuant to 23 U.S.C. 134 and 49 U.S.C. 5303.

National Forest System means all the lands and waters reported by the FS as being part of the National Forest System, including those generally known as National Forests and National Grasslands.

Operations means those activities associated with managing, controlling, and regulating highway traffic.

Secretary means the Secretary of Transportation.

Serviceability means the degree to which a bridge provides satisfactory service from the point of view of its users.

State means any one of the 50 States, the District of Columbia, or Puerto Rico.

Transportation facilities mean roads, streets, bridges, parking areas, transit vehicles, and other related transportation infrastructure.

Transportation Management Area (TMA) means an urbanized area with a population over 200,000 (as determined by the latest decennial census) or other area when TMA designation is requested by the Governor and the MPO (or affected local officials). It also must be officially designated by the Administrators of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The TMA designation applies to the entire metropolitan planning area(s).

Tri-party means the joint, cooperative, shared partnership among the Federal Lands Highway Division (FLHD), State Department of Transportation (State DOT), and the FS to carry out the FH program.

Subpart B–Forest Highway Program Management Systems

§ 971.200 Purpose.

The purpose of this subpart is to implement 23 U.S.C. 204, which requires the Secretary and the Secretary of each appropriate Federal land management agency, to the extent appropriate, to develop by rule safety, bridge, pavement, and congestion management systems for roads funded under the FLHP.

§ 971.202 Applicability.

The provisions in this subpart are applicable to the FS, the Federal Highway Administration, and the State DOTs that are responsible for satisfying these requirements for management systems pursuant to 23 U.S.C. 204.

§ 971.204 Management systems requirements.

(a) The tri-party partnership shall develop, establish, and implement the management systems as described in this subpart. If the State has established a management system for FH that fulfills the requirements in 23 U.S.C. 303, that management system, to the extent applicable, can be used to meet the requirements of this subpart consistent with 23 CFR 660.105(b). The management systems may be tailored to meet the FH program goals, policies, and needs using professional engineering and planning judgment to determine the nature and extent of systems coverage consistent with the intent and requirements of this rule.

(b) The tri-party partnership shall develop and implement procedures for the acceptance of the existing, or the development, establishment, implementation, and operation of new management systems. The procedures shall include:

(1) A process for ensuring the output of the management systems is considered in the development of the FH program transportation plans and transportation improvement programs, and in making project selection decisions under 23 U.S.C. 204;

(2) A process for the analyses and coordination of all management systems outputs to systematically operate, maintain, and upgrade existing transportation assets cost-effectively;

(3) A description of each management system;

(4) A process to operate and maintain the management systems and their associated databases; and

(5) A process for data collection, processing, analysis, and updating for each management system.

(c) All management systems will use databases with a common or coordinated reference system, that can be used to geolocate all database information, to ensure that data across management systems are comparable.

(d) Existing data sources may be used by the tri-party partnership to meet the management system requirements.

(e) The tri-party partnership shall develop an appropriate means to evaluate the effectiveness of the management systems in enhancing transportation investment decision-making and improving the overall efficiency of the affected transportation systems and facilities. This evaluation is to be conducted periodically, preferably as part of the FS planning process.

(f) The management systems shall be operated so investment decisions based on management system outputs can be accomplished at the State level.

§ 971.206 Funds for establishment, development, and implementation of the systems.

The FH program funds may be used for development, establishment, and implementation of the management systems. These funds are to be administered in accordance with the procedures and requirements applicable to the funds.

§ 971.208 Federal lands pavement management system (PMS).

In addition to the requirements provided in §971.204, the PMS must meet the following requirements:

(a) The tri-party partnership shall have PMS coverage of all FHs and other associated facilities, as appropriate, funded under the FLHP.

(b) The PMS may be based on the concepts described in the AASHTO's "Pavement Management Guide." $^{\prime\prime}$

¹ "Pavement Management Guide," AASHTO, 2001, is available for inspection as prescribed at 49 CFR part 7. It is also available from the American Association of State Highway and Transportation Officials (AASHTO), Publication Order Dept., P.O. Box 96716, Washington, DC 20090–6716 or online at *http://www.transportation.org/publications/bookstore.nsf.*

(c) The PMS may be utilized at various levels of technical complexity depending on the nature of the transportation network. These different levels may depend on mileage, functional classes, volumes, loading, usage, surface type, or other criteria the tri-party partnership deems appropriate.

(d) The PMS shall be designed to fit the FH program goals, policies, criteria, and needs using the following components, at a minimum, as a basic framework for a PMS:

(1) A database and an ongoing program for the collection and maintenance of the inventory, inspection, cost, and supplemental data needed to support the PMS. The minimum PMS database shall include:

(i) An inventory of the physical pavement features including the number of lanes, length, width, surface type, functional classification, and shoulder information;

(ii) A history of project dates and types of construction, reconstruction, rehabilitation, and preventive maintenance. If some of the inventory or historic data is difficult to establish, it may be collected when preservation or reconstruction work is performed;

(iii) A condition survey that includes ride, distress, rutting, and surface friction (as appropriate);

(iv) Traffic information including volumes and vehicle classification (as appropriate); and

(v) Data for estimating the costs of actions.

(2) A system for applying network level analytical procedures that are capable of analyzing data for all FHs and other appropriate associated facilities in the inventory or any subset. The minimum analyses shall include:

(i) A pavement condition analysis that includes ride, distress, rutting, and surface friction (as appropriate);

(ii) A pavement performance analysis that includes present and predicted performance and an estimate of the remaining service life. Performance and remaining service life may be developed with time; and

(iii) An investment analysis that:

(A) Identifies alternative strategies to improve pavement conditions;

(B) Estimates costs of any pavement improvement strategy;

(C) Determines maintenance, repair, and rehabilitation strategies for pavements using life cycle cost analysis or a comparable procedure;

(D) Provides for short and long term budget forecasting; and

(E) Recommends optimal allocation of limited funds by developing a prioritized list of candidate projects over a predefined planning horizon (both short and long term).

(e) For any FHs and other appropriate associated facilities in the inventory or subset thereof, PMS reporting requirements shall include, but are not limited to, percentage of roads in good, fair, and poor condition.

§ 971.210 Federal lands bridge management system (BMS).

In addition to the requirements provided in §971.204, the BMS must meet the following requirements:

(a) The tri-party partnership shall have a BMS for the FH bridges funded under the FLHP and required to be inventoried and inspected under 23 CFR 650, subpart C, National Bridge Inspection Standards (NBIS).

(b) The BMS may be based on the concepts described in the AASHTO's "Guidelines for Bridge Management Systems."²

² "Guidelines for Bridge Management Systems," AASHTO, 1993, is available for inspection as prescribed at 49 CFR part 7. It is also available from the American Association of State Highway and Transportation Officials (AASHTO), Publication Order Dept., P.O. Box 96716, Washington, DC 20090–6716 or online at *http://www.transportation.org/publications/bookstore.nsf*.

(c) The BMS shall be designed to fit the FH program goals, policies, criteria, and needs using the following components, as a minimum, as a basic framework for a BMS:

(1) A database and an ongoing program for the collection and maintenance of the inventory, inspection, cost, and supplemental data needed to support the BMS. The minimum BMS database shall include:

(i) The inventory data required by the NBIS (23 CFR 650, subpart C);

(ii) Data characterizing the severity and extent of deterioration of bridge elements;

(iii) Data for estimating the cost of improvement actions;

(iv) Traffic information including volumes and vehicle classification (as appropriate); and

(v) A history of conditions and actions taken on each bridge, excluding minor or incidental maintenance.

(2) A system for applying network level analytical procedures at the State or local area level, as appropriate, and capable of analyzing data for all bridges in the inventory or any subset. The minimum analyses shall include:

(i) A prediction of performance and estimate of the remaining service life of structural and other key elements of each bridge, both with and without intervening actions; and

(ii) A recommendation for optimal allocation of limited funds through development of a prioritized list of candidate projects over predefined short and long-term planning horizons.

(d) The BMS may include the capability to perform an investment analysis, as appropriate, considering size of structure, traffic volume, and structural condition. The investment analysis may:

(1) Identify alternative strategies to improve bridge condition, safety, and serviceability;

(2) Estimate the costs of any strategies ranging from maintenance of individual elements to full bridge replacement;

(3) Determine maintenance, repair, and rehabilitation strategies for bridge elements using life cycle cost analysis or a comparable procedure; and

(4) Provide short and long-term budget forecasting.

(e) For any bridge in the inventory or subset thereof, BMS reporting requirements shall include, but are not limited to, percentage of non-deficient bridges.

§ 971.212 Federal lands safety management system (SMS).

In addition to the requirements provided in §971.204, the SMS must meet the following requirements:

(a) The tri-party partnership shall have an SMS for transportation systems providing access to and within National Forests and Grasslands, and funded under the FLHP.

(b) The SMS may be based on the guidance in "Safety Management Systems: Good Practices for Development and Implementation."³

³ "Safety Management Systems: Good Practices for Development and Implementation," FHWA and NHTSA, May 1996, may be obtained at the FHWA, Office of Safety, Room 3407, 400 Seventh St., SW., Washington, DC 20590, or electronically at *http://safety.fhwa.dot.gov/media/documents.htm.* It is available for inspection and copying as prescribed at 49 CFR part 7.

(c) The tri-party partnership shall utilize SMS to ensure that safety is considered and implemented, as appropriate, in all phases of transportation system planning, design, construction, maintenance, and operations.

(d) The SMS may be utilized at various levels of complexity depending on the nature of the facility and/or network involved.

(e) The SMS shall be designed to fit the FH program goals, policies, criteria, and needs and shall contain the following components:

(1) An ongoing program for the collection, maintenance, and reporting of a database that includes:

(i) Accident records with detail for analysis such as accident type using standard reporting descriptions (e.g., right-angle, rear-end, head-on, pedestrian-related, etc.), location, description of event, severity, weather, and cause;

(ii) An inventory of safety appurtenances such as signs, delineators, and guardrails (including terminals);

(iii) Traffic information including volume and vehicle classification (as appropriate); and

(iv) Accident rates by customary criteria such as location, roadway classification, and vehicle miles of travel.

(2) Development, establishment, and implementation of procedures for:

(i) Where appropriate, routine maintenance and upgrading of safety appurtenances including highway rail crossing safety devices, signs, highway elements, and operational features,

(ii) Identifying, investigating, and analyzing hazardous or potentially hazardous transportation system safety problems, roadway locations, and features;

(iii) Establishing countermeasures and setting priorities to correct the identified hazards and potential hazards.

(3) Identification of focal points for all contacts at State, regional, tribal, and local levels to coordinate, develop, establish, and implement the SMS among the agencies.

(f) While the SMS applies to appropriate transportation systems providing access to and within National Forests and Grasslands funded under the FLHP, the extent of system requirements (e.g., data collection, analyses, and standards) for low volume roads may be tailored to be consistent with the functional classification of the roads. However, adequate requirements should be included for each roadway to provide for effective inclusion of safety decisions in the administration of the FH program.

§ 971.214 Federal lands congestion management system (CMS).

(a) For purposes of this section, congestion means the level at which transportation system performance is no longer acceptable due to traffic interference. For portions of the FH network outside the boundaries of TMAs, the tri-party partnership shall:

(1) Develop criteria to determine when a CMS is to be implemented for a specific FH; and

(2) Have CMS coverage for the transportation systems providing access to and within National Forests, as appropriate, that meet minimum CMS criteria.

(b) The tri-party partnership shall consider the results of the CMS when selecting the implementation of strategies that provide the most efficient and effective use of existing and future transportation facilities.

(c) In addition to the requirements provided in §971.204, the CMS must meet the following requirements:

(1) For those FH transportation systems that require a CMS, in both metropolitan and nonmetropolitan areas, consideration shall be given to strategies that reduce private automobile travel and improve existing transportation efficiency. Approaches may include the use of alternative mode studies and implementation plans as components of the CMS.

(2) A CMS will:

(i) Identify and document measures for congestion (e.g., level of service);

(ii) Identify the causes of congestion;

(iii) Include processes for evaluating the cost and effectiveness of alternative strategies to manage congestion;

(iv) Identify the anticipated benefits of appropriate alternative traditional and nontraditional congestion management strategies;

(v) Determine methods to monitor and evaluate the performance of the multi-modal transportation system; and

(vi) Appropriately consider the following example categories of strategies, or combinations of strategies for each area:

(A) Transportation demand management measures;

(B) Traffic operational improvements;

(C) Public transportation improvements;

(D) ITS technologies; and

(E) Additional system capacity.

Appendix G: Forest Plan Functions

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

Τορίς	The Forest Plan does	The Forest Plan 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.

What a Forest Plan Does and Does Not Do

Торіс	The Forest Plan does	The Forest Plan 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 Oregon Department of Fish & Wildlife (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.shtml