
Trails and Travel Management

Key Points

- All action alternatives and the Proposed RMP would increase the acreage of areas *closed* to public motorized access compared to the No Action alternative.
- All action alternatives and the Proposed RMP would not designate any areas as *open* to public motorized access.
- Alternative D would provide the most trail-based opportunities for both motorized and non-motorized recreation activities.
- Easements and reciprocal right-of-way agreements secure access for BLM forest management activities. Reciprocal right-of-way agreements over O&C and Coos Bay Wagon Road lands do not grant rights for public access and recreational use. For this reason, a portion of BLM-managed roads and BLM-administered lands preclude legal public access.
- The overall replacement value of the BLM's transportation system exceeds \$10 billion. Approximately 30 percent of road mileage is in fair or poor condition, primarily due to depleted surfacing aggregate and well-used minor culverts. Currently, the deferred maintenance backlog exceeds \$300 million.

Summary of Notable Changes from the Draft RMP/EIS

The analysis of new road construction for commercial thinning in Issue 2 of this section uses new road construction ratios derived from six years (2007–2012) of harvest volume sold data and timber sale contract data rather than estimated new road construction ratios for commercial thinning from the 2008 FEIS. Ratios based on actual timber sale experience are intended to provide more accurate analytical basis than the estimates in the Draft RMP/EIS. These actual ratios are lower than the estimated 2008 FEIS ratios ranging from 33 percent lower in the Coos Bay District to 80 percent lower in the Medford District.

Background

BLM-managed Travel and Transportation System

The BLM manages a complex and well-utilized travel system within western Oregon. The BLM manages approximately 15,000 miles of roads and 395 miles of designated trails within the decision area. The primary purpose of the BLM transportation system is access for resource management, recreation use, and transportation of forest products. Due to the BLM's historic checkerboard land ownership pattern in Oregon, this road network has been developed in concert with neighboring private timberland owners, and thus has elements of a joint-use BLM/private road network. The BLM has designated a network of trails and travel management areas within the planning area to address particular concerns and prescribe specific management actions. Travel management areas frame transportation issues and help delineate and administer travel networks to support specific uses and resource requirements.

Long-term or perpetual reciprocal right-of-way agreements provide legal access to Federal and private timberlands for BLM administrative use and private timberland owners as authorized by the FLPMA, as well as other Federal laws and regulations. A reciprocal right-of-way agreement provides both the BLM and the private landowner with a non-exclusive right to use, construct, and maintain roads on each other's property for administrative purposes such as forest management. These types of agreements are in effect on nearly 75 percent of BLM-administered lands in the planning area. Approximately 85 percent of the 15,000-mile BLM-administered road system is on BLM-administered lands. Assuming the network is

distributed uniformly among the 75 percent of BLM-administered lands managed under reciprocal right-of-way agreements, approximately 64 percent of BLM-managed roads on BLM-administered lands are covered by these agreements. Consistent with this assumption, the remaining 36 percent of BLM-managed roads on BLM-administered lands are not covered by reciprocal right-of-way agreements. Additionally, approximately 13 percent of the BLM-managed road system is on private land, with the majority of roads on lands managed by reciprocal right-of-way agreements. Thus, approximately 77 percent of BLM transportation system mileage is likely to be managed under a reciprocal right-of-way agreement.

Reciprocal right-of-way agreements over O&C and Coos Bay Wagon Road lands under 43 CFR 2812 do not grant rights for public access and recreational use. For this reason, a substantial portion of BLM-managed roads and BLM-administered lands do not include legal public access. BLM-managed roads can afford public access under certain circumstances, (e.g., when the BLM obtains non-2812 easements), or when contiguous road segments both originate and terminate upon BLM-administered lands. Current commercial use of the BLM's portion of the joint-use network consists predominantly of forest management activities.

The BLM manages public motorized access under three possible categories based on BLM land use planning decisions that take into account natural resource protection and public safety. The public motorized access categories applied to public motorized access designations are (1) *open*, which allows for unlimited travel, including cross-country, (2) *limited*, where motorized use is restricted to meet specific resource management objectives, and (3) *closed* to motorized use. These categories are described in more detail below under Issue 1. The BLM would apply designations of *open*, *limited*, and *closed* for public motorized access by alternative and the Proposed RMP to all acres in the decision area.

Implementation-level Travel Management Planning

Consistent with current BLM policy¹²¹, the BLM is deferring implementation-level travel management planning during the current planning effort. Implementation-level travel management planning is the process of establishing a final travel and transportation network that includes route-specific designations within the broader land use planning level area designations. Land use planning-level designations are applied to all acres of BLM-administered lands within the planning area and designate areas as *open*, *limited*, or *closed* to public motorized access, as defined in the BLM Travel and Transportation Management manual (USDI BLM 2011). Through this planning effort, the BLM would designate all lands in the decision area as one of these three options and would identify areas in *limited* designations where implementation-travel management planning would occur under the action alternatives and the Proposed RMP. The BLM would complete route-specific designations within areas in *limited*

¹²¹ The BLM Travel and Transportation Management Manual-1626 (USDI BLM 2011) outlines the BLM's policies for travel and transportation management planning in the land use planning process consistent with 43 CFR 8342. Included in this policy direction are reasons for deferring the development of an implementation-level travel management plan, which include: the size and complexity of the area, controversy, or incomplete data. The BLM has deferred implementation-level travel management planning for the planning area due to the size of the planning area and the complexities brought from the checkerboard landownership pattern and the number of reciprocal right-of-way agreements throughout. Additionally, the BLM is currently revising the 1626 Manual, and is updating it to reflect current practices in travel and transportation management planning, including establishing a more orderly and comprehensive process to address travel and transportation planning and management. As part of the revisions, the BLM is updating policy on the travel management planning process in land use planning in that "[c]ompleting only the required land use planning level decisions and considerations when developing an RMP, and deferring more detailed site-specific TTM planning to subsequent implementation level decisions will be the standard approach to addressing TTM in the planning process. This is due to the complex nature, potential for controversy, sizable datasets and often incomplete data available to complete a planning area-wide, site-specific TMP concurrently with a land use plan." (USDA BLM 2014, .06 (B) 6).

designations within 5 years after the completion of this plan revision (**Appendix X**). Although the land use planning-level designations of *open*, *limited*, or *closed* address only public motorized access, subsequent implementation-level travel management planning would address all modes of public travel, including non-motorized travel.

Implementation-level travel planning would follow a site-specific process for selecting a final public road and trail network. Selection of final public road and trail networks would consider types of use (e.g., motorized and non-motorized), class of user,¹²² and seasons of use. The BLM would make final public route designations through implementation-level travel management planning¹²³ for the decision area in comprehensive, interdisciplinary travel and transportation management plans (TMPs) scheduled to be completed within 5 years after approval of the RMP revision. The BLM’s GIS geodatabase would provide information for identifying public roads and trails for both motorized and non-motorized recreation activities. The BLM began on-the-ground route inventories across the decision area during the summer of 2014. Route inventories will continue throughout 2016. The BLM estimates that there are approximately 1,000 miles of non-designated user-created routes within the decision area. Where these routes are located within areas designated as *limited* for public motorized access, the BLM would develop proposed future public route designations or closures through public scoping and NEPA analysis utilizing draft route inventories to evaluate amendments to the existing travel network during an implementation-level travel management planning. **Appendix Q** includes interim public motorized access guidelines that the BLM would apply to *limited* to existing designations until subsequent travel management plans would be completed. **Appendix Q** also identifies areas where the BLM has completed implementation-level travel management plans prior to this RMP revision process.

Table 3-217 displays existing travel management area designations within the decision area under the 1995 RMPs.

Table 3-217. Existing 1995 RMP public motorized access designations within the decision area

District/ Field Office	Open (Acres)	Limited to Existing Roads and Trails (Acres)	Limited to Existing Roads and Designated Trails (Acres)	Limited to Designated Roads and Trails (Acres)	Limited to Designated Roads (Acres)	Closed (Acres)	Totals (Acres)
Coos Bay	-	-	-	318,676	-	3,489	322,165
Eugene	-	320,883	-	-	-	3,547	324,430
Klamath Falls	29,902	137,154	-	47,222	-	10,702	224,980
Medford	139,878	26,514	-	661,357	-	46,371	874,120
Roseburg	-	416,560	-	6,731	-	3,283	426,574
Salem	160,614	48,771	87,144	16,192	69,508	17,197	399,426
Totals	330,394	949,882	87,144	1,050,178	69,508	84,589	2,571,695

¹²² Class of user identifies the type of activity allowed. For motorized roads and trails, classes may include designated routes for highway-legal vehicles, OHVs, or two-wheeled vehicles. For non-motorized routes, classes may include designated routes for mountain biking, hiking, or horseback riding.

¹²³ Implementation-level travel management planning decisions generally constitute the BLM’s final approval allowing on-the-ground actions to proceed. These types of decisions require site-specific planning and environmental (e.g., NEPA) analysis. The implementation level travel management planning will be conducted using an interdisciplinary team approach to address all resource uses, including administrative, recreation, commercial and associated modes of travel (motorized, mechanized and non-motorized types).

R.S. 2477 Assertions

Section 8 of the Mining Act of 1866 provided that “be it further enacted, that the right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted.” The statute was self-enacting; rights were established by construction of a highway on unreserved public lands without acknowledgement or action by the Federal government. Congress later recodified this section of the statute as Revised Statute 2477 (R.S. 2477). The FLPMA repealed R.S. 2477 in 1976 with a savings provision for prior rights to be established.

There are a total of 53 documented R.S. 2477 assertions within the decision area: 2 in the Coos Bay District, 14 in the Eugene District, 1 in the Klamath Falls Field Office, 10 in the Medford District, 10 in the Roseburg District, and 16 in the Salem District.

A travel management plan is not intended to provide evidence bearing on—or address the validity of—R.S. 2477 assertions. R.S. 2477 rights are determined through a process independent of the BLM’s planning process. Consequently, travel management planning does not take into consideration R.S. 2477 assertions or evidence. Travel management planning is based upon resource uses and associated access to public lands and waters. Should a decision be made on R.S. 2477 assertions, the BLM may adjust travel routes accordingly.

Issue 1

How would the alternatives affect the BLM’s ability to provide trail and travel opportunities in western Oregon?

Summary of Analytical Methods

The BLM analyzed the effect of the alternatives and the Proposed RMP on trail and travel opportunities based on the acres designated as *open*, *limited*, or *closed* for public motorized access.

Although the BLM has some site-specific and anecdotal information about illegal public motorized travel activities, the BLM does not have a basis for predicting the location or effects of any widespread or systematic illegal public motorized travel activities. In addition, much of the decision area has physical limitations to potential illegal public motorized travel activities such as dense vegetation, steep slopes, and locked gates. Terrain, vegetation, and a greater amount of open spaces in most of the interior/south can lead to degradation and erosion in a greater proportion than most of the coastal/north where vegetation is denser and terrain is steeper. However, at this scale of analysis, the BLM does not have a basis for characterizing current illegal public motorized travel activities or forecasting potential illegal public motorized travel activities in the future under any of the alternatives and the Proposed RMP. The site-specific and anecdotal information that the BLM has about illegal public motorized travel activities is fragmentary and highly variable. Many areas that are experiencing illegal public motorized travel activities are apparently similar in characteristics such as public access, proximity to population centers, and terrain to many other areas that are not experiencing illegal public motorized travel activities. To use this site-specific and anecdotal information to project illegal public motorized travel activities in other areas within the decision area or to project future illegal public motorized travel activities would be unreliable and speculative. Therefore, in this analysis, the BLM assumed that members of the public participating in motorized travel recreation typically operate vehicles consistent with BLM decisions about public motorized travel opportunities.

The Planning Criteria provides additional information on analytical assumptions, methods and techniques, and geographic and temporal scales, which is incorporated here by reference (USDI BLM 2014, pp. 115–119).

Background

All alternatives and the Proposed RMP would designate all lands in the decision area as *open*, *limited*, or *closed* to public motorized access, which are defined as follows:

- **Open**—Areas where the BLM does not limit public motorized travel activities since there are no issues regarding resources, visitor conflicts, or public safety to warrant limiting cross-country travel
- **Limited**—Areas where the BLM has restricted public motorized travel activities in order to meet recreational and resource management objectives; restrictions may include the number or types of vehicles, the time or season of use, uses required to be permitted or licensed; and uses limited by existing or designated roads and trails
- **Closed**—Areas that the BLM has closed to all public motorized travel activities to protect resources, ensure visitor safety, or reduce visitor conflicts

For areas designated as *limited*, the BLM would designate through subsequent, implementation-level travel management planning the types or modes of public travel, the limitations on time or season of use, the limitations to certain types of vehicles, the limitations on specific public routes, or limitations of other types.

The BLM based all designations on the protection of resources, the promotion of safety for all users, and the minimization of conflicts of users of BLM-administered lands. In developing the action alternatives and the Proposed RMP, the BLM applied the following designation criteria (43 CFR 8342.1) when designating lands as *open*, *limited*, or *closed* to public motorized access:

- Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.*
- Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.*
- Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.*
- Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.*

In applying the following designation criteria to the action alternatives and the Proposed RMP, the BLM designated lands with special management designations as follows:

- **Lands with wilderness values**—The BLM designated all Wilderness Areas and District-Designated Reserve – Lands Managed for their Wilderness Characteristics as *closed* under the action alternatives and the Proposed RMP to protect resources, ensure visitor safety, or reduce visitor conflicts and prevent impairment of wilderness suitability.
- **Recreation Management Areas and Areas of Critical Environmental Concern**—The BLM conducted site-specific reviews of the more than 450 Recreation Management Areas and Areas of Critical Environmental Concern to evaluate potential resource issues, visitor conflicts, or public safety concerns in determining the appropriate designation for each area. The public motorized access designation of each Recreation Management Area and Area of Critical Environmental Concern is provided in **Appendix O** and in **Appendix F (Table F-2)**, respectively. These designations include areas identified as *limited* and areas identified as *closed*. These site-specific evaluations considered desired recreation opportunities, recreational settings, relevant and important values, and special management needs to identify the appropriate public motorized

access designation. The BLM did not find any Recreation Management Areas or Areas of Critical Environmental Concern appropriate to designate as open.

The BLM designated all remaining BLM-administered lands as *limited* under the action alternatives and the Proposed RMP, even though not all remaining BLM-administered lands have legal public access due to the checkerboard nature of the planning area and right-of-way agreements across private lands that do not provide for public use. The BLM did not identify any acres under the action alternatives or the Proposed RMP where there would be no issues regarding resources, visitor conflicts, or public safety to warrant not limiting cross-country travel to designate as *open*.

The BLM would make refinements as needed to public travel routes within lands designated as *limited* through additional analysis and implementation-level travel management planning. The BLM would collaborate with affected and interested parties in evaluating the designated road and trail network for suitability for active route use and management, envisioning potential changes to the existing system or adding new trails that would help meet current and future demands within lands designated as *limited*. In conducting such evaluations, the BLM would apply designation criteria in 43 CFR 8342 and use prioritization guidance provided in **Appendix Q** for determining the order for completion of these evaluations.

Affected Environment and Environmental Consequences

The BLM currently manages 63 individual public trails and trail systems, with over 395 miles of trails in the decision area. Trail-based recreation opportunities within the decision area include supporting public trail systems for motorized and non-motorized users and providing a range of available activities across various recreation settings. Popular activities include hiking, mountain biking, horseback riding, and riding OHVs. **Appendix Q** contains an overview of the existing trail opportunities within the decision area.

The BLM would provide specific opportunities for both motorized and non-motorized trails in portions of the decision area designated for motorized use under RMA designations (see the Recreation section of this chapter). These designations would increase opportunities over the long-term by facilitating increased funding for motorized routes and trails and non-motorized trails.

Under the action alternatives and the Proposed RMP, the BLM would designate varying acreage of RMAs that would emphasize public motorized recreation activities (see the Recreation section of this chapter and **Appendix O**). Management of these RMAs would, over time, concentrate public motorized recreation activities within these RMAs and reduce dispersed motorized travel activities on other BLM-administered lands. Motorized users would be attracted to greater opportunities within these managed areas that provide targeted public motorized recreation opportunities.

For visitors engaging in non-motorized activities within RMAs specifically managed for motorized travel activities, the quality of their experiences would diminish to these extent that their activities would be incompatible with motorized travel activities. Over time, visitors seeking non-motorized forms of recreation would avoid RMAs specifically managed to accommodate motorized travel activities. In general, RMAs specifically managed for motorized travel activities would segregate user groups, eventually resulting in an overall improvement in the quality of experiences for all visitors.

If the BLM would not specifically manage some RMAs for motorized recreation opportunities, visitors seeking motorized forms of recreation would experience reduced opportunities over time. Therefore, conflicts between motorized and non-motorized visitors would increase in popular use areas, resulting in lower quality recreation experiences for both non-motorized and motorized visitors.

Public Motorized Access Designations

Table 3-218 summarizes public motorized access designations across the decision area by alternative and the Proposed RMP.

Table 3-218. Public motorized access designations

Trails and Travel Management Designations	No Action (Acres)	Alt. A (Acres)	Alt. B (Acres)	Alt. C (Acres)	Alt. D (Acres)	PRMP (Acres)
<i>Open</i>	319,661	-	-	-	-	-
<i>Limited</i>	2,088,946	2,345,575	2,325,663	2,296,313	2,320,987	2,322,820
<i>Closed</i>	63,539	128,757	148,551	178,001	153,305	156,036

None of the action alternatives or the Proposed RMP would designate any areas as *open* to public motorized access. The BLM would designate the 319,661 acres designated as *open* under the No Action alternative as *limited* or *closed* under all action alternatives and the Proposed RMP (**Table 3-218**). The reduction in acres *open* to public motorized travel activities would not directly equate to a concurrent decrease in public motorized travel opportunities across the decision area, because most of the areas that designated as *open* under the No Action alternative are located on steep, densely forested terrain, which is not conducive to cross-country motorized travel, regardless of designation. The BLM classifies only 7 percent of the area designated as *open* under the No Action alternative as non-forest habitat. The forested conditions on the remaining acreage generally confines public motorized travel activities to existing roads and trails, despite their current *open* designations. Nevertheless, eliminating the areas designated as *open* would result in some site-specific and localized loss of public motorized recreation opportunities, while improving non-motorized recreational experiences in these areas.

A *limited* designation would reduce cross-country public motorized travel activities in an area but would not eliminate it from existing or designated routes. Under all alternatives and the Proposed RMP, the BLM would designate the majority of the decision area as *limited* for public motorized access (**Table 3-218**). Alternative A would have the largest area designated as *limited*, followed by Alternative B, the Proposed RMP, Alternative D, and Alternative C. All action alternatives and the Proposed RMP would designate more acres as *limited* than the No Action alternative. In areas designated as *limited* to existing routes, the BLM would make changes in public travel opportunities (including non-motorized travel) consistent with 43 CFR 8342.1 – Designation Criteria, primarily through subsequent implementation-level travel management plans, which would designate specific roads and trails available for public travel and make specific restrictions. The BLM would improve or expand designated routes to enhance visitor experiences or to meet increasing demand subsequent to implementation-level travel management plans. In addition, through implementation-level travel management planning, the BLM would also prohibit or restrict public travel on routes that are not designed or suitable for travel activities or that are only compatible for certain types of travel in order to reduce visitor conflicts and improve public safety.

A *closed* designation would completely prohibit public motorized travel activities in the designated area. All action alternatives and the Proposed RMP would increase the acreage designated as *closed* to public motorized access compared to the No Action alternative (**Table 3-218**). The total acres *closed* to public motorized access would vary by action alternative and the Proposed RMP, largely due to variation in the acreage of RMAs, ACECs, and District-Designated Reserve – Lands Managed for their Wilderness Characteristics, from 128,757 acres under Alternative A to 178,001 acres under Alternative C (**Table 3-218** and **Table 3-3**). The BLM would designate some RMAs as *closed* to public motorized travel activities under the action alternatives and the Proposed RMP, to provide for Primitive recreation opportunities. The increase in *closed* acres would result in some site-specific and localized loss of public

motorized recreation opportunities, while improving non-motorized recreational experiences in these areas.

Table 3-219 shows the acreage *closed* to public motorized access by land use allocation or designation by alternative and the Proposed RMP.

Table 3-219. Areas *closed* to public motorized access by land use allocation or designation

District/ Field Office (Area)	Land Use Allocation or Designation	Alt. A (Acres)	Alt. B (Acres)	Alt. C (Acres)	Alt. D (Acres)	PRMP (Acres)
Coos Bay	Recreation Management Areas	102	101	101	1,234	-
	Areas of Critical Environmental Concern	5,183	5,183	5,183	5,183	5,183
	District-Designated Reserve – Lands Managed for their Wilderness Characteristics	2,467	2,473	2,472	-	2,473
Eugene	Recreation Management Areas	52	294	2,893	3,955	2,598
	Areas of Critical Environmental Concern	6,899	6,899	6,548	6,975	6,975
Klamath Falls	Recreation Management Areas	9	7,061	16,167	13,884	13,416
	Areas of Critical Environmental Concern	-	-	-	-	-
Medford	Recreation Management Areas	17,096	30,045	26,320	35,754	12,816
	Areas of Critical Environmental Concern	11,302	11,302	11,302	11,302	11,302
	District-Designated Reserve – Lands Managed for their Wilderness Characteristics	68,645	73,994	62,904	-	74,119
	Wilderness	8,590	8,590	8,590	8,590	8,590
Roseburg	Recreation Management Areas	158	6,913	9,018	10,408	6,563
	Areas of Critical Environmental Concern	10,197	10,197	10,197	10,197	10,197
Salem	Recreation Management Areas	97	15,730	32,724	40,231	2,920
	Areas of Critical Environmental Concern	9,565	9,491	8,887	9,565	9,491
	District-Designated Reserve – Lands Managed for their Wilderness Characteristics	2,533	58	1,516	-	2,515
	Wilderness	5,703	5,703	5,703	5,703	5,703
Decision Area	Recreation Management Areas	17,514	60,144	87,223	105,466	38,313
	Areas of Critical Environmental Concern	34,650	34,515	33,893	34,905	43,148
	District-Designated Reserve – Lands Managed for their Wilderness Characteristics	79,709	76,525	66,190	-	79,107
	Wilderness	14,293	14,293	14,293	14,293	14,293
Grand Totals*		128,757	148,551	178,001	153,305	156,036

* Grand totals do not total the sum of acres within the alternatives due to overlap within the alternatives and Proposed RMP of RMAs, ACECs, and District-Designated Reserve – Lands Managed for their Wilderness Characteristics. Additionally, some areas that are designated as *closed* are not within RMAs, ACECs, District-Designated Reserve – Lands Managed for their Wilderness Characteristics, or Wilderness. Grand totals reflect total acres designated as *closed* for each alternative or the Proposed RMP after removing the duplication of acres.

The No Action alternative would designate 13 percent of the decision area as *open* for public motorized access. Under the No Action alternative, most of the decision area (84 percent) would be designated as *limited* for public motorized access until the BLM would complete implementation-level travel management planning. This acreage designated as *limited* would be substantially lower than all action alternatives and the Proposed RMP. The No Action alternative would maintain the designation of 3 percent of the decision area as *closed* for public motorized access, substantially smaller than all action alternatives and the Proposed RMP. Although the No Action alternative is the only action alternative that would maintain any areas as open and would maintain the fewest acres as closed, the No Action alternative would result in the eventual decrease of motorized recreation opportunities because of limited management of RMAs for motorized recreation. Over time, the absence of RMAs specifically managed for motorized recreation opportunities under the No Action alternative would result in increasing conflicts between motorized and non-motorized visitors, resulting in lower quality recreation experiences for both non-motorized and motorized visitors.

Under Alternative A, most of the decision area (95 percent) would be designated as *limited* for public motorized access until the BLM would complete implementation-level travel management planning. Alternative A would designate a smaller acreage as *closed* for public motorized access than the other action alternatives and the Proposed RMP. However, under Alternative A, the BLM would not establish any RMAs that emphasize public motorized travel activities. Compared to the No Action alternative, Alternative A would designate more areas as *closed*, and would designate more RMAs for non-motorized trail use (**Appendix O**). Although Alternative A would designate fewer total acres within RMAs as *closed* to public motorized access, it would designate a higher proportion of RMAs as *closed* for public motorized access (87 percent). Overall, even though Alternative A would designate fewer total acres as *closed* than all other action alternatives or the Proposed RMP, Alternative A would result in the eventual decrease of motorized recreation opportunities due to the absence of RMAs for motorized recreation.

Under Alternative B, most of the decision area (94 percent) would be designated as *limited* for public motorized access until the BLM would complete implementation-level travel management planning. Alternative B would designate more acres as *closed* than the No Action alternative, Alternative A and the Proposed RMP, but fewer acres than Alternatives C and D. Alternative B would designate more RMAs for both motorized and non-motorized trail uses compared to Alternative A. Alternative B would restrict fewer acres within RMAs as *closed* to public motorized access than Alternatives C and D, but more acres than Alternative A and the Proposed RMP.

Under Alternative C, most of the decision area (93 percent) would be designated as *limited* for public motorized access until the BLM would complete implementation-level travel management planning. Alternative C would designate more total acres as *closed* than all other alternatives and the Proposed RMP. Alternative C would designate fewer RMA acres as *closed* than Alternative D, but more than Alternatives A and B and the Proposed RMP. Overall, even though Alternative C would designate more total acres as *closed* than any other alternative or the Proposed RMP, Alternative C would result in the eventual increase of motorized recreation opportunities due to the increase in acres designated as RMAs for motorized recreation.

Under Alternative D, most of the decision area (94 percent) would be designated as *limited* for public motorized access until the BLM would complete implementation-level travel management planning. Alternative D would designate more total acres as *closed* than the No Action alternative, Alternatives A and B, and fewer acres than Alternative C and the Proposed RMP. Although Alternative D would designate more RMA acres as *closed* than any other action alternative or the Proposed RMP, Alternative D would not allocate any District-Designated Reserve – Lands Managed for their Wilderness Characteristics, which would reduce the total acreage designated as *closed*.

Under the Proposed RMP, most of the decision area (94 percent) would be designated as *limited* for public motorized access until the BLM would complete implementation-level travel management planning. The Proposed RMP would designate more total acres as *closed* than the No Action alternative, Alternatives A, B, and D, but fewer acres than Alternative C. The Proposed RMP would designate fewer RMA acres as *closed* than Alternatives B, C, and D, but more than Alternative A. The Proposed RMP would designate fewer ACEC acres as *closed* than all action alternatives. Overall, even though the Proposed RMP would designate the second-most total acres as *closed*, the Proposed RMP would result in the eventual increase of motorized recreation opportunities due to the increase in acres designated as RMAs for motorized recreation.

Issue 2

How will the alternatives affect the use, maintenance, and condition of the BLM's transportation system?

Summary of Analytical Methods

The BLM used road ratios (feet/Mbf) from two sources to estimate miles of new road construction required for implementation of the No Action alternative and all the action alternatives and the Proposed RMP. These road ratios reflect different road requirements for different types of harvest. The BLM used ratios developed for the 2008 FEIS for the regeneration harvest and uneven-aged management harvest, and road ratios developed from 6 years (FY2007–FY2012) of harvest volume sold data and timber sale contract data for the commercial thinning harvest. The BLM is unable to use the harvest volume or timber sale contract data source for regeneration harvest or uneven-aged management harvest because the BLM has not implemented enough of these harvests in the recent past to provide new road construction data for either of these harvest types.

Uneven-aged management and commercial thinning harvest typically require more new road construction than regeneration harvest. The average road ratios (feet/Mbf) across the decision area for uneven-age management harvest are 20 percent higher than the road ratios for regeneration harvest, and the road ratios for commercial thinning harvest are 70 percent higher than for regeneration harvest. The Medford District is an exception to the rule for commercial thinning harvest, as these ratios are actually 30 percent lower than for regeneration harvest.

The BLM projected miles of road renovation and purchaser renovation value, miles of road improvement, and miles of road closure for each of the alternatives and the Proposed RMP using 6 years (FY2007–FY2012) of harvest volume sold data and timber sale contract data. The BLM projected total miles of the road network utilized for each alternative and the Proposed RMP using 8 years (CY2005–CY2012) of BLM timber sale contract haul data.

The BLM assumed that current trends in road closures would continue into the future, because road closure mileage is not be sensitive to harvest levels, given that most BLM-administered lands are encumbered by reciprocal right-of-way agreements. In other words, even if the harvest level would indicate an opportunity for road closure, the BLM would not be able to accomplish these closures in some locations due to the need to protect reciprocal right-of-way holders' rights to use BLM-owned roads.

In this analysis, the BLM evaluated the following:

- Miles of permanent and temporary new road construction
- Miles of permanent and long-term road closure
- Road network mileage changes
- Miles of road renovation and improvement
- Miles of the existing road network utilized

- Road maintenance fees collected as a percentage of annual maintenance need
- Value of purchaser renovation as a percentage of the BLM’s deferred maintenance backlog

The Planning Criteria provides more detailed information on analytical assumptions, methods and techniques, and geographic and temporal scales, which is incorporated here by reference (USDI BLM 2014, pp. 127–130).

Affected Environment

Road Network Description

The following functional classifications describe the BLM’s western Oregon transportation system:

- **Collector roads**—Roads that primarily provide access to large blocks of public land, accommodate multiple uses, have BLM’s highest traffic volumes, and connect with state and county road systems
- **Local roads**—Roads that normally serve smaller areas than collectors, accommodate fewer uses, have lower traffic volumes, and connect with collectors or State and County road systems
- **Resource roads**—Roads that provide point access to public lands, typically exist for a single use, carry very low traffic volumes, and connect with local or collector roads

These functional classifications indicate the character of service the roads provide and the appropriate road maintenance intensity levels from basic custodial care to annual scheduled and preventative maintenance programs.

Table 3-220 shows the distribution of the functional classifications within the BLM’s western Oregon transportation system. Currently, slightly less than 5 percent of the transportation system falls into the collector classification, while about 21 percent of the system is local, and nearly 75 percent resource.

Table 3-220. Miles of BLM-managed roads within the decision area by functional classification

District/ Field Office	Collector Roads (Miles)	Local Roads (Miles)	Resource Roads (Miles)	Total Roads (Miles)
Coos Bay	186	408	1,302	1,896
Eugene	71	422	1,524	2,017
Klamath Falls	47	154	323	524
Medford	156	981	3,452	4,589
Roseburg	94	581	2,193	2,868
Salem	101	546	1,789	2,436
Totals	655	3,092	10,583	14,330

The total inventoried BLM transportation system mileage has remained relatively steady since 2007; there are currently 14,330 miles compared to 14,394 miles in 2007. Additionally, the BLM owns approximately 600 miles of non-inventoried roads—typically short (< 500 feet) logging spurs—within the boundaries of the decision area. Eighty-one percent of the BLM transportation system has some form of surfacing (aggregate or bituminous surface treatment), with 97 percent built to a single lane width.

Road Network Condition

Table 3-221, Table 3-222, and Table 3-223 summarize western Oregon road, bridge, and major culvert condition data, respectively.

Table 3-221. Road condition, mileage, replacement value, and deferred maintenance backlog

District/ Field Office	Road Condition	Mileage	Replacement Value (Dollars)	Deferred Maintenance (Dollars)
Coos Bay	Fair/Poor	397	\$314 million	\$20 million
	Good	1,499	\$1.216 billion	\$1 million
	Totals	1,896	\$1.530 billion	\$21 million
Eugene	Fair/Poor	537	\$361 million	\$23 million
	Good	1,480	\$1.267 billion	\$2 million
	Totals	2,017	\$1.628 billion	\$25 million
Klamath Falls	Fair/Poor	66	\$47 million	\$6 million
	Good	458	\$241 million	\$1 million
	Totals	524	\$288 million	\$7 million
Medford	Fair/Poor	1,540	\$1.061 billion	\$123 million
	Good	3,049	\$2.016 billion	\$4 million
	Totals	4,589	\$3.077 billion	\$127 million
Roseburg	Fair/Poor	1,176	\$730 million	\$85 million
	Good	1,692	\$934 million	\$5 million
	Totals	2,868	\$1.664 billion	\$90 million
Salem	Fair/Poor	575	\$408 million	\$46 million
	Good	1,861	\$1.347 billion	\$1 million
	Totals	2,436	\$1.755 billion	\$47 million
Totals	Fair/Poor	4,291	\$2.921 billion	\$303 million
	Good	10,039	\$7.021 billion	\$14 million
Grand Total		14,330	\$9.942 billion	\$317 million

Table 3-222. Bridge condition, replacement value, and deferred maintenance backlog

District/ Field Office	Bridge Condition	Count	Replacement Value (Dollars)	Deferred Maintenance (Dollars)
All Offices	Fair/Poor	53	\$34.5 Million	\$7.1 Million
	Good	306	\$249.9 Million	\$1.5 Million
Grand Total		359	\$284.4 Million	\$8.6 Million

Table 3-223. Major culvert condition, replacement value, and deferred maintenance backlog

District/ Field Office	Major Culvert Condition	Count	Replacement Value (Dollars)	Deferred Maintenance (Dollars)
All Offices	Fair/Poor	18	\$1.8 Million	\$1.2 Million
	Good	526	\$57.3 Million	-
Grand Total		544	\$59.1 Million	\$1.2 Million

The overall replacement value (the current cost to rebuild the network from scratch) of the BLM transportation system is about \$9.9 billion. Approximately 30 percent of the road mileage is in fair or poor condition, primarily due to depleted surfacing aggregate and worn-out minor culverts. Currently the

deferred maintenance backlog is about \$317 million. However, 85 percent of bridges and 97 percent of major culverts (> 7 foot diameter) are in good condition.

Road Maintenance

The BLM is responsible for maintaining roads under the BLM's ownership. 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 and extraction, recreation, and fire management activities.

Each year, the districts identify and prioritize annual maintenance work. Currently the BLM maintains about 14 percent of the western Oregon transportation system each year. The miles of annual maintenance the BLM conducts has declined in recent years. From 2007 to 2013, the annual maintenance mileage declined about 47 percent, from 3,926 miles in 2007 to 2,064 miles in 2013. Annual maintenance work ranges from aggregate surface blading and roadside brush removal, to pothole repair and culvert replacement. The BLM funds annual maintenance of roads from a combination of appropriated funds and a collected account. Commercial timber haul, both BLM and private, generates funds paid into the collected account based on a maintenance fee for volume-hauled and mileage-used.

Although BLM appropriated funding has remained flat over the last two decades, the BLM's collected account has declined from \$8 million to about \$3 million annually over the past 25 years. This reduction is due entirely to BLM's declining timber sale offerings, since private use of the network has remained constant over the last two decades. This BLM funding shortfall creates a gap between annual maintenance need and actual annual maintenance expenditure, resulting in a large and growing deferred maintenance backlog, currently about \$317 million.

Road Closure

There are times when the BLM determines that a road closure or travel restriction may be warranted. The objectives of road closure are typically for safety or resource protection, such as 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 BLM districts coordinate in advance with potentially affected reciprocal right-of-way permittees on decisions to close roads for the purpose of protecting permittee rights to use BLM-owned roads. Should permittees not concur on BLM-proposed long-term or permanent closures, these proposals must be dropped, thus limiting the BLM's opportunities to reduce road densities.

The BLM currently has about 900 miles (6 percent) of the transportation system in a long-term decommissioned status. These are resource roads that have been closed to vehicles and left in an erosion-resistant condition; they may be re-opened in the future as needed. Slightly more than half of these miles have a natural surface type.

Environmental Consequences

New Road Construction

Timber harvest operations would require construction of additional resource roads under each of the alternatives and the Proposed RMP. No new collector or local roads would be needed as this portion of the transportation network was fully built out decades ago. **Table 3-224** summarizes the estimated new permanent and temporary road construction by surface type for the first decade.

Table 3-224. First decade new road construction by road surfacing and status

Alternative/ Proposed RMP	Temporary Rock (Miles)	Temporary Natural (Miles)	Permanent Rock (Miles)	Permanent Natural (Miles)	Total (Miles)
No Action	32	283	245	77	637
Alt. A	29	90	147	33	299
Alt. B	44	197	216	74	531
Alt. C	60	230	335	74	699
Alt. D	24	71	117	28	240
PRMP	35	170	173	59	437

In the first decade, total resource road new construction mileages would range from 240 miles for Alternative D to 699 miles for Alternative C, with the Proposed RMP requiring 437 miles.

In the first decade, new construction of permanent resource roads would range from 145 miles for Alternative D to 409 miles for Alternative C, with the PRMP producing 232 miles. The Proposed RMP permanent mileage would represent 1.5 percent of the existing western Oregon road network. Approximately 75 percent of these new Proposed RMP permanent road miles would be surfaced with aggregate. All new construction would be single lane width. **Table 3-225** contains a summary of the estimated new road construction by harvest type for the first decade.

Table 3-225. First decade new road construction associated with harvest methods

Alternative/ Proposed RMP	Regeneration Harvest (Miles)	Thinning Harvest (Miles)	Uneven-aged Harvest (Miles)	Totals (Miles)
No Action	309	328	-	637
Alt. A	232	10	57	299
Alt. B	149	195	187	531
Alt. C	467	112	120	699
Alt. D	94	15	131	240
PRMP	137	129	171	437

The amount of new construction attributable to each harvest type would vary greatly among the alternatives and the Proposed RMP; regeneration harvest would range from 28 percent (Alternative B) to 78 percent (Alternative A), thinning harvest would range from 3 percent (Alternative A) to 51 percent (No Action), and uneven-age management harvest would range from 17 percent (Alternative C) to 55 percent (Alternative D). New construction mileages under the Proposed RMP would be fairly evenly divided among the three harvest types. **Table 3-226** to **Table 3-231** contain a summary of the estimated new permanent and temporary road construction by office and surface type for the first decade.¹²⁴

¹²⁴ These estimates represent analytical results based on the assumptions described in the Summary of Analytical Methods above. The BLM has made these assumptions and estimations solely for analytical purposes. These mileages of new permanent and temporary road construction by office and surface type for the first decade do not represent management direction or restrictions on future road construction under any of the alternatives and the Proposed RMP. Road construction under each alternative and the Proposed RMP would be implemented consistent with the management direction consistent with project-level analysis and decision-making.

Table 3-226. No Action first decade new road construction by road surfacing and status

District/ Field Office	Temporary Rock (Miles)	Temporary Natural (Miles)	Permanent Rock (Miles)	Permanent Natural (Miles)	Totals (Miles)
Coos Bay	8	36	37	25	106
Eugene	1	64	80	-	145
Klamath Falls	-	-	-	3	3
Medford	6	65	66	40	177
Roseburg	3	57	53	6	119
Salem	14	61	9	3	87
Totals	32	283	245	77	637

Table 3-227. Alternative A first decade new road construction by road surfacing and status

District/ Field Office	Temporary Rock (Miles)	Temporary Natural (Miles)	Permanent Rock (Miles)	Permanent Natural (Miles)	Totals (Miles)
Coos Bay	10	15	25	3	53
Eugene	4	4	40	1	49
Klamath Falls	-	-	-	1	1
Medford	9	26	42	23	100
Roseburg	1	16	25	-	42
Salem	5	29	15	5	54
Totals	29	90	147	33	299

Table 3-228. Alternative B first decade new road construction by road surfacing and status

District/ Field Office	Temporary Rock (Miles)	Temporary Natural (Miles)	Permanent Rock (Miles)	Permanent Natural (Miles)	Totals (Miles)
Coos Bay	5	26	25	20	76
Eugene	3	36	65	1	105
Klamath Falls	-	-	-	2	2
Medford	23	42	76	42	183
Roseburg	2	41	35	4	82
Salem	11	52	15	5	83
Totals	44	197	216	74	531

Table 3-229. Alternative C first decade new road construction by road surfacing and status

District/ Field Office	Temporary Rock (Miles)	Temporary Natural (Miles)	Permanent Rock (Miles)	Permanent Natural (Miles)	Totals (Miles)
Coos Bay	18	38	53	14	123
Eugene	9	22	105	2	138
Klamath Falls	-	-	-	3	3
Medford	17	49	76	43	185
Roseburg	3	55	73	3	134
Salem	13	66	28	9	116
Totals	60	230	335	74	699

Table 3-230. Alternative D first decade new road construction by road surfacing and status

District/ Field Office	Temporary Rock (Miles)	Temporary Natural (Miles)	Permanent Rock (Miles)	Permanent Natural (Miles)	Totals (Miles)
Coos Bay	6	8	12	3	29
Eugene	4	3	37	-	44
Klamath Falls	-	-	-	1	1
Medford	10	20	37	20	87
Roseburg	-	16	21	-	37
Salem	4	24	10	4	42
Totals	24	71	117	28	240

Table 3-231. Proposed RMP first decade new road construction by road surfacing and status

District/ Field Office	Temporary Rock (Miles)	Temporary Natural (Miles)	Permanent Rock (Miles)	Permanent Natural (Miles)	Totals (Miles)
Coos Bay	3	17	16	13	49
Eugene	3	28	56	1	88
Klamath Falls	-	1	-	1	2
Medford	17	37	62	35	151
Roseburg	2	40	27	5	74
Salem	10	47	12	4	73
Totals	35	170	173	59	437

The Medford District would require more new permanent road construction than the other western Oregon offices for each of the alternatives and the Proposed RMP. While the road ratios (feet/Mbf) for regeneration harvest and uneven-aged management harvest are about 2.5 times greater in the Medford District than the average of the other offices—due to the Medford District’s lower per acre harvest volumes—the road ratios for commercial thinning harvest is roughly equal across all the offices. The Medford District accounts for 35 percent of the new road miles for the Proposed RMP while producing only 18 percent of the total harvest volume.

Road Closure

The BLM would accomplish both permanent and long-term road closures under each of the alternatives and the Proposed RMP. **Table 3-232** and **Table 3-233** summarize estimated permanent and long-term road closures by surface type for the first decade. The BLM has concluded that there is no reasonable basis to project a difference in road closure mileages among the alternatives and the Proposed RMP. Regardless of any changes in management of BLM-administered lands under the alternatives and the Proposed RMP, the opportunities for the BLM to close roads would continue to be heavily influenced by the need to protect reciprocal right-of-way holders' rights to use BLM-owned roads.

Table 3-232. First decade permanent road closure

District/ Field Office	Rock (Miles)	Natural (Miles)	Totals (Miles)
Coos Bay	2	29	31
Eugene	4	38	42
Klamath Falls	-	-	-
Medford	1	7	8
Roseburg	-	10	10
Salem	1	1	2
Totals	8	85	93

Table 3-233. First decade long-term road closure

District/ Field Office	Rock (Miles)	Natural (Miles)	Totals (Miles)
Coos Bay	35	96	131
Eugene	49	4	53
Klamath Falls	-	9	9
Medford	-	10	10
Roseburg	7	75	82
Salem	27	61	88
Totals	118	255	373

Permanent road closures, aimed primarily at natural surface roads, would affect substantially less than 1 percent of the western Oregon road network in the first decade.

Long-term road closures, implemented at a 2:1 ratio of natural surface type to rock surface type, would increase the percentage of the BLM road network in a long-term closure status from its current 6 percent to 8 percent by the end of the first decade.

In the first decade, net permanent road mileage changes would range from an increase of 52 miles for Alternative D to an increase of 316 miles for Alternative C. Net permanent road mileage would increase by 139 miles for the Proposed RMP, representing a 1 percent increase in the existing western Oregon road network.

Road Renovation and Road Improvement

The BLM will accomplish both renovation and improvement of existing roads needed for timber sale use under each of the alternatives and the Proposed RMP to support anticipated use, to provide for safety, and

to protect adjacent lands and resources. Renovation consists of restoring a degraded road to its original design standard such as replacing worn out cross drain culverts and depleted rock surfacing. Improvement consists of upgrading the original design standard such as adding cross drain culverts and rock surfacing to an existing natural surface road. **Table 3-234** summarizes the estimated existing road renovation and improvement for the first decade.

Table 3-234. First decade existing road renovation and improvement

Alternative/ Proposed RMP	Renovation (Miles)	Improvement (Miles)
No Action	6,667	311
Alt. A	3,669	223
Alt. B	5,098	287
Alt. C	7,495	526
Alt. D	2,685	161
PRMP	4,295	246

In the first decade, road renovation mileages would range from 2,685 miles for Alternative D to 7,495 miles for Alternative C. The Proposed RMP would generate 4,295 miles of renovation, approximately 80 percent of which would occur on rock surface roads. Renovation of some roads would occur more than once in the first decade. Renovation tasks typically include roadside brushing, ditch line and culvert cleaning, culvert replacement, rock surface replacement, and pothole patching on paved roads.

In the first decade, road improvement mileages would range from 161 miles for Alternative D to 526 miles for Alternative C. The Proposed RMP would generate 246 miles of improvement, virtually all of which would consist of rock natural surfaced roads, thus increasing the percentage of surfaced roads by 2 percent from the current 81 percent.

Road Utilization, Maintenance, and Condition

The BLM performed a reference analysis of “Manage most commercial lands for maximizing timber production” in the 2008 FEIS (USDI BLM 2008, pp. 573–574) and that analysis is incorporated here by reference. This reference analysis evaluated the outcomes if all BLM-administered lands in the planning area capable of producing a long-term flow of commercial timber volume would be managed under intensive forest management, without regard for the requirements of other laws or the purpose and need for action. The BLM presents this reference analysis in the context of road utilization, maintenance, and condition as a benchmark in the presentation of the analysis for the alternatives and the Proposed RMP. See the Forest Management section of this chapter for further description of harvest levels from this reference analysis.

Table 3-235 contains a summary of estimated road utilization by surface type for the first decade for each of the alternatives and the Proposed RMP and the 2008 reference analysis (BLM 2008, p. 484, **Table 3-60**).

Table 3-235. First decade existing road utilization by surface type

Alternative/ Proposed RMP	Paved (Miles)	Paved (Percent)	Rock (Miles)	Rock (Percent)
No Action	2,667	191%	4,115	40%
Alt. A	1,666	120%	2,561	25%
Alt. B	2,222	159%	3,416	33%
Alt. C	3,734	268%	5,741	56%
Alt. D	1,206	87%	1,854	18%
2008 FEIS Reference Analysis	8,047	577%	12,370	120%
PRMP	1,859	133%	2,858	28%

In the first decade, rocked road utilization percentages would range from 18 percent for Alternative D to 56 percent under Alternative C. Similarly, the first decade paved road utilization percentages would range from 87 percent for Alternative D to 268 percent under Alternative C. The Proposed RMP utilization percentage would be 28 percent for rocked roads and 133 percent for paved roads. In comparison, the 2008 “Manage most commercial lands for maximizing timber production” reference analysis rocked and paved utilization percentages would be 120 percent and 577 percent (i.e., each paved road mile will be used 5.77 times) respectively.

Table 3-236 and **Table 3-237** summarize estimated road maintenance fee collections by surface type for the first decade for each of the alternatives and the Proposed RMP and the 2008 reference analysis. The BLM based these estimates on both road utilization ratios developed from 8 years (CY2005–FY2012) of BLM timber sale road use activity—at a western Oregon scale—and BLM’s current road maintenance fee rate schedule. Additionally, the tables compare maintenance fee collections to the annual maintenance need for roads as reported in the Facility Asset Management System (the BLM’s constructed asset inventory).

Table 3-236. First decade paved road maintenance fee collections compared to annual maintenance (AM) need

Alternative/ Proposed RMP	Road Use (Mbf-Miles)	Maintenance Fee/Mbf-Mile (Dollars)	Maintenance Fee Collected (Dollars)	AM Need (Dollars)	AM Need (Percent)
No Action	11.9 M	\$0.71	\$8.4 M	\$80 M	10%
Alt. A	7.4 M	\$0.71	\$5.3 M	\$80 M	6%
Alt. B	9.9 M	\$0.71	\$7.0 M	\$80 M	9%
Alt. C	16.6 M	\$0.71	\$11.8 M	\$80 M	15%
Alt. D	5.4 M	\$0.71	\$3.8 M	\$80 M	5%
2008 FEIS Reference Analysis	35.8 M	\$0.71	\$25.4 M	\$80 M	32%
PRMP	8.3 M	\$0.71	\$5.9 M	\$80 M	7%

Table 3-237. First decade rocked road maintenance fee collections compared to annual maintenance (AM) need

Alternative/ Proposed RMP	Road Use (Mbf-Miles)	Maintenance Fee/Mbf-Mile (Dollars)	Maintenance Fee Collected (Dollars)	AM Need (Dollars)	AM Need (Percent)
No Action	5.4 M	\$1.46	\$7.9 M	\$88 M	9%
Alt. A	3.4 M	\$1.46	\$4.9 M	\$88 M	6%
Alt. B	4.5 M	\$1.46	\$6.6 M	\$88 M	7%
Alt. C	7.5 M	\$1.46	\$11.0 M	\$88 M	12%
Alt. D	2.4 M	\$1.46	\$3.6 M	\$88 M	4%
2008 FEIS Reference Analysis	16.2 M	\$1.46	\$23.7 M	\$88 M	27%
PRMP	3.8 M	\$1.46	\$5.5 M	\$88 M	6%

In the first decade, rocked road maintenance fee collection would range from 4 percent of annual maintenance need for Alternative D to 12 percent for Alternative C. Similarly, the first decade paved road maintenance fee collections range from 5 percent of annual maintenance need for Alternative D to 15 percent for Alternative C. The Proposed RMP would generate maintenance fee collections of 6 percent of annual maintenance need for rocked roads and 7 percent of annual maintenance need for paved roads. In comparison, the 2008 “Manage most commercial lands for maximizing timber production” reference analysis rocked and paved road maintenance fee collection percentages would be 27 percent and 32 percent respectively.

The BLM’s other sources of annual maintenance funding during the first decade would not vary by alternative and the Proposed RMP: (1) assumed annual maintenance appropriation of \$63 million, and (2) private commercial timber haul maintenance fee collections of \$25 million. When sources of funding are combined, the total amount available for annual maintenance expenditures for both rocked and paved roads would range from \$95 million for Alternative D (57 percent of annual maintenance need) to \$111 million for Alternative C (66 percent of annual maintenance need). The Proposed RMP would generate total annual maintenance expenditures of \$99 million (59 percent of the \$168 million annual maintenance need). In comparison, the 2008 “Manage most commercial lands for maximizing timber production” reference analysis would generate total annual maintenance expenditures of \$137 million (82 percent of annual maintenance need).

Under all alternatives and the Proposed RMP, the road utilization rates would be insufficient to close the gap between annual maintenance expenditure and annual maintenance need, with the shortfall largest for Alternative D and least for Alternative C. The road utilization rates for the 2008 “Manage most commercial lands for maximizing timber production” reference analysis would be insufficient to close the gap between annual maintenance expenditure and annual maintenance need. The BLM is likely to continue to accrue new deferred maintenance in the first decade under any of the alternatives and the Proposed RMP. Given the higher utilization rates for paved roads relative to rocked roads, new deferred maintenance would likely skew towards rocked roads.

Table 3-238 contains a summary of the estimated value of timber sale purchaser renovation for the first decade for each of the alternatives and the Proposed RMP and the 2008 reference analysis. Additionally, the table compares renovation expenditures to the deferred maintenance backlog for roads as reported in the Facility Asset Management System (the BLM’s constructed asset inventory).

Table 3-238. First decade paved and rock-surfaced roads renovation expenditures compared to the deferred maintenance (DM) backlog

Alternative/ Proposed RMP	Total Harvest Volume (Mbf)	Renovation Expenditure/ Mbf (Dollars)	Renovation Expenditure (Dollars)	Current DM Backlog (Dollars)	DM Backlog (Percent)
No Action	3,995,556	\$9.55	\$38.2 M	\$317 M	12%
Alt. A	2,486,143	\$9.55	\$23.7 M	\$317 M	7%
Alt. B	3,316,594	\$9.55	\$31.7 M	\$317 M	10%
Alt. C	5,573,610	\$9.55	\$53.2 M	\$317 M	17%
Alt. D	1,800,457	\$9.55	\$17.2 M	\$317 M	5%
2008 FEIS Reference Analysis	12,010,000	\$9.55	\$114.7 M	\$317 M	36%
PRMP	2,775,140	\$9.55	\$26.5 M	\$317 M	8%

Renovation expenditures would reduce the BLM’s \$317 million deferred maintenance backlog. In the first decade, renovation expenditures would range from 5 percent of the deferred maintenance backlog for Alternative D to 17 percent for Alternative C. The Proposed RMP would generate renovation expenditures of \$26 million (8 percent of the deferred maintenance backlog). In comparison, the 2008 “Manage most commercial lands for maximizing timber production” reference analysis would generate renovation expenditures of 36 percent.

The only source of deferred maintenance funding other than timber sale purchaser renovations would be the BLM’s deferred maintenance program, which has assumed appropriation of \$20 million and would not vary by alternative and the Proposed RMP. When both sources are combined, the total amount available for deferred maintenance expenditures on surfaced roads during the first decades would range from \$37 million for Alternative D (12 percent of the deferred maintenance backlog) to \$73 million for Alternative C (23 percent of the deferred maintenance backlog). The Proposed RMP would generate total deferred maintenance expenditures of \$46 million (15 percent of the deferred maintenance backlog). In comparison, the 2008 “Manage most commercial lands for maximizing timber production” reference analysis would generate total deferred maintenance expenditures of \$135 million (42 percent of the deferred maintenance backlog).

Across all the alternatives and the Proposed RMP, the **net** deferred maintenance backlog would continue to grow, since reductions in the deferred maintenance backlog due to timber sale purchaser renovation expenditures and deferred maintenance program spending would be less than the new deferred maintenance generated by the gap between annual maintenance need and actual annual maintenance expenditure. The 2008 “Manage most commercial lands for maximizing timber production” reference analysis would result in a decline of the **net** deferred maintenance backlog substantially in the first decade.

References

- USDI BLM. 2011. Bureau of Land Management Travel and Transportation Manual–1626. http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/blm_manual.Par.38105.File.dat/1626.pdf
- . 2012. Bureau of Land Management Travel and Transportation Handbook–8342. http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.34786.File.dat/8342.pdf
- . 2014. Resource Management Plans for Western Oregon Planning Criteria. Bureau of Land Management, Oregon/Washington State Office, Portland, OR. <http://www.blm.gov/or/plans/rmpswesternoregon/files/rmp-criteria.pdf>
- . 2014. Review of Revised Bureau of Land Management Travel and Transportation Manual. WO IM 2015-032. December 18, 2014. http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2015/IM_2015-032.html

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