

**U. S. Department of the Interior
Bureau of Land Management**

Western Oregon Districts

**TRANSPORTATION MANAGEMENT
PLAN**

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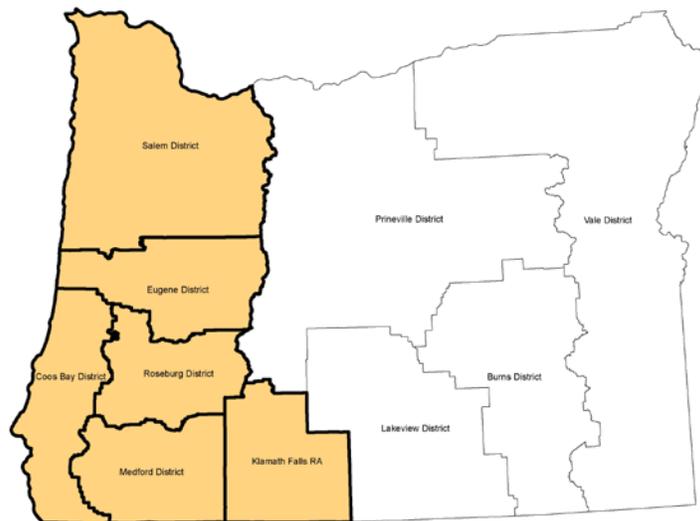
I. INTRODUCTION

The purpose of this Western Oregon Transportation Management Plan (TMP) is to provide vision, goals, objectives, and guidelines for managing the Bureau of Land Management's (BLM) road and trail transportation system throughout its Western Oregon Districts. This TMP encompasses Coos Bay, Eugene, Medford, Roseburg and Salem Districts, and the Klamath Falls Resource Area of the Lakeview District. These BLM Districts contain approximately 14,400 miles of BLM owned and controlled roads and 380 miles of trails within their boundaries.

This TMP responds to each District's Record of Decision and approved Resource Management Plan (ROD/RMP) objectives to develop and maintain a transportation plan that serves the needs of users in an environmentally sound manner. The TMP also responds to BLM's asset management planning process ensuring the transportation system is maintained in a sustainable fashion to effectively and efficiently support the Bureau's mission. The intent of this TMP is that the transportation system be managed in a manner consistent with the most current governing regulatory and resource management documents.

The TMP will be used to guide the management of the transportation system and to coordinate with federal, state, and local agencies. Transportation planning considers the importance and interdependency of all resources, including people, and is an important element in ecosystem management.

Western Oregon Districts Coos Bay, Eugene, Medford, Roseburg, Salem and
Klamath Falls Resource Area of the Lakeview District



II. PLAN GOALS AND OBJECTIVES

A. TRANSPORTATION AND ACCESS

The BLM owns and manages approximately 14,400 miles of road within the boundaries of its western Oregon districts. The primary purpose for development and use of the BLM road system is access for forest management activities and the transportation of forest products.

The BLM road system is primarily accessed by federal, state, local-government, and private road users and can be described by the following functional classifications:

- Collector roads—Roads that primarily provide access to large blocks of public land and connect with state and county road systems.
- Local roads—Roads that normally serve smaller areas than collectors and connect with collectors or State and County road systems.
- Resource roads—Roads that provide point access to public lands and connect with local or collector roads.

1. PUBLIC ROAD AUTHORITY

BLM roads are for the use, development, protection, and administration of public lands and resources, and, though administered by a public agency, and “generally open to use by the general public”, are not currently designated as public roads. BLM roads are subject to rules and regulations of the Secretary of the Interior, and, although public use is generally allowed, roads may be closed or use restricted to fulfill management objectives such as protecting public health and safety, preserving resources, or in support of security issues. BLM roads may also be subject to State and other Federal regulations as necessary to protect public health and safety.

BLM has proposed approximately 681 miles (72 roads) of “public road” in western Oregon for inclusion in the Federal Highway Administration (FHWA) Federal Lands Highway Program (FLHP) in response to Washington Office (WO) Instruction Memorandum (IM) No. 2009-178. Nominated road segments are tracked in the Facility Asset Management System (FAMS) database. Final designation of these proposed roads as FLHP roads will depend on BLM participation in the authorization of the Federal Surface Transportation Program (FSTP). Participation in the FLHP will enhance the BLM’s opportunity to receive funding to address maintenance and safety needs on these roads.

2. O&C RECIPROCAL RIGHT-OF-WAY AGREEMENTS

The BLM-administered land in western Oregon is predominantly intermingled in a checkerboard pattern with private land. Intermingled private lands are owned primarily by

timber companies and are managed for commercial timber production. Legal access to federal and private timberlands is provided through long-term or perpetual reciprocal right-of-way agreements between the United States and private timberland owners as authorized by the Federal Land and Policy Management Act of 1976 (FLPMA) and other Federal regulations.

A reciprocal right-of-way agreement provides both the United States and the private landowner with a non-exclusive right to use, construct and maintain logging roads on each other's property for forest management and removal of forest products. Nearly 85% of the public lands in western Oregon are available for road construction and commercial timber use under reciprocal right-of-way agreements. These reciprocal right-of-way agreements do not grant rights for public access and recreational use of roads constructed under these agreements.

3. FLPMA GRANTS AND CASUAL USE

Commercial use of BLM's road system is also authorized through FLPMA grants. Procedures are established in the regulations at 43 CFR 2800 for the orderly and timely processing, issuance, and management of right-of-way grants to individuals, business entities, and other government entities such as Forest Service (FS) & Oregon Department of Forestry (ODF).

Casual use of BLM's road system includes activities that involve practices which do not ordinarily cause any appreciable disturbance or damage to the public lands, resources or improvements and therefore do not require a right-of-way grant. There is no requirement for notifying BLM of casual use activities. Casual use does not provide the user with any interest or rights in or to the affected BLM lands or improvements. Casual use may include the following activities:

- Recreational activities such as use of roads for hunting and sightseeing. This does not include driving where vehicle use is prohibited.
- Domestic uses or activities associated with managing ranches, farms, and rural residences.
- Ingress and egress on existing BLM roads.
- Minor activities that have existed over a period of time without a grant and without causing appreciable disturbance to the public land resources or improvements.
- Off-highway vehicle (OHV) use; provided the use is consistent with 1) the regulations governing such use (43 CFR 8340), 2) off- road vehicle use designations contained in BLM land-use plans, and 3) the terms of temporary road closures ordered by BLM.

The BLM may close roads using gates, guardrails, earth/log barricades, and other closure devices to reduce wildlife disturbance, erosion and sedimentation or for other reasons.

The BLM provides the public, as is feasible and practicable, with current road maps and road signage on the transportation system.

4. **LEGAL PUBLIC ACCESS**

BLM typically negotiates exclusive easements with private landowners to obtain access for forest management activities when a reciprocal agreement is not needed. Unlike reciprocal right-of-way agreements, exclusive road easements typically grant rights for public use.

Legal public access can vary greatly because a majority of BLM-administered lands in western Oregon are intermingled with private lands. Reciprocal right-of-way agreements, exclusive and non-exclusive easements across adjacent private lands have a determining effect on public access.

Legal public access includes public access rights that have been secured by the United States, including roads constructed by BLM on public lands. Additionally, public access rights are typically included in the acquisition of exclusive road easements on private roads where the United States has acquired control of the right-of-way. While administrative access is legally available to the BLM, reciprocal right-of-way agreements do not include legal access rights for the public. All roads tributary to roads without legal public access also do not have legal public access.

Goal – Provide legal access to and through BLM-administered lands

Objectives

- Allow commercial use of the BLM road system and managed lands by adjacent private and public landowners by using reciprocal right-of-way agreements, unilateral permits, and FLPMA grants. FLPMA also allows casual use of the BLM road system by the public.
- Utilize easements to gain access to BLM managed lands when reciprocal R/W agreements are not feasible. Consider the need for public access when acquiring easements.
- Provide access for the management of BLM lands consistent with land use allocations and resource objectives.
- Coordinate with potentially affected stakeholders on any decisions to change legal road access (open/closed).

B. RESOURCE MANAGEMENT

Each District's ROD/RMP specifies management objectives/directions for numerous individual resource programs, the following of which are directly impacted by BLM's transportation system: air, water, soil, fish, wildlife, vegetation (botany and timber), and minerals. Transportation related goals/objectives for these resource programs are as follows:

1. FOREST PRODUCTS AND OTHER COMMODITIES

Goal – Provide access to current and future forest management projects

Objectives

- The transportation system will be maintained for the management of BLM lands to produce timber and special forest products and other commodities.
- Consider the use of alternative harvesting techniques to minimize new road construction.

2. AIR, WATER AND SOIL

Goal –Maintain air quality consistent with the Clean Air Act

Objective

- Reduce dust during timber hauling operations and other management activities that utilize natural or aggregate surfaced roads by using dust abatement measures.

Goal – Maintain or improve water quality

Objectives

- Apply the management actions/directions described in the Aquatic Conservation Strategy and 'Road and Landing' Best Management Practices (BMPs) as needed to maintain or restore water quality.
- Use watershed analysis and the Transportation Management Objectives (TMO) to prioritize roads for improvement, renovation, storm-proofing, maintenance, access requirements, decommissioning, full decommissioning, or obliteration.
- Use TMOs to prioritize the reduction of road miles in Key Watersheds as identified in District RMPs. Do not allow a net gain in road miles in Key Watersheds where BLM has discretionary authority.

Goal – Maintain or improve long-term soil productivity**Objective**

- Apply ‘Road and Landing’ Best Management Practices (BMPs) as needed to maintain or restore soil productivity.

3. FISH**Goal – Reduce adverse impacts to fish habitat****Objectives**

- Restore access to stream channels for all life stages of fish species by removing, replacing or modifying constructed fish passage barriers.
- Protect resident and anadromous fish and their associated habitat by reducing sedimentation and landslide hazards associated with BLM roads and trails.
- Manage BLM special status fish species in accordance with the transportation management features of recovery plans, designated critical habitat, conservation strategies and agreements. This puts additional requirements on BLM but does not put additional requirements on private users of BLM roads.

4. WILDLIFE**Goal – Reduce impacts to wildlife habitat****Objectives**

- Coordinate with the Oregon Department of Fish and Wildlife (ODF&W) in meeting wildlife management goals on BLM-administered lands.
- Manage vehicle access as necessary to meet ODF&W management goals for bald eagles, deer, and elk.
- Maintain visual barriers along roads, where appropriate, within designated deer and elk winter range.
- Manage BLM special status wildlife species in accordance with the transportation management features of recovery plans, designated critical habitat, conservation strategies and agreements in compliance with existing biological opinions.

5. VEGETATION

Goal – Provide for conservation of BLM special status plant and fungi species

Objective

- Manage BLM special status plant and fungi species in accordance with the transportation management features of recovery plans, designated critical habitat, conservation strategies and agreements.

Goal – Maintain or restore natural plant communities on non-forest and noncommercial forest lands

Objectives

- Design road construction, road maintenance, and culvert placement to retain or reconnect hydrologic flows to streams, wetlands, springs, fens, ponds, and vernal pools.
- Re-vegetate degraded or disturbed areas with native seed to maintain the native plant community.

Goal – Contain and/or reduce noxious weed infestations on BLM administered lands using an integrated pest management approach and avoid introducing or spreading noxious weed infestations in any areas

Objectives

- Treat invasive plants in accordance with the transportation management features of the Records of Decisions for the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic EIS (2007). The Vegetation Treatments Using Herbicides on BLM Lands in Oregon EIS (2010) document tiers to the Programmatic EIS.
- Use manual, mechanical, cultural, chemical, and biological treatments, as appropriate, to manage invasive plant infestations along roadsides.
- Coordinate with other road authorities to reduce the spread of noxious weeds.

Goal – Treat vegetation using most current agency direction when addressing forest health concerns along road systems

Objectives:

- Manage POC in accordance with the May 2004 ROD for the *Management of Port-Orford-cedar in southwest Oregon, Coos Bay, Medford, and Roseburg Districts*. Use the Risk Key provided in the 2004 FSEIS (p.2-18) in determining treatment needs.
- Treat host species on BLM Districts affected by the Sudden Oak Death (*Phytophthora ramorum*) disease by following current agency guidance for host and diseased vegetation.

6. MINERALS**Goal – Maintain existing opportunities and pursue new opportunities for the development of mineral resources****Objective**

- Provide economical sources of rock and aggregate in new and existing quarry and pit sites.

7. FIRE**Goal – Maintain suitable access for fire management****Objectives**

- Consider fire management needs on BLM managed lands as well as adjacent public and private lands in road access decisions.
- Consult with ODF, fire districts, and adjacent landowners on changes in road access (open/closed) status.
- Maintain roads that access fire management facilities such as pump chances, other water sources, and helipads.

C. RECREATION

The BLM transportation system provides access to a wide range of recreational opportunities for the public across western Oregon. These opportunities are supported by a network of recreational developments that include:

- Campgrounds
- Day-use areas

- Trail systems
- Backcountry and scenic byways
- Environmental education areas
- Recreation and public purpose leases to local governments

Additionally, the transportation system supports dispersed recreational opportunities such as hunting, fishing, sightseeing, and OHV use. Overall recreational use is increasing on BLM lands in western Oregon.

Goal – Provide and maintain access for both developed and dispersed outdoor recreation opportunities that contribute to meeting recreational demand and quality visitor experiences

Objectives

- Acquire legal public access to BLM-administered lands for developed recreation sites.
- Prioritize maintenance and improvements on roads that access developed recreation sites, trails and backcountry byways.
- Consider developing potential trails and back country byways depending on recreational demand, feasibility and funding.
- Consider developing closed roads where feasible to provide additional trail opportunities subject to valid existing rights.
- Complete travel management planning, commensurate with State Director priorities, subject to guidance provided in WO IM 2008-014, Clarification of Guidance and Integration of Comprehensive Travel and Transportation Management Planning into the Land Use Planning.
- Implement new OHV emphasis areas, where OHV use is concentrated and intensively managed, after completing activity level planning and NEPA compliance.
- Comply with visual resource management (VRM) direction as listed in each District’s RMP when making transportation management decisions.

D. PUBLIC INVOLVEMENT

Users of the BLM transportation system include general public, recreationists, contractors, permittees, private landowners, special interest groups, public utilities, mining claimants, local communities, and other agencies (local, state, and federal). All users have specific interests or rights in route access and maintenance.

Route access guidance, including OHV designations, is incorporated into each District’s RMP to ensure public involvement and resource needs are met.

The TMP is consistent with policies, budgets, access agreements, BLM Manual direction, each District's ROD/RMP, and governing regulatory documents. The TMP provides clarification and guidance of transportation issues resulting in better management of BLM's public lands and natural resources.

Goal - Consider the transportation needs of all users of the BLM transportation system

Objectives

- Participate in state and local transportation planning to exchange and integrate information for BLM transportation planning.
- Coordinate with local counties and other agencies to provide input for rural development.
- Develop partnerships or cooperative agreements, where appropriate, to increase monitoring and maintenance efficiency in operation areas.
- Encourage public participation in the NEPA process for transportation project development.

E. ASSET MANAGEMENT PLANNING

In 2004, Executive Order 13327 required DOI bureaus to develop Asset Management Plans (AMP). The primary goal of the BLM's asset management program is to ensure that the infrastructure is maintained in a sustainable fashion that supports the Bureau's mission effectively and efficiently.

The DOI and BLM AMP provide overall policy for managing the agencies assets and serves as a framework to guide asset investment decisions. Appropriate levels of annual maintenance funding, the most critical component of the long-term operation of an asset, represents the most significant opportunity to provide adequate stewardship of the BLM's assets.

Management emphasis on linear assets (roads, trails, and primitive roads) is on maintaining those assets that receive the greatest use, present the greatest threat to users' safety, or contribute to water quality degradation due to improper drainage.

The AMP process has verified that road annual maintenance needs far exceed road annual maintenance expenditures. District and Field Office Asset Business Plans (ABP) are management tools that can be used in conjunction with this TMP to set priorities for expending limited annual road maintenance funding. Deferred maintenance priorities should be determined on an annual basis for the purpose of submitting projects to the Deferred Maintenance/Capital Improvement Program or other applicable funding mechanisms.

Abandonment of BLM owned and controlled roads should be considered as a viable closure option for roads no longer needed for management purposes. The AMP for BLM, March 2009, states “*In some circumstances, the local office can make the decision not to maintain an asset and will choose to abandon the asset onsite. This can only be done if the asset will not present a hazard to the public or will not deteriorate to such an extent that it will eventually cause a hazard to the public. Examples of constructed assets that are candidates for abandonment include roads, trails, utility systems, or fences*”.

Goal – Provide and maintain a cost-effective transportation system.

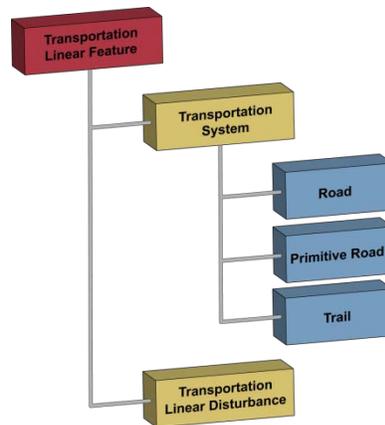
Objectives

- Consider ways to reduce construction costs.
- Reduce maintenance costs by maintaining to the appropriately assigned Maintenance Intensity.
- Consider closure through abandonment of BLM owned and controlled resource roads.
- Pursue all applicable funding sources to reduce BLM’s accumulated maintenance backlog, in particular the BLM’s deferred maintenance program.
- Share the improvement and catastrophic maintenance costs of District transportation systems with commercial users, whenever possible, through cost-share agreements.
- Evaluate existing road use to determine if partnerships or cooperative agreements are appropriate for road maintenance. For roads with high non BLM related traffic, consider transferring ownership to the state or county.
- Keep road maintenance fees current. The BLM Road Committee Working Group was chartered on July 18, 2007 by Ed Shepherd (BLM OR/WA State Director) and Bob Ragon (Douglas Timber Operators) for the purpose of developing a maintenance fee collection model that provides a simple, verifiable, fair system that charges appropriate fees for all commercial use of BLM’s road network. The new fee calculation model will be in place by January 1, 2011. The current interim fee schedule will be used through December 31, 2010.
- Place a high priority on monitoring and verifying road use for the collection of road use and maintenance fees, as outlined in the *Western Oregon Road Fee Collection Pilot Project* (October 1992).

III. STANDARDS

A. ROADS AND TRAILS TERMINOLOGY

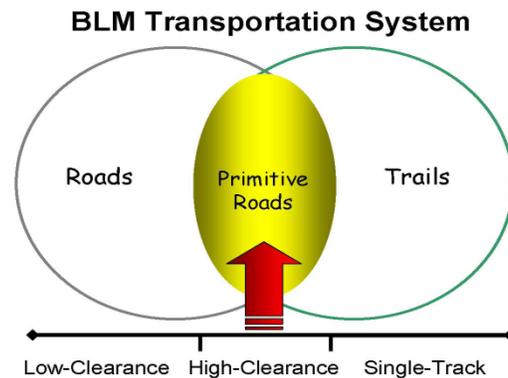
A national Roads and Trails Terminology Team was chartered in 2004 to establish strategic direction and consistent terminology for the BLM in managing the Bureau's transportation assets. There were both recreation and engineering personnel on the team. A report was published by the team in June 2006 and implemented in WO IM 2006-173. For clarity and a consistent understanding of the report's findings and recommendations, the following terms were established by the team as follows:



Transportation Linear Features – Linear features represents the broadest category of physical disturbance (planned and unplanned) on BLM land. Transportation related linear features include engineered roads and trails, as well as user-defined, non-engineered roads and trails created as a result of the public use of BLM land. Linear features may include roads and trails identified for closure or removal as well as those that make up the BLM's defined transportation system.

Transportation System – The transportation system represents the sum of the BLM's recognized inventory of linear features (roads, primitive roads, and trails) formally recognized, designated, and approved as part of the BLM's transportation system.

Roads, Primitive Roads, and Trails – Terms utilized to describe specific categories of transportation linear features and represent sub-sets of the BLM's transportation system.



- **Road:** A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.
- **Primitive Road:** A linear route managed for use by four-wheel drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road design standards. The primitive road classification is not based on the current state of disrepair or accumulated deferred maintenance on a transportation route, but rather on the general and intended condition of the route. Roads historically utilized for low-clearance passenger vehicles, but consciously allowed to degrade to roads requiring high-clearance vehicles, meet the “primitive road” definition.
- **Trail:** A linear route managed for human-powered, stock, or off-highway vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.

Transportation Linear Disturbances – Term utilized to identify man-made linear features that are not part of the BLM’s transportation system. Linear disturbances may include engineered (planned) as well as unplanned single and two-track linear features that are not part of the BLM’s transportation system.

Western Oregon Guidance - all western Oregon Maintenance Level (ML) 1 and ML 2 roads were reviewed to determine which of these could be appropriately re-classified as primitive roads. ML 3-5 roads were assumed to be low-clearance, two-wheel drive linear features maintained for regular and continuous use not meeting the primitive road definition, and therefore were not reviewed for re-classification. The majority of ML 1 and ML 2 roads in western Oregon were retained in the **road** category but placed in **storage**; very few were re-classified to the primitive road category since ML 1 and ML 2 roads in western Oregon were historically designed, built, and regularly and continuously used and maintained for low-clearance two-wheel drive vehicles.

The review was completed in December 2008 utilizing guidance supplied by a draft version of a document titled “Guidance to Classify Primitive Roads” dated June, 2007. Draft guidance has subsequently been made final by WO IM-2009-132. This guidance was produced jointly by the Washington Office recreation and engineering divisions.

B. FUNCTIONAL ROAD CLASSIFICATIONS

Functional classification, which is the grouping of roads by the character of service they provide, establishes a systematic approach to road planning, design, and maintenance. Stratifying the Bureau’s road network by functional classes provides a rational and cost-effective basis for (1) the selection and application of geometric design criteria and standards (e.g., maximum road grades, roadway width, and design speed); and (2) the assignment of appropriate road maintenance intensity levels (i.e., from basic custodial care to annual scheduled and preventative maintenance programs).

Most rural highway travel involves movement through networks of roads that can be described using a functional system based on traffic volume, vehicle speed, trip distance, travel mobility, and property access. The system of functional classifications in descending order consists of arterial (for main traffic movement), collector, local (for land access) and resource roads. The functional classification system helps determine how travel movement can be channelized through the network in a logical and efficient manner. Each element of the functional system can serve as a collecting facility for the next highest element.

Arterial roads typically are characterized by high traffic volumes and vehicle speeds, long trip distances, unimpeded travel mobility, and limited property access. Conversely, the function of **local** roads is to provide property access (implementation of which causes a limitation of travel mobility). Roads in this lower functional class typically support lower traffic volumes and vehicle speeds, and shorter trip distances. This functional classification system is more fully described in the Federal Highway Administration (FHWA) publication *Highway Functional Classification: Concepts, Criteria, and Procedures* (Revised 1989). The Bureau has added **resource** roads to the system identified in this FHWA plan to better account for the unique function of many Bureau roads in providing very small-scale public land access. These **resource** roads typically carry extremely low traffic volume and accommodate only one or two types of resource management (see BLM manual 9113).

Bureau roads are classified as follows:

1. **ARTERIAL ROADS** - The rural arterial system consists of a network of roads with the following service characteristics:
 - a. Linkage of cities, larger towns, and other traffic generators (such as major resort areas) capable of attracting travel over long distances.

- b. Integrated interstate and inter-county service.
- c. Internal spacing consistent with population density, so that all developed areas of the State are within a reasonable distance of arterial highways.
- d. Trip lengths and travel densities greater than those predominantly served by rural collector, local, and resource systems.
- e. Design standards provide for high travel speeds and minimum interference to through movement.

As Bureau roads are predominantly low volume and are generally extensions of or connectors to State Highway and rural County Road systems, an arterial classification does not apply normally to Bureau roads (see BLM manual 9113). In fact, in western Oregon BLM manages **no** arterial roads.

- 2. COLLECTOR ROADS** – The rural collector system generally serves travel primarily of intra-county rather than statewide distances and constitutes those roads on which predominant travel distance and speed are less than on arterial routes. These roads serve larger towns; important agricultural areas (e.g. forest management areas); county, state, and federal parks; and other traffic generators of equivalent intra-county importance. These roads link to the arterial system and are spaced at intervals consistent with population density to accommodate traffic from local roads and bring all developed areas within reasonable distances of collector roads.

Designation of Bureau collector roads is based on the following criteria:

- a. Roads that normally provide access to large blocks of public land and connect with state and county road systems.
- b. Roads that accommodate multiple uses and generally receive the highest volume of traffic of all roads in the Bureau road system.
- c. Roads designed to the Bureau's highest standards may be double lane.
- d. Roads designated as scenic routes or Back Country Byways (Type I, see BLM Handbook H-8357-1).
- e. Roads that provide access to recreational areas containing a number of developed sites and facilities.
- f. Roads that provide the most extensive linkage to the local road system.

- g. Only roads mapped by ODOT as collectors in accordance with their “Guidelines for Updating Federal-Aid Urban Boundary and Functional Classification” document dated July 2003 will be mapped by BLM as collectors. ODOT functional classification maps can be found at the following website:
<http://egov.oregon.gov/ODOT/TD/TDATA/gis/CountyMaps.shtml>
3. **LOCAL ROADS** – The rural local system primarily provides access to lands adjacent to the collector network and serves travel over relatively short distances. Designation of Bureau local roads is based on the following criteria:
- a. Roads that normally serve smaller areas than collectors and connect with collectors or state and county road systems.
 - b. Roads that accommodate fewer uses and receive lower traffic volumes than collectors.
 - c. Roads designed typically to a single lane width with steeper grades, sharper horizontal curves, and lower design speeds than collector roads due to mountainous terrain.
 - d. Roads that provide access to small recreational sites, trailheads, special sites and facilities (i.e., communication sites).
 - e. Roads that provide the most extensive linkage to the resource road system and are spaced at appropriate intervals to collect traffic from resource roads and provide for public land areas to be within a reasonable distance of a local road. This eliminates multiple parallel roads.
 - f. All local roads tie together arterial, collector, and/or other local roads; no dead-end roads.
 - Exception

Dead-end local roads must access, (1) developed recreation/administrative sites, BLM quarries, or fire program improvements (e.g., waterholes) or (2) a minimum of 5 sections (3,200 acres) regardless of the number of tributary spurs or the length of the road.
 - g. Not every road tributary to a collector road needs to be a local road.
 - h. Not every linking road needs to be a local road.
 - i. Typically, the local network mileage will be 2-4 times the collector network mileage. This is a reasonableness check, not a hard and fast rule, based on AASHTO classification study data collected in many states which show there is considerable consistency in the relative extents of the functional class systems.

4. **RESOURCE ROADS** – The Bureau resource road system provides access to the remaining portion of the public lands not accessed by collector or local roads. Designation of Bureau resource roads is based on the following criteria:
 - a. Roads that provide point access to public lands and connect with local or collector roads.
 - b. Roads are typically for only one or two types of resource management and carry very low traffic volumes. Typically they are low standard, single lane, natural or aggregate surfaced logging spurs.
 - c. Location and design of these roads are governed by safety standards, environmental compatibility and minimal construction and maintenance costs, and with minimal consideration for user cost, comfort, or travel time.
 - d. Roads have no established or designated recreational use (e.g., comfort station, trailhead, wayside) to attract the public.

C. TRANSPORTATION ASSET MANAGEMENT PLANNING AND REQUIREMENTS

1. TRANSPORTATION MANAGEMENT OBJECTIVES

The ROD/RMP requires that Transportation Management Objectives (TMO) be developed for all existing and newly constructed BLM owned and controlled roads. Key items such as private land access, road stability, erosion potential, recreational needs, and specific resource management objectives are examined by an interdisciplinary team to identify the needs and objectives of each road segment. Specific data elements might vary depending upon each District's unique needs, but the overall strategy is the same. TMOs recommend management actions for each BLM owned and controlled road and identify:

- a. current and future use and constraints
- b. improvement, renovation and maintenance needs
- c. road closures

TMOs will be developed or re-examined during project planning and as new information becomes available.

Travel routes will be examined from an overall transportation network standpoint to ensure that interconnecting roads have continuity of maintenance intensities and access. Roads that continue outside the analysis area to other BLM Districts, National Forests, public roads, or private lands will be examined for the same continuity.

New road and trail construction on BLM lands will be analyzed through the National Environmental Policy Act (NEPA) process including Categorical Exclusion (CX), Determination of NEPA Adequacy (DNA), Environmental Assessment (EA), and Environmental Impact Statement (EIS) as part of its associated project. TMO's will be established for new roads to ensure that they are properly incorporated into the transportation system.

2. ANNUAL MAINTENANCE

Annual Maintenance is regularly scheduled repairs and preventive maintenance, performed on a cyclic basis according to assigned maintenance intensities. Annual maintenance includes work and materials expended to keep a road at its original construction standard. Examples may include:

- blading, shaping and compacting
- cleaning of ditches, catch basins and culverts
- brush cutting
- surface patching and pot hole repair
- surface replacement
- culvert replacement
- minor slide removal
- slip out repair
- bridge maintenance

Maintenance Operation Plan (MOP)

Districts are required to complete a MOP in which annual maintenance work is identified and prioritized for each Fiscal Year. Prioritization is based on functional classification as stated in Section III D of this document. The MOP is intended to be a dynamic document which can be modified throughout the year to reflect changes.

The MOP will contain a list of roads, by miles and surface type, and a map that shows those roads scheduled to be maintained in the current year. The MOP will address the following for each road:

- Functional classification
- Maintenance intensity
- Active haul roads
- Findings from bridge and major culvert condition surveys and technical inspections
- Forecasted preventative maintenance
- Commitments under cooperative road maintenance agreements

The dates, work location, and work activity will be recorded to document maintenance accomplishments.

Districts can identify special project work throughout the year which is in addition to the MOP and is funded separately from annual maintenance activities. Special project work can be completed through the mobilization of labor and equipment throughout the maintenance organization, therefore, work could be located throughout Oregon and Washington.

District personnel with experience inspecting road and trail maintenance activities, should routinely inspect road and trail maintenance work for adherence to maintenance standards. Additionally, field personnel using the road and trail system are responsible for reporting maintenance needs. Maintenance standards include maintenance intensities found in BLM Manual 9113 and Best Management Practices found in each District's RMP.

Districts should have a Storm Patrol Team which can be mobilized to respond during and/or immediately after storms while damage to roads may be occurring. A detailed written inspection report describing road conditions, corrective actions taken and recommendations for additional repairs is required to document future annual, deferred or catastrophic maintenance needs. Applications for emergency repair funding from FHWA must be initiated within two weeks of the storm event.

3. DEFERRED MAINTENANCE

Deferred Maintenance is maintenance that was not performed when scheduled and therefore is delayed. The main objective of the deferred maintenance program is to reduce the accumulated maintenance backlog and to improve the overall physical and functional condition of BLM-owned facilities.

In accordance with Statement of Federal Financial Accounting Standard #6 (SFFAS), BLM is required to disclose the amount of deferred maintenance on roads and other facilities. To comply with SFFAS, deferred maintenance on roads must be identified and submitted according to the following procedure.

- Identify deferred maintenance needs through condition assessments, periodic reviews, or anytime other deficiencies are discovered.
- Rank project needs based on the following criteria: critical health and safety, critical natural and cultural resource protection, critical mission related needs, as well as Asset Priority Index (API), as determined by the functional classification framework, and Facility Condition Index (FCI) as generated through a condition assessment.
- Deferred maintenance projects will be submitted for approval by the national Engineering Advisory Team for inclusion in the BLM Deferred Maintenance Five Year Plan.

4. CAPITAL IMPROVEMENT

Capital Improvement is the construction, installation, or assembly of a new facility, or the alteration, expansion, or extension of an existing facility to accommodate a change of function or unmet programmatic needs. Road improvement includes work and materials expended to better a road by increasing its construction standards when compared to its original construction standards. Examples may include, but are not limited to: widening; surfacing; the addition of drainage structures and turnouts; and bridge replacement.

- Rank project needs based on the following criteria: critical health and safety, critical natural and cultural resource protection, critical mission related needs, as well as Asset Priority Index (API), as determined by the functional classification framework, and Facility Condition Index (FCI) as generated through a condition assessment.
- Capital improvement projects will be submitted for approval by the national Engineering Advisory Team for inclusion in the BLM Capital Improvement Five Year Plan.
- Capital improvement projects on resource roads are typically funded through timber sales.

5. CATASTROPHIC MAINTENANCE

Catastrophic maintenance includes work activities necessary to return a roadway or bridge facility back to serviceability following a failure that is sudden and complete due to an external cause. Examples include road washouts, avalanches, or rockslides. Catastrophic maintenance is not due to structural deficiencies, normal physical deterioration, or lack of maintenance. It is extremely important to treat these events as an emergency and request assistance within two weeks of the event. Follow the process provided in the U.S. Department of Transportation Emergency Relief for Federally Owned Roads (ERFO) Disaster Assistance Manual for wide spread events or extensive and complete failures.

Typical funding options for catastrophic maintenance include:

- ERFO
- Appropriated maintenance funding
- Benefitting activity funds
- Timber sales
- Cost share agreements

6. CONDITION ASSESSMENTS

Executive Order 13327, Federal Real Property Asset Management, mandates the Department of Interior achieve efficiencies and better manage the federal real property infrastructure. In response to this mandate each office must maintain a backlog of deferred maintenance that is supported by condition assessments. These assessments are also required to justify all road and trail projects submitted and approved on BLM's DM/CI Five Year Plan.

Condition assessments determine the overall condition of the transportation facilities and help in evaluating the performance of the maintenance program. Condition assessments are a critical step in monitoring and managing the road and trail systems. They are essential in maintaining an accurate inventory, prioritizing annual and deferred maintenance, load ratings for bridges and major culverts, and capital improvement activities.

- **Road Condition Assessments** are required to be performed on a ten-year cycle after the initial (baseline) assessments are completed. Perform road condition assessments in accordance with BLM Handbook H-9113-2, Road Condition Assessment Protocols. Roads within administrative and recreation site boundaries, considered site roads, are assessed during the recreation/administrative site assessments on a five-year inspection cycle.

Roads are not required to have condition assessments if they have been identified as being either physically inaccessible or as isolated and extremely remote.

Roads in storage are not currently open, operated, or maintained, but may be reopened at a future date. Storage roads are not required to have condition assessments until they are placed in an operational condition and maintained, however, prior to periods of short-term increased administrative or commercial (timber sale) use storage roads should receive an inspection to determine maintenance needs. Seasonally closed roads should not be placed in storage, but remain as operating throughout their normal seasonal closures.

- **Bridge and Major Culvert Condition Assessments** are comprised of condition surveys and technical inspections for BLM structures in accordance with BLM Manual 9112, Bridges and Major Culverts. An initial condition survey should be conducted prior to placing a structure into the inventory record database using BLM forms 9110-8 and 9110-8a. Subsequent condition surveys should be conducted annually to determine maintenance needs and the need for an unscheduled technical inspection.

Condition surveys should be conducted by District Office engineering personnel responsible for the on-the-ground maintenance inspection of roads and trails with assistance, when requested, from the State Office.

Technical inspections are detailed inspections performed to evaluate the structure and determine its safe load carrying capacity. Inspect and evaluate at least once a year all structures not capable of carrying the legal load limit. Perform a technical inspection and evaluation immediately after a structure is damaged by an accident or other cause. When BLM structures are evaluated and recommended for a load rating, districts must comply with BLM Manual 9112 and Information Bulletin (IB) No. OR-2009-066.

BLM bridges must be inspected and evaluated at regular intervals not to exceed two years and are typically performed by Western Federal Lands Highway Division, Federal Highway Administration (WFLHD-FHWA) personnel. Major culverts must be inspected and evaluated at regular intervals not exceeding 6 years and are performed by qualified district engineering personnel (see BLM Manual 9112, Bridges and Major Culverts for qualifications).

- **Trail Condition Assessments** will be conducted in accordance with draft “Guidance and Instructions for BLM Trails Inventory and Condition Assessment”. National Recreation Trails, National Scenic and Historic Trails, and BLM trails with high maintenance designations will be assessed. All remaining BLM trails should be assessed in conjunction with normal BLM operational activities to identify maintenance needs. Trails within administrative and recreation site boundaries, considered site trails, are assessed during the recreation/administrative site assessments on a five-year inspection cycle.

7. DATA MANAGEMENT

The road, primitive road and trail inventory is a critical component in the implementation of a Transportation Management Plan. It is used to manage information such as maintenance responsibility, functional classification, condition, use, Current Replacement Value (CRV), Facility Condition Index (FCI), annual and deferred maintenance needs, and actual costs from which BLM can determine and set maintenance priorities, make informed decisions regarding road closures and evaluate and monitor results.

Inventory information resides in two databases, digital spatial lines and informational. The digital spatial lines data (geometry of the line) for BLM inventoried, other agency, and private roads and trails are stored in the ground transportation (GTRN) geodatabase. The informational data that describes and characterizes other agency and private roads or trails are retained in GTRN. The majority of informational data for line work representing BLM inventoried roads and trails, is stored in the Facility Asset Management System (FAMS). FAMS data is linked to GTRN to complete the Oregon/Washington Ground Transportation inventory system in use in western Oregon (and state-wide).

a. Facility Asset Management System

Often referred to as Maximo, which is the underlying software, FAMS is the Bureau of Land Management's corporate facility asset management system and is the official record of inventory for BLM owned and controlled assets, including roads, primitive roads, trails, bridges, major culverts, and any other appurtenances and structures that are part of the BLM transportation system. FAMS also stores data about administrative and recreation sites, buildings and dams. Data stored and tracked in FAMS includes information about the physical characteristics of the feature, condition, jurisdiction, maintenance responsibility and asset business data such as the CRV, the FCI, the API, and annual/deferred maintenance costs. Data requirements in FAMS can be broken down into nationally required and optional data and state required data.

Required data that pertains to the entire road and primitive road:

National Required
Asset Description
Classification
Cost Code
Unit of Measure Quantity
Lat/Long – begin and end of road
Route Number

Required data that pertains to each road and primitive road segment:

National Required	State Required
Description	Maintenance Intensity
Classification	O & C Segment
Cost Code	Closure Status
Unit of Measure Quantity	Closure Reason
Lat/Long – begin & end mile	Sub-grade width
Begin Milepost	Functional Classification
End Milepost	Access Rights
Segment Average Width	
Jurisdiction	
Maintenance Responsibility	
Segment Surface Type	
Route Number	
O & C Land (y/n)	
Is Easement Needed (y/n)	
FLHP (y/n)	

Required data that pertains to each trail:

National Required
Trail Description
Classification
Cost Code
Unit of Measure Quantity
Route Number

Required data that pertains to each trail segment:

National Required
Description
Classification
Cost Code
Unit of Measure Quantity
Lat/Long – begin and end mile
Begin Milepost
End Milepost
Segment Average Width
Jurisdiction
Maintenance Responsibility
OR/CA Land (y/n)
Restrictions
Is Easement Needed (y/n)
Segment Surface Type

Additional information considered significant enough to track at a state level including shared road ownership; maintenance year, alternate road names, and ownership designation for cartographic purposes are contained within the GTRN database.

FAMS has the capability of storing written documentation, photos, scanned images, internet URL addresses and other records. This functionality is asset specific and provides a way to consolidate information about each road, primitive road, trail and related assets. This enables managers and users at all levels of the organization to have ready access to all road and trail related information.

In conjunction with the Asset Business Plans, FAMS data is used at the national, state and district levels to make business decisions regarding the BLM's assets. In terms of the transportation system, FAMS data is used to determine annual and deferred maintenance needs, road closure and decommissioning, major culvert and bridge replacement

requirements and out-year projection planning. Department of Interior and BLM business requirements, procedures and processes have shifted the attention of our data from local and state needs to national requests. Insuring FAMS data is current and correct is essential in order to justify needs and make sound business decisions.

b. *Ground Transportation GIS Geospatial Dataset*

The BLM’s GIS system is the repository of all transportation digital spatial line data for Oregon and Washington. The Ground Transportation (GTRN) geodatabase is the Oregon/Washington GIS corporate data that ties to other Oregon/Washington corporate GIS geodatabases, including a separate stand alone highway feature class, to provide a comprehensive operational and interactive inventory to manage the transportation program.

GTRN contains five feature datasets - BLM inventoried and non inventoried roads and trails, and closure devices. Each feature class has different attribute fields and different requirements.

- BLM inventoried – Roads, primitive roads and trails that make up the district’s transportation system. BLM owned and controlled roads are required to be inventoried, have a condition assessment completed every 10 years, and must be recorded as an asset in FAMS. This category may include roads and trails other than BLM owned and controlled. Private owned and controlled roads that are included in FAMS should spatially complete the network of roads that make up the District’s transportation system and should be of importance to BLM operations and mission.

For roads, primitive roads and trails, a majority of the BLM inventoried attributes are obtained nightly from the FAMS database. A small subset of the attributes does not depend on FAMS for data but instead are populated directly in GTRN. These can include state required and optional data.

State Required	Optional
Special Designation	Capital Improvement
	Ownership Designation
	Route Primary Name
	Route Secondary Name
	Year Last Maintained
	Metadata attributes

- Non-inventoried - roads and trails other than BLM inventoried roads that are outside of the district's transportation network. All attributes for non inventoried roads and trails are contained within GTRN.
- Closure devices - devices such as gates, boulders and other barriers that physically close the road to vehicular traffic. Closure device information is an optionally required attribute in FAMS and therefore is not used to populate the data in GTRN. Gate information, including location, closure status and control, is a state requirement. All other closure devices are optional.

State Required
Gate
Location
Closure Status
Control

c. Other Records

In addition to FAMS and GTRN, road and trail inventory information is stored as records and files at all levels of the organization. The BLM, Oregon State Office, O&C Logging Road Right-of-Way Handbook (H-2812-1), chapter VI, page 19 states that a road record support file should be prepared for each road and road segment within the BLM's transportation system and further clarifies the type of information that a file should contain and suggests a format. In addition to District road record support files, FAMS contains corporate data and is considered the overriding source of information about roads and trails. FAMS should accurately reflect paper and other digital records. FAMS file attachment functionality shall be utilized to capture all new and historical documents, new and existing road record files, and maps. Districts should work with their FAMS and GTRN data stewards to ensure data is accurate and complete in order to best represent assets for local, state and national transportation analysis and needs.

8. REAL PROPERTY

All new construction and replacement work to a new or an existing real property asset will be capitalized in BLM's real property system. This includes roads, trails, culverts and bridges. The BLM has established the capitalization threshold of \$100,000 (and above) per asset. The \$100,000 threshold consists of all costs incurred from conception to final acceptance of an asset such as planning, site investigations, design, and construction, including labor, equipment and materials.

- **Roads:** Only the surfacing and installation of appurtenances are capitalized for an existing road. For new roads, all costs to construct the road and appurtenances within the threshold shall be reported for capitalization. Any other work on the geometric cross section of an existing road such as sub-base, base course, and ditch will not be capitalized. Threshold cost for roads is calculated on a contiguous lane mile.
- **Trails:** Only the surfacing and installation of appurtenances are capitalized for an existing trail. For new trails, all costs to construct the trail and appurtenances within the threshold shall be reported for capitalization. All other work on the geometric cross section of an existing trail such as sub-base, base, course, and ditch will not be capitalized. Threshold cost for trails is calculated on a contiguous mile.
- **Bridges/Major Culverts:** Each bridge or major culvert, with all components and appurtenances, are to be treated as an asset. Expenses for each bridge or major culvert will be calculated for capitalization individually. It is the responsibility of district engineering staff, working with the district property manager, to complete the required paperwork to ensure real property assets accountability. The following forms, found electronically on the BLM intranet, should be completed for transportation assets.
 - › 1310-11: Construction Project Completion Report (for any construction project)
 - › 1530-19: Structures Record (only if a new bridge, major culvert, or road has been added, or an existing asset has been improved or upgraded)
 - › 1530-21: Pictures (always)
 - › Procurement document (always)

Additional information regarding policy and procedures can be found in BLM Manual 1530, Real Property Management, BLM Handbook, H-1530-1, Real Property General Operating Procedures, and various Instruction Memos.

9. BUDGET AND ACCOMPLISHMENTS

The Western Oregon transportation system maintenance program is consistently underfunded, receiving approximately 33% of our projected annual maintenance needs identified in FAMS. District MOP's, condition assessments and other means of prioritization ensures limited funding is targeted to the highest need.

- Annual Maintenance
 - › Roads - Districts receive appropriated annual maintenance funding allocated based on each districts priority road system. The priority road system is based on the functional classification of each road and is recorded in FAMS. Districts also receive collected annual maintenance funding based on active commercial haul on each districts road system. This funding remains in the district in which it is collected and should be used only for maintenance on timber haul roads.

- › Trails - Funding varies with each district's unique situation. Primarily, maintenance work is funded out of recreation specific appropriated and collected funds. Volunteers and partners are a vital component of trail maintenance activity.
- Deferred Maintenance/Capital Improvement – This one-time project funding is requested through the BLM's DM/CI Five Year Plan process via project submissions. Justifications for projects are based on FAMS deferred maintenance work orders.
- Catastrophic Maintenance - Funding for transportation projects is available from sources such as Emergency Relief Federally Owned (ERFO), timber sales, or other special appropriations (e.g. Title II of Secure Rural Schools).
- Special Project Funding - Additional annual maintenance, deferred maintenance and catastrophic maintenance needs should be funded with benefitting activity, one-time funding and other sources. This funding is identified as part of special project development and is separate from the annual MOP funding.

Operations and Maintenance Costs - In response to Executive Order 13327, Federal Real Property Management mandated the Department of Interior to achieve efficiencies and better manage the federal infrastructure. Among the goals, the Office of Management and Budget requires every DOI agency to provide evidence that it is tracking Operations and Maintenance costs annually. In 2007, the BLM's Washington Office requested involvement in a pilot project that would develop such a system. Oregon is one of the pilot states. The FAMS work order system is being piloted to track planned and actual annual maintenance accomplishments, labor, equipment, and supply cost. Additionally reports are being written and tested which address field user data needs.

Accomplishments - Workload targets are based on proposed budget and the annual MOP which can be adjusted when the Annual Work Plan is released. Actual accomplishments are reported on a periodic basis and should be based on road maintenance accomplishment reports. This is consistent with the concept of performance-based budgeting (Government Performance and Results Act of 1993, GPRA).

D. ROAD CONSTRUCTION, MAINTENANCE, AND CLOSURE

1. CONSTRUCTION

Roads, culverts, and bridges shall be designed and constructed in accordance with policies, standards in BLM Manuals in the 9100 Series, the ROD/RMP, and BMPs contained within the ROD/RMP.

2. MAINTENANCE

The BLM is responsible for maintaining roads under its ownership at standards set forth in FLPMA, BLM Manuals in the 9100 Series, 2812 Right of Way Handbook, ROD/RMP and the BMPs contained in the ROD/RMP. Maintenance provides for resource protection, safe accommodation of users, and protection of the government's investment. Road maintenance on BLM roads is primarily for timber management/extraction, recreation, and fire management activities. BLM owned roads are maintained by the following methods:

- BLM road maintenance crews.
- Contracting - a formal contract for maintenance.
- Cooperative maintenance agreement – formal sharing of maintenance between BLM and permittees or other government entities.
- Timber sale purchasers - BLM timber sale purchasers typically renovate (deferred maintenance) and perform operator maintenance (annual maintenance) on the resource road network as a contractual obligation under BLM timber sales.
- Permittee maintenance – BLM has the option of either performing the maintenance and collecting maintenance fees (and/or surface replacement fees) or requiring the permittee to perform the maintenance and waiving maintenance and/or surface replacement fees.
- FLPMA Right-of-Way grant – private party maintenance for their use.

Maintenance is divided into four intensity levels in accordance with the BLM Manual 9113. The intensity levels provide a progressive system of maintenance with even the lowest intensity level ensuring resource protection by controlling surface erosion and sedimentation. Maintenance intensities provide consistent objectives and standards for the care and maintenance of BLM roads based on identified management objectives. Maintenance intensities provide operational guidance to field personnel on the appropriate intensity, frequency, and type of maintenance activities that should be undertaken to keep the road in acceptable condition and provide guidance for the minimum standards of care for the annual maintenance of a road.

Western Oregon guidance has been included to assist the reader in determining an appropriate maintenance intensity level for each BLM owned road. Roads functionally classified as resource roads may receive more extensive maintenance during periods of increased administrative or commercial use. The benefitting activity or user (BLM timber sale purchaser or permittee) may be responsible for funding the maintenance work required for their use. Lack of funding or short-term increases in maintenance shall not be considered when assigning long-term maintenance intensity levels.

Roads not owned by the BLM, which were constructed on BLM lands under right-of-way grants or permits will be maintained in accordance with the terms of the grant or permit.

BLM ROAD MAINTENANCE INTENSITY LEVELS – The four road maintenance intensity levels are:

Intensity Level 0

Maintenance Description: Existing routes that will no longer be maintained and no longer be declared a route. Routes identified as Level 0 are identified for removal from the Transportation System entirely.

Maintenance Objectives:

- No planned annual maintenance.
- Meet identified environmental needs.
- No preventative maintenance or planned annual maintenance activities.

Maintenance Funds: No annual maintenance funds.

Western Oregon Guidance – The objective of this maintenance intensity level should include road segments currently closed to vehicles that may be used again in the future. This will facilitate assigning decommissioned roads at this level. Roads in storage should be assigned this maintenance intensity level.

Intensity Level 1

Maintenance Description: Routes where minimum (low intensity) maintenance is required to protect adjacent lands and resource values. These roads may be impassable for extended periods of time.

Maintenance Objectives:

- Low (Minimal) maintenance intensity.
- Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless route bed drainage is being adversely affected, causing erosion.
- Meets identified resource management objectives.
- Perform maintenance as necessary to protect adjacent lands and resource values.
- No preventative maintenance.
- Planned maintenance activities limited to environmental and resource protection.
- Route surface and other physical features are not maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to address environmental and resource protection requirements. No maintenance funds provided to perform preventative maintenance.

Western Oregon Guidance – Traffic is generally administrative with some minor specialized use or moderate seasonal use. These are typically low standard, low volume, single lane, natural or aggregate surfaced logging spurs, functionally classified as resource roads.

These roads will be the third priority for expending both annual (6252) and collected (9110) maintenance funding each year. Storm-proofing will be used to maintain open resource roads found within riparian reserve areas receiving infrequent maintenance. Storm-proofing puts a road into more of a self-maintaining condition and will reduce chronic sediment inputs along stream channels and water-bodies. BMPs for storm-proofing may involve:

- Relieving inboard ditches more frequently.
- Rocking road surfaces.
- Seeding, mulching, and re-vegetating erosion prone surfaces, where sediment delivery to stream channels may result.
- Applying site-specific measures to alleviate concentration of road drainage causing erosion and sediment delivery to streams.
- Lowering risk of stream diversion potential at stream crossings
- Upgrading stream crossings to pass the 100 year flood with allowance for debris and bedload.
- Removing or lowering unstable fills.
- Outsloping in-sloped ditch roads.
- Road drainage control to stabilize dissipation areas.

Intensity Level 2 *RESERVED FOR POSSIBLE FUTURE USE*

Intensity Level 3

Maintenance Description: Routes requiring moderate maintenance due to low volume use (for example, seasonally or year-round for commercial, recreational, or administrative access). Maintenance Intensities may not provide year-round access but are intended to generally provide resources appropriate to keep the route in use for the majority of the year.

Maintenance Objectives:

- Medium (Moderate) maintenance intensity.
- Drainage structures will be maintained as needed. Surface maintenance will be conducted to provide a reasonable level of riding comfort at prudent speeds for the route conditions and intended use. Brushing is conducted as needed to improve sight distance when appropriate for management uses. Landslides adversely affecting drainage receive high priority for removal; otherwise, they will be removed on a scheduled basis.
- Meets identified environmental needs.
- Generally maintained for year-round traffic.
- Perform annual maintenance necessary to protect adjacent lands and resource values.

- Perform preventative maintenance as required to generally keep the route in acceptable condition.
- Planned maintenance activities should include environmental and resource protection efforts, annual route surface.
- Route surface and other physical features are maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to preserve the route in the current condition; perform planned preventive maintenance activities on a scheduled basis; and address environmental and resource protection requirements.

Western Oregon Guidance – These road segments are functionally classified as local roads and serve as a connection to the BLM collector and resource road network.

These roads will be the second priority for expending both annual (6252) and collected (9110) maintenance funding each year.

Intensity Level 4 *RESERVED FOR POSSIBLE FUTURE USE*

Intensity Level 5

Maintenance Description: Route for high (maximum) maintenance due to year-round needs, high volume of traffic, or significant use. Also may include route identified through management objectives as requiring high intensities of maintenance or to be maintained open on a year-round basis.

Maintenance Objectives:

- High (Maximum) maintenance intensity.
- The entire route will be maintained at least annually. Problems will be repaired as discovered. These routes may be closed or have limited access due to weather conditions but are generally intended for year-round use.
- Meets identified environmental needs.
- Generally maintained for year-round traffic.
- Perform annual maintenance necessary to protect adjacent lands and resource values.
- Perform preventative maintenance as required to generally keep the route in acceptable condition.
- Planned maintenance activities should include environmental and resource protection efforts, annual route surface.
- Route surface and other physical features are maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to preserve the route in the current condition; perform planned preventative maintenance activities on a scheduled basis; and address environmental and resource protection requirements.

Western Oregon Guidance – These road segments generally link the state and county arterial road network with BLM’s local road network and are functionally classified as collector roads.

These roads will be the first priority for expending both annual (6252) and collected (9110) maintenance funding each year.

3. ROAD CLOSURE

Roads may be temporarily closed or travel restricted for administrative and resource protection purposes. Roads that are not needed for long-term resource management will be decommissioned. The Northwest Forest Plan and each District’s ROD/RMP emphasize a no net increase in the miles of road within Key Watersheds listed in their RMP.

As stated in the BLM, Oregon State Office, O&C Logging Road Right-of-Way Handbook, H-2812-1 dated February 2009, there are times the BLM determines, for various reasons (safety, resource protection, etc.), a road closure or travel restriction may be warranted. The objectives of road closure are to reduce sedimentation, restore hydrological processes, reduce total road maintenance cost, and reduce impacts to fish or wildlife habitat, botanical resources, or special areas. The following identifies the necessary steps to complete the work as outlined in the O&C Logging Road Right-of-Way Handbook.

- Determine BLM’s rights of control and public access rights.
- Determine potential category of closure or restriction.
- Written notification to third parties.

BLM district offices will coordinate in advance with potentially affected right-of-way permittees on decisions that close roads. If the permittees do not concur on long-term or permanent closures, the proposal must be dropped or the Authorized Officer may seek advice from the Oregon State Office.

The Association of O&C Counties and BLM have executed a Memorandum of Agreement (MOA) (MOU-BLM-OR930-0610) that establishes the process for consultation among BLM Districts, O&C county governing bodies and the Association, regarding BLM management proposals that would result in possible road or trail closures, travel use restrictions, or decommissioning.

State fire protection associations shall be consulted prior to road closures and travel use restrictions.

The appropriate category of road closure will be determined through an Interdisciplinary Team process. Only the full decommission and obliteration categories are appropriate to meet the Management Direction of a reduction or no net increase in the amount of roads within Key Watersheds. **NOTE:** *FAMS closure status domain value CL (closed) is not used in western Oregon.*

The four categories of road closures are:

- a. **Temporary/Seasonal/Limited Access** – These are typically resource roads, closed with a gate or barrier. The road will be closed to public vehicular traffic but may be open for BLM/Permittee commercial activities. The road may or may not be closed to BLM administrative uses on a seasonal basis depending upon impacts to the resources. Drainage structures will be left in place. Road segments placed in short-term temporary closure (FAMS closure status ‘ST’) will be moved from FAMS operating status to FAMS storage status. Road segments seasonally closed (FAMS closure status ‘SC’) will remain in FAMS operating status.
- b. **Decommission (long-term)** – These will be based on resource protection needs and the RMP directives. The road segment will be closed to vehicles on a long-term basis, but may be used again in the future. Prior to closure the road will be left in an erosion-resistant condition by establishing cross drains, eliminating diversion potential at stream channels, and stabilizing or removing fills on unstable areas. Exposed soils will be treated to reduce sediment delivery to streams. The road will be closed with an earthen barrier or its equivalent. This category can include roads that have been or will be closed due to a natural process (abandonment) and may be opened and maintained for future use. Road segments placed in long-term closure (FAMS closure status ‘DR’) will be moved from FAMS operating status to FAMS storage status.
- c. **Full Decommission (permanent)** – Roads determined through an interdisciplinary process to have no future need may be subsoiled (or tilled), seeded, mulched, and planted to reestablish vegetation. Cross drains, fills in stream channels, and unstable areas will be removed, if necessary, to restore natural hydrologic flow. The road will be closed with an earthen barrier or its equivalent. The road will not require future maintenance. This category includes roads that have been closed due to a natural process (abandonment) and where hydrologic flow has been naturally restored. Road segments placed in permanent closure (FAMS closure status ‘FD’) will be moved from FAMS operating status to FAMS decommission status.
- d. **Obliteration (full site restoration/permanent)** – Roads receiving this level of treatment have no future need. All drainage structures will be removed. Fill material used in the original road construction will be excavated and placed on the subgrade in an attempt to reestablish the original ground line. Exposed soil will be vegetated with native trees or other native vegetation. Road segments placed in permanent closure (FAMS closure status ‘OB’) will be moved from FAMS operating status to FAMS decommission status. Road closure by obliteration is rarely used.

E. TRAIL CONSTRUCTION, MAINTENANCE, AND CLOSURE

BLM provides trails for a broad spectrum of uses on the public lands including hiking, horseback riding, cross-country skiing, bicycling, OHV, and administrative purposes. Trails crossing BLM lands must be located, designed, constructed, and maintained to preserve natural, historic, cultural, and scenic values. Unauthorized trails should be identified and appropriate measures taken.

1. **CONSTRUCTION** – Trails will be designed and constructed in accordance with the policies and standards set forth in BLM Manual 9114, the ROD/RMP, and the NEPA analysis.
2. **MAINTENANCE** – The BLM is responsible for maintaining trails under its control in accordance with the policies and standards set forth in BLM Manual 9114. Maintenance provides for resource protection and the reasonable safety of users.

BLM Trail Maintenance Intensities

Maintenance Intensities provide consistent objectives and standards for the care and maintenance of BLM trails based on identified management objectives. Maintenance Intensities are consistent with land-use planning management objectives (for example, natural, cultural, recreational setting, and visual). Maintenance Intensities provide operational guidance to field personnel on the appropriate intensity, frequency, and type of maintenance activities that should be undertaken to keep the trail in acceptable condition and provide guidance for the minimum standards of care for the annual maintenance of a trail.

Maintenance Intensities do not describe trail geometry, trail types, types of use or other physical or managerial characteristics of the trail. Those terms are addressed as other descriptive attributes to a route.

Intensity Level 0

Maintenance Description: Existing trails that will no longer be maintained or declared as trails. Trails identified as Level 0 are identified for removal from the Transportation System entirely.

Maintenance Objectives:

- No planned annual maintenance.
- Meets identified environmental needs.
- No preventive maintenance or planned annual maintenance activities.

Maintenance Funds: No annual maintenance funds.

Intensity Level 1

Maintenance Description: Trails where minimal (low-intensity) maintenance is required to protect adjacent lands and resource values. These trails may be impassable for extended periods of time.

Maintenance Objectives:

- Low (Minimal) maintenance intensity.
- Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless trail bed drainage is being adversely affected, causing erosion.
- Meets identified resource management objectives.
- Perform maintenance as necessary to protect adjacent lands and resource values.
- No preventive maintenance.
- Planned maintenance activities limited to environmental and resource protection.
- Trail surface and other physical features are not maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to address environmental and resource protection requirements. No maintenance funds provided to perform preventive maintenance.

Intensity Level 2 - *RESERVED FOR POSSIBLE FUTURE USE*

Intensity Level 3

Maintenance Description: Trails requiring moderate maintenance because of low-volume use (e.g., seasonally or year-round for commercial, recreational, or administrative access). Maintenance Intensities may not provide year-round access, but are intended to generally provide resources appropriate for keeping the trail in use for the majority of the year.

Maintenance Objectives:

- Medium (Moderate) maintenance intensity.
- Drainage structures will be maintained as needed. Surface maintenance will be conducted to provide a reasonable level of riding comfort at prudent speeds for the trail conditions and intended use. Brushing is conducted as needed to improve sight distance when appropriate for management uses. Landslides adversely affecting drainage receive high priority for removal; otherwise they will be removed on a scheduled basis.
- Meets identified environmental needs.
- Generally maintained for year-round traffic.
- Perform annual maintenance necessary to protect adjacent lands and resource values.
- Perform preventive maintenance as required to generally keep the trail in acceptable condition.

- Planned maintenance activities should include environmental and resource protection efforts, annual trail surface.
- Trail surface and other physical features are maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to preserve the trail in the present condition; perform planned preventive maintenance activities on a scheduled basis; and address environmental and resource protection requirements.

Intensity Level 4 - *RESERVED FOR POSSIBLE FUTURE USE*

Intensity Level 5

Maintenance Description: Trails for high (Maximum) maintenance because of year-round needs, high-volume traffic, or significant use. Also may include trails identified through management objectives as requiring high intensities of maintenance or to be maintained open year-round.

Maintenance Objectives:

- High (maximum) maintenance intensity.
- The entire trail will be maintained at least annually. Problems will be repaired as discovered. These trails may be closed or have limited access because of weather conditions but are generally intended for year round use.
- Meets identified environmental needs.
- Generally maintained for year-round traffic.
- Perform annual maintenance necessary to protect adjacent lands and resource values.
- Perform preventive maintenance as required to generally keep the trail in acceptable condition.
- Planned maintenance activities should include environmental and resource protection efforts, annual trail surface.
- Trail surface and other physical features are maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to preserve the trail in the present condition; perform planned preventive maintenance activities on a scheduled basis; and address environmental and resource protection requirements.

3. **TRAIL CLOSURE/LIMITATIONS** – Trails may be closed or use restricted to fulfill management objectives such as protecting public health and safety or preserving resources in accordance with 43CFR 8364 and 43CFR 8365.1.

Restrictions that may be placed on the use of trails include but are not limited to:

- No bicycles
- No horses
- No motorized vehicles
- Permit required for use
- Seasonal closure

F. TRAVEL MANAGEMENT PLANNING

1. OFF-HIGHWAY VEHICLE DESIGNATIONS

All BLM-administered lands are required (Executive Order 11644 & 43 CFR 8342.1) to be designated as open, limited, or closed to OHV.

Designations are based on protecting natural and cultural resources, public safety, and limiting visitor conflicts. Definitions of open, limited, and closed areas are provided below:

- **Open areas.** Motorized vehicle travel is permitted year-long anywhere within an area designated as open to OHV use. Open designations are used for intensive OHV use areas where there are no special restrictions or where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel (see 43 CFR 8340.05).
- **Limited areas.** Motorized vehicle travel within specified areas and/or on designated routes, roads, vehicle ways, or trails is subject to restrictions. The limited designation is used where OHV use must be restricted to meet specific resource management objectives. Examples of limitations include number or type of vehicles, time or season of use, permitted or licensed use only, use limited to designated roads and trails, or other limitations if restrictions are necessary to meet resource management objectives, including certain competitive or intensive use areas that have special limitations (see 43 CFR 8340.05).
- **Closed areas.** Motorized vehicle travel is prohibited in the area. Access by means other than motorized vehicle, such as mechanized or non-motorized use, is permitted. Areas are designated closed if closure to all vehicular use is necessary (see 43 CFR 8340.05).

Approximately 1.1 million acres (43%) of BLM-administered lands in western Oregon are designated as limited to **designated** roads and trails for OHV use, while approximately 1.0 million acres (40%) are designated as limited to **existing** roads and trails. 330,000 acres (13%) are open to OHV use and 97,000 acres (4%) are closed to OHV use. Any changes to these OHV designations will require a RMP amendment.

There are currently four existing and seven recently proposed OHV emphasis areas, encompassing about 100,000 acres, across western Oregon. These are areas of concentrated and intensively managed OHV use. New OHV emphasis areas may be implemented upon completion of appropriate activity level planning and NEPA compliance.

2. **COMPREHENSIVE TRAVEL AND TRANSPORTATION MANAGEMENT PLANNING**

Comprehensive Travel and Transportation Management (CTTM) is a comprehensive interdisciplinary approach to travel and transportation planning and management that addresses resource uses and associated access to public lands and waters, including motorized, non-motorized, mechanical, and animal-powered modes of travel. The objectives of BLM's CTTM are to:

- a. Establish a long-term, sustainable, multi-modal transportation system of roads, primitive roads, and trails that addresses public and administrative access needs to and across BLM-managed lands and waters.
- b. Support the agency's mission and land use planning goals and objectives to provide for resource management, public and administrative access, and transportation needs.
- c. Manage travel and transportation on public lands and waters in accordance with law, Executive Order, proclamation, regulation, and policy.

Districts may complete CTTM plans at the scale of an entire district or field office or sequence these plans by specific areas or OHV designations as needed to address complex or controversial management areas (see IM OR-2010-009). BLM policy states that CTTM plans should be developed within five years of completing an RMP. There is no firm timeframe, however, for completing CTTM plans since western Oregon RMP's pre-date WO IM 2008-014.

CTTM plans define designated motorized and non-motorized transportation networks. Appropriate activity level planning and NEPA compliance should be completed for these plans. See the CTTM WO IM 2008-014 for further guidance on travel management planning.

IV. DISTRICT IMPLEMENTATION

A. IMPLEMENTATION PLAN

Each District will individually develop a District Implementation Plan. This Plan in conjunction with the Western Oregon TMP forms the individualized Road Management Plan. The Plan shall reflect the unique conditions in the District.

The Plan shall convey how condition assessments, maintenance, road closures and corporate transportation inventory updates will be accomplished in a timely manner. Each district has the flexibility to incorporate relevant information in their implementation plan.

At a minimum, the implementation plan shall document the processes, products, and responsible positions for the following:

1. CONDITION ASSESSMENTS

- Road/bridge/major culvert condition assessments
- Storm inspections
- Discovery deficiencies/deferred maintenance

2. ANNUAL MAINTENANCE

- MOPs
- Periodic inspections
- Storm proofing

3. CLOSED ROADS (temporary and permanent)

- Monitoring

4. CORPORATE TRANSPORTATION INVENTORY

- FAMS (tabular)
- GTRN (spatial)

5. TMO's

6. DEFERRED MAINTENANCE

- 5-Year Plan
- Other Funding Sources

V. AUTHORITY AND POLICY

A. AUTHORITY

A number of Federal laws and internal regulations give BLM the authority to develop and manage an integrated road and trail system:

The following Laws and Executive Orders address transportation planning, operation, and maintenance:

- FLPMA - Federal Land Policy and Management Act of 1976, Public Law 94-579, Sections 202 and 502. Provides for resource management rehabilitation, protection, improvement, planning, and administration on the basis of sustained yield. It provides for the management of transportation systems on public lands in a manner that will protect the ecological, air, water, scientific, scenic, historical, and archaeological values, and Areas of Critical Environmental Concern (ACEC). It requires the preparation and maintenance of the inventory of public land resources, including the transportation system, on a continuing basis. It also provides for receiving fair market value for the use of the transportation system.
- Executive Order 12088, October 13, 1978, Federal Compliance with Pollution Control Standards. Requires that BLM ensure that all necessary actions are taken for prevention, control, and abatement of environmental pollution with respect to transportation facilities and activities.
- Executive Orders 11644, February 8, 1972 and 11989, May 24, 1977, Off-Road Vehicles on Public Lands. Requires that BLM provides procedures that will ensure that the use of Off Highway Vehicles on public lands will be controlled and directed to protect the resources of those lands, to promote the safety of all users, and to minimize conflicts among the various users of those lands.
- Executive Order 11514, March 5, 1970, Protection and Enhancement of Environmental Quality, as amended by Executive Order 11991, (Sections. 2(g) and 3(h), May 24, 1977). Requires BLM to provide leadership in protecting and enhancing the quality of the Nation's environment to sustain and enrich human life. Requires BLM transportation policies, plans, and programs to meet national environmental goals.
- Executive Order 13327, February 5, 2004, Federal Real Property Asset Management. Requires DOI and its agencies, including BLM, to develop Asset Management Plans which present a strategic vision and plan of action for strengthening the management of assets.

- Standard Federal Financial Accounting Standard # 6 (SFFAS), Accounting for Property, Plant and Equipment. The accounting standard # 6 was published by the Office of Management and Budget (OMB), and the Comptroller General's Office of the United States in 1998. SFFAS #6 requires federal agencies to disclose the amount of deferred maintenance they have and report the information in each year's audited financial statement. This standard also requires federal agencies to perform condition assessments to identify and verify their deferred maintenance backlog. Accounting standards are developed by the Federal Accounting Standards Advisory Board (FASAB) to address financial and budgetary information needs of the Congress, executive branch agencies, and other users of federal financial information.
- Executive Order 13112, February 3, 1999, Invasive Species. Directs federal agencies to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause.
- Executive Order 13195, January 18, 2001, Trails for America in the 21st Century. Directs federal agencies to protect, connect, promote, and assist trails of all types throughout the United States to the extent practicable, and in cooperation with Tribes, States, local governments, and interested groups.
- Government Performance and Results Act of 1993 is a law which seeks to make the federal government more accountable for the tax dollars it spends and the results it achieves. It requires that government agencies develop and implement performance management systems to focus on results, and promote service quality, and public satisfaction. GPRA has three main components that BLM must comply with, strategic plans, annual performance plans, and annual performance reports.
- Oregon and California Grant Lands Act of 1937 (O&C Act). Provides for management of the reconveyed CBWR and revested O&C Railroad grant lands for permanent forest production under the principle of sustained yield; for cooperative agreements with other agencies or private owners for coordinated administration; for performing any and all acts; for making such rules and regulations as may be necessary and proper for administering such lands; and for distribution of receipts.
- National Environment Policy Act (NEPA) of 1969. Requires the preparation of Environmental Impact Statements for any transportation project that may have significant affect on the environment. It requires systematic and interdisciplinary planning in making decisions about major BLM actions or proposals from the public that may have significant influence on the environment.
- Clean Water Act as amended in 1987 and Clean Air Act of 1990 as amended. Requires BLM to protect air and water quality, maintain Federal and State designated water and air quality standards, and abide by the requirements of the State Implementation Plans.

- Section 124 of the Omnibus Consolidated Appropriations Act of 1997, PL 104-208. Provides the framework by which the Bureau of Land Management may enter into watershed restoration and enhancement agreements in fiscal year 1997 and each fiscal year thereafter to restore and maintain fish, wildlife, and other biotic resources on public or private land or both to benefit these resources on public land within the watershed.
- The Endangered Species Act (ESA) of 1973 as amended. Requires federal agencies to seek to conserve endangered and threatened species and to avoid destroying or adversely modifying their designated or critical habitat.
- The Federal Water Pollution Control Act of 1970. Requires Federal land managers to comply with all Federal, State, and local requirements, administrative authorities, process, and sanctions regarding the control and abatement of water pollution in the same manner and to the same extent as any nongovernmental entity.
- The U.S. Code of Federal Regulations (CFR) contains traffic and engineering regulations that BLM must follow in the management and operation of its roads and trails. Through the CFR, the District Managers have the authority to implement traffic rules and issue Federal Orders that close or restrict road and trail use.
 - 43 CFR 2800 Rights-of-Way, under Federal Land Policy Management Act
 - 43 CFR 2810 Tram Roads and Logging Roads
 - 43 CFR 8340 Off-Road Vehicles
 - 43 CFR 8350 Management Areas
 - 43 CFR 8360 Visitor Services

B. POLICY

The TMP is based on the following policies and responsibilities taken from various BLM Manuals and documents:

- BLM, Oregon State Office, Handbook H-2812-1 – *O&C Logging Road Right-of-Way Handbook*
- BLM Manual 9100 – *Facilities Planning, Design, Construction, and Maintenance*
- BLM Manual 9110 - *Transportation Facilities*
- BLM Handbook H-9110-1 - *Transportation Planning*
- BLM Manual 9112 - *Bridges and Major Culverts*
- BLM Handbook H-9112-1 – *Bridge Design and Maintenance*
- BLM Handbook H-9112-2 – *Protocols for Bridge Condition Assessments*
- BLM Handbook H-9112-3 – *Checklist for Bridge Condition Assessments*
- BLM Handbook H-9112-4 – *Protocols for Major Culvert Condition Assessments*
- BLM Handbook H-9112-5 – *Checklist for Major Culvert Condition Assessments*
- BLM Manual 9113 – *Roads* (under revision)

- BLM Handbook H-9113-1 – *Road Design* (under development)
- BLM Handbook H-9113-2 – *Guidance and Instructions for Roadway Condition Assessment Teams* (under development)
- BLM Manual 9114 – *Trails* (under revision)
- BLM Handbook H-9114-1- *Condition Assessment or Inspection of Trails* (under development)
- BLM Handbook H-8357-1- *Back Country Byways*
- BLM Manual 8340 - *Off-Road Vehicles*
- BLM Manual 9130 - *Signs*
- BLM Manual 1530 – *Real Property Management*
- BLM Handbook H-1530-1 – *Real Property General Operating Procedures*

Other Guidance

- The DOI Strategic Plan is a requirement of GPRA. GPRA requires that each federal agency submit a comprehensive strategic plan to Congress. DOI's updated and revised Strategic Plan for FY2007-2012 was released at the end of 2006, superseding the 2003-2008 Plan. DOI's plan includes a set of measurable long-term goals for the organization and provides a roadmap to meet its goals and fulfill its mission. The plan identifies a number of long-term goals for the transportation program.
- Attachment G, titled Department of the Interior (DOI) Facilities Maintenance and Capital Improvements, is included each FY as part of the DOI's Budget Request Formulation. The document establishes the programmatic guidance and timetable for deferred maintenance and capital improvement program Five-Year Plan submissions.
- Five-Year Plan submissions. The Department of Interior (DOI) has committed to Congress and the Office of Management and Budget that a comprehensive five-year deferred maintenance and capital improvement plan would be updated and funded each year to address DOI's deferred maintenance backlog.
- Approved District (includes Klamath Falls Resource Area) Resource Management Plans/Record of Decision identifies how the transportation system will be managed and operated.
- Approved Records of Decisions for the Vegetation Treatments Using Herbicides on BLM lands in 17 Western States Programmatic EIS, 2007.
- Approved Record of Decision for the Management of Port Orford cedar in southwest Oregon, Coos Bay, Medford, and Roseburg Districts, 2004.
- District Manuals and Handbooks addressing transportation planning, operation, and maintenance for each District.

- Western Oregon Road Fee Collection Pilot Project (October, 1992), I.M. OR-93-49 (December 17, 1992). Implemented procedures to improve tracking, monitoring, and verification of hauling of forest products over BLM roads, fee collection accountability, and collection of road use and maintenance fees.
- NMFS (National Marine Fisheries Service). 2008. Reinitiation of the Endangered Species Act Section 7 Formal Programmatic Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Fish Habitat Restoration Activities in Oregon and Washington, CY2007-CY2012. June 27, 2008. No. 2008/03506, Seattle, WA.
- USFWS. 2007. Biological Opinion and Letter of Concurrence, USDA Forest Service, USDI Bureau of Land Management and the Coquille Indian Tribe for Programmatic Aquatic Habitat Restoration Activities in Oregon and Washington that Affect ESA-listed Fish, Wildlife, and Plant Species and their Critical Habitats. Portland, OR. TAILS # 13420-2007-F-0055
- USFWS. 2008. Biological Opinion on the Effects to Bull Trout (*Salvelinus confluentus*) from On-going Forest Service and Bureau of Land Management Activities in Northwestern Oregon, FY2009-FY2019. Portland, OR. TAILS # 13420-2008-F-0085.
- *Anadromous Salmonid Passage Facility Design*. National Marine Fisheries Service (NMFS), Northwest Region, Portland, OR. 2008.
- National Management Strategy for Motorized Off-Highway Vehicle use on public lands, dated January 2001.
- WO IM-2008-014, Clarification of Guidance and Integration of Comprehensive Travel and Transportation Management Planning into the Land Use Planning Process. IM provides national guidance for travel management planning.
- OR IM-2010-009, Withdrawal of Record of Decision and Resource Management Plan, Western Oregon Plan Revision and Continued Implementation of 1995 Resource Management Plans. IM provides OHV Emphasis Area and Travel Management Planning guidance and revised BMP's as contained in Appendix I for the 2008 WOPR FEIS for western Oregon districts.
- OR IM-2005-088, Road Maintenance Fee Data Collection. Requires districts to enter log and mineral haul data into the Road Maintenance Fee Data Collection Application for use in the new Road Maintenance Fee Calculation model.

- OR IB-2005-139, Interim Road Maintenance Fee Schedule and OR IB-2007-062, Extension of Interim Road Maintenance Fee Schedule. Establishes current fee schedule; to be replaced on January 1, 2011 with a new fee schedule computed using the new Fee calculation model.
- OR IB-2009-066, Posting Bridges for Reduced Loads and Issuing Authorization Letters for Overloads. Clarifies BLM policy regarding use of bridges load rated for less than legal highway (Oregon) loading.
- WO IM-2009-132, Guidance to Classify Primitive Roads. Establishes criteria for determining correct classification of roads and primitive roads.
- MOU-BLM-OR930-0610, Memorandum of Agreement established by the Association of O&C Counties and BLM. Defines process for consultation between BLM and the various O&C counties prior to BLM closing roads or restricting access to roads.

VI. GLOSSARY

Abandonment – Closing an asset through a natural process (decommissioned or full decommissioned).

Back Country Byway – BLM’s scenic byways program of roads. Road segments designated as part of the National Scenic Byway System that consist of corridors along many of the agency’s roads that have significant scenic, historical, cultural, or recreational qualities. (These roads may or may not be a BLM controlled road).

Best Management Practices (BMP) – Methods, measures, or practices designed to prevent or reduce water pollution. Not limited to structural and nonstructural controls, and procedures for operations and maintenance. Usually, BMPs are applied as a system of practices rather than a single practice.

Capitalization – Capitalization is defined as recording the total acquisition cost of an item in the general ledger of DOI’s financial accounts. The intent of capitalization in the financial records is to provide an accurate and total reflection of the BLM’s investment in real property over time and to provide information on operating performance by allocating costs to the periods benefited.

Dispersed Recreation – This term refers to recreational use outside developed recreational sites. This includes activities such as scenic driving, hiking, bicycling, backpacking, hunting, fishing, snowmobiling, horseback riding, cross-country skiing, and recreation in primitive environments.

Easement – the rights granted to the United States through the purchase of a Right-of-Way.

Exclusive easement – An exclusive easement grants control of the rights-of-way to the United States and may allow it to authorize third-party use (i.e., public) and set rules of use.

Nonexclusive easement – A nonexclusive easement only allows use by the United States and its’ agents and those authorized to do business on United States lands. The underlying landowner still controls the land use, subject to the rights granted to the United States.

Geographic Information System (GIS) – An organized collection of computer hardware, software, and geographic data designed to efficiently capture, store, update, manipulate, analyze, and display all forms of geographically referenced information. Certain complex spatial operations are possible with GIS that would be very time-consuming or impractical otherwise.

Interdisciplinary Team (ID Team) – This is a group of individuals with varying areas of specialty assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad enough to adequately analyze the problem and propose action.

Key Watersheds – a component of the Aquatic Conservation Strategy required by BLM’s 1995 RMP’s serving as refugia for maintaining and recovering habitat for at-risk stocks of anadromous salmonids and resident fish species. Key watersheds overlay portions of all land use allocations and place additional management requirements on activities in those areas.

Major Culvert – a culvert with an end area greater than 35 square feet.

Off-Highway Vehicle – Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain (e.g., motorcycles, All-Terrain Vehicles, 4-wheel drive vehicles, and snowmobiles). *The term "Off-Highway Vehicle" replaces the term "Off-Road Vehicle" to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same.*

Partnership – In the context of these guidelines, partnerships are those alliances between individuals, groups, and/or the District that enable road and trail maintenance or monitoring activities beyond those required for resource management access.

Permittee – (a) The cooperating party to a reciprocal agreement (some early agreements refer to such a party as "Applicant"); (b) A third party using a road controlled by the United States and constructed over lands belonging to the Permittee in a reciprocal agreement; and (c) A party authorized to use roads controlled by the United States under the terms of a Unilateral O&C Right-of-Way, mining, or grazing permit, etc.

Preventive Maintenance – Scheduled servicing, repairs, inspections, adjustments, and replacement of components of the road system that result in fewer premature replacements and achieve the expected life of the facility component.

Public Domain Lands – Original holdings of the United States never granted or conveyed to other jurisdictions, or reacquired by exchange for other public domain lands.

Public Involvement – A process designed to broaden the information base upon which agency decisions are made by (1) informing the public about District activities, plans, and decisions, and (2) encouraging public understanding about and participation in the planning processes leading to final decision-making.

Reciprocal Right-of-Way agreement – Documents which exchange access rights between the U.S. and a permittee pursuant to the regulations at 43 CFR 2812. A reciprocal right-of-way agreement generally consists of an Agreement, a Permit, an exclusive easement, a License Agreement, and associated exhibits and schedules.

Resource Management Plan (RMP) – A land use plan prepared by BLM Districts or Resource Areas under current regulations in accordance with the Federal Land Policy and Management Act.

Road Control – The right to use the road and authorize third parties to use the road subject to the rights of the road owner. (see ‘road ownership’ definition).

Road Density – This is the number of miles of roads within a given area, usually expressed in miles of road per square mile of land.

Road Ownership – The rights of road ownership include: 1) use of the road, 2) first right of maintenance on the road and collecting pro-rata expenses from other users (maintenance and/or surface replacement fees), or allowing for operator maintenance, 3) collection of road use fees from other users for amortization of the replacement cost of the road, and 4) establishing reasonable traffic regulations for the use of the road which are applicable to all users of the road, including the road owner.

Stakeholder – Any adjacent landowner, permittee, contractor, or local, state, or federal agencies, impacted by BLM decisions. This does not include the general public unless they fall into one of the categories listed above.

Watershed – The drainage basin contributing water, organic matter, dissolved nutrients, and sediments to a stream or lake.

Watershed Analysis – A procedure used to characterize human, aquatic, riparian, and terrestrial features, conditions, processes, and interactions within a watershed. Watershed analysis is not a decision-making process. The results of watershed analysis establish the context for subsequent decision-making.

VII. ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
API	Asset Priority Index
BLM	Bureau of Land Management
BMP	Best Management Practice
CFR	Code of Federal Regulation
CRV	Current Replacement Value
CTTM	Comprehensive Travel and Transportation Management
DM/CI	Deferred Maintenance/Capital Improvement
DOI	Department of Interior
FAMS	Facility Asset Management System
FCI	Facility Condition Index
FHWA	Federal Highway Administration
FLPMA	Federal Land Policy and Management Act of 1976
GIS	Geographic Information System
GPRA	Government Performance and Results Act
GTRN	Ground Transportation theme
MOP	Maintenance Operation Plan
NEPA	National Environmental Policy Act of 1969
NMFS	National Marine Fisheries Service
O&C	Oregon and California lands
ODF	Oregon Department of Forestry
ODOT	Oregon Department of Transportation
RMP	Resource Management Plan
ROD	Record of Decision
TMO	Transportation Management Objective
TMP	Transportation Management Plan
USFS	United States Forest Service
WO	Washington Office

VIII. REFERENCES

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