Form 1221-2
(June 1969)

	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MANUAL TRANSMITTAL SHEET	**Release** **8-82** **Date** **03/16/2012**

Subject

H-8342 Travel and Transportation Handbook (Public)

1. **Explanation of Material Transmitted:** This Handbook provides specific guidance for preparing, amending, revising, maintaining, implementing, monitoring, and evaluating BLM land use and travel management plans. It provides further guidance related to the objectives, authorities, responsibilities, and policy considerations outlined in Manual Section 1626, Travel and Transportation Management. The material in this Handbook will replace the previous guidance issued in Appendix C, section II. D of the Land Use Planning Handbook (H-1601-1).

2. **Reports Required:** None.

3. **Material Superseded:** None.

4. **Filing Instructions:** File as directed below.

Remove: **Insert:**
None   All of H 8342-1
                                                     (Total 148 pages)

/s/ Edwin L. Roberson
Assistant Director, Renewable Resources and Planning

United States
Department of the Interior
Bureau of Land Management

Travel and Transportation

Management Handbook

BLM HANDBOOK H-8342-1

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I. Introduction

The introduction section provides information on the purpose of this Handbook, a brief background of travel and transportation management (TTM) and basic information on the types of decisions to be made in the TTM process. Later sections provide more detail of the TTM process.

A. The Purpose of this Handbook and the Need for Travel and Transportation Management Guidance

This Travel Management Handbook (Handbook) clarifies policy and establishes procedures for implementing travel and transportation planning and management in the Bureau of Land Management (BLM) land use and implementation plans. This Handbook describes how to comprehensively manage travel and transportation on public land through the development of comprehensive travel networks.

Travel and transportation planning must go beyond motorized or off-highway vehicle (OHV) activities to address non-motorized travel and recreational needs, as well as resource issues. A key goal of this Handbook is to integrate resource programs in an interdisciplinary manner in the planning and management of a travel and transportation network that best meets the full range of public, resource management and administrative access needs.

Diverse travel management settings exist on BLM-administered lands as a result of public access needs and recreational interests, landscape types, and characteristics of the existing network of transportation routes (either planned or unplanned). The TTM must account for legal and administrative access needs, recreation activities, and the wide range of resource concerns and existing management designations on BLM-administered lands.

The TTM process seeks to identify and understand the use of existing transportation features (roads, primitive roads and trails), incorporate the existing and future needs for transportation, access and recreational opportunities, and use an interdisciplinary planning process to develop appropriate travel networks and recreational opportunities that reflect the environmental concerns and legal requirements of a Resource Management Plan (RMP) process.

The goal of the TTM process is to create travel networks that are logical and sustainable, as well as meet the increasingly diverse transportation, access and recreational needs of the public. The process moves from broad scale interdisciplinary planning achieved in a RMP, to more specific Activity or Area Plans, and further to specific implementation and maintenance actions for roads, primitive roads, trails, and other access and recreation related needs.

B. Background of Travel and Transportation Planning and Management

In the early 1980s, in response to Presidential Executive Orders 11644 and 11989, the BLM began designating all public lands in one of three OHV designation categories because of public concern regarding the proliferation of unplanned roads and trails and their impact on public land resources. More recently, as a national response to increasing demand for recreation trails on the public lands, the BLM developed an OHV strategy and a mountain bike strategy. These two strategies emphasize that the BLM should be proactive in seeking travel management solutions that conserve natural resources, while providing ample recreation opportunities

C. Travel and Transportation Management Decisions – What Decisions are you Going to Make?

   i.   Resource Management Planning Level Decisions

          The RMPs ensure that the public lands are managed in accordance with the intent of Congress as stated in the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1701 *et seq*.), under the principles of multiple use and sustained yield. Decisions in the RMPs guide future land management actions and subsequent site-specific implementation decisions. Decisions contained in RMPs are called land use plan (LUP) decisions. These broad-scale decisions direct future land management actions and subsequent site-specific implementation decisions.

   1.   TTM decisions for the RMP: OHV Area Designations

         The OHV area designations are LUP decisions related to transportation, rather than implementation decisions. The designation of areas as Open, Limited, or Closed to OHV use is required for every acre within the planning area boundary of an RMP that is managed by the BLM.

   2.   Identification of Travel Management Areas

         Field offices can, where needed, delineate Travel Management Areas (TMA) that meet the RMP objectives for each alternative. Where there are unique or shared circumstances, high levels of controversy, or complex resource considerations, TMAs may be delineated to address particular concerns and prescribe specific management actions for a defined geographic area. These are usually identified where TTM (either motorized or non-motorized) requires particular focus or increased intensity of management. While OHV area designations are mandatory LUP allocations, TMAs are an optional planning tool to

frame transportation issues and help delineate travel networks that
address specific uses and resource concerns.

ii.   Implementation Level Decisions

Implementation level 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., National Environmental Policy
Act of 1969 or NEPA) analysis.

TTM Implementation Level Decisions

The designation of the individual roads, primitive roads and trails, whether
completed concurrent with the RMP or deferred in the RMP, are addressed as
an implementation level plan tiered from the RMP. Travel and transportation
decisions can be developed as a stand-alone Travel Management Plan (TMP)
or incorporated into activity management plans, such as those for recreation or
energy. All TTM planning should be completed within five (5) years of the
signing of the Record of Decision (ROD) for the RMP. The TTM planning
will be conducted using an interdisciplinary (ID) team approach to address all
resource uses, including administrative, recreation, commercial and associated
modes of travel (motorized, mechanized and non-motorized types).

II.   Developing a TTM Strategy and Planning Schedule

A.   Statewide Strategy

In 2009, each of the BLM State Offices were required to develop a TTM action plan
that included a planning schedule to establish specific timeframes within which travel
management plans are to be developed. These action plans and planning schedules
are the primary tools available to state offices when strategic decisions are made in
prioritizing planning efforts. Priorities can be based on a variety of factors depending
on the circumstances in each state. High priority for TTM planning is often given to
areas with wildland/urban interface related resource impact and user conflict issues,
areas with sensitive, threatened or endangered species or related habitats, and/or areas
with significant cultural resources. It is essential that state offices maintain a current
action plan and planning schedule so that limited funding can be targeted most
effectively.

B.   District/Field Office/NLCS Unit Strategy

As with the statewide TTM action plan and planning schedule, each BLM district,
field office or National Landscape Conservation System (NLCS) unit should maintain
its own strategy for completing TTM planning and implementation. This should be

performed in coordination with the state office TTM action plan. Many BLM districts, field offices and NLCS units encompass millions of acres of publicly managed land that require TTM planning and management. Determining where to begin the TTM process and the priority order in which it will proceed is necessary to manage such a large workload that often takes many years. A well-developed action plan and planning schedule that prioritizes the planning and implementation work is essential to effective TTM.

III.   Fundamental Components of the TTM Planning Process

A.   Essential Planning Elements

Effectively integrating the TTM framework into the LUP process requires addressing these four essential planning elements:

i.   Comprehensive: Managers are to consider access needs and should incorporate management prescriptions for all motorized, mechanized, and non-motorized travel and access that occurs on public lands. The TTM prescriptions should be implemented in a holistic approach that provides clear direction for access and recreation opportunities while protecting sensitive areas and meeting resource management objectives of all resource programs.

ii.   Interdisciplinary: The TTM must be interdisciplinary, requiring all affected BLM resource programs to actively participate throughout the planning process and during the implementation phase.

iii.   Collaborative: Collaboration is a process in which interested parties, often with widely varied interests, work together to seek solutions with broad support for managing public lands. Collaboration mandates methods, not outcomes; it does not imply that parties will achieve consensus. Depending on local circumstances and the judgment of the field manager, varying levels of collaboration may be used in specific involvement processes. Travel plans should be accomplished in a collaborative process by incorporating internal and external input from cooperating agencies, communities, and interest groups.

iv.   Outcome-based: Travel and transportation systems should be identified, designated, and managed in such a manner that they support the RMP desired outcomes. In order to meet this outcome-based element, the implemented transportation and access prescriptions should:

- Meet resource program goals and objectives, and be consistent with social and environmental objectives for allowing travel and determining transportation networks in the area;

- Provide appropriate levels of access and associated benefits to both recreation travelers and resource users;

- Ensure that prescribed setting characteristics are maintained; and

- Establish the primary means and modes of travel allowed for accomplishing the planning objectives.

B.   Need for Multi-modal Access

Comprehensive travel and transportation planning must consider and address all resource and administrative access needs, including a wide range of modes of travel: motorized; non-motorized; mechanized (cycling, mountain biking, etc.); stock and animal-powered transportation (horses, dog sleds, wagons, etc.); winter modes of travel including skiers, snow-shoes, and snowmobiles; water transportation (motorized and non-motorized boating); and aircraft (helicopters, wheel and float planes, ultra-lights, gliders, etc.). Access across BLM-managed lands to Federal and state-owned waters and for aircraft landings on land and water, should also be considered where appropriate. The final transportation network developed by the TTM process needs to support resource management decisions and other authorized activities, while protecting resources and the public lands to the greatest extent possible.

C.   Interdisciplinary Team Approach

The TTM process, like other planning processes, identifies the need to use an ID team approach involving those program specialists who are responsible for resources that are directly affected by TTM decisions. These specialists include recreation and visitor services, wilderness, lands and realty, engineering, energy and minerals, renewable resources (range, riparian, wildlife, wild horse & burro, soils, water, and air), law enforcement, cultural resources (prehistoric and historic), and subsistence (Alaska) specialists as needed to address specific program issues and needs. The ID team should be led by a transportation planner or someone very familiar with the TTM planning process. Additionally, the ID team must include a Geographic Information System (GIS) specialist who can conduct the analysis and develop the planning maps that will be needed.

The ID team will develop an initial list of specific travel and transportation issues from existing information, including transportation inventories, land health assessments, other resource monitoring efforts, and public input. The TTM issues to be considered include the following:

- Determining if the existing travel and transportation systems are meeting current and future needs, such as access, desired recreational outcomes and resource needs;

- Determining the types of travel and transportation assets that are required to meet the access and recreational outcome needs;

- Determining the range of impacts to sensitive resources being caused by the existing travel and transportation systems and possible mitigations; and

- Determining the types of conflicts (social and biophysical) that may be occurring due to the present configuration of the transportation system.

Additional information will be collected from external stakeholders and the public during scoping and throughout the planning process. Planning alternatives developed during the planning process may include decisions that will need to be addressed by the ID team.

D. Administrative Record

During the pre-planning analysis, the process for developing and maintaining the administrative record needs to be established. The administrative record contains an assortment of supporting documentation used during the planning effort. This documentation includes all public comments and comments from other agencies or government entities, supporting studies, environmental surveys, prior planning documents and maps, records of consultations and supporting technical information and references to published sources. If the planning document were challenged in court, the administrative record would be relied upon to provide all information that led to the decisions. The record for TTM planning must include adequate documentation of the route-selection decision-making process. This must include documentation of how each of the designation criteria in 43 CFR 8342.1 was considered. Refer to the BLM's National Environmental Policy Act Handbook H-1790-1 (Section 13.4.1 and Appendix 10) for detailed information regarding maintaining an administrative record.

IV. Land Use Planning

A. Preplanning

It is important to consider TTM planning in the pre-planning phase of a LUP revision. This is the time to re-evaluate the district/field office/NLCS unit TTM action plan and planning schedule.

i. Inventory

An assessment of the current ground transportation linear feature (GTLF) database should be conducted during the pre-planning stage. The GTLF geospatial database is the comprehensive baseline inventory of all transportation

related routes, both motorized and non-motorized, that exist on the BLM-managed lands for a particular planning area. In many areas, this baseline inventory will be incomplete or inaccurate. It is essential that a credible GTLF baseline inventory be available for any TTM planning efforts where specific route designation decisions are anticipated. The TTM action plan will indicate which areas are higher in priority for the completion of TTM planning. As part of the LUP pre-plan, GTLF baseline data needs should be identified as well as how the data is to be gathered.

ii.   Data Gathering

It is also important to identify other data needs that relate to a LUP area or sub-area when preparing for TTM planning. For example, a visitor use survey that may be needed for a recreation planning effort may require modification to determine access or trail related needs. Or, particular information related to an area with sensitive habitat concerns may be essential for TTM planning in the context of habitat fragmentation.

B.   Determine Concurrent or Deferred TTM Planning

The planning unit TTM action plan and planning schedule should indicate which areas, if any, of the LUP planning unit are to have implementation level TTM planning completed concurrently with the land use planning process and which areas, if any, are to be deferred until after the LUP process has been completed. Possible reasons for not completing the final network might be size or complexity of the area, controversy, incomplete data, or other constraints.

If sufficient travel and transportation information is available for a smaller area or sub-unit within the planning area, such as a TMA, consider completing the TTM planning as part of the RMP and deferring the remainder of the RMP planning area to an implementation level travel management plan(s).

The TTM planning can be prioritized to focus on areas that are most heavily used, or areas that have existing social conflicts, resource concerns, or a defined need for route definition or development for administrative, public access or other needs first. These areas may require consideration of new route development and/or existing route relocation in addition to route decommissioning.

In some cases, the need for TTM is in the development of a functional and sustainable transportation system that meets current and future needs. In other cases, TTM is necessary to restore areas with a proliferation of user-created routes. These areas may place greater reliance on evaluating existing routes and decommissioning undesirable routes in the TTM process.

C. Designation of Off-Highway Vehicle (OHV) Management Areas.

All public lands are required to have off-highway vehicle area designations (as defined in 43 CFR 8340.0-5 (a) *See* Appendix 3, Glossary of Terms). For OHV area designations, s*ee* 43 CFR 8342.1. The OHV area designations are land use allocations that must be determined in the RMP and classified as open, limited or closed to motorized travel. Criteria for open, limited and closed area designations are established in 43 CFR 8340.0-5(f), (g) and (h), respectively. The OHV area designations do not apply to non-motorized travel, though areas can be designated for non-motorized transportation systems in the RMP process. The designation of OHV areas should consider the needs for a variety of road, primitive road and trail systems tailored to various users, including non-motorized.

The "open," "limited" and "closed" area designations, and the criteria established for route selection in areas designated as limited, are RMP-level decisions and can be protested under the planning regulations (*see* 43 CFR 1610).

i. Open Area Designations

Areas designated as "open" are intended for intensive OHV or other transportation use areas where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.

Existing laws, proclamations, regulations or Executive Orders may limit the use of the open area designation or impose additional requirements relating to travel and transportation planning and management in specific circumstances. Because of significant increases in OHV use on public lands and the development of new vehicle technologies, the designation of large areas that remain open to unregulated cross-country travel is no longer a viable management strategy. However, the BLM may consider designating open areas where unlimited or unregulated cross-country travel does not pose resource damage concerns or where use related impacts can be mitigated or reduced to an acceptable level.

Open areas will be limited to a size that can be effectively managed and geographically identified to offer a quality OHV opportunity for participants. Expansive open areas allowing cross-country travel, without a corresponding and identified user need or demand, will not be designated in RMP revisions or new travel management plans.

ii. Limited Area Designations

Areas where transportation use must be restricted to meet specific objectives are 'limited' area designations. For areas classified as limited, the BLM must consider a full range of possibilities. Limitations include those related to:

- Types or modes of travel;

- Identified roads, primitive roads and trails;

- Time or season of use;

- Certain types of vehicles (i.e. OHVs, motorcycles, all-terrain vehicles, high clearance, etc.);

- Authorized or permitted vehicles or users; or

- BLM administrative use only or other types of limitations.

Field offices should identify where motorized over-the-snow travel is acceptable and/or should be limited. Motorized over-the-snow travel may be limited by vehicle type, season, snow-depth, or other conditions as necessary. Under the 'limited' designation, motorized cross-country, over-the-snow, travel may be allowed. Each limited area should clearly address limitations related to over-the-snow use as circumstances require.

Additionally, the BLM must provide specific guidance about the process for managing motorized vehicle access for authorized, permitted, or otherwise approved vehicles for those specific categories of motorized vehicle uses that are exempt from a limited OHV designation.

Area designations limiting motorized use to existing roads, primitive roads and trails can only be made on an interim basis as a preliminary step leading to the selection of a designated network of roads, primitive roads and trails. This interim designation may only be used when the development of a designated road, primitive road and trail network for all, or a sub-unit, of the planning area is deferred until after the RMP is completed. The RMP must clearly identify the process leading from the interim area designation of "limited to existing roads, primitive roads and trails" to the development of a designated network of roads, primitive roads and trails. The RMP should state that the area designation will change from "limited to existing roads, primitive roads, and trails" to "limited to designated roads, primitive roads, and trails" upon the completion of a travel management plan. Even though 'use on existing roads' appears within the definition of 'limited area' in 43 CFR 8340.0-5(g), it has been determined that, due to the specific mention of 'areas and trails' in 43 CFR 8342.1(a)-(d), individual routes must be evaluated to determine whether they can be managed in accordance with the designation

criteria; regardless of whether use is to be limited to 'existing' routes. This leaves little practical distinction in the evaluation process between 'designated' and 'existing' routes. A 'designated' route system provides more long-term management flexibility in terms of being able to add, delete or relocate routes in the transportation system.

iii.   Closed

Areas where OHV use is prohibited: Areas, roads, and/or trails are designated closed if closure to all OHV use is necessary to protect resources, promote visitor safety or reduce user conflicts. Administrative/authorized use of motor vehicles may be allowed within these areas.

Except as otherwise provided by law, congressionally designated wilderness areas are statutorily closed to motorized and mechanized use. Routes in these areas must be identified, along with the mode of travel.

D.   Consideration of National Landscape Conservation System Designations

The TTM planning must be completed for all national monuments and congressionally designated national conservation areas, national recreation areas, cooperative management and protection areas, outstanding natural areas, forest reserves, and the Conservation Lands of the California Desert (in accordance with the establishing statute or Presidential Proclamation).

The LUPs must reference, incorporate, or be amended with provisions for applicable:

- National monument or national conservation area plans required by the Presidential proclamation or the act of Congress that established each national monument or national conservation area.

- National Scenic and Historic Trails (NSHT) comprehensive management plans required by the National Trails System Act. *See* The National Scenic and Historic Trails Manual and Handbook Series for supplemental guidance.

- National wild and scenic rivers comprehensive river management plans required by the Wild and Scenic Rivers Act. *See* the Wild and Scenic Rivers Manual and Handbook Series for supplemental guidance.

- Wilderness management plans (non-motorized and non-mechanized trails only) required by the Wilderness Act. *See* the Wilderness Manual and Handbook Series for supplemental guidance.

All TTM decisions pertaining to National Monuments, National Conservation Areas and similar designations will conform to RMP/EIS-level plans, and will be in accordance with the establishing statute or Presidential proclamation.

E.   Other TTM Considerations for LUP

    i.   Administrative Designations

Management of existing or proposed new administrative designations, such as national scenic or backcountry byways and national recreation trails, also must be addressed in RMPs. These administrative designations must be consistent with the goals and objectives for the planning area.

    ii.   Water and Air Travel

The RMPs shall address access across BLM-managed lands to Federal and state-owned waters and for aircraft landings on land and water. Recreational backcountry airstrips can be an integral part of a balanced and efficient transportation system. Backcountry airstrip designations must be consistent with the goals and objectives for the planning area and applicable Federal Aviation Administration regulations.

    iii.   Authorized and Permitted Uses

Use of OHVs can be administratively authorized or permitted for non-casual activities, such as accessing range developments, exploration for energy or minerals, and access to inholdings. Authorizations or permits that include OHV activities shall address the use of OHVs as part of the authorization or permit. Authorized OHV activities may require an appropriate level of NEPA analysis, should be compatible with the LUP goals, and may have use stipulations and limitations associated with the authorization or permit. This includes travel over land, water, snow, and landing of aircraft related to permitted commercial or authorized activities.

    iv.   Accessibility

Under section 504 of the Rehabilitation Act of 1973, no person with a disability can be denied participation in a Federal program that is available to all other people solely because of his or her disability. Wheelchair and mobility devices, including those that are battery-powered, that are designed solely for use by a mobility-impaired person for locomotion, and that are suitable for use in an indoor pedestrian area, are allowed in all areas open to foot travel. There is no legal requirement to allow people with disabilities to use motor vehicles on roads, primitive roads, or trails or in areas that are

closed to motor vehicle use. Restrictions on motor vehicle use that are applied consistently to everyone are not discriminatory. Generally, granting an exemption from designations for people with disabilities would not be consistent with the management objectives of the planning area.

v.   Designation of Transportation Corridors

The BLM may determine the locations and boundaries of right-of-way (ROW) corridors during the LUP process. The RMPs may include transportation corridors identified for future facility development. The RMP process may identify and assess different options for regional or local transportation corridors and select a particular corridor with the purpose of narrowing the range of possible locations for roads to be sited and developed in the future by other jurisdictions.

The BLM may designate any transportation and utility corridor existing prior to October 21, 1976, as a transportation and utility corridor without further review. The RMP or plan amendment may also identify areas where the BLM will not allow ROW corridors for environmental, safety, or other reasons (43 CFR 2802.11).

F.   Delineation of Travel Management Areas

Field offices can, where appropriate, delineate TMAs that meet the RMP objectives for each alternative. Where there are unique or shared circumstances, high levels of controversy, or complex resource considerations, TMAs may be delineated to address particular concerns and prescribe specific management actions for a defined geographic area. These are usually identified where TTM (either motorized or non-motorized) requires particular focus or increased intensity of management. While OHV area designations are mandatory LUP allocations, TMAs are an optional planning tool to frame transportation issues and help delineate travel networks that address specific uses and resource concerns. To help ensure that travel decisions support program-specific management objectives, the BLM should strive to make TMA boundaries correspond with the management areas defined for various land and resources programs. For example, within the planning area, there may be two very different areas identified that are located next to each other. One may be a Special Recreation Management Area (SRMA) that is being managed to provide OHV recreational trail opportunities, while the other could be a Wilderness Area that is managed to maintain its wilderness characteristics or a National Historic Landmark. These areas would likely need to be identified as two different TMAs, each of which would implement very different TTM prescriptions.

The TMAs may also be delineated to aid in the manageability of the travel planning process. For example, it may be useful to divide a larger planning area into TMAs

due to the differing public involvement needs. The TMAs could be based on county or other community based boundaries.

Dividing an area into TMAs can also allow for higher priority areas to go through the travel planning process first deferring areas with lower resource or user conflict concerns for later travel planning efforts. In cases where final, specific route and access designations in TMAs are to be deferred and addressed at a later date, the TMA is still required to have an OHV area designation. In these cases, the RMP should still determine and define the standards and guidelines for making future route and access designations.

To be comprehensive, TTM should consider the designation of non-motorized trails. The TMAs can be identified to provide for this type of use exclusively or to emphasize this use. The designation of non-motorized trails can occur without a legal restriction to stay only on these trails, or the planning decision can include a restriction to designated trails. If a field office chooses to restrict non-motorized travel to specific routes, it must do so through the development of supplemental rules through a Federal Register process, using 43 CFR8365.1-6 – Supplementary Rules (*see* 43 CFR 8365 – Rules of Conduct).

The RMP should include recreation goals, objectives, and direction for non-motorized trails and access. Particular attention should be paid towards areas and transportation facilities that are shared between different types of users, areas or facilities that are oriented by management/maintenance or designation for a particular type of use, and circumstances where one type of use may preclude or impact another. This direction may be included in RMP-wide direction, SRMA or Extended Recreation Management Area (ERMA)-specific direction or in RMP direction for specific TMAs.

When delineating TMAs and developing management prescriptions for these areas, the BLM should consider the following for allowing travel and establishing LUP objectives for the area:

- Other resource values and uses;

- Primary travelers;

- Emerging uses such as growing recreational-use types or traffic generated by local community growth;

- Setting characteristics that are to be maintained, including recreation setting characteristics (related to ROS – recreation opportunity spectrum) and visual resource management (VRM) settings;

- Primary means of travel allowed to accomplish the objectives and to maintain the setting characteristics;

- Social conflicts between different travel types;

- Social conflicts between public land visitors and adjacent private property owners;

- The number and type of access points;

- The baseline road system of Federal/state highways, county roads, and other ROW roads;

- Existing ROWs and likely future ROW requests;

- Existing geographic identity and public knowledge of particular areas; and

- Identifiable boundaries of the TMA based on topography, major roads, or other easily discernible elements.

G. Combining Land Use Planning and Implementation Level Decisions

The BLM may use a single land use planning/NEPA process to make both land use plan and implementation decisions, provided both types of decisions are adequately addressed with the appropriate level of NEPA analysis. Land use planning decisions are subject to protests only. Land use plan protests occur after publication of the Proposed RMP/Final EIS and prior to signature of the record of decision (ROD). Land use plan decisions are signed by the State Directors, and protests are resolved by the BLM Director (delegated to the Assistant Director for Renewable Resources and Planning). The BLM's protest procedures are contained in 43 CFR § 1610.5-2.

Implementation level decisions or proposed actions that are associated with an RMP are only subject to appeals. An example of an appealable implementation level decision within an RMP is the designation of an individual route as open, limited, or closed. Appeals are typically done after a final decision (the signing of a ROD for an RMP) has been made by the BLM. All appeals go to the IBLA to be decided upon – essentially asking the IBLA to make the BLM change its initial decision.

H. Travel Management Planning Deferred to an Implementation/Activity Level Plan

If the final travel and transportation network is to be deferred in the RMP, then the RMP serves to document the decision-making process used to develop the initial network; provides the basis for future management decisions; and sets guidelines for making transportation network adjustments throughout the life of the plan. The following tasks should be completed in the RMP for each planning area, or TMA:

i. Produce a map of the known and existing network of transportation linear features, including modes of travel. Examples include inventory maps provided by counties or other agencies, data collected as part of a route

inventory i.e., GTLF effort, BLM 100K maps, and maps based on digitized information from aerial photos.

ii.   Define the goals for the use, location, and development/decommissioning to implement the long-term, final transportation system.

iii.   Define interim management objectives for areas or sub-areas where route designations were not completed concurrent with the RMP. Clearly state the process of moving from an interim designation of "limited to existing roads, primitive roads and trails," to a designation of "limited to designated roads primitive roads and trails" upon completion of TMPs.

iv.   Identify any uncompleted travel and transportation tasks:

1.   Outline additional data needs and a strategy for collection. Data needs may include the completion of a baseline route inventory, data on threatened and endangered, or sensitive species, or habitat, cultural resources, range utilization or improvements, invasive weeds, vegetation, soils, herd management areas, mineral exploration, and/or developments, etc. Additional scoping meetings or follow-up meetings with constituents may be required.

2.   Provide a clear planning sequence, including public process (focusing on user groups and stakeholders), initial route selection criteria, and constraints for subsequent road and trail selection and identification.

3.   Provide a schedule to complete the area or sub-area road, primitive road and trail selection process.

v.   Identify any easements and rights-of-way to be issued to the BLM or others needed to maintain the preliminary or existing road and trail network. For example, easements needed to cross private inholdings that were historically used by the public and the BLM, but with increasing development and urbanization, are being gated and restricted.

V. Travel and Transportation Management Planning – Implementation Level

The designation of the individual roads, primitive roads and trails, whether completed concurrent with the RMP or deferred in the RMP, are addressed as an implementation level plan tiered from the RMP. Travel and transportation decisions can be developed as a stand-alone Travel Management Plan (TMP) or incorporated into activity management plans, such as those for recreation or energy. The TTM planning should be completed within five (5) years of the signing of the ROD for the RMP. The TTM implementation plan should be developed using an ID team to address all resource uses, including

administrative, recreation, commercial and associated modes of travel (motorized, mechanized and non-motorized types).

A. Travel Management Settings

Consideration of travel management is often determined by levels of use, proximity to urban centers, and resource constraints. Different combinations of settings may occur in the planning areas that require different approaches to travel management, including the following areas:

- **Backcountry areas:** where the use of roads or existing routes is the general concern. Use levels are generally low and established routes typically access key destinations or provide desired recreation opportunities as well as administrative access with relatively few resource or social conflicts. Some existing routes may be redundant, sited poorly, or cause resource impacts. Use levels and the dispersed nature of public use may allow for cross-country travel for one or more types of non-motorized users without causing adverse effects.

- **Front country or urban interface areas:** where route density, high level of access and user conflicts are often the major concerns. Use levels are high, and while these areas have a large number of routes, the diversity and quality of the routes may be low. Cross-country travel and undesignated routes may be causing resource and social impacts. The scale of these areas may vary where public lands exist adjacent to, or within metropolitan areas. Numerous small pockets of urban interface may be located in rural areas near smaller communities. Although smaller in scale, the same resource issues or social conflicts may be present. User expectations for transportation system use may vary widely, including desires for separation of uses by trail or area, demand for multiple access points to road, primitive road, and trail systems from private properties, and desire for limitations on the use of ROW roads or administrative roads.

- **Destination areas:** where public land visitors are attracted from local, regional, and national populations. These may be longstanding use areas or newly designated areas with increasing use. Visitor expectations may vary widely and new visitors may have increased expectations due to the special designation (e.g., National Conservation Area, National Monument, etc.) or marketing of the area initiated by other entities. Commercial and organized group use of the transportation system may be high or increasing. Use may be focused on certain areas, attractions, or entry portals.

B. Link Between Recreation and TTM Planning

The following discussion identifies the initial steps of the NEPA process and its application in the travel management process. In some situations, the link between recreation goals and outcomes, and transportation planning is very great. Indicators

of when a more detailed approach and/or recreation oriented approach to travel management may be needed include:

- The planning area has been listed on the "top 10" list in regional or national media due to a particular type of trail/recreation use;
- There are large numbers of YouTube videos or other media showing use of trails (either designated or undesignated) in the planning area;
- There are increasing numbers of trails being built or maintained without authorization in the area;
- Undesignated trail systems have signs and names;
- There is an increase in commercial or group use requests for trail dependent activities;
- One type of trail user group increasingly claims that their use is the "historic" or "valid" use;
- A range of user groups increase their comments and concerns regarding safety or trail damage caused by a different type of user;
- Guide books, maps and other information are available on-line or for sale at local businesses; or
- Parking and traffic problems become a regular occurrence at parking/staging areas.

For an example of how recreation and travel management planning can be accomplished in concert with each other, *see* the Table Mesa RMZ Recreation and Travel Management Plan, Appendix 6.

C.   Definition of Linear Transportation Features

The TTM planning occurs during the RMP process or at the implementation phase of the LUP process. To ensure consistency of information sharing, the BLM has adopted definitions for classifying three primary travel and transportation route types and asset categories. These classifications apply to BLM-designated travel networks, and may be further defined/classified as to difficulty levels, maintenance intensities, and allowable uses through LUP or Activity Plan decisions.

i.   Components of a Designated Travel Network

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. These may include ROW roads granted by the BLM to other entities.

Primitive Road: A linear route managed for use by four-wheel drive or high-clearance vehicles. These routes do not normally meet any BLM road design standards.

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.

ii.   Transportation Linear Disturbances

Routes that are not part of the BLM's designated transportation network are identified as "*Transportation Linear Disturbances*." These human-made linear features may include engineered (planned) as well as unplanned single and two-track linear features that are not part of the BLM's transportation system. These routes will usually be identified in a plan for decommissioning and rehabilitating unauthorized routes – a product of the TTM planning process.

iii.   Temporary Routes

Temporary routes are defined as short-term overland roads, primitive roads or trails authorized or acquired for the development, construction or staging of a project or event that has a finite lifespan. Temporary routes are not intended to be part of the permanent or designated transportation network and must be reclaimed when their intended purpose(s) has been fulfilled. Temporary routes should be constructed to minimum standards necessary to accommodate the intended use; the intent is that the project proponent (or their representative) will reclaim the route once the original project purpose or need has been completed. Temporary routes are considered emergency, single use or permitted activity access. Unless they are specifically intended to accommodate public use, they should not be made available for that use. A temporary route will be authorized or acquired for the specific time period and duration specified in the written authorization (permit, ROW, lease, contract etc.) and will be scheduled and budgeted for reclamation to prevent further vehicle use and soil erosion from occurring by providing adequate drainage and re-vegetation.

Complete reclamation of all temporary routes may not be desired or necessary in all situations. When temporary routes are required for periodic use, it may be more desirable to close the temporary route to use, assure proper hydrologic functioning of the road bed, and re-vegetate according to the prescription approved in the authorization than it would be to recontour soils and slopes to original conditions. In addition, sometimes the BLM allows the temporary route proponent to participate in approved off-site mitigation measures in lieu of reclaiming the temporary route. This type of off-site mitigation is subject to the approval of the BLM's authorized officer.

The BLM will identify, track, monitor, prioritize and fund the removal of unwanted transportation-related linear features. The requirement to reclaim temporary routes, and identify a responsible party and source of funds provides a formal approach for temporary route removal.

iv.   Route Designation Limitations Relating to Wilderness Study Areas

In Wilderness Study Areas (WSA), motorized and mechanized use may be permitted to continue along existing routes identified in the wilderness inventory conducted in support of Sections 603 and 202 of FLPMA. In these cases, final route classification is delayed until Congressional action is taken, or a LUP decision is made to close specific routes to motorized and mechanized use. Primitive roads and motorized/mechanized trails shall not be designated and classified as an asset within a WSA. Any motorized/mechanized linear transportation feature located within these areas will be identified in a transportation inventory as a motorized/mechanized "primitive route."

Routes in WSAs will not be classified as a transportation asset and entered into the Facility Asset Management System (FAMS) unless one of the following conditions is met:

- Congress designates the area as "wilderness" and the routes are designated as non-motorized and non-mechanized trails; or

- Congress releases the WSA from wilderness consideration and the routes are designated.

D.   Data Requirements for TTM Planning

The transportation systems on BLM-administered lands are as diverse as the landscape settings and communities that exist throughout the west. The BLM transportation systems may include improved roads, trailheads, user created routes and signs, airfields, informal staging areas and formal ROWs. The existing transportation system may not be evident or clearly documented, and is often a combination of state and/or local government maintained roads, designated BLM routes, undesignated routes historically used for grazing, minerals or other administrative purposes, formal rights-of-way grants, and all manner of user created routes and parking areas. The review of the existing transportation system should recognize those routes managed by non-BLM entities with existing valid ROWs. These routes can be thought of as the "baseline" transportation system, i.e., those routes that are not likely to be decommissioned during the life of the LUP.

Broader issues and opportunities that extend beyond the planning area and beyond BLM-administered lands should be considered. These issues include connections with transportation systems managed by other entities; traffic volumes and the condition of the regional road network; and trail systems and their connections/portals identified in tribal, state, county, community and other land management agency plans.

It is essential that the BLM identify all existing routes to the extent feasible. Much of this information may be available to the BLM from previous maps or information obtained during earlier BLM planning efforts. Additionally, with new technology readily available, the BLM can take advantage of various databases that provide both satellite and airborne imagery. In most cases, additional field data will need to be collected using GPS technology to fill gaps in the existing data or to categorize existing known routes with the data fields/data dictionary developed for the planning effort. The BLM has a step-by-step process of best practices in *Technical Reference 9113-1, Planning and Conducting Route Inventories*. The route data should be combined into the GTLF geospatial database. The GTLF is the BLM's standard architecture for transportation route data.

Elements of the transportation system to document may include:

- Existing transportation networks;

- Federal, state, local and tribal transportation systems;

- BLM-system roads and trails;

- ROWs for road and utility access;

- Identification of improved roads that provide for private property or utility access that lack existing ROW grants;

- Undesignated roads, primitive roads or trails (there are situations where improved and maintained roads exist on BLM-administered lands where the ROW status has not been determined);

- Existing Use Limitations on designated routes;

- Physical attributes of existing routes (width, surface type, surface condition, engineering features (culverts, drainage features, etc.), hazards, signs, gates, historic features, and other point data);

- Congressional, Presidential and administrative designations (National Conservation Areas, NSHT, Back Country Byways, National Recreation Trails, etc.);

- ROWs, easements and inholdings;

- Critical and or sensitive areas;

- Existing transportation setting, including:
  - Route density, habitat fragmentation
  - Unfragmented patch size, habitat effectiveness
  - The volume of traffic going through an area, or into specific portals or destinations
  - Key use areas or zones with different user types or areas with shared uses
  - Areas dominated by BLM-system roads that serve as arterials versus areas where state or county roads serve as arterials
  - Areas where ROWs make up the majority of travel routes
- Existing user created trailheads and staging areas;
- Condition on adjoining private or other jurisdiction (does route continue in same condition and apparent use outside BLM-administered lands, does it change physically or by user type?);
- Route proximity to sensitive habitats or resources;
- Route proximity to private property;
- Level of public use and maintenance issues on ROW roads;
- Legal access and trespass issues;
- Public safety and hazards on routes (e.g. steep or badly eroded routes);
- Legal approach permits and approvals for safe connections to county roads or state and Federal highways;
- Area designations that affect travel management;
- Access to resources;
- Mineral materials sites;
- Withdrawals;
- Routes identified as critical for administrative use;
- Access to grazing allotments or developments; and
- Needed patrol or fire suppression roads.

The BLM must determine if the collected information is adequate for analysis and decision-making, or if significant data gaps exist. Data needs are collectively determined by the planning criteria management concerns and issues previously identified during the pre-analysis phase of the planning process. If data is not available in existing forms, the BLM can solicit information from members of the public, various user groups, and local land owners. Data collected from the public or

other non-BLM entities should be verified by the BLM. It is ultimately the decision of the BLM which data will be used. During the preplanning phase, transportation data collection needs must be identified. This requires the BLM to develop a process for inventorying and collecting the data related to the existing travel and transportation network. The following issues should be addressed during data collection:

- Determine the data needs, budget, and project timeline.

- Identify and locate existing routes and modes of travel, and related transportation features.

- Develop GIS database and map of existing transportation network.

- Trails data shall conform to Federal Trails Data Standards (FTDS).

- FTDS apply to all trails data: Nationally designated (by Congress or Secretarial Order) and Regular trails.

- Use existing GTLF data categories, as appropriate.

- Recognize that some BLM travel management data are inaccurate or out of date and need to be field checked.

While the BLM should collect as much relevant information as possible during the RMP planning process, the data collection should be informed and guided by the issues and concerns identified by the ID team and through public scoping. Transportation data at the RMP level may tend to overlook the most recently created routes and fail to identify trails to a greater degree than roads. Input and collaboration with trail user groups, research through guidebooks and online trail information sources may be helpful in identifying areas where additional field data collection is important. Areas that are important local or regional destinations for trail use, or where dispersed recreation activities are highly popular (e.g., rockhounding) may require an interactive approach to data collection and public review of the transportation inventory.

The importance of making effective use of GIS technology cannot be overemphasized. For example, GIS can be utilized in the public involvement process to allow the public to have an interactive interface with the route data being presented. This can greatly facilitate the public's ability to understand and comment on the accuracy of the data that will be evaluated for possible inclusion in the designated route network (*see* Appendix 9 for examples of how GIS can facilitate the TTM process.)

E. TTM Preplanning

A pre-plan analysis that is well developed will set the scope of the transportation data inventory and the type of data that will need to be collected during the data collection

phase.   A key issue in travel management is the failure to identify the eventual use of data. This may lead to the collecting of too much data, collecting unnecessary data, or failing to collect the specific information needed for alternative development or analysis of alternatives. Additionally, data collection may identify any legal constraints that may determine access issues that are beyond the scope of the plan.

F. Analyze Management Situation (AMS) and Establish the Planning Criteria

The physical, administrative, and use characteristics of the planning area should be documented. During the RMP process this typically involves the preparation of an "Analysis of Management Situation (AMS)." In an implementation or activity plan, the AMS can be referenced and additional information collected and presented in the existing setting portion of the implementation plan Environmental Assessment (EA). The travel and transportation portion of the AMS serves several purposes in a RMP:

- identifies the existing travel and transportation network;
- discusses how that network is managed and used; and
- identifies the capability of the transportation network to respond to the identified issues, concerns, and opportunities.

The AMS, or existing transportation setting, should also describe the types of settings, experiences, and benefits that users are seeking through various modes of travel and determine activity trends to estimate future demands. The AMS should identify the context within which BLM-administered lands exist – both in terms of a larger regional transportation system, and how the BLM-administered lands are being used. Once completed, the AMS provides an excellent starting point for identifying the *no action* alternative and becomes or is a foundation for alternative analysis.

i.   Understand Transportation System Users

Identify travel management needs through an understanding of the habits of visitors, agency staff and administrative users, permitted users, local residents, ROW holders, and public road users traveling through the area. The BLM should strive to understand the needs of existing users, and the emerging or currently un-met demand for road and trail use in an area. Information to consider includes:

- Why people visit the area;

- Entrance and exit patterns and key destinations within the planning area;

- Seasonal, weekly, and hour of day trends;

- Size and type of vehicles/modes uses for travel (e.g., street legal vehicle, OHV, OHV Class, bicycle (road, mountain bike, and free-ride/downhill bike), equestrian or pack stock, pedestrian, etc.);

- Visitation by groups or commercial uses;

- Out of area visitation versus local;

- Where and how long visitors park their vehicles; and

- The most frequent transportation conflicts.

Gaining a thorough knowledge of travel management needs is a difficult task, particularly in larger scale RMP efforts that include large areas and many different communities. Travel management needs may also be difficult to fully identify in intensively used urban interface lands.

ii.   Anticipate Change

When generating the planning criteria for TTM, consider any reasonably foreseen future transportation developments or travel activities that may occur within or in close proximity to the planning area. These items should be incorporated into sideboards and used later for evaluating cumulative impacts (both direct and indirect). Examples include:

- Parcels lacking legal access should be considered to the extent possible, and future needed ROWs should be identified and included in the analysis, even if a request for an actual ROW grant has not been received;

- Changes in county, state or Federal highway status should be considered, particularly when BLM designated access points or trailheads may be located on these roads managed by other entities;

- Local community trails plans that indicate a designated trail link from a community to BLM-administered lands;

- Increased traffic levels on local roads due to development proposals or road capacity increases that affect crossing trails or ingress/egress to BLM-administered lands;

- Identification of improved/maintained roads that provide for private property access that do not have existing ROW grants;

- Reasonably foreseeable access needs for administrative use, including mining claims, grazing allotments, and new or upgraded road needs for public safety/fire suppression; and

- Changes in technology can lead to significant changes in the types of equipment the public wants to use on the transportation system.

Other changes to consider include potential increases in recreation use on BLM-administered lands. In some cases, current demand may already exceed the capacity of road and trail systems. In others, the development of additional or more highly publicized trail systems may exacerbate existing conditions such as road maintenance needs to access trailhead or staging areas.

G. Scoping

The TTM planning team must ensure that during the scoping period, travel and transportation information, issues, concerns, and opportunities are requested in the scoping notice. Consider putting extra emphasis on outreach early in the scoping process. Work closely with cooperators to develop an outreach strategy. Notify the public about the purpose of the TTM process, including criteria that will be used to analyze any proposed transportation system. Outcomes may result in limitations on travel and or road closures, as well as additions to the transportation network. Useful information for the development of a public involvement plan can be found in "*National Assessment of Travel Management Planning: Challenges, Recommendations, and Best Practices for Public Involvement*" (May 20, 2009, Institute for Environmental Negotiation, University of Virginia). *See also*, Appendix 9, GIS Tools for information on how to utilize GIS technology in the public involvement process.

While public participation is initiated during the scoping period, it is important that the BLM continue to actively solicit information from the public throughout the data collection phase and attempt to update the public throughout the planning process.

Access and recreational needs are not always clearly found by looking at the landscape, because many people either do not know about opportunities on BLM-administered lands or have elected to go elsewhere because of use conflicts or perception of hazards. Scoping and public input should be incorporated into the transportation planning process to help identify existing uses and needs.

Some examples of how to do this include:

- Use of field tours for the public in areas where they may be unfamiliar;
- Outreach through surveys developed by partners;
- Review of State Comprehensive Outdoor Recreation Plan data that shows existing regional trails demand and needs; and
- Meetings with trail advocacy groups.

H. Transportation System Development

Field offices will establish a process to identify, evaluate, and select specific routes available for motorized uses within the areas designated as limited to OHV use and specify limitation(s) or restrictions on type, duration, and season of uses or modes of transportation allowed. *See* Appendix 10: Examples of Area and Route Evaluation Documentation for an example of how the area and route evaluation can be conducted. The BLM can also identify goals for future route development to create particular types of OHV routes and ensure their functionality and sustainability. The process requires identification of all travel needs for the public, as well as administrative and resource management activities, such as research and monitoring, permitting, or emergency/fire access. The RMP will include a map (to be included in the alternatives and final decision sections of the RMP) of the roads, primitive roads, and trails open and available for use.

Non-motorized routes are unique in that the OHV area designations do not apply to them. In the absence of statutes, proclamations or supplemental rules limiting non-motorized uses, non-motorized trails may be designated in open, limited or closed OHV area designations. One exception would be mechanized uses in a designated wilderness or wilderness study area. An RMP can identify future goals and guidelines under which subsequent non-motorized trails systems would be developed in activity level plans. The primary purpose of designating a non-motorized trail is to classify it as an asset and to allow for its active management in the context of established trail management objectives and desired recreation management outcomes.

Required products of the TTM planning process include:

- Criteria to select or reject specific roads, primitive roads, and trails in the final travel management network; to add new roads, primitive roads or trails; and to specify limitations. The criteria must include those identified in 43 CFR 8342.1;

- A map of roads, primitive roads, trails for all travel modes and uses, including motorized, non-motorized, and mechanized travel;

- Definitions and additional limitations for specific roads, primitive roads and trails (defined in Appendix 3, Glossary of Terms);

- Guidelines for managing and maintaining the system. This includes the development of route specific road, primitive road and trail management objectives, a sign plan, education/public information plan, enforcement plan, and a process requiring the application of engineering best management practices;

- Indicators to guide future plan maintenance, amendments, or revisions related to the travel management network;

- Needed easements and ROWs, to be issued to the BLM or others, to maintain the existing road, primitive road and trail network providing public land access. This would include ROW grants and ROW corridors for future grants;

- Provisions for new route construction and use or adaptation/relocation of existing routes;

- A plan for decommissioning and rehabilitating closed or unauthorized routes;

- A monitoring plan; and

- Classification of all roads, primitive roads and trails, designated for travel in a travel management plan, as assets in FAMS. All roads, primitive roads and trails will also be identified as such in the GTLF geospatial database.

i. Criteria Identified

At a minimum, the route selection criteria must use the designation criteria identified in 43 CFR §8342.1. Other criteria should be established based on issues identified in the scoping process, goals and objectives identified in the RMP or those identified in BLM policy.

There are management considerations that can be used to develop a sustainable high-quality travel system. A well-designed travel system can direct use away from sensitive areas and still provide high-quality recreational activities and access for administrative, legislatively mandated, and commercial needs. Criteria used to make route selections should resolve user conflicts, reduce route duplication, provide sustainable routes, and the likely need to reduce the overall number of routes. Individual roads, primitive roads, and trails should be chosen with the transportation network goals in mind rather than just using all the inherited roads, primitive roads and trails. The process should identify to the extent possible, roads that have legal status such as ROW roads and roads managed by other entities (Federal, state or county roads).

Travel management planning is not intended to address the validity of any R.S. 2477 assertions. All RMPs and TMPs, at a minimum, should include the following statement with regard to R.S. 2477 assertions:

"*A travel management plan is not intended to provide evidence bearing on or addressing the validity of any R.S. 2477 assertions. R.S. 2477 rights are determined through a process that is entirely independent of the BLM's planning process. Consequently, travel management planning should not take into consideration R.S. 2477 assertions or evidence. Travel management planning should be founded on an independently determined purpose and need that is based on resource uses and associated access to public lands and waters. At such time as a decision is made on R.S. 2477 assertions, the BLM will adjust its travel routes accordingly.*"

ii. Document Objective of the Route (purpose and need, access and uses)

Road, primitive road, and trail management objectives (for definitions, *see* Appendix 3, Glossary of Terms) will be identified and documented for each route selected for inclusion into the travel network. The route management objectives should relate directly to the goals and objectives established in the RMP for a particular area. The identification of route management objectives provides an additional opportunity to document the purpose and need for each route.

iii.   Evaluate the Route Against the Criteria

Each route being considered for inclusion into the designated travel network must be evaluated individually against the established criteria. This can be a very time consuming process that benefits greatly from the application of GIS software to organize and assist with the analysis of the data (*see* Appendix 9 for examples of how GIS can facilitate the TTM process). Minimizing the number of routes to be evaluated by combining shorter route segments into one continuous longer route will also reduce the time required for the route evaluation process. Shorter route segments can be combined into longer routes to the extent that the purpose and need and/or conditions associated with the route do not change. Combining many separate routes together and evaluating them by area, for example, does not constitute individual route evaluation and, therefore, makes it impossible to evaluate against the designation criteria.

The route evaluation process must be conducted by an ID team consisting of specialists with adequate knowledge of the resource issues associated with the criteria being evaluated. The evaluation process for each route must be clearly documented in the administrative record for each of the identified criteria.

I.   **Formulate Alternatives**

Alternative development is central to the planning process. Describe an appropriate range of alternatives that address the resources and resource uses within the planning area. Alternatives must address issues identified during the scoping process that are carried forward and should offer a distinct range of management strategies, e.g., no action, conservation, adaptive management and development that address all concerns raised by all of the programs being addressed in the plan.

Travel management decisions made at an RMP level would typically address a wider range of alternatives, while travel management plans done as part of activity plans tiered to an RMP, may reflect a narrower range of options that are based on the allocations and guidelines adopted in the RMP, as well as site specific input during

the activity plan EA process. For example, if the RMP specifies that a TMA will be managed for OHV use, an activity plan tiered to the RMP would not consider a conservation alternative that closes the area to motorized use.

Alternatives may be identified based on the following concerns:

- Evaluations of existing travel patterns and conditions;
- Evaluations of projected future travel patterns and conditions;
- Input from the public;
- Direction from legislation and existing plans;
- Resource conditions and needs; and
- Environmental considerations.

Travel management plans must consider the resource issues of the planning area; the existing transportation system that is not changeable (i.e., managed by other entities and some ROWs); and recreation demand or social issues that affect the design of future road, primitive road and trail systems. Many of these factors and challenges are presented in Appendix 5, TTM Challenges and Solutions. Other alternative development considerations:

- Alternatives should be developed in a collaborative manner; involve your stakeholders and user groups to the extent feasible.

- Alternatives should reflect setting characteristics that have been established for existing and proposed RMAs, Management Emphasis Areas (MEA) or TMAs. While these setting characteristics are guidelines, they must be recognized to maintain recreational setting objectives.

- To ensure that management actions associated with the TTM program are consistent with other management actions, they should be identified in such a manner that they address, to the best of their ability, the following:

  o Support the desired outcomes of all resource programs, as expressed in the goals and objectives in the LUP, along with any additional landscape prescriptions.

  o Depict principal transportation infrastructure needed to properly manage the BLM-administered lands and resources, uses and access.

  o Identify how the travel and transportation system connects with surrounding transportation systems.

  o Explain and document the criteria for TTM decisions. Designation criteria may be different for non-motorized trails vs. motorized trails. Describe what

other limitations or access restrictions should be put in place (i.e., seasonal limitations and/or vehicle type and size restrictions).

- o Identify impacts to resources caused by roads, primitive roads, and trails.

- o Identify land and easement acquisition needs to support the proposed transportation network under each alternative.

- o Identify appropriate mitigation and monitoring strategies.

i.   Estimate the Effects of the Alternatives

Once a range of alternatives have been identified, the BLM will need to assess the level of impacts associated with the TTM decisions. This includes both long- and short-term impacts, direct and indirect impacts and cumulative impacts. Impacts from the Travel and Transportation Program on other resources and resource uses will be addressed in collaboration with those programs. When assessing impacts, the BLM should, when possible, assess the level of impacts in a quantifiable manner. Within the Travel and Transportation Program, quantifiable impacts often use measures such as acreages (amount of land impacted), amount and timing of anticipated use, and time of restrictions. The degree of detail and specificity may vary depending on the degree of detail in the alternatives. Examples of impact measurements include:

- Mileage of roads and/or trails per user group;
- Degree of sharing between user groups;
- Density of designated routes;
- Characteristics of road/trail systems in terms of difficulty levels;
- Mileage and type of route closures and rehabilitation;
- Anticipated times, amounts and durations of use;
- Travel time or distance to reach public land portals or key destinations; and
- Relationship between public land routes and private property.

Preferred Alternative Selection

For transportation system use on public lands, it is rare that all participants in a planning/design process will agree on a single identified alternative or option. Efforts should be made to incorporate the best attributes of several alternatives or options, if possible, to meet the purpose and need of the project. The authorized officer will select the preferred alternative including OHV area designations, and any travel and transportation decisions.

The Notice of Availability (NOA) of the draft RMP/EIS will be published in the *Federal Register*, media, mailings, etc. The NOA will notify the public when the draft RMP/EIS is available for public review and comment period. Additionally, detailed TTM information developed during the TTM planning process should be attached to the draft RMP as an appendix. The implementation portion of the TMP will describe the routes designated, seasonal closures, road, primitive road and trail management objectives, mapping and travel information, signing, interagency coordination, use supervision or permit allocation, monitoring, enforcement, routes to be decommissioned, and maintenance. Road, primitive road and trail systems may be specifically identified, or TMAs identified that contain further guidance on future development of the transportation system.

VI. Travel Management Plan Implementation

Planning for project implementation includes final decisions on how a project will be designed, funded and operated. An important implementation factor is the recognition of capital and operating costs, and how those costs may be covered. Partnerships developed during the initial stages of inventory and planning, and cultivated throughout the planning process are critical for successful project implementation. The development of local and regional partnerships may include development of grant applications (both agency developed and requests made through partners). These may include recreation and trails related grants, OHV specific grants, resource conservation/restoration grants, or grant proposals for youth and fitness objectives accomplished by the development of trail systems. These types of partnerships are important for securing funds from local, state, and Federal transportation agencies. Active local partners provide a constituency for obtaining grant funds and donations in labor or services that contribute toward local matching requirements.

Alternatives using an adaptive management approach will typically spell out future thresholds and monitoring made to review and adjust management prescriptions. These can be the basis for developing future public partnerships. The development of clearly identified trail standards will assist in providing a framework for volunteer trail construction and maintenance, which is critical to the success of most BLM trail systems.

Another critical opportunity to consider is the development of joint agency trail management partnerships. In many areas, both the BLM and the United States Forest Service (USFS) provide similar recreational trail opportunities, which often are used and maintained at different seasons of the year. In many cases, both agencies can form active partnerships to share and secure additional resources for trail management.

A. Signing
A sign plan must be developed detailing how the TMP will be communicated to travel network users. Depending on the TMA or other TTM planning area, this can

be as simple as identifying the location of entry signs and/or kiosks. Some sign plans will be more complex with route identification signs, route numbering schema, warning signs, use restriction signing, etc. (*See* 'Signage' in Appendix 6 for an example of a sign plan. Also, *see* Appendix 7, BLM TTM Signage)
Route identification signing should take into consideration established signing/numbering protocols for a state or region. Consult with other local, state or Federal land management agency sign coordinators (including the state BLM TTM program lead) on coordination needs or other signing opportunities.

B. Education

An education plan or strategy must be developed detailing how the TTM decision(s) will be communicated to the travel network users. This will likely include OHV/trail ethics (e.g. Tread Lightly! Leave No Trace, or other locally based efforts), outreach to local schools, community groups to provide TMP information, and web-based information. This may also include the use of hot-lines or web-based tools to communicate weather related route closures.

C. Enforcement

An enforcement plan must be developed to identify how the TMPs will be enforced. This must be done in coordination with BLM law enforcement staff and, to the extent practicable, with state and/or local law enforcement agencies. This plan should prioritize how to use limited law enforcement resources to the greatest effect. This may involve identifying the need for law enforcement coverage in certain high-priority areas at certain high-use times of the year.

D. Rehabilitation

Any transportation linear features that have not been identified as part of the designated travel network must be included in a rehabilitation plan for closed or unauthorized routes. This plan details the types of route restoration and/or closure methods to be used. It also sets priorities for which areas or types of routes that are to receive treatments. This plan should also establish the process by which unauthorized routes identified through the monitoring process are to be added to the rehabilitation plan route database.

E. Map

When the TTM process is completed and a system of designated roads, primitive roads and trails has been identified, a map must be produced to communicate to the travel network users which routes are available for motorized use and any conditions on that use. The map should also identify non-motorized trail opportunities and associated access points such as trailheads and parking areas. The development of the

map must be done with the involvement of BLM law enforcement. The map should be of a reasonable scale that is easy for network users to interpret and should clearly communicate any use restrictions. The map may be published in paper and/or electronic formats.

F. Road, Primitive Road and Trail Maintenance Intensities/Best Management Practices

Maintenance intensities should be established for all roads, primitive roads and trails. Consult with engineering staff for the current guidance on the setting of the maintenance intensities as well as how to apply the latest best management practices for the construction, reconstruction or maintenance of a route. These have likely already been established for the BLM road network. Most primitive roads are likely to have low maintenance intensities but should be managed so as to protect sensitive resources and provide for an acceptable level of health and safety risk given the type of use. Various trail organizations specialize in the application of best management practices for certain types of trails (e.g. ATV/motorcycle, mountain bike or equestrian trails) and can provide valuable information and support in the development and management of various types of trails.

G. Monitoring

A comprehensive, yet appropriately scaled, monitoring plan is essential to provide feedback on the effectiveness of a TMP. A manageable monitoring plan will call for more intensive monitoring where resource conditions or use impacts may change quickly while allowing for less intensive monitoring in areas of lower resource concern or use intensity. Monitoring needs related to travel and transportation systems include:

- Unauthorized route development;
- Identification of maintenance needs;
- Fence and barrier conditions;
- Safety issues;
- Impacts to sensitive resources;
- Review and maintenance of route difficulty levels; and
- Sign and information kiosk condition and placement.

Monitoring needs can include a variety of elements that can be supported by volunteers and partners where appropriate. In addition, clearly identified monitoring needs and programs allow monitoring to be done by a variety of resource staff at the times when they are in a particular area.

H.   Development of Road, Primitive Road, and Trail Management Objectives

Road, primitive road and trail management objectives are fundamental building blocks for road, primitive road, and trail management. They tier from and reflect RMP, travel management and/or road, primitive road and trail-specific management direction. Route management objectives synthesize and document, in one convenient place, the management intention for the road, primitive road and trail, and provide basic reference information for subsequent road, primitive road and trail planning, management, condition surveys, and reporting.

I.   Adaptive Management

i.   Develop Adaptive Management Principles

Adaptive management language should be included that address how routes may be modified within the transportation network in the future. Adaptive management refers to a system of management practices based on clearly identified outcomes, including monitoring to determine 1) if management actions are meeting outcomes, and 2) if not, to facilitate management changes that will best ensure that outcomes are either met or reevaluated. Adaptive management recognizes that knowledge about natural resource systems is sometimes uncertain and that adaptive management is the preferred method of management in these instances.

ii.   Changes to the Travel Network

Changes to a transportation network (e.g., new routes, re-routes or closures) in "limited" areas may be made through activity-level planning or with the appropriate site-specific NEPA analysis. Project proposals for all resource programs that require changes to the travel and transportation network will also include proposed modifications to the associated TMP. Analysis of any TMP modifications can occur within project NEPA analysis. Modifications to area OHV designations (open, closed or limited) require an amendment to the RMP through the OHV designation process.

iii.   Emergency Closures

In the event of an emergency, immediate actions, such as closure or restrictions or uses of the public lands, must be taken to prevent or reduce risk to public health or safety, property or important resources. Emergencies are unforeseen events of such severity that they require immediate action to avoid dire consequences. The BLM Handbook (*see* H-1790-1, Sec. 2.3) defines the following actions as typical emergency actions:

- Cleanup of a hazardous material spill;
- Fire suppression activities related to ongoing wildland fires; and
- Emergency stabilization actions following wildland fires or other disasters

iv.   Temporary Closures

RMPs shall address temporary closure and restrictions of areas and trails on public lands available to OHV use. Where OHV activities are causing considerable adverse effects to resources, temporary closures can be implemented under the authority of 43 CFR 8341.2 and 8364.1 (consult current guidance on the appropriate use of these authorities). The purpose of a temporary closure and restriction are to protect public health and safety, or prevent undue or unnecessary resource degradation due to unforeseen circumstances and should not be used in lieu of permanent closures.

All RMPs and TMPs at a minimum should include the following statement in accordance with 43 CFR 8341.2 with regard to OHV use:

Where off-road vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence.

To the extent that the above statement and more site, issue and/or resource specific evaluation is handled through the NEPA analysis process associated with either the RMP or TMP, temporary closures and restrictions exercised under this process may not require further NEPA review. This may include closure of routes or areas.

Considering this language, an RMP should, to the extent practicable, identify thresholds and criteria under which closures would occur and the areas or routes that would be affected by these thresholds. However, planning efforts should be handled in a manner to avoid the need for temporary closures, but identifying issues with OHV use and addressing them with management actions, including the identification of TMAs and accompanying plan direction for future road, trail, and access management actions. The RMP or activity plan may also identify areas that may be closed to particular travel uses while transportation systems are being created (i.e., routes developed and/or rehabilitated). These may include areas of high route density that are not designated as "open" in the RMP process.

J.   Game Retrieval

An important TTM planning and implementation consideration is how to address game retrieval. To the extent practicable, game retrieval policies should be coordinated with other Federal, state, local and/or tribal governments. *See* Appendix 3: Glossary of Terms for a definition of game retrieval.

K.   Roadside Camps and Pull-off Considerations

All TTM planning and implementation must consider how motorized vehicles will be allowed to access dispersed camping/day use areas along designated routes. Coordination with other land management agencies may allow for a consistent approach to how to address this issue. Some TMPs allow a certain distance from centerline of the designated route while others only allow access to areas adjacent to designated routes in specific designated use areas via designated access routes. The BLM law enforcement should be consulted in the development of these definitions.

L.   Supplementary Rules

Supplementary rules will need to be established for those areas identified in an RMP/TMP where non-motorized access is limited to designated routes or some other limitation on use. *See* 43 CFR 8365.1-6 for the supplementary rulemaking process.

'Land Use Planning Process' and 'Travel and Transportation Management' Relationship

LAND USE PLANNING PROCESS

Resource Management Plan (RMP)

TRAVEL AND TRANSPORTATION MANAGEMENT

Pre-plan Analysis: Identify Issues

Identify issues or land use problems that need to be resolved.

- Determine if the existing travel and transportation systems are meeting current and future needs, such as access and resource needs.
- Decide on the components (such as roads, primitive roads, and trails) of the travel and transportation system, which are needed for access.
- Identify areas for permanent closure.

Begin compiling an administrative record related to travel and transportation management.

Pre-plan Analysis: Develop Planning Criteria

Planning criteria establishes constraints and guides the planning process; set the scope of inventory and data collection. Preliminary planning criteria developed by the BLM can be modified through public comment.

Determine the level of data and information needed for all types of travel and transportation, including OHV area designations and motorized and non-motorized road, primitive road, and trail selections.

Realize the legal constraints which impact the decision space.

'

Figure 1 of 4

'Land Use Planning Process' and 'Travel and Transportation Management' Relationship

Scoping

This is the start of the formal NEPA process inviting the public to identify issues or land use problems, which need to be resolved.

Solicit ideas through mailings, newspaper articles, public meetings, and workshops.

Gather, screen and evaluate ideas from public, private and internal sources.

Summarize issues to guide planning process.

Engage internal and external partners/stakeholders in identifying issues, problems and opportunities related to OHV, transportation and access, and travel management.

Solicit the public for specific OHV, travel and transportation and access information, ideas and concerns.

Identify existing OHV, travel and transportation data.

Determine if additional data needs should be addressed from issues that were raised during scoping.

Collect a baseline inventory of roads, primitive roads, and trails.

Collect Inventory Data

Collect inventory data based on the planning criteria. Data are generally collected from existing sources. New data collection is limited to what is needed to resolve the planning issues identified.

Prepare preliminary map of OHV area designations and existing roads, primitive roads, trails (both motorized and non-motorized) and access points.

Address how the RMP can be responsive to conflicts of transportation and access on other resource values and uses.

Analyze the Management Situation (AMS)

Gather information on current management situation. This analysis provides a reference for developing and evaluating alternatives.

Identify current condition and determine type and extend of use:

•Who is using the current transportation system?

•Is it meeting public & administrative access needs, and protecting resource values?

•What are the indicators, trends, demands, risks, forecasts & opportunities concerning travel and transportation management?

Figure 2 of 4

'Land Use Planning Process' and 'Travel and Transportation Management' Relationship

Formulate Alternatives

Identify a range of reasonable combinations of resource uses and management practices. Develop reasonable alternatives that address issues identified during scoping and offer a distinct choice among management strategies. Include no action alternative.

- Delineate travel management areas that meet the land use plan objectives for each alternative.

- Use "limited" OHV designation as the default designation for motorized travel.

- Document rationale for an open or closed designation & determine criteria for selecting specific routes within areas where any form of travel and access is "limited".

- Transportation alternatives should analyze closures and seasonal (and other types of restrictions).

Estimate Effects of Alternative

Collect inventory data based on the planning criteria. Data are generally collected from existing sources. New data collection (i.e., inventory) is limited to what is needed to resolve the planning issues identified.

These steps are implementation decisions & can be completed as part of the RMP or deferred to a separate travel or activity plan.

- Select roads, primitive roads, and trails available for motorized use, within 'Limited to Designated' roads and trails areas.

- Determine which non-motorized trails are open for use.

Select the Preferred Alternative

The Field Manager recommends to the State Director a preferred alternative that best resolves planning issues and promotes balanced multiple use objectives. The State Director approves selection of preferred alternative along with other alternatives under consideration.

- Quantify impacts (long/short term, direct/indirect, and cumulative effects) of each alternative on public and administrative access.

- Address impacts of implementing & managing travel and transportation systems (including costs & time) for each alternative.

Analyze the impacts of travel and transportation on other resource values and uses.

Resolve conflicts prior to selection of the preferred alternative. Proposed RMP decisions should not inherently conflict with other resource values, i.e., there should not be an open OHV area overlaying T&ES habitat.

Figure 3 of 4

'Land Use Planning Process' and 'Travel and Transportation Management' Relationship

Issue Draft RMP/EIS

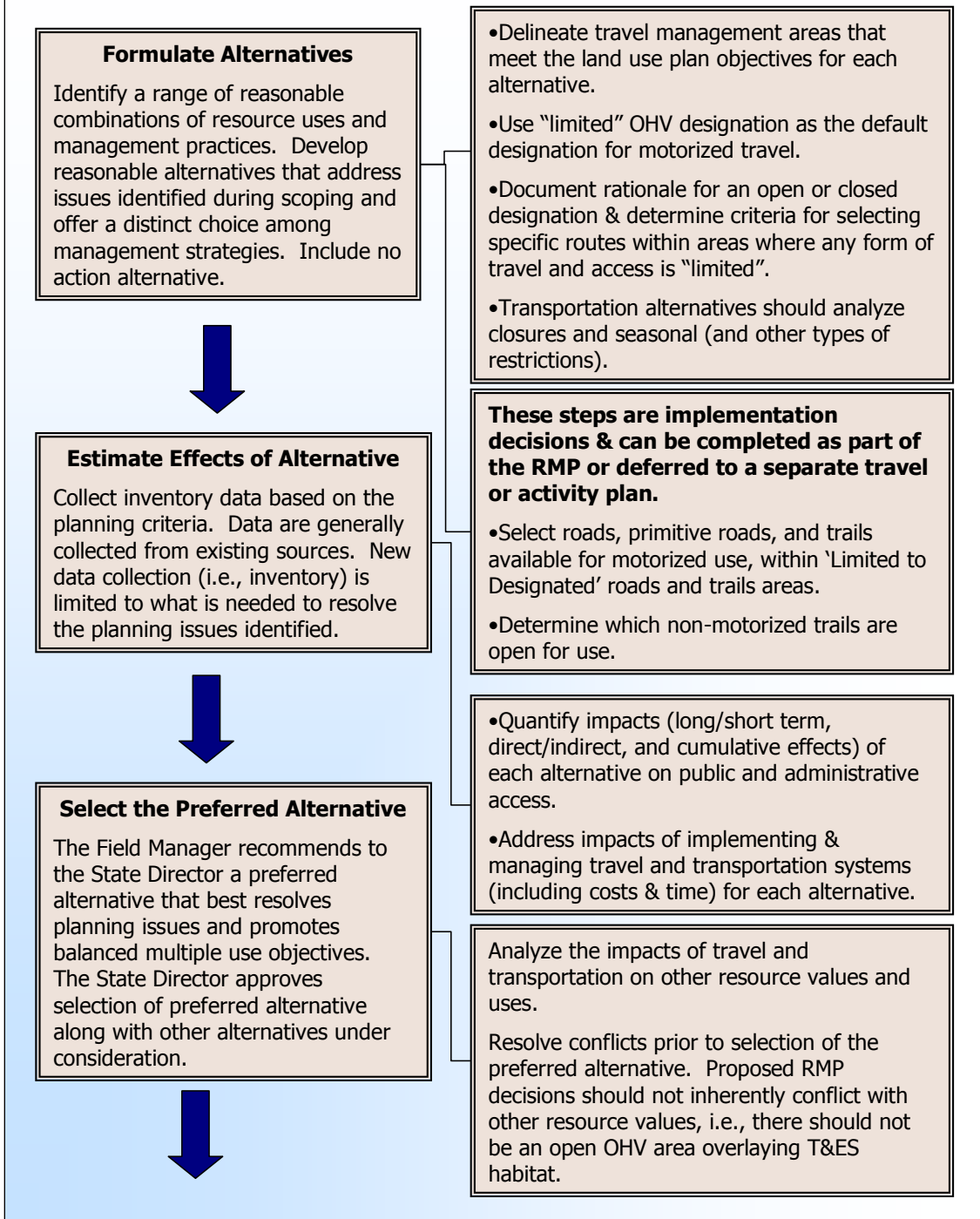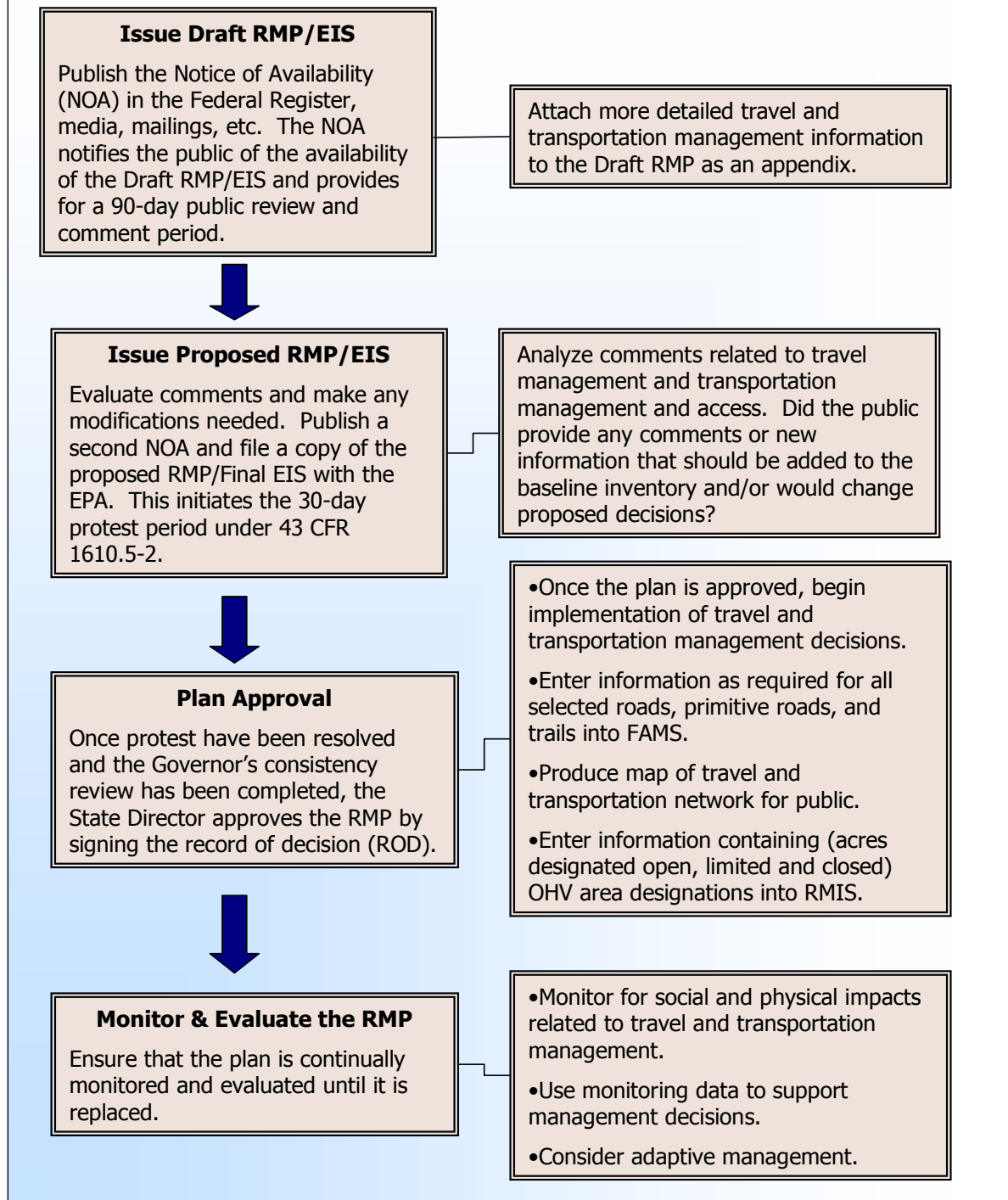Publish the Notice of Availability (NOA) in the Federal Register, media, mailings, etc. The NOA notifies the public of the availability of the Draft RMP/EIS and provides for a 90-day public review and comment period.

Attach more detailed travel and transportation management information to the Draft RMP as an appendix.

Issue Proposed RMP/EIS

Evaluate comments and make any modifications needed. Publish a second NOA and file a copy of the proposed RMP/Final EIS with the EPA. This initiates the 30-day protest period under 43 CFR 1610.5-2.

Analyze comments related to travel management and transportation management and access. Did the public provide any comments or new information that should be added to the baseline inventory and/or would change proposed decisions?

Plan Approval

Once protest have been resolved and the Governor's consistency review has been completed, the State Director approves the RMP by signing the record of decision (ROD).

- Once the plan is approved, begin implementation of travel and transportation management decisions.

- Enter information as required for all selected roads, primitive roads, and trails into FAMS.

- Produce map of travel and transportation network for public.

- Enter information containing (acres designated open, limited and closed) OHV area designations into RMIS.

Monitor & Evaluate the RMP

Ensure that the plan is continually monitored and evaluated until it is replaced.

- Monitor for social and physical impacts related to travel and transportation management.

- Use monitoring data to support management decisions.

- Consider adaptive management.

Figure 4 of 4

Appendix 2: Commonly used Acronyms

AMS	Analysis of the Management Situation
ATV	All-terrain vehicle
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
DR	Decision Record
EA	Environmental Assessment
EIS	Environmental Impact Statement
ERMA	Extensive Recreation Management Area
FAMS	Facility Asset Management System
FLPMA	Federal Land Policy and Management Act of 1976
FRN	Federal Register Notice
FTDS	Federal Trail Data Standards
GIS	Geographic Information System
GPS	Global Positioning System
ID	Interdisciplinary
ID team	Interdisciplinary Team
LUP	Land Use Plan
MEA	Management Emphasis Area
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NSHT	National Scenic and Historic Trail
NLCS	National Landscape Conservation System
NCA	National Conservation Area
NOA	Notice of Availability
NPS	National Park Service
OHV	Off-highway vehicle
ORV	Off-road vehicle
RMIS	Recreation Management Information System
RMP	Resource Management Plan
RMZ	Recreation Management Zone
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
ROW	Rights-of-way
SRMA	Special Recreation Management Area
T&E	Threatened and Endangered
TMA	Travel Management Area
TMP	Travel Management Plan
TTM	Travel and Transportation Management
VRM	Visual Resource Management
WSA	Wilderness Study Area

Appendix 3: Glossary of Terms

Access: The opportunity to approach, enter, or make use of public lands.

Accessible: A term used to describe a site, building, facility, or trail that complies with the Architectural Barrier Act Accessibility Standards (ABAAS) and can be approached, entered, and used by people with disabilities.

Adaptive Management: Adaptive management is a tool which requires a measureable objective, monitoring to determine the effectiveness of the management practices in achieving the objective, evaluation to determine if the objective is being reached, and adaptation based on the results.

Animal-powered/Assisted Travel: Travel using horses, livestock, dogs, or other animals to travel to and across BLM-managed public lands.

Assets (related to linear transportation features): Engineering term used to describe roads, primitive roads, and trails that are included in FAMS. Assets are maintained through the maintenance program.

> **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. These routes do not customarily meet any BLM road design standards.

> **Trail:** Linear routes managed for human-powered, stock, or off-road 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.

Classification: The grouping of similar transportation features, e.g., roads, primitive roads and trails, to be entered into the BLM GTLF and FAMS databases.

Environmental Assessment (EA): A document prepared early in a planning process that evaluates the potential environmental consequences of a project or activity. An EA results in a decision, based on the assessment of the degree of impact of an action, that an EIS is necessary, or that an action will have no significant effect and a finding of no significant impact can be made.

Environmental Impact Statement (EIS): One type of document prepared by Federal agencies in compliance with NEPA that portrays the environmental consequences of proposed Federal actions that are expected to have significant impacts on the human environment.

Extensive Recreation Management Area (ERMA): The ERMA is an administrative unit that requires specific management consideration in order to address recreation use, demand, or Recreation and Visitor Services program investments.

Facility Asset Management System (FAMS): The BLM's national database which tracks asset inventory and maintenance needs.

Federal Highway Administration (FHWA): The FHWA deals with highway transportation in its broadest scope; administering all Federal Highway transportation programs.

Federal Trails Data Standards (FTDS): a common set of standardized terminology that can be consistently applied to a core set of trails information. FTDS:

- are applied to all BLM trails – congressionally designated NSHTs, administratively designated National Recreation Trails or any other trails designated through the TTM process.

- are not a database.

- can be incorporated into existing databases and/or used to crosswalk existing agency data to provide combined or shared information at a Federal/multi-jurisdictional level.

- are approved by the Federal Geographic Data Committee

Four-Wheel Drive Vehicle (4x4, 4WD): A passenger vehicle or light truck having power available to all wheels generally capable of off-highway travel.

Game Retrieval: Generally refers to retrieval of a downed big game animal by an individual who has legally taken that animal. Refer to state fish and game management agency definitions of 'game retrieval' as it may vary by state.

Ground Transportation Linear Feature (GTLF): A geospatial database of transportation (from motorized to foot) linear features as they exist on the ground. Features include all linear features; not just what is in the BLM Transportation System.

Implementation Plan: A site-specific plan written to implement decisions made in a LUP. An implementation plan usually selects and applies best management practices to meet land use plan objectives. Implementation plans are synonymous with "activity" plans. Examples of implementation plans include interdisciplinary management plans, travel management plans, habitat management plans, recreation area management plans, and allotment management plans.

Implementation Plan Decisions: Decisions that take action to implement land use plan decisions; generally appealable to the Interior Board of Land Appeals (IBLA) under 43 CFR 4.410.

Land Use Plan (LUP): A set of decisions contained in Resource Management Plans that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA, an assimilation of land use plan level decisions developed through the planning process outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed. The LUP addresses resource management and includes a defined travel management system of areas, roads, primitive roads, and trails.

Management Decision: A decision made by the BLM to manage public lands. Management decisions include both land use plan decisions and implementation decisions.

Mechanized Travel: Moving by means of mechanical devices such as a bicycle; not powered by a motor.

Memorandum of Understanding (MOU): An agreement between the BLM and participating parties that specifies each party's responsibilities regarding a particular project or goal.

Mode: A particular form of travel, such as walking, bicycling, motor vehicle, horse, etc.

Mode Shift: The shift of people from one mode of travel to another.

Motorized Travel: Moving by means of vehicles that are propelled by motors such as cars, trucks, OHVs, motorcycles, boats and aircraft.

Motorized Vehicle: Synonymous with off-highway vehicle (OHV). Examples of this type of vehicle include all-terrain vehicles (ATV), Utility Type Vehicle (UTV), Sport Utility Vehicle (SUV), motorcycle, and snowmobiles.

> **All-Terrain Vehicle (ATV):** A wheeled vehicle other than a snowmobile, which are defined as having a wheelbase and chassis of fifty (50) inches in width or less, steered with handlebars, generally having a dry weight of 800 pounds or less, travels on three or more low-pressure tires, and with a seat designed to be straddled by the operator.

> **Motorcycle:** Motorized vehicles with two tires and with a seat designed to be straddled by the operator.

> **Off-Highway Vehicle (OHV):** OHV is synonymous with Off-Road Vehicles (ORV). ORV is defined in 43 CFR 8340.0-5 (a): Off-road vehicle means any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: 1) Any non-amphibious registered motorboat; 2) Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; 3) Any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; 4) Vehicles in official use; and 5) Any combat or combat support vehicle when used in times of national defense emergencies. OHVs generally include dirt motorcycles, dune buggies, jeeps, 4-wheel drive vehicles, SUVs, over-the-snow vehicles, UTVs and ATVs.

> **Over-the-Snow Vehicle:** An over-snow vehicle is defined as a motor vehicle that is designed for use over snow that runs on a track or tracks and/or a ski or skis, while in use over snow. An over-snow vehicle does not include machinery used strictly for the grooming of non-motorized trails.

> **Sport Utility Vehicle (SUV):** A street legal, high clearance vehicle used primarily on-highway but designed to be capable of off-highway travel.

> **Utility Type (or Terrain) Vehicle (UTV):** Any recreational motor vehicle other than an ATV, motorbike or snowmobile designed for and capable of travel over designated unpaved roads, traveling on four (4) or more low-pressure tires, maximum width less than seventy-four (74) inches, usually a maximum weight less than two thousand (2,000) pounds, or having a wheelbase of ninety-four (94) inches or less. Utility type vehicle does not include vehicles specially designed to carry a person with disabilities.

Multimodal: Facilities serving more than one transportation mode or a transportation network comprised of a variety of modes.

Non-motorized Travel: Moving by foot, stock or pack animal (or other animal-powered travel), boat, or mechanized vehicle such as a bicycle.

Official Use: Use by an employee, agent, or designated representative of the Federal Government or one of its contractors, in the course of his employment, agency, or representation.

OHV Area Designations: Used by Federal agencies in the management of OHVs on public lands. Refers to LUP decisions (allocations) that permit, establish conditions, or prohibit OHV activities on specific areas of public lands. All public lands are required to have OHV designations (43 CFR 8342.1). The CFR requires all BLM-managed public lands to be designated as open, limited, or closed to off-road vehicles and provides guidelines for designation. The definitions of open, limited, and closed are provided in 43 CFR 8340.0-5 (f), (g), and (h), respectively.

> **Open:** 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:** 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:** Motorized vehicle travel is prohibited in the area. Access by means other than motorized vehicle is permitted. Areas are designated closed if closure to all vehicular use is necessary to protect resources, promote visitor safety, or reduce use conflicts (*see* 43 CFR 8340.05).

Plan Amendment: The process of considering or making changes in the terms, conditions, and decision of approved plans. Usually only one or two issues are considered that involve only a portion of the planning areas.

Preliminary Network: If a final road and trails network is not identified in the RMP process, the plan should include a preliminary network that will be identified for use until a final network is selected through a subsequent implementation plan.

Primitive Road: A linear route managed for use by four-wheel drive or high-clearance vehicles. These routes do not customarily meet any BLM road design standards.

Primitive Road Management Objective: Primitive road management objectives document the intended purpose of an individual primitive road in providing access and/or recreational outcomes to implement a travel and/or an RMP. Primitive road management objectives should be based on management area direction, including desired future conditions, uses, recreational

outcomes and settings, as well as travel management plan objectives. Primitive road management objectives synthesize and document, in one convenient place, the management intention for the primitive road, and provide basic reference information for subsequent travel and transportation planning and management.

Primitive Route: Any transportation linear feature located within a WSA or lands with wilderness characteristics designated for protection by a land use plan and not meeting the wilderness inventory road definition.

Resource Management Plan (RMP): A BLM planning document, generically referred to as a 'land use plan', prepared in accordance with Section 202 of FLPMA that presents systematic guidelines for making resource management decisions for a planning area. An RMP is typically based on an EIS.

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.

Road Management Objective: Road management objectives document the intended purpose of an individual road in providing access to implement a travel and/or RMP. They should be based on management area direction, including desired future conditions, uses and settings, as well as travel management plan objectives. Road management objectives should also contain any established design criteria, operation criteria, and maintenance criteria. Road management objectives synthesize and document, in one convenient place, the management intention for the road, and provide basic reference information for subsequent travel and transportation planning and management.

Road, Primitive Road, and Trail Identification: For the purposes of this guidance, road and trail identification refers to the on-the-ground process (including signs, maps, and other means of informing the public about requirements) of implementing the road and trail network selected in the land use plan or implementation plan. Guidance on the identification requirements is in 43 CFR 8342.2.

Road, Primitive Road, and Trail Selection: For each limited area, the BLM should choose a network of roads, primitive roads, and trails that are available for motorized use, and other access needs including non-motorized, mechanized use, and animal-assisted modes of travel consistent with the goals, objectives, and other considerations described in the LUP.

Routes: Multiple roads, trails, and primitive roads; a group or set of roads, trails, and primitive roads that represents less than 100 percent of the BLM transportation system. Generically, components of the transportation system are described as "routes."

RS 2477: Revised Statute 2477; Section 8 of the Mining Act of 1866 provided: "and 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 being established by "construction" of a "highway" on unreserved public lands, without any form of acknowledgement or action by the Federal government. This section of the statute was later re-codified as Revised Statute 2477. R.S. 2477 was repealed by FLPMA on October 21, 1976, with a savings provision for rights established prior.

Special Recreation Management Area (SRMA): The SRMA is an administrative unit where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance or distinctiveness; especially compared to other areas used for recreation.

Supplemental Rules: See 43 CFR 8365.1-6

Temporary Route: Temporary routes are defined as short-term overland roads, primitive roads or trails; authorized or acquired for the development, construction or staging of a project or event that has a finite lifespan.

Trail: Linear routes managed for human-powered, stock, or off-road 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.

Trail Management Objective: Trail management objectives document the intended purpose of an individual trail in providing access and/or recreational outcomes to implement a travel and/or RMP. They should be based on management area direction, including desired future conditions, uses, recreational outcomes and settings, as well as travel management plan objectives. The objectives synthesize and document, in one convenient place, the management intention for the trail, and provide basic reference information for subsequent travel and transportation planning and management.

Transportation Enhancement: Projects that include: providing bicycle and pedestrian facilities, converting abandoned railroad ROWs into trails, preserving historic transportation sites, acquiring scenic easements, mitigating the negative impacts of a project on a community by providing additional benefits, and other non-motorized projects.

Transportation Linear Disturbances: Linear disturbances identify human-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.

Transportation Linear Features: Linear features represent the broadest category of physical disturbance (planned and unplanned) on the 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 the BLM land. Linear features may include roads, primitive roads, and trails identified for closure or removal as well as those that make up the BLM's defined transportation system.

Transportation Network: The network of roads, primitive roads, and trails (motorized and non-motorized) that are selected (recognized, designated, or authorized) for use through the comprehensive travel and transportation planning process.

Transportation System: The roads, primitive roads, and trails designated as facility assets and maintained by the BLM.

Travel Management Area (TMA): TMAs are polygons or delineated areas where travel management (either motorized or non-motorized) requires particular focus. These areas may be designated as open, closed, or limited to motorized use and will typically have an identified or

designated network of roads, trails, ways, and other routes that provide for public access and travel across the planning area. All designated travel routes within TMAs should have a clearly identified need and purpose, as well as clearly defined activity types, modes of travel, and seasons or times for allowable access or other limitations.

Travel Management Plan (TMP): The document that describes the process and decisions related to the selection and management of the Transportation Network. This plan can be integrated in an RMP or as a stand-alone implementation plan after development of the RMP.

Travel and Transportation Management (TTM): The on-the-ground management and administration of travel and transportation networks (both motorized and non-motorized) to ensure that public and administrative access are met, resources are protected, and regulatory needs are considered. It consists of implementation, education, enforcement, monitoring, easement acquisition, mapping and signing, and other measures necessary for providing access to public lands for a wide variety of uses (including uses for administrative, recreational, traditional, authorized, commercial, educational, and other purposes) as well as all forms of motorized and non-motorized access or use, such as foot, equestrian, mountain bike, off-highway vehicle, and other forms of transportation.

Wilderness Study Area (WSA): A roadless area or island that was inventoried and found to have wilderness characteristics as described in Section 2 (c) of the Wilderness Act of 1964 (78 stat. 891). Includes areas inventoried and studied prior to April 14, 2003, under the authority of Sections 201, 202 and 603 of FLPMA and includes legislative Wilderness Study Areas created by law.

Appendix 4: Frequently Asked Questions

A) Questions and Answers Pertaining to Travel and Transportation Management (TTM).

Q. What is TTM?
A: TTM planning addresses in an interdisciplinary way all resource values and uses (recreational, traditional, commercial, authorized, and other); and includes all modes (motorized, mechanized, non-motorized, and non-mechanized) of access and travel on the public lands. The TTM goals are to:
- Provide and improve sustainable access for public needs and experiences;
- Protect natural and cultural resources and settings;
- Promote the safety of public land users; and
- Minimize conflicts among the various users of public lands.

Q: Why is it called Travel and Transportation Management rather than travel management?
A: Historically, the travel and transportation programs have been segmented between two programs: engineering (transportation) and recreation (travel). There are extensible, interrelated management and public access implications. It is imperative that the BLM manage transportation and travel systems in a holistic, interdisciplinary context, giving consideration to all resource values and uses that it manages.

Q: What is a Travel Management Area (TMA)?
A: A TMA is a planning tool for delineating a sub-unit of the planning area where unique travel management (either motorized or non-motorized) circumstances result in the need for particular focus and additional analysis (*a TMA is not an allocation or a land use decision*). Field Offices can use a TMA to separate a specific area from the rest of the planning area for a variety of reasons, which may include complexity, the need for a higher level of public involvement, or special resource characteristics. It may be that the road, primitive road and trail decisions in a TMA need to be deferred and addressed at a later date. If so, a TMA is still required to have an OHV area designation. This allows field offices to move forward and make road, primitive road and trail selections for the transportation network in the rest of the planning area. Some field offices will have no TMAs.

The TMAs are polygons or delineated areas where a rational approach has been taken to classify areas as open, closed, or limited, and have identified or designated a network of roads, primitive roads, trails, and other routes that provide for public access and travel across the planning area. All designated travel routes within TMAs should have a clearly identified need and purpose, as well as clearly defined activity types, modes of travel, and seasons or timeframes for allowable access or other limitations.

Q: Do TMAs cover entire planning areas?
A: A field office may delineate TMAs where there is a need. In some instances, field offices may decide to put all the planning areas into one or more TMAs. In other instances, field offices

may have no TMAs, or TMAs for areas where there are no other overriding resources objectives set. The following are examples of where TMAs may or may not be delineated in the RMP:

EXAMPLE: *Could field offices manage travel and transportation differently for Areas of Critical Environmental concerns (ACEC), Special Recreation Management Areas (SRMA), Wilderness Study Areas (WSA), areas with oil and gas production focus, or wildlife management areas to achieve specific land use objectives?* In instances where the manager decides travel and transportation should be managed differently, these areas could have a different corresponding TMA (possibly with different OHV designations) that provide for public and administrative access. Note: LUPs that have many specific landscape objectives and management prescriptions may need to delineate multiple TMAs. However, there will be times when the prescriptions for the ACEC, SRMA, or WSA could also meet the TTM needs of the area. Note: Land use plans that are broad will probably have fewer TMAs.

EXAMPLE: *If both an ACEC and a SRMA or ERMA are managed the same, allowing cross-country foot or horse travel and limited to designated route travel for mechanized conveyances and OHVs, could they fall into one TMA?* Yes. It is likely the limited route designation criteria will vary because of the varying land use objectives in each. This variation could cause similar routes to be open in a SRMA or ERMA and closed in an ACEC. If having different TMAs helps to explain to the public limited route designation or helps in planning and management, it may be beneficial to have separate TMAs.

EXAMPLE: *What if there are SRMAs with several Recreation Management Zones (RMZ)?* As per H-1601-1, each RMZ has a different recreation management objective. Presumably, then each RMZ would probably need to manage travel and transportation differently to achieve the individual RMZ objectives. Each RMZ could require a separate TMA, and the boundaries of the TMAs would be the same as the RMZs.

Q: Are TMAs different from open, limited, closed OHV areas?
A: The TMAs include OHV area designations as required by 43 CFR 8342.1. Additionally, OHV area designations only address motorized use, and a TMA should address all forms of travel and transportation.

Q: What happens if road, primitive road and trail designations are not completed in the RMP?
A: The TTM planning is usually accomplished during the RMP process when time and resources allow. The goal should be to make as many road, primitive road, and trail designations in the RMP as possible. For the "limited" areas with complex or controversial issues needing further input and analysis that cannot be resolved within the RMP or final EIS, separate travel management plans should be completed within five years of the signing of the ROD.

Q: Can route designations and decisions in a portion of the planning area be deferred until after the RMP?

A: Yes. Because of complexity, level of controversy, or other reasons, some of the route decisions in the planning area can be deferred to a future travel management plan. The area that is deferred should be delineated as a TMA.

Q: Can you designate routes in Wilderness Study Areas (WSA)?

A: In WSAs, motorized and mechanized use may be permitted to continue along existing routes identified in the wilderness inventory conducted in support of Sections 603 and 202 of FLPMA. In these cases, final route classification is delayed until Congressional action is taken, or a LUP decision is made to close specific routes to motorized and mechanized use. Primitive roads and motorized/mechanized trails shall not be designated and classified as an asset within a WSA. Any motorized/ mechanized linear transportation feature located within these areas will be identified in a transportation inventory as a motorized/mechanized "primitive route."

Routes in WSAs will not be classified as a transportation asset and entered into FAMS unless one of the following conditions is met:

- Congress designates the area as "wilderness" and the routes are designated as non-motorized and non-mechanized trails, or
- Congress releases the WSA from wilderness consideration and the routes are designated.

Q: Can you have a designated trail in a closed area?
A: Yes, if the trail is non-motorized and the area is closed to motorized use only. An area closed to motorized use should not have motorized trails in it. If motorized trails are present, then the area should be in the limited category.

Q: Can you have a designated trail in an open area?
A: Yes, a designated trail may go through an open area and continue on into a limited area; however, in the open area, the user is not required to stay on the designated trail. Also, designating a trail allows it to be more actively managed as an asset (i.e. in the FAMS system).

Q: What are administrative routes?
A: Administrative routes are those that are limited to authorized users (typically motorized access). These are existing routes that lead to developments that have an administrative purpose, where the BLM or a permitted user must have access for regular maintenance or operation. These authorized developments could include such items as power lines, cabins, weather stations, communication sites, spring developments, corrals, or water troughs.

Q: Can I change an OHV area designation (open, limited, closed) without a plan amendment?
A: No. OHV area designation changes require a plan amendment per 43 CFR 8342.2 B.

Q: Within the limited area designation, can you move from "limited to existing" to "limited to designated" without a plan amendment?

A: Yes, if the RMP language provides for this option through established criteria and parameters for change. If, however, the RMP is silent on this issue, a plan amendment would be required.

Q: Can I change (add or subtract) a route within a "limited to designated" roads and trails area without a plan amendment?
A: Yes, but site-specific NEPA analysis is required. If there is a need to add a route or re-route a road or trail that is not currently in the transportation network, it needs to be made clear that NEPA and Section 106 compliance must be accomplished before construction or formal recognition can occur. An EA may be adequate for minor changes or adjustments to the transportation network. In some areas, field offices may rotate route closures within the limited areas (i.e., year-by-year or seasonally). This is managed through analysis in an EA. In an emergency situation, a route can be closed using the special rules in 43 CFR 8342. To the extent the TMP anticipates minor adjustments and corrections to maps; minor changes may be done as plan maintenance. The NEPA requirements may or may not apply.

Q: Can I change (add or subtract) a route within a "limited to existing" roads and trails area without a plan amendment?
A: Yes, the same as routes within a "limited to designated" category apply (*see* above).

Q: Can I have both "limited to existing" and "limited to designated" routes in the same "limited" area?
A: No, they should be one or the other. All routes can be "limited to existing" on an interim basis until a travel management plan is completed. At the completion of the TMP, all routes in the "limited" area involved will change to "limited to designated".

Q: What is the difference between land use planning (LUP) decisions and implementation decisions?
A: The OHV area designations and the criteria for selecting roads and trails are LUP decisions. The individual route evaluation and selection for designation is an implementation decision. These are still implementation level decisions even if they are developed concurrently with an RMP. The RMP should clearly describe which decisions are LUP level (protestable) and which are implantation level (appealable).

Q: If the implementation decisions are made as part of the RMP, do they require a separate Decision Record (DR) from the Record of Decision (ROD)?
A: No. They may all be included under a single ROD, but they may also be accomplished through a separate DR. *See* LUP Handbook, pages 30-31.

Q: Who is considered a collaborator?
A: Anyone who provides information to the planning effort can be a collaborator. (*see* LUP Handbook glossary, page 2).

Q: Who is considered a cooperator or cooperating agency?

A: A government entity (e.g., U.S. Fish and Wildlife Service, state, county, city) that is a signatory to a memorandum of understanding outlining mutual responsibilities. The cooperator can "sit at the table" when formulating alternatives (*see* LUP Handbook pages 6-9, Cooperating Agency status through the NEPA).

Q: How and where do I start making an inventory of roads, primitive roads, and trails? How much inventory is needed?
A: Start with field offices files, aerial photos, and GIS data layers. Examine the BLM 100K surface maps, and any published guidebooks regarding the area. State and county agencies often have valuable information. Satellite data is becoming cheaper and more readily available. Compile as much data as possible in the office before beginning an on-the-ground assessment. Prioritize areas or sub-units of the planning area to allow for a systematic inventory process. While a 100 percent (100%) inventory may not be possible, the focus should be on starting with an inventory that is credible for the public involvement process. A baseline map of the inventory should be made available to the public for its input. This baseline inventory data should be incorporated into the Ground Transportation Linear Feature (GTLF) geospatial database. Solicit road, primitive road, and trail input from the public during scoping and any other comment period. Document in the administrative record that the input was incorporated into the baseline information or, if it was not, why it was not incorporated.

Montana, North Dakota, and South Dakota EIS Example: Through site-specific planning, roads, primitive roads, and trails would be inventoried, mapped, and designated as open, seasonally open, or closed. The inventory should be commensurate with the analysis needs, issues, desired resource conditions, and resource management objectives for the area. This inventory may include system roads and trails, unclassified roads and trails, non-system roads and trails, and roads and trails on existing visitor recreation maps and transportation plans.

Q: Does the BLM have a standard protocol for inventory of roads, primitive roads, and trails?
A: Yes. Refer to Graves, P., Atkinson, A., and Goldbach, M. 2006. *Travel and Transportation Management: Planning and Conducting Route Inventories.* Technical Reference 9113-1, BLM/WO/ST-06/007+9113, Bureau of Land Management, Denver Colorado. Inventory data should be incorporated into the GTLF geospatial database.

Q: What level of cultural resource inventory is needed to implement the transportation network decisions?
A: Inventory requirements, priorities, and strategies will vary depending on the effect and nature of the proposed OHV activity and the expected density and nature of historic properties based on existing inventory information. *See* BLM Manual sections 8110, 8120, and 8130, BLM Handbook H-8120-1 Guidelines for Conducting Tribal Consultation, and State-specific policies and procedures for additional guidance. Each state should have its own inventory protocol as part of Cultural Resource Manual Supplements. The protocol should be developed in consultation with the respective State Historic Preservation Officers.

Q: Is tribal coordination/consultation required?
A: Yes. Travel Management decisions can adversely affect Native American access to important tribal resources or lands, and it is therefore imperative to consult with tribes as early in the planning process as possible. Tribal consultation is required under various laws, regulations, policies, and Executive Orders.

Q: How do I legally enforce non-motorized area designations? What's the citation?
A: Non-motorized area designations are enforced in two ways. For temporary or seasonal closures/restrictions, cite 43 CFR 8364 – Closures and Restrictions. For permanent designations, cite 43 CFR 8365.1-6 – Supplementary Rules (43 CFR 8365 – Rules of Conduct).

Q: Is a *Federal Register Notice* (FRN) required for enforcing motorized route designations?
A: No. According to law enforcement personnel, as long as the Administrative Procedures Act was followed (public is notified and has a chance to comment), the motorized route designations decision is enforceable with the signing of the ROD or DR.

Q: What authority should I use to protect persons, property, and public lands and resources affected by non-motorized (mechanized, stock, foot, or other) travel?
A: 43 CFR 8364 – Closures and Restrictions is utilized for temporary or seasonal closures or restrictions. 43 CFR 8365.1-6 Supplementary Rules is utilized for permanent designations.

Q: Do we need an additional FRN on route designations once the ROD for the RMP is signed?
A: An additional FRN is not needed for motorized road, primitive road and trail designations. A NOA with the signing of the ROD is the final step at which point the decisions can be implemented and enforced. If other restrictions are being put in place, such as limiting mountain bike use, a supplementary rule would have to be published in the *Federal Register*.

Q: If routes are deferred until after the RMP is completed and a Travel Management Plan is made to designate roads, primitive roads, and trails, do we need an FRN to make the designations enforceable?
A: No, as long as an EA is completed and the public has been notified and has had a chance to comment on the proposed actions. The selection of roads, primitive roads, and trails is an implementation of the RMP decisions – not a new rule – and therefore is enforceable with the signing of the decision record. If other restrictions are being put in place, such as limiting mountain bike use, a supplementary rule would have to be published in the *Federal Register*.

Q: What if there is a fire in a closed area and there is a need to drill to stabilize the soils or to start the recovery of wildlife habitat? What if a fire burns in an open area and there is a need to close the area to promote vegetative recovery in absence of external effects?
A: In the above situations, the BLM has the ability to take management actions necessary to protect and recover the soils and vegetation.

Q: What kind of exceptions can be made for game retrieval?
A: If there are exceptions for game retrieval, they should be described in the TMP. There is no national standard for these types of exceptions. Field offices should consider coordinating this policy with other Federal land management agencies, and with their state wildlife resources department. Within the BLM, for example, the Montana BLM allows for this exception whereas the Utah BLM does not.

Q: What other kinds of exceptions can be made?
A: 43 CFR 8340.0-5 (a) Excepts certain uses from the OHV regulations, such as:
   1. Any non-amphibious registered motorboat;
   2. Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes;
   3. Any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved;
   4. Vehicles in official use; and
   5. Any combat or combat support vehicle when used in times of national defense emergencies.

B) Questions and Answers Pertaining to National Scenic and Historic Trails

Q: Is travel and transportation planning different in any way for National Scenic Trails and National Historic Trails?
A: Yes. There are special requirements for National Scenic and Historic Trails. These can be found in the Land Use Planning Handbook, Appendix C, Section III. A. (Congressional Designations – National Scenic and Historic Trails). It is recommended that those provisions be understood and addressed in advance of area designation and route selection.

Q: How are these requirements different?
A: National Scenic and Historic Trails (NSHT) are long-distance trails designated by the U.S. Congress. On BLM-administered lands, they are units of the NLCS and fall under the provisions of the National Trails System Act. Each trail has unique enabling legislation and is administered and managed under a special trail-wide comprehensive management plan.

The NSHTs are not only physical routes on the ground – composed of roads, primitive roads, and trails by the BLM definition – but some national trails or trail segments are also cultural properties such as ruts, traces, swales, or historic sites. Some scenic trail segments require point-to-point navigation, and some historic trails show only as a route on a congressional map, with no discernible evidence of human passage on the ground. Although they are called "trails" by Congress and meet the BLM's definition of trail (or primitive road or road) in some places, the character of these linear features – and their setting or context – can vary significantly.

Q: How are these requirements the same?
A: Normally, in areas where NSHTs are and will continue to be managed as roads, primitive roads, or trails by the BLM definition, they would fall within the "limited area" category. Where

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national trails are considered cultural properties or where view shed or setting protections are desired to retain landscape character or for other purposes including visitor experience, a "closed area" designation may be used, depending on public access considerations. As in the Special Designation section of the handbook for these trails, all resource allocation tools should be used to create the best set of alternatives, rather than relying solely on area and trail designations. Similarly, when designing a route network for a "limited area," use care in route selection and the types of uses that are or are not permitted on NSHTs. Those may be dictated by law or policy in some instances, especially for motorized use and scenic trails, and motorized or non-motorized use on historic trails or cultural properties. National trails should not be identified for disposal or reclamation.

Q: What additional guidance is available for National Scenic and Historic Trails to help determine travel and transportation provisions?
A: The BLM guidance for the National Scenic and Historic Trails Program can be found in FLPMA, National Trails System Act, Departmental Manual Section 710, Executive Order 13195, 43 CFR 8351.1-1 *Motorized vehicle use*, and appendix C, Section III. A. of the LUP Handbook and other applicable laws such as the National Historic Preservation Act and related BLM Manuals. The Comprehensive Trail Management Plan for each trail may also contain applicable provisions. General guidance for the program will be produced over the next 10 years through implementation of the National Scenic and Historic Trail Strategy and Work Plan.

Q: Can a National Scenic and Historic Trail segment be a TMA?
A: Yes. It can be part of a TMA, or be its own TMA, depending on the resource issues in the planning area. Activity level (implementation) plans are warranted for some National Scenic or Historic Trail segments (*see* LUP Handbook, Appendix C, Section III. A. Congressional Designation – National Scenic and Historic Trails).

Q: Should NSHT be placed in Facility Asset Management System?
A: Yes, following the required data standards. (*See* Federal Trail Data Standards for additional guidance at www.nps.gov/gis/trails/)

Appendix 5: TTM Challenges and Solutions for Recreation/Trail Management

From a recreation facilities and services standpoint, common TTM challenges include:

1. Dense proliferation of routes that provide quantity, but low quality of recreation opportunities;

2. Access issues, including unplanned access that either limits the ability of visitors to gain access to BLM-administered lands or are so numerous as to be unmanageable;

3. Circulation within the system is poor, providing limited opportunities for all, or for a particular type of user;

4. Parking and staging areas that are insufficient in number, locations, and size;

5. Real or perceived conflicts between user types or between public land visitors and adjacent landowners; and

6. Lack of quality and diversity of trail experiences.

Each of these six challenges is described below.

Challenge 1 – Route Density

Route density is increasingly a problem on BLM-administered lands throughout the west. Particular problem areas include urban interface lands as well as recreation destinations where regional and out of state visitors converge. High visitor use levels and/or a lack of a clearly defined travel system are often exacerbated by environmental factors such as flat to rolling terrain and sparse vegetation which allows for easy cross-country travel. Recent changes in RMP allocations that increase the amount of "limited" travel management (OHV) designations conflicts with historic use patterns, where the public identifies BLM-administered lands as the "Big Open", available for cross-country travel. Areas with extremely high route density can detract from visual quality, be confusing to visitors, provide relatively few sustainable routes of actual quality or diversity for recreation use, and cause unacceptable fragmentation of wildlife habitat. Options to deal with existing or increasing route density include the following:

- Manage the number and type of access points;

- Identify and maximize the use of primary routes for a wider variety of purposes;

- Use an interdisciplinary approach to route closures and relocations (e.g. fire/fuels work, habit restoration projects, etc.);

- Provide standards for route decommissioning in concert with road, primitive road or trail development (i.e. do not call a primitive road a non-motorized trail; it should be redesigned as a high-quality trail overlaying the old primitive road footprint and rehabilitated to the new use);

- Focus on clear signs and maps for way-finding;

- Temporarily close areas while implementing the transportation system; and

- Require decommissioning of unwanted routes prior to developing new roads or trails.

Challenge 2 – Access Management

Access issues take multiple forms on BLM-administered lands. In some areas, the proliferation of access points is responsible for high-route densities and social conflicts on public lands. In other cases, the lack of developed and designated access has led to private land trespass as visitors pass through undeveloped private property to access public lands beyond. Roads traditionally used for access may be ROWs granted for private property access. As visitation and use of these roads increase, issues may occur as maintenance costs for ROW holders increases. Likewise, historic access that occurred at low levels of visitation may become high enough to cause conflicts with adjacent residences.

Access issues also include the expansion of undeveloped and undefined parking areas, causing resource damage or spilling onto private lands. Often the type of vehicles using an area changes over time, with single vehicles or vehicles with small trailers being supplanted by large RVs and camp trailers. In these cases, twisting access roads or tight turning radius into developed sites may not be able to handle these newer, larger vehicles.

A key issue in the spread of user-created access and parking areas is the lack of a quality environment at the portal to public lands – and the lack of information and education. If entry points to public lands consist of braided, non-engineered, and expanding disturbed sites, the likelihood of increasing land stewardship of visitors is low.

Strategies and tools to deal with access issues include:

- Providing information on visitor maps, websites, or recreation area entry that indicate maximum vehicle size or vehicle length restrictions;

- Prioritizing the decommissioning of routes adjacent to and connecting with the transportation network in locations or corridors where access is confined to specific trailheads;

- Working with interested/affected public to identify minor access points for local or neighborhood use;

- Coordinating proposed trailhead or access locations with appropriate state or county transportation departments or the Federal Highway Administration to secure valid approach permits and choose locations that provide for safe ingress/egress points;

- Locating larger capacity trailheads away from residential or sensitive land uses;

- Defining trailhead capacities and provide specific areas for single vehicles vs. trailers;

- Providing different trailheads for different types of users to promote the use of separate trail systems; and

- Removing parking from sensitive resource areas.

Challenge 3 – Improve Circulation

Travel patterns on roads, primitive roads and trails within public lands shape the experiences of visitors. However, the existing layout of routes within BLM-administered lands is often the result of chance and isolated decisions based on outdated circumstances. Factors that result in the user creation of routes, such as construction of fence lines for administrative or property boundaries often result in roads, primitive roads or trails along fence lines with little intrinsic user quality and high social conflicts. In many cases, established routes through public lands dead end at private property boundaries and no longer serve any functional access needs. Often the densest network of routes radiate out from user created staging areas, which may not be in locations where trail heads or high trail density are appropriate.

Circulation issues also occur through the use of unplanned or undersigned systems that lead visitors on long, flat and, relatively fast routes such as power line ROWs, yet lead to few attractions or fail to provide reasonable loops. Routes may be laid out in a way that seasonal closures of specific routes may destroy the functionality of large loops or significant portions of the trail system, leading to violations of closures and resource impacts. Strategies and tools for solving circulation problems include:

- Using TMAs where possible that include distinct areas or use a select group of access points or gateways;

- Providing loops of varying lengths and stacked loop systems to disperse trail users where possible;

- Avoiding dead-end routes into private property. If a route is needed to access private property, consider connections to the corner of private parcels that allow administrative access around private property without the need for easements or reciprocal ROWs;

- Considering the use of public roads and maintained ROW roads as arterials for the transportation system, reducing the need for new road construction;

- Seeking easements where possible to retain transportation system function and reduce the need for additional road construction; and

- Providing easy trails near trailheads, more difficult trails further away.

Challenge 4 – Improve Parking

Often, parking and staging areas on BLM-administered lands are user-created areas that grow in size over time. These areas may be located near sensitive resources, inadequate for the use being served, or have unsafe connections to public highways. In urban interface areas, these parking and staging areas may be a result of historic use patterns, but now are located adjacent to private development. Often, there are numerous small parking areas scattered along a public road corridor as visitors seek privacy and their own setting. In areas that are becoming highly popular

trail destinations, existing parking areas are inadequate to handle the demand, and parking may spill out onto public road shoulders in an unsafe manner.

With the designation of parking and trailhead facilities, concerns may be raised by adjacent communities or landowners about a variety of issues, including noise, nighttime use, and traffic impacts on local roads as more visitors access the public land gateway. If the parking area/trailhead is located on a ROW road maintained by others, they may raise concerns regarding the fairness of maintaining a road that may receive large increases in public recreational use.

Things to consider when designating parking areas and trailheads:

- Include trailhead locations in scoping and public involvement process;

- Consider use of criteria that locates trailheads and parking areas where there are fewer social and natural resource conflicts;

- Use trailhead locations to differentiate trail user types. Access opportunities can help define zones for different user types;

- Choose locations in consultation with state or county road departments, which may require approach permits;

- Trailheads and parking areas located further inside public land areas may have fewer conflicts with adjacent land uses; however, there is a tradeoff between these locations and the need to maintain longer access roads on public lands and increased fragmentation;

- Consider areas where future expansion of trailhead parking is available.

  If the trailhead/parking area is at the end of a dead-end road, consult with local jurisdictions and fire/public safety for turning radius standards to allow fire trucks and emergency vehicles to turn around;

- Consider guidelines for overnight camping, firearm discharge and other activities within parking/staging areas; and

- To reduce conflicts, consider different pods/areas within a larger trailhead to reduce user conflicts (e.g., separate areas for equestrian or OHV parking).

Challenge 5 – Resolving User Conflicts

Traditionally, a diverse range of recreation opportunities with a minimum of management constraints have been provided on BLM-administered lands. As the number and diversity of public land visitors has increased, the issues of user conflicts, safety, and desired recreation setting have increased. In more intensively used areas such as urban interface, SRMAs, ERMAs, and areas that are receiving increased visitation, user conflicts are often expressed as:

- Difference in speed of travel between different trail user groups;

- Difficulty in maintaining trail tread for multiple users (i.e., one user group tears up the trail tread for others);

- Difficulty in maintaining a specific, desired trail width if the trail is used by a wide range of users;

- Noise and dust;

- Trail obstacles may be desired, or constructed by one set of users, and a hindrance or safety issue for others;

- Trail locations adjacent to private property may be of concern to adjacent landowners;

- Historic route patterns may prompt visitors to trespass on private lands; and

- Popular trails may dead-end at private property (e.g., a trail along a river corridor that ends at private lands).

User conflicts are perceptions, often expressed as concerns, fears and unease, and involve a variety of issues ranging from safety to resource impacts. Careful dialogue and facilitation during public input may help define the root cause of these concerns and develop solutions. Solutions may vary for different portions of the planning area, depending on levels of use, terrain, and the predominant type of existing routes. Careful consideration of user conflicts should be balanced with the management resources available to manage transportation systems. Complex management settings with separate trails for a variety of users, many different trail use zones, or highly specific regulations such as speed limits or seasonal/daily use restrictions may be difficult to implement.

Some strategies and tools to consider when dealing with road, primitive road and trail user conflicts include:

- Identify different areas or zones for different types of users (using existing landscape features to help define different use areas – ridges, waterways, highways, power lines, or grazing allotment fences, etc.);

- Identify different trails for different types of users, often this type of management is made easier if separate trailheads/access points are provided for different users;

- Clearly identify trail management objectives, design, and maintenance standards, including route signage for allowed uses and difficulty levels;

- Maintain adequate sight distances for curvilinear trails;

- Identify areas or features that are most sought after by a variety of trail user types, and consider how to provide these to a variety of users;

- Provide public information on trail etiquette and trail regulations through use of visitor maps, trailhead kiosks, and website information;

- Consider seasonal restrictions, trail control points, pullouts, and parallel trails where needed to inform and regulate trail users;

- Existing routes often occur as the easiest, most level and least curvilinear routes. These routes may encourage high speed use by motorized and mechanized users. Consider trail design that may help slow down visitors; and

- Consider the length of trail systems and types of uses. Motorized and mechanized trail systems typically require greater trail miles per user than pedestrian and equestrian trails. Providing adequate trail miles and a variety of loops may help decrease crowding and user conflicts).

User conflicts also often involve public land visitors and adjacent residents. Trail proximity to private property is increasingly becoming a contentious issue. Some property owners want trails located near them because they offer access, while many others want roads, primitive roads and trails located far away from their property, to reduce noise, dust, disturbance and potential for trespass. During the planning process, the ID team should consider whether locating trails adjacent to private property is needed to reduce fragmentation of BLM-administered lands, or whether locating trails and roads further away to decrease social conflicts is more important. Consideration of these issues may result in choices to:

- Set noise thresholds for OHVs at a lower level than the existing State standard (if present);

- Close areas seasonally, or by time of day;

- Locate routes to take advantage of topographic barriers that help reduce noise issues;

- For areas that are surrounded by residential development, consider the use of "Closed" area designation for motorized vehicle use;

- Include decisions for future fence construction along public land boundaries in heavily used trail areas;

- Limit the public recreational use of specific road ROWs; and

- Work with communities to identify community or subdivision level access points or easements.

Challenge 6 – Quality and Diversity of Trail Experiences
A large portion of BLM-administered lands lack planned and designated transportation systems where roads, primitive roads or trails are deliberately designed, located and maintained for specific uses or opportunities. Often the public has never been asked what types of routes they would like to use on public lands, or what type of experience they are seeking. While one set of conditions are sought by administrative users, a completely different setting and route condition may be desired by recreational visitors. A route-by-route evaluation of existing routes will help identify routes with particular constraints or those that are not needed for administrative access,

or redundant routes for area access. However, the broader recreation need is often not met by simply evaluating the existing network and removing those routes not desired. Key issues involved in providing a diverse and quality trail experience include the number of roads in an area versus the number of specific trail opportunities.   While most visitors can use roads and primitive roads for any type of activity from hiking to full-size vehicle use, roads do not provide a high degree of difficulty for many trail users or fail to provide an interesting, more intimate and natural experience for visitors. Trail users seek challenging routes, including highly technical primitive roads that are not roads, single track motorcycle or mountain bike trails, and varied trail alignments for equestrian or hiking/backpacking use. Some strategies and tools for providing quality and diversity in the primitive road/trail system include:

- Identifying different trails for different types of users, often this type of management is made easier if separate trailheads/access points are provided for different users;

- While the RMP may identify a subset of existing routes for a particular use, the RMP may also identify goals and guidelines for providing a greater range of opportunities for a particular type of trail user and specific level of difficulty. For example:

    o The existing network is composed of routes greater than 4 feet in width; however the lack of need for administrative roads in the area may lead to a decision for future activity level plans to emphasize conversion of roads to narrower motorcycle trails.

    o The existing network of routes includes a large number of hill climbs created by OHV use that are not sustainable trails. The RMP may identify the need to rehabilitate the existing routes and create a sustainable network of non-motorized trails in the area.

    Other considerations are as follows:

- Look for corridors or trail use areas that provide specific conditions that are highly sought after;

- Provide for assigned difficulty levels and a monitoring process for determining if these difficulty levels are being maintained;

- Realign existing trails to provide for more variety and create more sustainable trail alignments;

- Use existing landscape features to provide challenge and technical difficulty where possible; and

- Technical trail features should be designed as a bypass, with the main stem of the trail staying at the typical trail difficulty level.

Appendix 6: Example of a Recreation and Travel Management Plan

Though this plan covers a small area by typical BLM standards (11,000+ acres), it provides an excellent example of not only how a travel management plan can be formatted, but also of how recreation and travel management plans can be integrated into a plan that serves both purposes. The same basic format or interdisciplinary approach could be used for a much larger area. The level of detail needed is largely driven by the need – more for more intensively managed areas, less for larger areas with more dispersed management.

(Note: This represents only a portion of the original plan)

TABLE MESA RECREATION MANAGEMENT ZONE

RECREATION AND TRAVEL MANAGEMENT PLAN

&

ENVIRONMENTAL ASSESSMENT

DOI-BLM-AZ-PDO-2009-022-EA

PREPARED BY:

U.S. DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
PHOENIX DISTRICT OFFICE
HASSAYAMPA FIELD OFFICE

PHOENIX, ARIZONA

JUNE 2010

Table Mesa Recreation and Travel Management Plan
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I. INTRODUCTION

The Table Mesa planning area is located on the northern edge of the rapidly urbanizing Phoenix Metropolitan area in the BLM Bradshaw-Harquahala planning area. It pertains to the Hassayampa Field Office (HFO), located within the BLM Phoenix District Office. Population growth from 1990 to 2000 exceeded 40 percent in the region. As the population grows, so does the demand for recreational opportunities. The Table Mesa area is used for motorized recreation, target shooting, hiking, biking, equestrian use, recreational mining, camping, and sight-seeing.

The area also contains a major utility corridor, permitted grazing allotments, active mining operations, and private land in holdings. As use increases in this finite space, conflict can occur between users seeking differing recreation experiences. Additionally, as urban development encroaches upon public lands, recreation pressures can negatively impact natural and cultural resources, as well as other authorized uses, such as grazing and mining.

BLM HANDBOOK   Rel. No. 8-82
                                                                 Date: 03/16/2012

The Table Mesa Recreation and TMP is written in conformance with the *Bradshaw-Harquahala Approved Resource Management Plan and Record of Decision* (BH ARMP/ROD). For the Table Mesa area, the BH ARMP/ROD offers a mix of recreational opportunities that attempt to meet a wide variety of recreation demands, while reducing conflict among users with natural resources, cultural resources, and traditional public land uses. The BH ARMP/ROD emphasizes community partnerships to develop recreational opportunities in support of resource protection and public education. Within the Bradshaw-Harquahala planning area, the Table Mesa Recreation Management Zone (RMZ) is part of the Black Canyon Management Unit and Black Canyon SRMA. The SRMAs are areas that require special management, and/or have increased recreation use and demand. The SRMAs are areas of intensive recreation use and are managed to retain recreation opportunities while protecting resources and reducing user conflicts. Portions of the Black Canyon Hiking and Equestrian Trail RMZ coincide with the Table Mesa RMZ. The RMZs are located within SRMAs and have a particular recreation management focus or resource challenges.

This document is the product of extensive public and agency input and consists of background information, proposals received and considered from members of the public and governmental agencies, a proposed plan, plan alternatives, and an environmental assessment.

The goal of the **Table Mesa Recreation and TMP** is to propose a management framework that allows for both current and future recreation needs in the Table Mesa area, while ensuring protection of resources. Specifically, this plan intends to reduce conflict among hikers, equestrian users, mountain bikers, recreational shooters, OHV users, private land owners, and other users of the area. It identifies the BLM system of roads, primitive roads and trails, and the designations for their use and maintenance; it outlines facilities to be developed in support of recreation; defines buffered areas closed to recreational target shooting; and it discusses visitor management and plan implementation. The plan includes establishment of facilities, staging areas, creation of new motorized and non-motorized routes, and closure of some motorized routes.

The **Environmental Assessment (EA)** analyzes the Table Mesa Recreation Area plan and its alternative. The NEPA Number for this EA is DOI-BLM-AZ-PDO-2009-022-EA. Publication of this EA will be followed by a 15-day public review period, specifically seeking additional data or information that may fundamentally alter the proposed plan. Upon completion of the review period, and pending no fundamental alteration to the plan, a Finding of *No Significant Impact* will be issued along with a DR. Following approval of the decision by the Hassayampa Field Manager, a notice of use restrictions pursuant to 43 CFR8342 and 43 CFR8365 will be published in the *Federal Register* to establish rules necessary to implement the final Recreation and Travel Management plan and associated designations.

PLANNING AREA LOCATION

The Table Mesa RMZ is comprised of approximately 11,557 acres located within the Black Canyon Management Unit of the BLM's Bradshaw-Harquahala Planning Area (Figure 1). In addition to the BLM acreage, the planning area includes private land in-holdings. Its primary

access point is from Interstate-17 at the Table Mesa Road Exit. It is located north of New River, south of Black Canyon City, and west of I-17. The southwestern boundary of the RMZ is adjacent to the Lake Pleasant Regional Park.
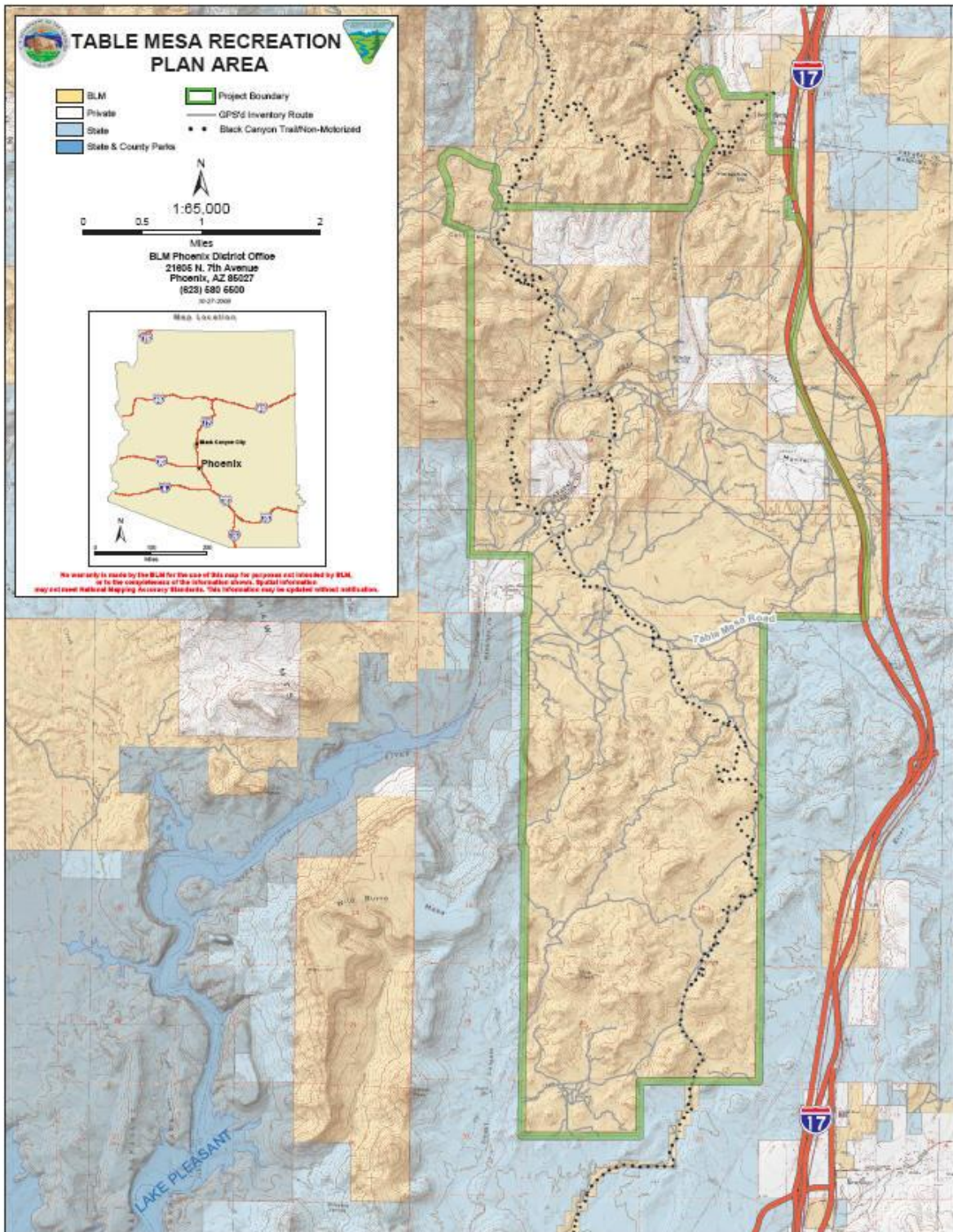
FIGURE 1: TABLE MESA PLANNING AREA MAP

INVENTORIES

Route Inventory and Evaluation

A route inventory was conducted in the Table Mesa RMZ area during 2002 under an interagency project involving the State of Arizona OHV program, Arizona State Land Department, the BLM and the U.S. Forest Service. Interested user groups helped identify hard-to-find routes prior to the inventory. Participants involved in route evaluation included representatives of the Arizona Game and Fish Department and the BLM. The OHV user organizations and other interested groups and individuals submitted comments during meetings and associated comment periods, providing additional information on the use and need for particular roads and trails. Goals and objectives were identified for the planning area, which addressed multiple use and resource protection concerns relating to recreation access and travel management. Based on the route-by-route evaluation and public meetings, the route system alternatives were created and are discussed in this plan.

Target Shooting Site Inventory and Evaluation

A target shooting site inventory began in 2002, was updated in 2008, and was completed in 2009, in conjunction with the Arizona Department of Game and Fish and the National Rifle Association (*see* Appendix A). The purpose of the assessment was to determine the locations and suitability of existing shooting sites within the Table Mesa area. The assessment considered 40 sites currently being used for target shooting. Most existing shooting sites in the Table Mesa RMZ occur along roads. Based on this evaluation, a plan to conserve natural and cultural resources, improve visitor experiences and public safety was deemed necessary.

BENEFITS BASED RECREATION MANAGEMENT

Benefits Based Management (BBM) [Outcome Focused Management] is a recreation management philosophy that focuses on the positive and beneficial outcomes derived from recreational activities, rather than emphasizing the recreation activities themselves. It promotes quality recreation experiences from the visitors' or users' perspectives. The BBM provides the conceptual recreation framework to view, plan and collaboratively deliver recreation services as a means to a larger end – an end in which outcomes benefit individuals, communities, economies and the environment. By conducting BBM analysis, recreational settings can be better delineated and managed. In BBM, priority is given to resource dependent recreation. Resource dependent recreation is that which can only be done where the natural resource or setting exists. *An example is running for fitness versus nature hiking*. Fitness running can be done on a treadmill or anywhere a suitable surface exists. Nature hiking requires a natural setting and things to observe along the way. Hiking would not be suitable indoors or in unnatural settings; thus it is a resource dependent recreation. The BBM analysis was conducted for recreational uses in the Bradshaw-Harquahala planning process. It was determined that – while recognizing other forms of recreation in the area – the primary niche for the Table Mesa RMZ is intensive motorized recreation for single and two-track routes with camping related to OHV use. The OHV recreation is closely associated with the use of specialized two, three and four wheel

vehicles, intended for recreation or racing uses. Vehicles include dirt bikes, quads, go-carts, utility terrain vehicles (UTVs or side-by-sides), and specially prepared 4x4 vehicles.

SCOPING & PUBLIC PARTICIPATION

This Table Mesa Recreation and Travel Management Plan has been crafted with considerable input from individual citizens and groups who utilize the area for recreation activities, interested landowners, other interested members of the public, and government agencies at the Federal, state, and local levels. Feedback has been received both in writing and in public scoping meetings.
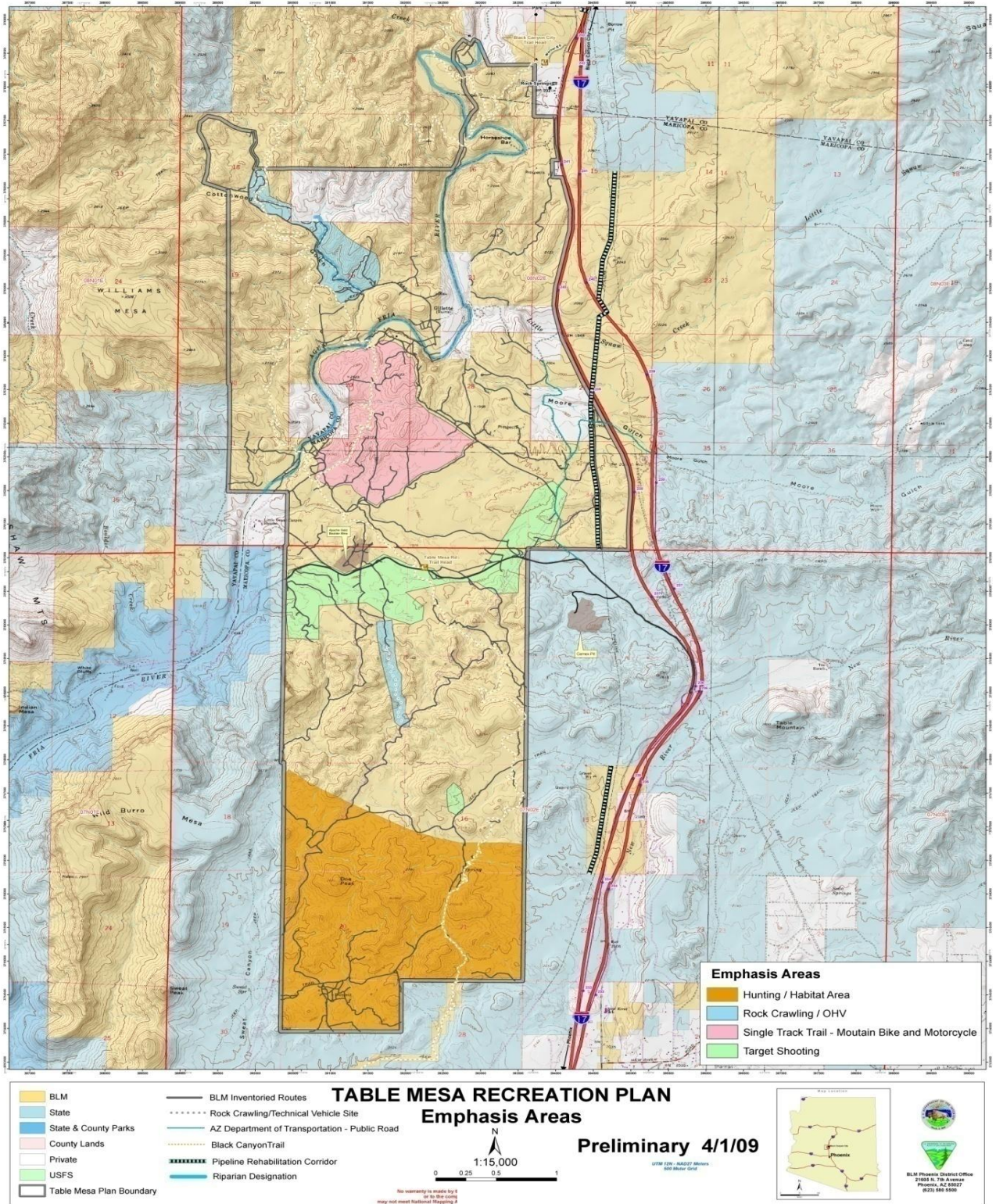
In an effort to collaborate with individuals and groups interested in the outcome of the Table Mesa RMZ planning effort, six formal public meetings were held in Phoenix and Anthem, including three scoping meetings (November 18 and 20, 2008 and June 30, 2009), and three core strategy meetings (January 20, February 3, and 17, 2009). Communication has been encouraged by establishing dedicated public scoping websites containing meeting notes, planning processes, and maps on a BLM website.

Scoping revealed that the Table Mesa area is utilized by the public for a variety of recreational purposes, including:

- Target Shooting;
- Off-Highway Vehicle Driving and Rock Crawling;
- Hiking on the Black Canyon Trail and other trails;
- Rock Hounding;
- Equestrian Activities;
- Camping;
- Hunting;
- Mining and Gold Panning; and
- Access to fishing and other activities provided in adjacent Lake Pleasant Regional Park.

The RMZ is heavily used for recreational target shooting and OHV driving, but demand for all recreation types mentioned above is increasing as the Phoenix metropolitan urban area grows closer to public lands. Some of the recreation uses engender solitude experiences with little non-natural noise, while others are amenable to large groups, with heavy mechanized use heavy noise.

In an attempt to encourage compatible recreation use within the Table Mesa RMZ and to accommodate resource protection, a zoned approach (*see* Figure 2) was derived for the proposed plan. Emphasis areas focus on hunting and habitat preservation, four-wheeling and technical vehicle driving, single track trails (for motorized and non-motorized use), and target shooting.

Emphasis Areas

⬛ (orange)	Hunting / Habitat Area
⬛ (blue)	Rock Crawling / OHV
⬛ (pink)	Single Track Trail - Moutain Bike and Motorcycle
⬛ (green)	Target Shooting

TABLE MESA RECREATION PLAN
Emphasis Areas

Preliminary 4/1/09

1:15,000

🟨	BLM
🟦	State
🟦	State & County Parks
🟪	County Lands
⬜	Private
🟩	USFS
▭	Table Mesa Plan Boundary

——	BLM Inventoried Routes
•••••	Rock Crawling/Technical Vehicle Site
‐‐‐‐	AZ Department of Transportation - Public Road
··········	Black CanyonTrail
▪▪▪▪▪	Pipeline Rehabilitation Corridor
——	Riparian Designation

1.

FIGURE 2: RECREATION EMPHASIS AREA MAP

ISSUES & CONCERNS

The following issues and concerns were identified during the scoping process. These issues and concerns help frame the purpose and need for the planning effort and shape the alternatives presented later in this document.

- Recreational shooting in unsafe locations and in high volume endangers other users, damages existing flora, and creates litter.

- OHV driving occurs off of routes, on county roads, cross-country, and in sensitive riparian areas.

- The Black Canyon Trail (BCT) use is increasing, but parking and staging areas are not sufficient.

- Access to some popular BLM recreation sites currently requires crossing private or state trust land, which the BLM may not endorse.

- OHV and Rock Crawling use is increasing and has damaged some desert tortoise habitat and riparian areas.

- Mining clubs have claims along the Agua Fria River riparian corridor, requiring access and staging locations.

- Rock hounding use is increasing.

- Access across the Agua Fria River is dependent upon water levels and during heavy rains, puts some users in danger and possibly harms river resources.

- State Lands will be closing the service road gas pipeline parallel to I-17 to vehicle traffic and is requesting BLM to do the same.

- Increasing recreation use requires larger staging and camping areas.

- Gravel pit operations in TR5NR2E Sec. 5 have unique concerns and may interrupt other uses and be interrupted by recreation.

- Access to popular recreation sites outside of the planning area should be considered.

- Grazing allotments throughout the RMZ are still active and require access.

- Wilderness characteristic areas are located immediately north of and adjacent to the RMZ.

- Arizona Department of Transportation is planning to widen Interstate Highway 17 along the eastern boundary of the RMZ and is concerned that the plan will conflict with future highway improvements.

- Parts of the RMZ occur within Maricopa County and are required to comply with state laws on dust pollution (PM10) Area A Particulate Matter 10 Dust Management protocols.

- Table Mesa Road is the main access route to the north arm of Lake Pleasant County Park. Conservation and recreational uses of the park's Agua Fria Conservation Area need to be considered to ensure that the management plans for the park and the Table Mesa area complement each other, while allowing for a wide range of activities in diverse locations.

- Some private land owners are concerned about target shooting in areas adjacent to their land, planned for future housing development.

- Utilities need continued access.

- Access to BLM lands sometimes crosses county and state lands where such access may not be consistent with their management mission.

PROPOSALS CONSIDERED IN THE PLANNING PROCESS

Given the level of public and agency participation in the RMZ planning effort, many proposals were considered in the planning process. Each proposal from members of the public was considered in detail and in light of the desired future conditions, and the *Bradshaw-Harquahala ARMP/ROD* decisions for the Black Canyon SRMA, Table Mesa RMZ, and Black Canyon Hiking and Equestrian Trails RMZ.

Routes

- Ensure unlicensed vehicular access from Black Canyon City on both sides of I-17, South of Rusty Rock Mine, and on gas line east of 1-17 under Moore's Gulch.

- With passage of a state law that requires a type of OHV License (decal), proposed route closures across state land may be appropriate. Reconsider proposed closures.

- Maintain as *open* the routes that connect to state land, thus allowing loops.

- Maintain as *open* the dead-end routes for cell phone access (thus improving safety) and offering hilltop viewpoints. Monitor these locations for route proliferation.

- Maintain as *open* the dead-end route overlooking Gillette.

- Connect a loop in the south area to allow vehicle driving to be spread out in order to improve trail riding. Make a loop route around the south end of the Table Mesa RMZ.

- Open routes to create loop trails.

- Add additional hiking and biking trails for various skill levels.

- Keep Old Stage Route open for access from Black Canyon City to "Collateral Damage" Rock Crawling area.

- Make a new route on the west side of the Gillette Property.

- Maintain access to Lake Pleasant Regional Park.

- OHV and horse trails should be separate.

- Need improved roads for cars.

- Emphasize motorized use in this area with non-motorized emphasis in adjacent area.

- Maintain access to Tip Top Mine.

- Reopen old mining roads, specifically in the southern area (Bonnie Bell Mine.)

- Allow motorized access from New River.

- Evaluate and designate a sand run in the Agua Fria River.

- Create a new route on BLM land, parallel to the power line road to allow loop route in south end of RMZ.

- Conduct separate NEPA (environmental) analysis for each proposed route change.

- Do not improve Table Mesa Road.

- Consider at least 100 miles of OHV routes.

- Consider allowing route 17B/19K for day use only.

- Add single track mountain bike trails in Doe Peak area.

- Consider allowing Route 16P/16N to be designated as *open* for single track use only.

- Driving in washes/river should be allowed.

- Add a long-distance motor cycle route from Table Mesa to Bumble Bee.

- Consider separating trails by speed limit instead of vehicle/use.

- Do not limit public to existing trails.

Rock Crawling / Technical Vehicle Sites

- Close the egress road near tortoise habitat and use the egress road that "Anaconda" Rock Crawling site uses (12I).

- Need good, surface-hardened staging area to access rock crawling sites.

- Resurvey the "Collateral Damage" Rock Crawling site and provide access to the site.

- Keep the "Die Hard" rock crawling site open and regulate shooting if necessary.

- Consider a northern access route (skirting private land) for "Collateral Damage" Rock Crawling site.

- Maintain as *open* all existing rock crawling routes.

- Open the "Armageddon" rock crawling site on a limited basis.

Recreational Target Shooting

- Consider access for disabled people in the shooting buffer proposal.
- If safe shooting areas are established, ensure that more than five or six are created to spread out the shooters.
- Close area north of Table Mesa Road to shooting since most of the OHV activity and camping occurs north of the road.
- Reevaluate the proposed closing of shooting site S-5 (maintain as open).
- Do not develop shooting sites or allow shooting to occur along the AZCO road.
- Do not identify safe shooting sites near private property that is planned for future residential development.
- Reevaluate the safe shooting area philosophy, since dispersed shooting keeps each group safe from other groups of shooters who may use poor judgment.
- Reconsider proposed closure of S22 and S29.
- Reconsider proposed shooting closures at sites within washes as some users feel that lead migration concerns are unfounded and wash banks provide safe backstops. (This proposal also included water quality data from the City of Phoenix Water Plant.)
- Create mini ranges and require their use – the Doe Peak area would be good for this.
- Develop many smaller shooting areas instead of a few larger ones.
- Retain shooting site S-29 as a shotgun range.
- Develop shooting sites.
- Do not close any of the RMZ to shooting.
- Ban shooting in entire Table Mesa Planning Area.
- Create safety fan areas to improve shooting safety.

Hunting

- Include game hunting access to riparian areas.
- Consider adding game birds for better hunting.

Rights-of-Way & Realty

- Pursue access across the Lake Pleasant Regional Park for long distance trails.
- Pursue access across state and private lands to minimize the need for new routes to bypass these lands.
- Partner with Arizona Off-Highway Vehicle Coalition to pursue legal access, as necessary.
- Add old roads on topographical maps into the system for later use.
- Purchase the "Gillette" private property in holding and make it a camp/picnic area.
- Require key access to the area from I-17.

Education, Outreach, Administration & Enforcement

- Work with public volunteer groups to educate public and clean/improve the area.

- Unsafe shooting is better addressed through education and enforcement; change the philosophy to do this.

- Allow OHV groups to adopt/sponsor areas/sites for monitoring and care.

- Allow shooting site S-28 to be adopted by the Honeywell Sportsmen.

- Improve communication capabilities via local cell tower.

- Maintain kiosks with paper targets for users.

- Ensure safety on Black Canyon Trail.

- Enforcement and regulation must become a priority -- More patrols by rangers.

- Ensure enforcement of dumping/littering laws.

- Name the 4X4 Trails on a map.

- Work with Bureau of Alcohol, Tobacco, and Firearms, and the Department of Public Safety to conduct sweeps of shooting users.

- Adopt an enforcement plan: first offense leads to a ticket; second office leads to banishment from area.

- Allow hunting of nuisance burros.

- Consider a reasonably-priced use permit.

- Consider a uniform access pass for recreation areas.

- Consider trail use rotation.

- Include water stations for recreationalists.

Facilities

- Create more camping areas along the Agua Fria River.

- Mark trailheads and roads.

- Ensure sufficient signage to avoid getting lost.

- For rock crawling sites, create a gatekeeper or limiter device to restrict access by smaller vehicles.

- Include signage indicating where private lands occur.

- Ensure training lot is located away from target shooting.

- Signage with jurisdictional safety emergency contact numbers.

- Add a helipad to the Table Mesa planning area.

- Add an airstrip to Table Mesa planning area

- Create a gold panning area in Agua Fria River.

- Erect a bridge over the Agua Fria River to protect it while allowing access to the other side.

- Add camp sites near shooting areas.

- Add trash receptacles, enforce their use, and remove trash.

CONFORMANCE

Land Use Plan

The BLM's planning process is governed by FLPMA (43 USC 1711) and 43 Code of Federal Regulations (CFR) 1600, which governs the administrative review process for most of BLM's decisions. Land use plans ensure that BLM-administered public lands are managed in accordance with the intent of Congress as stated in FLPMA and under the principles of multiple use and sustained yield. As required by FLPMA, public lands must be managed in a manner that protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, preserves and protects certain public lands in their natural condition and provides food and habitat for fish and wildlife and domestic animals; and that provides for outdoor recreation and human occupancy and use by encouraging collaboration and public participation throughout the planning process. In addition, public lands must be managed to help meet the nation's needs for domestic sources of minerals, food, timber, and fiber from public lands.

The LUPs are the main mechanism for guiding the BLM activities to achieve the mission and goals outlined in the BLM's Strategic Plan (BLM 2000). The BLM currently manages the Table Mesa RMZ under the *Bradshaw-Harquahala Approved Resource Management Plan and Record of Decision* (2010).

The *Bradshaw-Harquahala ARMP/ROD* contains Desired Future Conditions for several resources and resource uses within the Black Canyon SRMA and the Table Mesa RMZ. These Desired Future Conditions drive management direction and serve as a basis for the Plan for Recreation, Lands and Realty, Biological Resources, Cultural Resources, Wilderness Characteristics, Visual Resources, Rangeland Management, Travel Management, and Mineral Resource Management. A brief summary of some of these resources is presented below.

Black Canyon SRMA Desired Future Conditions

- Preserve scenic and open space values and provide an array of public opportunities for trail-based recreation within diverse and healthy landscapes.

- Provide an assortment of intensively managed, intensively used trail-based motorized and non-motorized recreation uses within the SRMA. Emphasize motorized and non-motorized trail links east and west of I-17, links with Prescott and Tonto National Forests, Lake Pleasant Regional Park, the Castle Hot Springs area, the Great Western Trail, and connections to all communities.

- Manage the recreation area to function as an open space gateway into Maricopa County from the north, managed for viewsheds and long-range vistas of valleys, hills, and the Bradshaw Mountains. Connect the Maricopa County Park System with a regional non-motorized trail system between Lake Pleasant Regional Park, the Cave Creek Recreation Area, and the Spur Cross Ranch Conservation Area.

- Facilitate preserving a scenic open space corridor along I-17 between Yavapai and Maricopa Counties, welcoming visitors to Maricopa County and promoting area tourism.

- Maintain recreation settings identified through inventory as shown on the Recreation Opportunity Spectrum (*see* Map 3-11 of the *Bradshaw-Harquahala PRMP/FEIS*), except where otherwise stipulated in prescriptions of other allocations.

- Secure more law enforcement and public-user group involvement as a high priority to promote environmentally responsible recreation, discourage vandalism, protect the public, and protect the public investment in public lands.

Table Mesa RMZ Desired Future Conditions

- Manage for intensive motorized single and two-track routes and general motorized recreation.

- Manage activities for acceptable dust control and compatibility with neighboring communities and landowners.

- Maintain semi-primitive motorized and roaded-natural settings. Users will occasionally be concentrated in developed sites, but recreation use will generally be dispersed.

- Construct and maintain facilities to meet the basic needs of visitors and to enhance resource protection. Maintain clear yet non-intrusive signing in most of the RMZ.

Black Canyon Hiking and Equestrian Trails RMZ Desired Future Conditions

- Design and build new trail segments with community and citizen participation.

- Provide high-quality non-motorized recreation experiences for hikers, equestrians, and mountain bikers through the Black Canyon corridor.
- Incorporate loops, links, and trailheads. Link the communities of Black Canyon City, New River, Anthem, and Phoenix.

Long Distance Route Corridors

- Complete the designation of long distance route corridors to establish the importance of such routes for further planning and connectivity with surrounding towns and jurisdictions.

Lands & Realty

The Table Mesa RMZ also contains a utility corridor with both electrical power lines and natural gas pipelines. The corridor flanks the eastern boundary of the RMZ and most users pass through the corridor to access recreation sites from the Table Mesa Road exit of I-17. Future maintenance of this corridor is required.

Biological Resources

The Table Mesa RMZ supports several important wildlife habitats, including riparian zones along the Agua Fria River and desert tortoise habitat. The RMP makes specific provisions for the protection of the habitat for special status species, such as desert tortoise and yellow-billed cuckoo. The RMP also outlines goals of protecting other priority habitats for game species, other special status species, birds of conservation concern, and raptors. Specific RMP decisions are as follows: TE- 1,2,7,8,9,10,11,12,13,14; WF- 1,7,16,18,20; VM -1; LH- 1,2,3; WS- 1; TM -21, 27.

Cultural Resources

The Black Canyon Corridor Special Cultural Resource Management Area (SCRMA) exists within the RMZ. This management area includes diverse types of prehistoric archaeological sites, along with sites associated with historic ranching and mining. The historic Black Canyon Sheep Driveway passed through the area. The *Bradshaw-Harquahala ARMP/ROD* emphasizes continued monitoring and protection of sites in the SCRMA, and it allows for interpretive development at selected sites as identified. Tribal consultation for protection of cultural resources has occurred and will continue to occur for the SCRMA.

Other Special Recreation Uses – Black Canyon Hiking and Equestrian Trails RMZ

The Black Canyon Trail (a *National Recreation Trail*) RMZ bisects the Table Mesa RMZ. The Black Canyon Trail RMZ shares many of the Desired Future Conditions with the Table Mesa RMZ. The Recreation Area Management Plan for the Table Mesa RMZ must ensure that the Black Canyon Trail RMZ can be successfully managed to meet its prescribed DFCs.

Other Laws, Regulations, Policies & Program Guidance

- Americans with Disabilities Act of 1990.

- Clean Water Act of 1977.

- Executive Order 11988, Floodplain Management, May 24, 1977.

- Executive Order 11990, Protection of Wetlands, May 24, 1977.

- Fish and Wildlife Coordination Act of 1934, as amended.

- Endangered Species Act of 1973, as amended.

- Clean Air Act of 1963, as amended.

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994.

- Executive Order 13007, Indian Sacred Sites, 1996.

- Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, January 10, 2001.

- National Historic Preservation Act of 1966, as amended. Native American Graves Protection and Repatriation Act (1990).

- 43CFR9268 Law Enforcement – Recreation Programs.

- BLM Instruction Memorandum 2006-173, *Implementation of Roads and Trails Terminology Report.*
- BLM Instruction Memorandum 2008-174, *Road Maintenance Agreements*.
- BLM Instruction Memorandum 2008-074, *Methods for Authorizing Shooting Ranges and Areas on Public Lands.*
- BLM Instruction Memorandum 2008-014, *Clarification of Guidance and Integration of Comprehensive Travel and Transportation Management Planning into the Land Use Planning*
- BLM Instruction Memorandum 2008-091, *Guidance for Signing When Implementing Comprehensive Travel and Transportation Management Planning.*
- BLM Instruction Memorandum 2007-041, *Federal Lands Hunting, Fishing and Shooting Sports Roundtable Memorandum of Understanding.*

- BLM Instruction memorandum 2007-030, *Clarification of Cultural Resource Considerations for Off-highway Vehicle (OHV) Designation and Travel Management.*
- BLM Instruction Memorandum AZ2009-017, *State Specific Guidance for Implementation of the Arizona Off-Highway Vehicle (OHV) Law.*
- Arizona Revised Statute Title 49 sections 400-500 governing air quality.
- Memos of communication between Arizona State Land Department and BLM Arizona State Office regarding access across state trust lands.

PURPOSE AND NEED FOR THE PLAN AND DECISION TO BE MADE

The purpose of the Table Mesa RMZ Recreation Area Management Plan is to identify, promote, and establish compatible recreation use of the RMZ, while protecting natural resources, cultural resources, and public safety.

Currently, no formal management framework exists for the Table Mesa RMZ. Public demand for recreational uses is on the rise; use conflict is increasing; ecosystem health is affected; and public safety is a concern. Given the Desired Future Conditions for recreation and other resources located within the planning area, a holistic management framework is needed to respond to increased use; to ensure that the objectives of two co-located RMZs are met; and to protect valuable cultural and natural resources.

The BLM will decide whether to implement the Table Mesa Recreation and Travel Management Plan.

II. PROPOSED ACTION AND ALTERNATIVES

Several alternatives were considered and refined throughout the planning process. Given the extensive period allotted for public scoping and outreach on this plan, only two alternatives will be considered in detail and include the No Action Alternative and the Plan. Alternatives considered but eliminated from detailed analysis are also discussed in this chapter.

PROPOSED RECREATION AND TRAVEL MANAGEMENT PLAN

The plan is categorized by management actions related to routes, technical vehicle sites, facilities, shooting area buffer closures, and implementation. Each of these components is discussed in detail in the following sections.

Routes

A comprehensive route system is sought in this plan. The route system has been designed to create loop trails, maximize recreation while protecting resources, and concentrate much of the trail-based recreation activity in a hub north of Table Mesa Road. To meet these design goals, some routes identified during the route inventory are designated as closed or are reserved for administrative or permitted access only. Other routes remain open and other new routes are

proposed. Routes include new primitive roads, new motorized single-track trails, new non-motorized single track trails for mountain bikes, and non-motorized trails. Table 1 and Table 2 summarize basic route information in this plan.

TABLE 1: EXISTING ROUTES SUMMARY

Description of Existing Routes	Miles
Total Inventoried Routes in RMZ *Includes All routes, both motorized and non-motorized*	*91.8*
Primary, Secondary and Tertiary Roads Open to All Use	73.3
Primary, Secondary or Tertiary Roads Closed to All Use	0
Primary, Secondary or Tertiary Roads Limited to Administrative/Permitted Use	0
Trails Limited to Non-Motorized Use *Includes Black Canyon Trail and its side loop trails*	18.5

TABLE 2: FINAL ROUTE DESIGNATION FOR EXISTING AND NEW ROUTES

Description of Final Route Designation	Miles
Total Miles of Roads, Primitive Roads and Trails Being Designated	*85.5*
Roads Open to All Uses	9.8
Primitive Roads Open to All Uses	32.7
Primitive Roads Limited to Administrative/Permitted Uses Only	5.8
Trails Limited to Non-motorized Use	20.5
New Primitive Roads Open to All Uses	3.6
New Motorized Trails (Open to all vehicles 24" wide or less)	7.5
New Non-Motorized Trails	5.6

Specific route information for the plan, such as asset types, functional classes, and maintenance intensities, is discussed in the following sections.

Asset Types

BLM classifies its routes as roads, primitive roads, or trails.

Roads are linear routes managed for use by low clearance vehicles having four or more wheels, and are maintained for regular and continuous use. Roads that are located within the RMZ and under BLM management include the *Table Mesa Road*, *Little Pan Mine Road* and the *AZCO Mine Road*. Table Mesa Road is also a county road and is regularly maintained by Maricopa County. Improvements to these roads will be made to ensure that both roads meet requirements of high-intensity usage and provide year-round access to high-clearance vehicles, RVs and trailers. Both roads will be open to unlicensed vehicles.

- *Table Mesa Road*
  Improvements will include surface hardening or gravel overlay to aid in dust suppression, and drainage management, while maintaining a natural appearance. Primary maintenance will be conducted by Maricopa County Department of Transportation. Dry Season passage of vehicles towing trailers with a total vehicle length of 45 feet is the desired condition. Culverts may be installed at major wash crossings to improve wet-weather safety and reduce maintenance needs between rain events. This BLM road will be maintained at a Maintenance Intensity level 3 or comparable standard by Maricopa County as allowed by their ROW.

- *Little Pan Mine Road*
  Improvements will include surface hardening, dust suppression, and drainage management, while maintaining a natural appearance. On the mountain pass leading to the Agua Fria River, a concrete apron, or similar hardening, may be added to slopes greater than 10 percent to prevent erosion and improve drivability. Dry season passage of vehicles towing trailers with a total vehicle length of 45 feet is the desired condition. This BLM road will be maintained at a Maintenance Intensity level 3.

- *AZCO Mine Road*
  Improvements will include grading, dust suppression, or surface hardening on the Maricopa County side of the road. The road may be improved with gravel or larger aggregate for dust control. The Arizona Department of Transportation will be the primary road manager between Table Mesa road and private land at T8E, R2E Sections 27 NW1/4, SW1/4, NW1/4. The BLM will assume primary maintenance of the road from approximately T8N R2E Sec 27 NW1/4, SW1/4 and Sec28 NE1/4, S1/2 to the Agua Fria River in Maricopa County. West of the Agua Fria River in Yavapai County, the BLM will assume primary maintenance responsibility. This BLM road will be maintained at a Maintenance Intensity level 3.

Primitive Roads are linear routes managed for use by four-wheel drive or high-clearance vehicles. They do not normally meet BLM design standards and are existing unimproved routes. They are typically eight to ten ft. wide and accommodate full size 4WD vehicles. They will generally accommodate single lane travel, with passing turnouts or widening as needed. They may be passable by passenger car, but rough between many spots. Typically these are routes with a Local or Resource functional class, and Level 1 maintenance intensity. State vehicle safety and equipment laws apply to motor vehicle use on these routes. Licensing for street use is generally not required. Primitive roads will be open to all motorized vehicle use year-round.

Trails are linear routes managed for human-powered, stock, or OHV forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles. They include locally known non-motorized trails, and very rough roads intended to be kept in that condition. Special use restrictions may be established for these routes to require minimum equipment standards following public notification via *Federal Register* Notice. Physical barriers or restrictive devices and signing may be installed. Monitoring will be carried out to detect change and take corrective action. Trails will be open year round.

The asset type summary for the plan is shown in Table 3, and for each route in Appendix D. While Tables 1 and 2 discuss general route information, Table 3 specifically outlines asset types. Transportation asset definitions are in accordance with BLM Instruction Memorandum 2006-173- *Implementation of Roads and Trails Terminology Report.*

Table 3: Asset Type Summary

ASSET TYPE	DESIGNATION	MILES	TOTAL MILES
Road	Open	9.8	
	Closed	0	
	Limited	0	9.8
Primitive Road	Open	32.7	
	Closed	22.9	
	Limited Admin	5.8	65.0
	New	3.6	
Trail	Open Non-Motor (2)	20.5	
	Closed	0	
	New Non-Motor (2)	5.6	33.6
	New Motor (3)	7.5	
Total			108.4

Functional Class

Functional classes indicate the relative importance of a route's transportation and access functions, and are the basis for geometric design standards and maintenance guidelines. The functional classifications are determined according to guidance in *BLM Manual 9113 Roads*. Functional class is defined by collector roads, local roads, and resource roads.

Collector Roads are the highest standard of a BLM road. They provide primary access to large blocks of land and connect with or are extensions of a public road system. Collector roads accommodate mixed traffic and serve many uses. They generally receive the highest volume of traffic within the BLM road system. User cost, safety, comfort, and travel time are primary road management considerations. Collector roads usually require application of the highest standards used by the BLM. As a result, they have the potential for creating substantial environmental impacts and often require complex mitigation procedures.

Local Roads normally serve a smaller area than collector roads and connect to collector roads or public road systems. Local roads receive lower volumes, carry fewer traffic types, and generally serve fewer users. User cost, comfort, and travel time are secondary to construction and maintenance cost considerations. Low volume local roads in mountainous terrain, where operating speed is reduced by effort of terrain, may be single land roads with turnouts.

Resource Roads are usually spur roads that provide point access and connect to local or collector roads. They carry very low volume and accommodate only one or two types of uses. Use restrictions are applied to prevent conflicts between users needing the road and users attracted to the road. The location and design of these roads are governed by environmental compatibility and minimizing BLM costs, with minimal consideration for user cost, comfort, or travel time.

The proposed functional class designations summary is shown on the table below, and for each route in Appendix D. Most of the routes in the planning area are designated as Resource Roads - unpaved, single lane - with very low traffic volume (Average Daily Traffic ≤150 vehicle passes) and very low traffic speeds.

TABLE 4: PROPOSED FUNCTIONAL CLASSES -- MILEAGE SUMMARY

FUNCTIONAL CLASS	MILES
Collector	0
Local	9.8
Resource	42.1
None (Decommission or Trails)	56.5
Total	108.4

Maintenance Intensities

No existing BLM transportation assets are presently identified for the Table Mesa planning area, and maintenance on roads and trails over the past ten years has been minimal. Authorized users (mineral materials operations, grazing permits, utilities) also perform intermittent road maintenance on routes needed for their permitted activities.

Maintenance intensity classes help direct maintenance work to needs based on route importance, route conditions, access objectives, or resource conditions on adjacent lands. Maintenance intensity is broken down into four classes, discussed below.

Level 0 routes are 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.

Level 1 routes require minimum (low intensity) maintenance to protect adjacent lands and resource values. These roads may be impassable for extended periods of time.

Level 3 routes require more moderate maintenance due to low volume use (such as seasonal or year-round for commercial, recreation, or administrative access). Maintenance intensities may not provide year-round access but are intended to provide resources appropriate to maintain a usable route for most of the year.

Level 5 routes require high (maximum) maintenance due to year-round needs, high-volume traffic, or significant use. Level 5 designations may also include routes identified through management objectives require high intensities of maintenance or to be maintained open on a year-round basis.

The proposed maintenance intensity class summary is shown in Table 5 and for each route in Appendix E. These will provide the basis for updating the BLM FAMS database for the project area. Under BLM policy, transportation maintenance and repairs may be conducted on BLM routes on a case-by-case basis depending on need and following NEPA analysis.

Table 5: Maintenance Intensities

Maintenance Intensity	Total Miles
Level 5	0
Level 3 (Roads)	9.8
Level 1 (Primitive roads/Trails)	75.7
Level 0 (Decommission)	22.9
Total	108.4

Access Vehicle Type

The typical vehicle for a given route largely dictates the physical characteristics required for a route to be passable by that vehicle and others with similar or lesser requirements. The route width, roughness, grade, curve radius, side clearance, and associated physical parameters vary depending on the type of access vehicle and the use desired for a route. Presently, nearly all the existing routes on public land are primitive roads unimproved, receive very low volume, and require very low speed.

Typical vehicles

Vehicles used on the travel routes (all three asset categories) in the planning area include haul trucks; motor homes; passenger cars; high-clearance 2WD, 4WD, ATV<50", UTV>50" vehicles; trail motorcycles; extreme 4WD vehicles; mountain bikes; riding horses; and foot hikers.

Road Condition and Design Standards and Guidelines

Standards exist for BLM roads based on average daily traffic, functional classification and terrain type and can be found in *BLM Manual 9113 - Roads*. Standards also exist for trails based on hiking and equestrian user needs which are found in *BLM Manual 9114 - Trails*. No geometric standards or guidelines exist for BLM primitive roads. For the purposes of managing dust, road and trail maintenance will emphasize improving drainage so that silt does not accumulate on the tread. Additionally, 1"-2" diameter gravel may be applied to problem areas where dust generation is especially high. Liquid dust suppressants will be applied as short term measures to improve air quality.

Speed and Dust Management

Speed limits may be enacted through a supplemental rule making process, if consultation with the Maricopa County Environmental Quality Division determines that doing so would improve air quality. Speed Limit Recommendation signs will be placed where doing so would improve public safety and air quality.

Driving to create excessive dust through spin turns, also known as *doughnuts*, is prohibited. This prohibition is deemed necessary to improve air quality in Maricopa County. Future limitations on driving vehicles, such as, but not limited to, speed limitations could be necessary and would be implemented through a supplemental rule making process.

Figure 3 displays the network of open roads, primitive roads and trails, approved new primitive roads and trails, and the location of routes to be closed and rehabilitated.
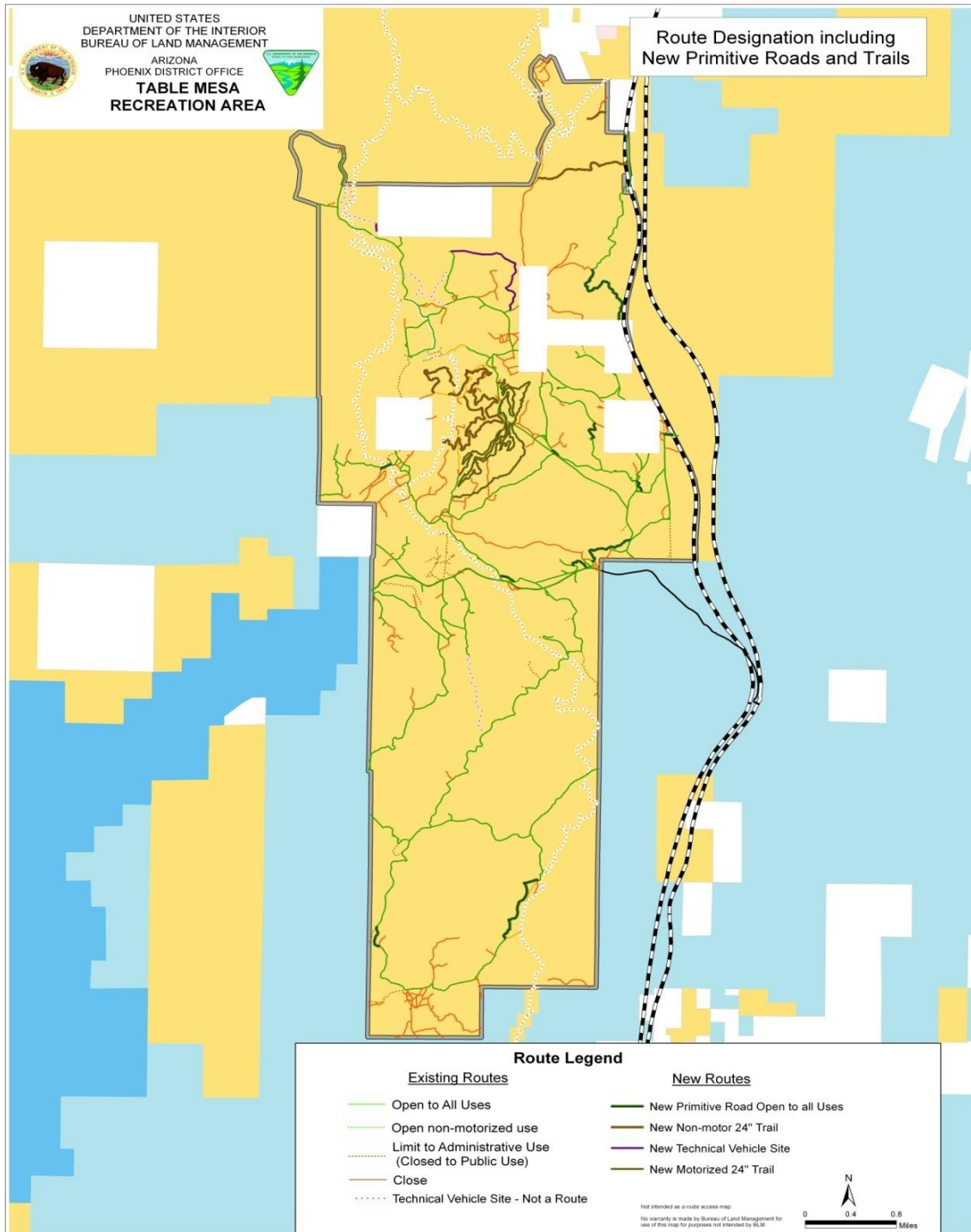

Figure 3: ROUTE DESIGNATION INCLUDING NEW PRIMITIVE ROADS AND TRAILS

Figure 4 displays the designation of route asset and maintenance intensity. Assets will be entered into the BLM FAMS for continued management.
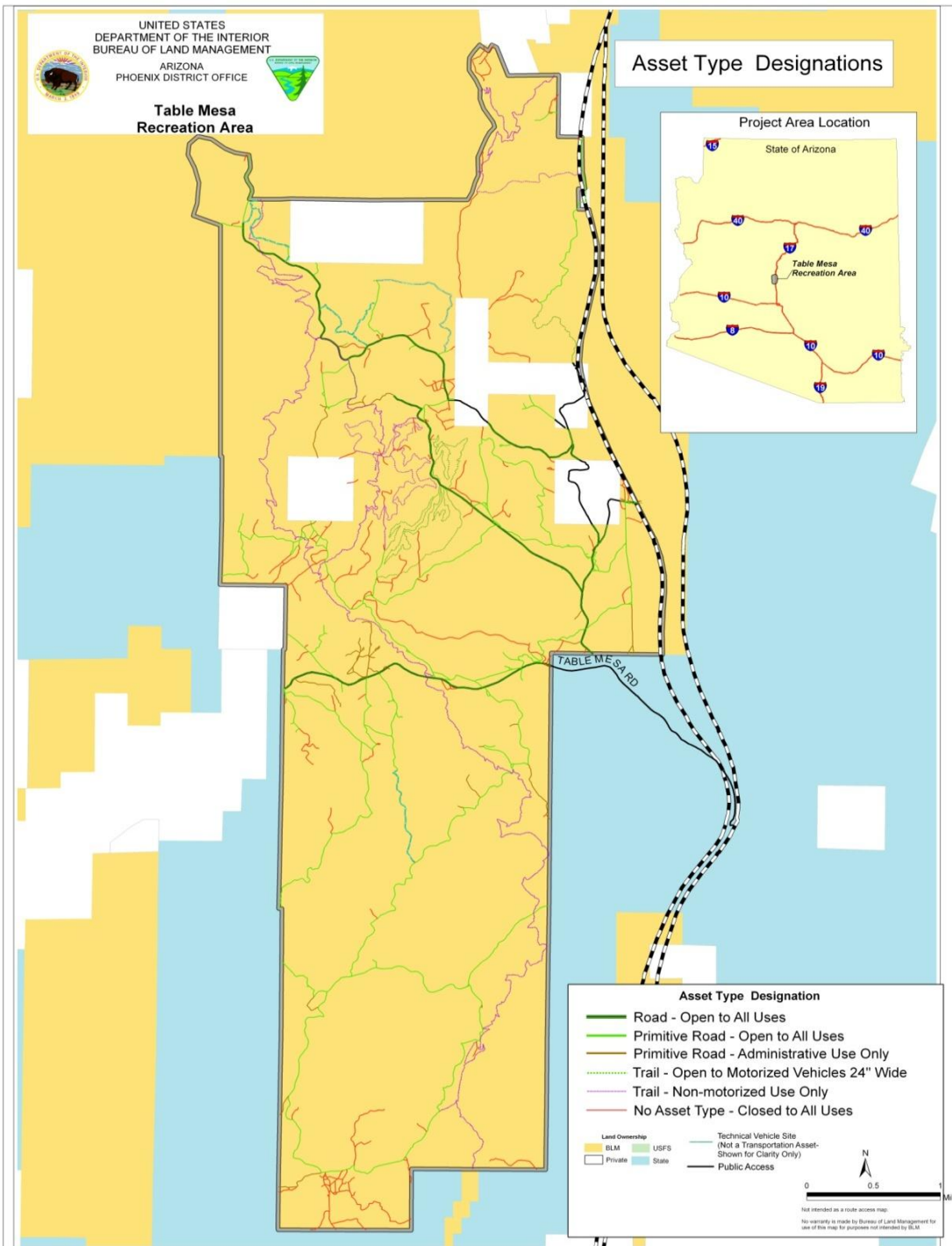

FIGURE 4: LINEAR ASSET TYPE AND ASSOCIATED MAINTENANCE INTENSITY

Figure 5 (Table Mesa North) and Figure 6 (Table Mesa South) displays the official final route designation. The two public use maps may change slightly prior to printing to facilitate understanding and communicate specific messages about the area. The route numbers and allowable uses will remain unchanged.
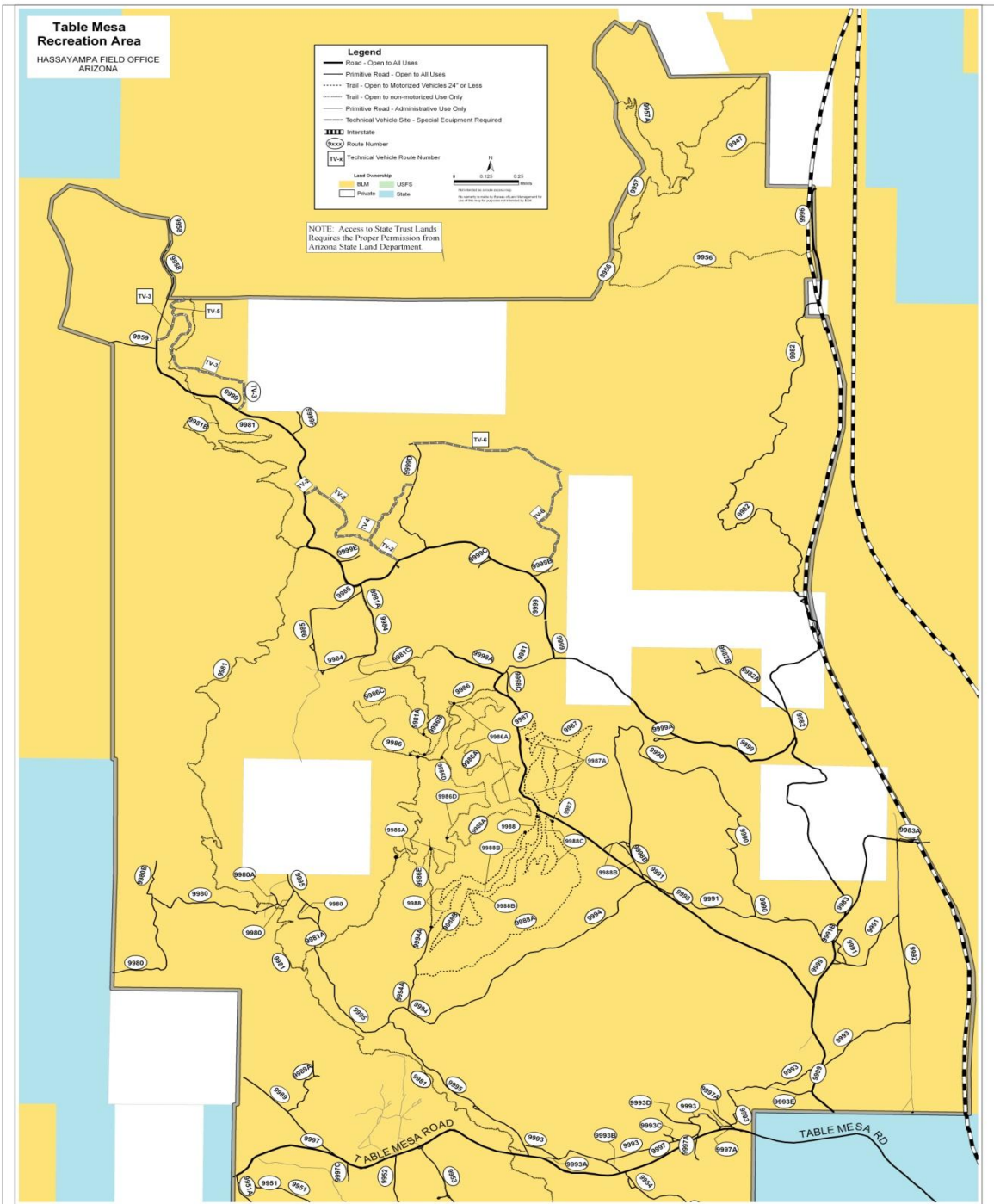

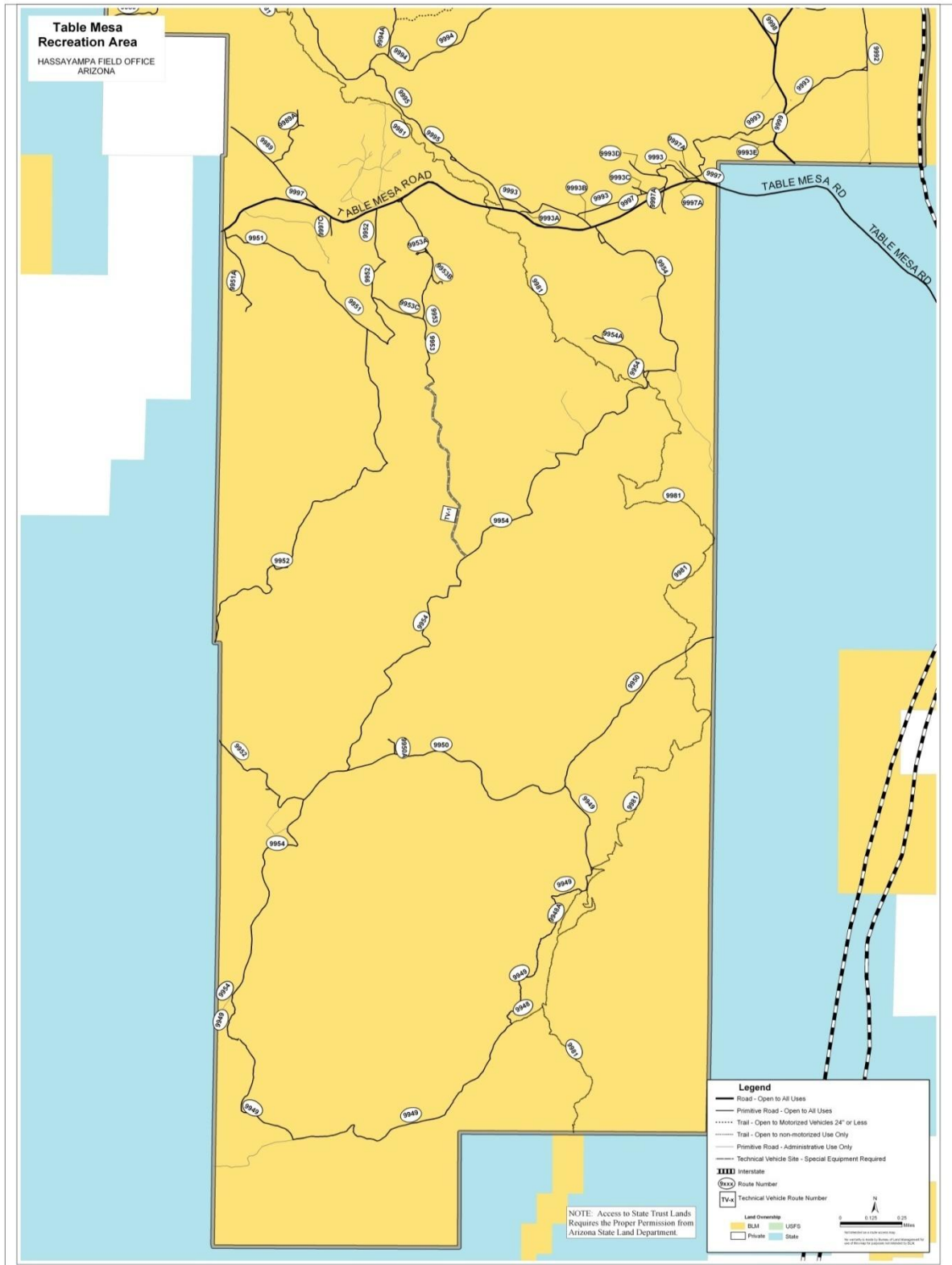**FIGURE 5: TABLE MESA NORTH FINAL ROUTE DESIGNATION**

FIGURE 6: TABLE MESA SOUTH FINAL ROUTE DESIGNATION

Technical Vehicle Sites

Technical Vehicle Sites, also known as Rock Crawling 4wd trails, are designated as sites, rather than routes. A recreation site plan will be created for each site. Rock Crawling sites within the Table Mesa RMZ will have special rules of use, may contain vehicle limiter devices, and may require limited/permitted use. The proposed plan includes 1.1 miles of new technical vehicle sites, closure of 1.4 miles of existing sites. Table 6 demonstrates the proposed plan mileage for rock crawling/technical vehicle sites.

TABLE 6: ROCK CRAWLING / TECHNICAL VEHICLE SITES

Open Technical Vehicle Sites	2.7 Miles
Closed Technical Vehicle Sites	1.4 Miles
Proposed new Technical Vehicle Sites	1.1 Miles

1. Facilities

To support multiple recreation uses, this plan proposes several new facilities, including campsites, staging areas, protective fencing, barriers, information kiosks, administrative gates, a nature trail, and development of the Black Canyon Trail Trailhead. Site-specific designs will be developed to avoid or mitigate impact to natural and cultural resources. Specific descriptions of each facility can be found in Table 7.

TABLE 7: PROPOSED FACILITIES

Facility	Facility Description
F-1	**Campsite** Designated camping locations and camping length of stay limits (14 days) would be developed as needed for the following purposes: • protecting resources • ensuring visitor safety • avoiding social conflicts • improving recreation experiences • increasing recreation opportunities Other characteristics include: • fire pan requirement for campfires • requirement to use only firewood without nails • consider vendor applications for firewood sales • campsite cleanup requirements including placement of campfire ashes in

Facility	Facility Description
	provided bins • no water or toilet facilities provided • flat areas for small group camping • dust suppression or gravel to reduce dust on upper camp area Site-specific rules (such as quiet hours, pet limitations, etc.) may be addressed through Supplemental Rule Making Process.
F-2	**Protective Fence** Protective fencing will be erected to prevent travel from Route 12W into the Riparian zone of the Agua Fria River. This is to ensure conformance with the Land Health Standards and wildlife habitat.
F-3	**Campsite** Designated camping locations and camping length of stay limits (long- and short-term) would be developed as needed for the following purposes (refer to F-1): • protecting resources • ensuring visitor safety • avoiding social conflicts • improving recreation experiences • increasing recreation opportunities • improving group/partner permit opportunities
F-4	**Black Canyon Trail Trailhead** The trailhead will include a parking area (with dust control to comply with PM10 regulations). The new trailhead will accommodate up to thirty cars. Trash barrels may be provided if area partnerships can be developed to defray costs. A vault toilet will be provided.
F-5	**Information Kiosk** Kiosk to include information such as map of area, emergency contact information, area rules of use, recreation etiquette, etc.
F-6	**Information Kiosk** Kiosk to include information such as map of area, emergency contact information, area rules of use, recreation etiquette, and other important messages.
F-7	**Protective Fence** Protective fencing will be erected to prevent travel from Route 16H into the riparian zone of the Agua Fria River. This is to ensure that vehicles do not traverse the riparian zone and to ensure conformance with the Land Health Standards and wildlife habitat established in the *Bradshaw-Harquahala ARMP/ROD*.

Facility	Facility Description
F-8	**Two Group Campsites - Old AZCO Mine** Designated camping locations and camping length of stay limits (14 days) would be developed as needed for the following purposes: • protecting resources • ensuring visitor safety • avoiding social conflicts • improving recreation experiences in an undeveloped setting • increasing recreation opportunities Other characteristics would include: • flat areas for small groups to camp together • camp fire allowance requiring fire pan use and using dead and down wood only
F-9	**Campsite** Designated camping locations and camping length of stay limits (long- and short-term) would be developed as needed for the following purposes: • protecting resources • ensuring visitor safety • avoiding social conflicts • improving recreation experiences • increasing recreation opportunities Site-specific rules (such as quiet hours, pet limitations, etc.) may be addressed through Supplemental Rule Making Process.
F-10	**Campsite/Staging Area** Designated camping locations and camping length of stay limits (14 days) would be established for the following purposes: • protecting resources • ensuring visitor safety • avoiding social conflicts • improving recreation experiences, and • increasing recreation opportunities

Facility	Facility Description
	• Could accommodate overflow from campsite/staging area located at F-11 Other characteristics of this campsite/staging area may include: • Development as an OHV-centered campsite/staging area to include Special Recreation Permits (SRP) for OHV events • Hardened surface • Enclosure via pipe rail fencing • Vault toilet • Camp host site • Dust mitigation measures will be applied Site-specific rules (such as quiet hours, pet limitations, etc.) may be addressed through Supplemental Rule Making Process.
F-11	**Campsite/Staging Area** Designated camping locations and camping length of stay limits (14 days) would be established for the following purposes: • protecting resources • ensuring visitor safety • avoiding social conflicts • improving recreation experiences, and • increasing recreation opportunities • Could accommodate overflow from campsite/staging area located at F-10 Other characteristics of this campsite/staging area may include: • Development of quiet recreation area with access to the Black Canyon Trail • Vault toilet • Camp host site Dust mitigation measures will be applied.
F-12	**Nature Trail** A short nature one-way or loop trail would exit from the Rock Springs Café area to BLM land. Trail would serve as a walking opportunity for a shorter experience on BLM land and could be developed in accordance with the Architectural Barriers Act/universal access requirements to increase accessibility. This trail would be developed in partnership with the land owners at the Rock Springs Café area.

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Facility	Facility Description
F-13	**Staging Area** This staging area would be developed for OHV and equestrian access to areas to the south. It would provide access to the RMZ for Black Canyon City residents and be managed for day use. • Wire perimeter fence • Single panel information kiosk • Dust suppressant or gravel for Maricopa county dust rule compliance
F-14	**OHV Training Area** The OHV training area will be developed to support a safe place to practice/learn safe OHV handling and driving. Speeds will be limited to less than 20 MPH. This area may feature the following: • Direct access to OHV loop trails and primitive roads • Developed features such as drills to practice safe OHV handling • A permitted *All-Terrain Vehicle Safety Institute* (ASI) training site • Dust abatement • Protective Fencing for beginners and children
F-15	**Protective Fence** Protective fencing would be erected to prevent OHV use on closed Routes 22AAc, 22N, 22V, 22M, and 22AAA. Doing so will limit access to closed routes, including the Black Canyon Trail; encourage OHV enthusiasts to enter the Table Mesa Recreation Management Zone from the main portal at Table Mesa Road, thereby controlling unmanaged growth of OHV routes along the southern boundary of the Table Mesa Recreation Management Zone; and ensure conformance with the Land Health Standards and wildlife habitat goals in the RMP.
F-16	**Administrative Gate** This gate would limit access via Route 20 to a private land in-holding within the Table Mesa Recreation Management Zone. Access would be granted for administrative purposes and to permitted parties.
F-17	**Barrier** These barriers would prevent access via Route 13BB to private land in-holdings within the Table Mesa Recreation Management Zone. Barriers may feature: • Concrete bollards with break-away cable • Fence railing • Break-away water gaps

Facility	Facility Description
F-18	**Horseshoe Bar Trailhead** The trailhead will include a parking area with dust control to comply with Maricopa county dust regulations. The new trailhead will accommodate up to 15 cars and will not have water or restroom facilities. Trash barrels may be provided if area partnerships can be developed to defray costs.

In addition to the facilities noted above, the BLM will encourage the placement of trash receptacles in the Table Mesa planning area. The BLM will encourage a partnership to maintain and manage these receptacles.

Recreational Target Shooting

Under this plan, recreational target shooting will be restricted in certain areas of the planning area. Target shooting is allowed on 6,969 acres of the Table Mesa RMZ, provided that shooters abide by the guidelines in Appendix A. These areas are delineated by four buffer closures that include:

- A one-quarter mile buffer on either side of the National Black Canyon Trail.

- A one-quarter mile buffer radius around all developed facility sites.

- A one-quarter mile buffer at the western park boundary with the Lake Pleasant Regional Park boundary, where the park boundary is immediately adjacent to the Table Mesa RMZ.

- A 200 foot buffer on either one or both sides of major travel routes.

Figure 7 shows the buffer zones in relations to the route system.

Recreational target shooting will be restricted to areas outside of the aforementioned buffer areas.

Other Rules/ Restrictions that apply to this area:

- No shooting from or into buffer areas.
- Target Shooters must abide by safe shooting standards in Appendix A.
- No target shooting from sunset to sunrise.

Hunting in the Table Mesa RMZ remains open, in accordance with the State of Arizona rules and regulations.

Natural areas

An area along the Agua Fria River will be managed as a natural area where riparian condition is in proper function condition (PFC). This area is adjacent to an old placer mine site at bend in the

Agua Fria River called Horseshoe Bar. As shown on map "No Shooting Buffer Zones with Facility locations," the area follows the Agua Fria River and comprises 16 acres. A faint remnant of a mining road exists in the river flood plain; yet periodic flooding makes the development of any trails in this area unfeasible. The ease of access to the area makes it suitable for nature walks for school children, visitors to Black Canyon City, and travelers seeking a respite from interstate travel. Careful monitoring of the riparian condition will ensure that standards are met and action taken to prevent further degradation if condition declines.

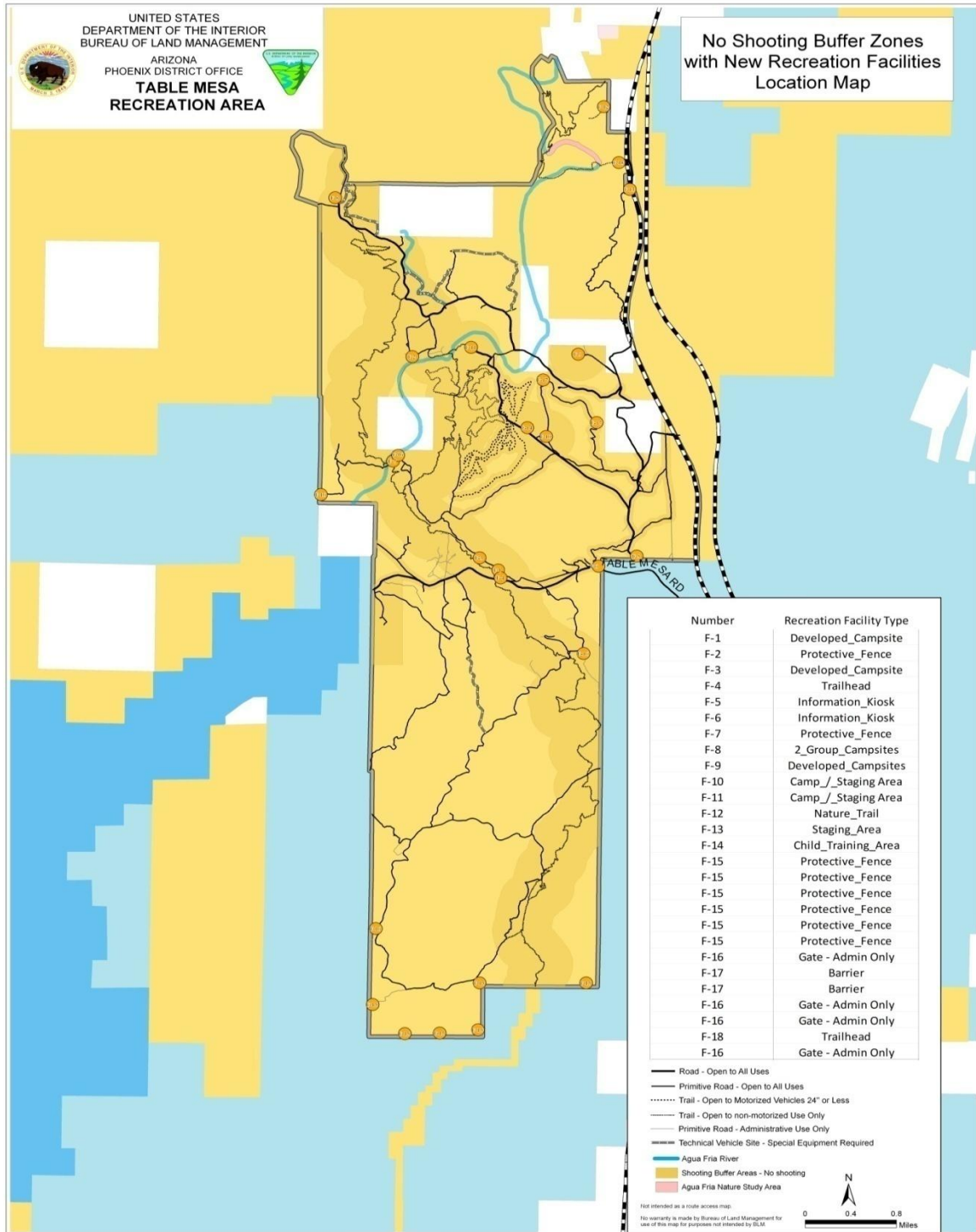Figure 7 displays the no-shooting zone buffers with facilities.

FIGURE 7: NO SHOOTING BUFFER ZONES WITH NEW RECREATION FACILITIES MAP

Land Owner Access / Access Needed

Private lands are contained within the planning boundary. High use recreation sites have been located to minimize effects to private land owners. Identifying existing ROWs to private lands and establishing the location for future ROW issuance is one way to minimize the effects of recreation and recreational travel on land owners. Figure 8 shows the approved routes to private property that exist today or those that will be granted for future ROWs. All private property within the planning area either has legal access or is in progress to acquire access. Properties to the west of the planning area will be granted access using the identified roads on this map. Long distance corridors are identified on this map and are important to connecting large blocks of BLM-managed land and also connecting to adjacent jurisdictions.

To ensure long term access to two routes south of Table Mesa Road, 9950 and 9952, the BLM should acquire access across Arizona State Trust Lands. The BLM can directly secure access through easement or seek temporary access through a special land use permit, which conveys no rights, but would remove a requirement for the public to possess a state trust land recreation permit to use the connecting primitive roads on trust land. Access could be acquired by the BLM or a partner of the BLM.
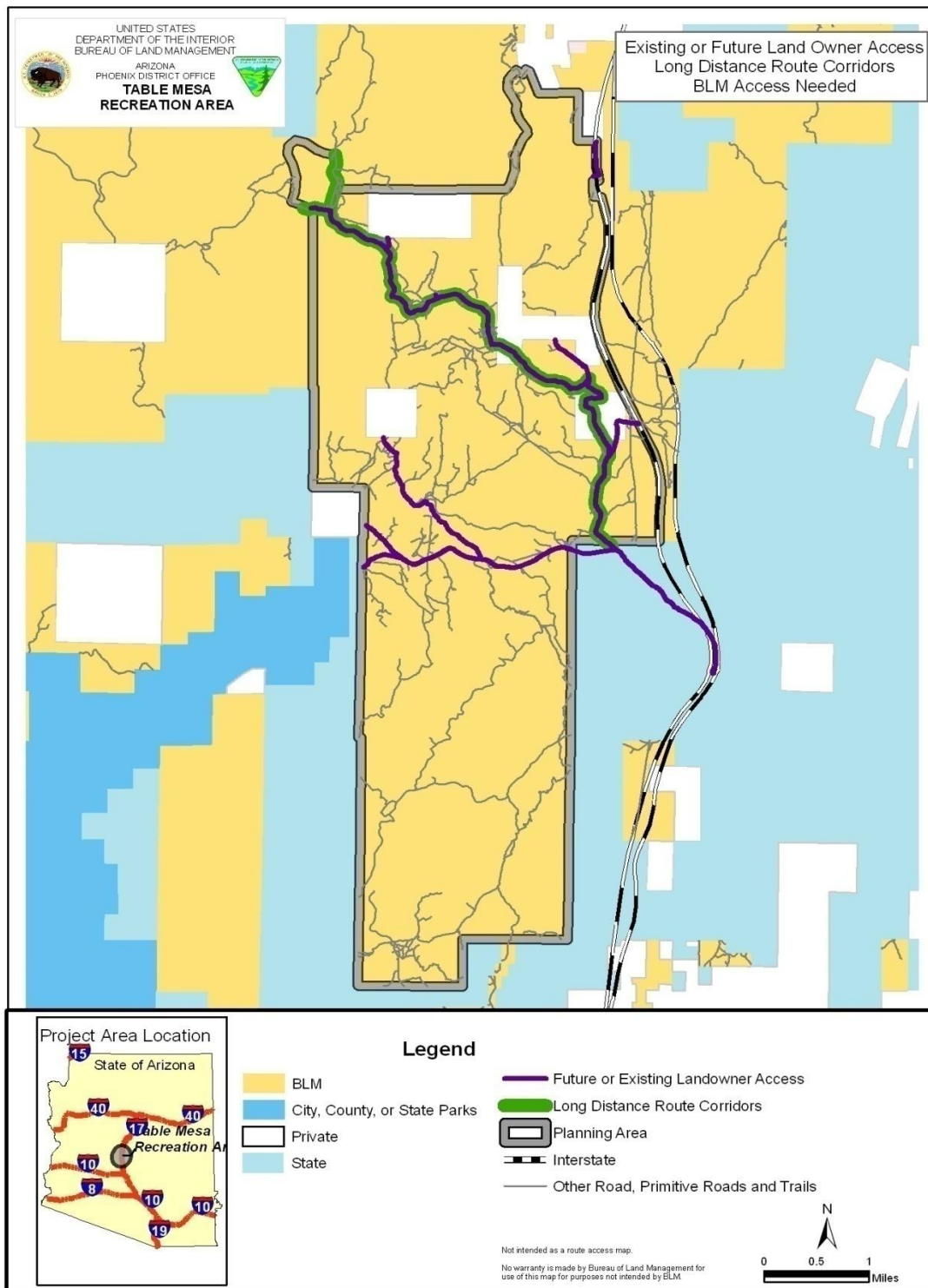
Figure 8: LAND OWNER ACCESS AND LONG DISTANCE ROUTE CORRIDOR MAP

Plan Implementation

Education

Currently the Table Mesa RMZ lacks a formalized educational program, though safety information and area maps can be obtained from the Hassayampa Field Office and online from the BLM website. Formal signage placed in the RMZ is often destroyed or vandalized. The BLM promotes education through the Arizona OHV Ambassador Program and through community events.

Because the Table Mesa RMZ will be managed for multiple recreation uses and because of the other resources in the area, messaging about accepted uses and rules of use is very important. In particular, information about routes and target shooting opportunities, along with closures, is imperative to communicate to users. Interpretive programs will be developed as a tool to help in this public education effort. These programs may include the natural and cultural history of the area, such as historic mining activities, historic stage coach routes, etc. These messages will be conveyed through the concepts of ethics, safety, and courtesy. Outdoor ethics such as *Tread Lightly!* and *Leave No Trace* will be communicated.

Use levels are expected to be moderate-to- high and research supports the separation of uses. (Andereck, 2001). Since the minimization of conflict among the various recreation uses of BLM land is required, most motorized and non-motorized trail use will be separated to minimize the number of contacts between these recreational uses. Messaging on kiosks and literature encouraging tolerance and respect will be developed. Interpretive and or interactive programs will be developed to foster appreciation of the natural, historic, and cultural elements of the area and to attract urban youth to the greater outdoors.

The Table Mesa educational and outreach program will be developed in collaboration with Federal, state, and county entities, established and emerging organizations and programs, and with public participation.

The field office endeavors to use emerging technology and up-to-date communication methods to convey information and obtain public participation and stewardship in on-the-ground management and evaluation of the Plan.

Key messages to communicate

- Table Mesa is an area for multi recreational opportunities, enjoyed by varied users.
- The area promotes shared use and has some specific designations.
- Resource protection land ethics are important in this area.
- The National Recreation Trail -- Black Canyon Trail -- is a non-motorized trail and is buffered by a quarter mile zone in which recreational target shooting is prohibited.

- 61 percent of the area remains open to recreational shooting where it can be safely achieved for marksmen and other shooting enthusiasts.

Targeted Methods of Communication

- POD-casts including downloadable items such as: maps, land use ethics, rules, historic and cultural settings, maps, rules, air quality alerts, fire prevention restrictions, emergency announcements, etc.;

- Electronic Kiosks: Including downloadable items such as trail track logs, audio story telling for cultural, historic, natural interpretative information;

- Web Video & Focus Surveys: produce interactive sites for user info and feedback to the BLM;

- Speakers Bureau;

- School Presentations: promoting the BLM messages and outdoor multiple land uses, land ethics, leading to invitations for field tours;

- Website: updated regularly and designed to give viewers something new each time they view the page;

- Organized Tours: Regular/routine schedules for schools, local organizations, elected leaders, parent and teacher groups, etc. *Use inner city partners and events that already include minorities and new residents, gateway cities;*

- Onsite Workshops: emphasizing urban youth activities in greater outdoors;

- Public Service Announcements: via radio, TV, sports organizations, Friends, OHV, Shooting Roundtable, Equestrian, Black Canyon City organizations web sites and gateway facilities, etc.;

- Media Field Trips;

- Cable access (TV) shows: including Spanish speaking channels for maximum outreach;

- Morning TV talk shows;

- Marketing: Foreign media; travel channel, green TV; the Amazing Race, Animal, Discovery, etc.;

- Exhibits;

- Traditional Brochures and Guides; and

- Organized Education: Use new and alternate ASU sources (marketing, journalism, and recreation), formalized law enforcement activities and non-formal law enforcement peer to peer education, youth and outdoor organizations, etc.

In order to achieve the aforementioned outreach and education objectives, it is imperative to

create sustainable partnerships with private groups and governmental organizations, such as: OHV dealerships, the AZ OHV Coalition, the Friends of Table Mesa Recreation Area, and other OHV and Shooting Sports enthusiasts, hiking and equestrian clubs, schools, media organizations, Az. Game & Fish, Maricopa County Parks, Maricopa and Yavapai County Sheriff departments, American Indian tribes, local utilities and private businesses that hold permits within or adjacent to Table Mesa, etc.

Financial resources for many outreach programs need to be identified. Moreover, it will be increasingly important to create an annual calendar of events and prioritize activities with the responsible personnel/organizations and the funding sources in order to ensure sustainability.

Enforcement

Currently, law enforcement coverage in the RMZ is provided by BLM Phoenix District Rangers. Enforcement actions are typically in response to complaints, and patrols are conducted on a periodic basis depending on priorities throughout the Phoenix District. Illegal activities have occurred within the RMZ in the past.

- The BLM Law enforcement patrol on public lands in the planning area is provided by HFO BLM Rangers stationed in the HFO Office, Maricopa and Yavapai County Sheriffs, the Arizona Game and Fish Department, and Arizona State Land Department trespass officers.

- The Maricopa County Sheriff also provides law enforcement on public lands in the area on a regular basis, primarily while patrolling the adjacent Lake Pleasant Regional Park or as a result of a call for service.

- Yavapai County provides occasional presence and their participation will be requested for specific operations.

- The Arizona Game and Fish Department provides enforcement related to hunting laws and OHV use.

Law enforcement concerns with public use in the area include accidents, DUI, firearm violations, cross-country motorized vehicle use and creation of new routes and trails by visitors. As with education, enforcement efforts can be multiplied through coordinated multi-jurisdictional management efforts. Educational and monitoring efforts by volunteer user groups can leverage formal law enforcement efforts. Volunteer user groups can educate users on rules and etiquette for the area.

Goals for a successful enforcement plan include:

- Increase the presence of the BLM law enforcement staff and BLM law enforcement in the area. The BLM park rangers will conduct high profile, routine patrols into the area to

enforce laws and regulations. They may initiate emergency or law enforcement response simply by being first on the scene;

- Improve and expand interagency cooperation in the area;

- Concentrate efforts on high use periods such as weekends and holidays;

- Focus targeted enforcement in "hot spots";

- Increase enforcement capacity, including the use of new technology;

- Support of volunteer efforts to educate public on rules and etiquette;

- Expand interagency cooperation in the area; and

- Encourage educational and monitoring efforts by volunteer user groups and citizen-based education groups, which can leverage formal law enforcement efforts. Volunteer user groups will educate users on rules and etiquette for the area.

Partnerships with private groups such as area OHV dealerships, the AZ OHV Coalition, the Friends of Table Mesa group, and other OHV and Shooting Sports enthusiasts groups will be encouraged to promote safe OHV use and safe shooting practices. Volunteer groups, such as the members of the OHV Ambassador Program, may assist with monitoring, public education and special events. Cooperation with adjoining local and state jurisdictions is important for educating the public. Given its proximity to the Phoenix Metropolitan area and other recreation areas (such as the Lake Pleasant Regional Park and the Ben Avery Shooting range), concerted regional recreation messages/education can improve recreational expectations and outcomes at all sites. Implementation of the plan may require installation of gates and barriers to prevent vehicle traffic in areas not designated for motorized travel. The location and design of gates and barriers will depend on site conditions where they are needed. Typically, gates will be made of steel and designed to be vandal resistant. Fencing may be used, including barb wire, post, and cable, or other materials. Barriers or barricades may be temporary or permanent, and may be made of stone, boulders, concrete, steel, or wood.

Signage

A signing plan map is shown in Figure 10. Presently, very little signing is found throughout the planning area; however some standard BLM signing is found at gates and several locations for special purposes. Various types of signs and markers will be installed according to current BLM policy and guidance for recreation and travel management signing. Signs will be placed along roads, primitive roads and trails, and will include:

- Area and public land identification.
- Entry kiosks and informational kiosks.
- Bulletin boards.
- Route numbers and the designation status of a route.
- Shooting area closures.
- Area map boards.

Signing will be kept to the minimum necessary for visitor management and assistance and as a tool for resource protection, regulatory and informational purposes. Initially, all routes will be signed at intersections, then every one-half mile beyond that and other points which may be confusing to visitors. Signing for shooting area buffer closures will be placed at reasonable intervals to ensure that users understand where closures exist. Signing will be designed to provide the public with clear and correct information to avoid off-network travel, avoid shooting in buffered areas, and to prevent use conflict. In order to issue citations, law enforcement staff must be able to prove to a magistrate there was ample information readily available for the visitor to do the right thing. Through monitoring and ongoing public group input, strategies will be developed to constantly improve the effectiveness of signing. Maintenance procedures and schedules will be developed for signs and markers. This will include anticipated replacement needs. A sign inventory and database will be created to facilitate tracking of sign location and maintenance. It is expected that during the first 5 years many signs will be removed or destroyed, and will be replaced or updated with a new communication or engineering technique.

FIGURE 9: ENTRY SIGNAGE & ROUTE MARKER EXAMPLES

Specific sign or communication/engineering may include:

- "Open" route signing and signage on "open" routes adjacent to private property indicating private property boundary.

- "Open" route maintenance, with an emphasis on making the "open" network of routes more obvious and attractive to use than the "closed" routes. Existing park ranger and maintenance staff would do this work during route signing and sign maintenance.

- Designated Routes will be marked with brown flexible markers with standard decals.

- "Open" routes will be marked with "Designated Route" or white arrow and route number decals at intersections and at one half mile intervals along the route as necessary to indicate routes that are "open" for vehicle travel.

- Where there is a potential for an "open" route to be extended past its current end point by vehicle travel, "Motorized Route Ends" signs decals may be used.

- "Non-Motorized Use Only" routes will be marked with standard symbol decals, indicating that the route is "closed" to motor vehicles.

- "Administrative Use Only" routes will be marked with standard "Closed" route signs most prominent then the standard administrative use only sign will be shown.

- "Closed" routes will be marked with "No Motor Vehicle" or "Route Closed" decals with standard vehicle symbols. As "closed" routes heal through natural re-vegetation or reclamation efforts, and markers are no longer necessary, they will be removed. "Closed" route markers will be sited only where absolutely necessary for resource protection or public safety.

- Shooting area closure signage will be kept to the minimum while ensuring clear delineation of the area closures. Information signs with positive messages will be used and are preferred over limitation signage. The BLM is prohibited from signing areas "open" to shooting.

- To implement the target shooting buffer area approach, a red/green sign system will be devised and installed. Simple red and green signs indicating when entering or leaving a buffer zone will be placed back-to-back on the same post. A message will be posted directly below the red or green sign stating the buffer width, and thus how far from the route a person would have to go to target shoot. A sample sign is shown below. Actual signs may vary slightly.

- Additional target shooting and route messages likely to be used include:
  - "Keep it Clean, Keep it Open" (Duba, 2008)
  - "You can be fined for irresponsible behavior"
  - Tread Lightly!

Figure 10 displays the type and location of signs necessary to implement the travel and recreation management decisions made in this plan.
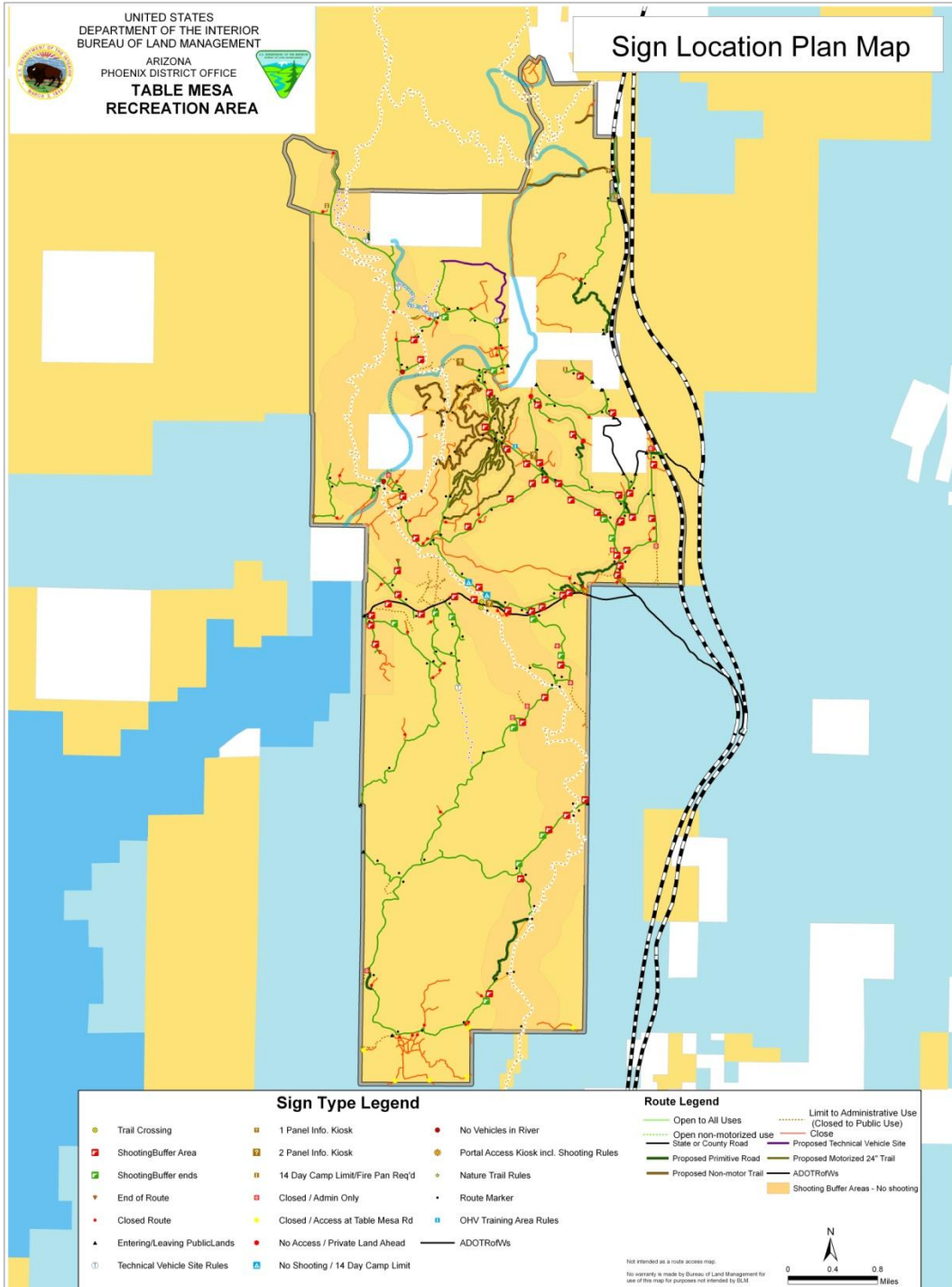

FIGURE 10: SIGN PLAN MAP

Rehabilitation

Rehabilitation of target shooting sites, closed primitive roads and disturbed areas would include the following:

1) Removal of foreign debris and trash;
2) Ripping compacted soil and seeding with a native seed mixture;
3) Planting high value vegetation such as native trees and cactus;
4) Fencing the area to prevent driving, cattle trampling or grazing of saplings; and
5) Irrigation of trees and cactus as necessary.

High value vegetation will be transplanted to the degree feasible. Vegetation growing in the path of new primitive roads or trails will be salvaged and relocated to the immediate area or other areas in need of such vegetation.

Implementation Strategy

Following approval of the proposed plan, a notice will be published in the *Federal Register* in accordance with 43 CFR 8365 to establish new use restrictions needed to implement and enforce the plan. The notice will specify the shooting area closures, and other use restrictions to be enforced.

Prioritization of Work

Specific prioritization of work will be guided by five factors/questions. The highest priority would be given to areas for which all factors apply.

1. Does it maintain/enhance public safety?
2. Is it located within an area of high resource value?
3. Does it have above-average density of important sensitive species?
4. Does it have above-average disturbance?
5. Does it have significant urban interface issues?

Past agency experience, such as that obtained through the implementation of the *Ord Mountain Route Designation Pilot Project* in the California Desert District CDCA, can give valuable insight into not only effective implementation actions, but also the order in which they should occur. Implementation of the Ord Mountain Pilot plan revealed that the most effective short-term action taken was an increase in enforcement and visitor service patrolling, which resulted in a commensurate increase in visitor contacts. Through this increased number of contacts, visitors realized that the BLM was aggressively and successfully implementing a new route network. Visitors generally responded to this in one of two ways. Those who were seeking a cross-country driving experience – and did not want to be limited to routes – gradually moved to the

designated "Open Areas" where they could continue to recreate in a more unrestricted manner. Others continued to recreate in the Ord Mountains, generally staying on "open" routes.

The least effective short-term action taken in the Ord Mountains was signing the "closed" route network. This effort consumed a lot of staff time, and signs were removed almost as quickly as they were put up. The need to re-sign routes placed additional demands on scarce staff time and materials. Given the lessons learned, the successful implementation of a new route network and shooting closures should proceed in the following order:

1. Pursue funding for outreach literature, signage and staff necessary to implement the route/facility signing effort (i.e. law enforcement, non-law enforcement type park rangers and maintenance staff).

2. Pursue funding for route and site rehabilitation.

3. Sign the "open" route network (limit signing the "closed" route network).

4. Maintain the "open" route network with the principal goal being to make the "open" route network more attractive than the "closed" route network.

5. Install informational kiosks and signage where they would be most effective. Site these facilities where it would reach the greatest number of visitors and where it would target an audience that might be the most receptive to such facilities. For example such facilities might be most beneficial at major trailheads and campgrounds that are heavily visited by camping families/groups.

6. Develop and publish up-to-date, readily available, and easy-to-understand maps. Consider using the USGS quadrangle format.

7. Regularly maintain signs, kiosks, routes, maps and brochures.

Once funding is available for law enforcement and rehabilitation, the following steps should be taken:

1. Begin area and route rehabilitation in priority areas such as riparian zones and along main roads.

2. Area and route rehabilitation would require active maintenance for at least one year to prevent reestablishment of routes and areas, and the growth of seed and plants.

Initiate enforcement and visitor service patrols with the following caveats:

1. Do not over commit; funding must be available to sustain the new patrol for a period of at least two years. Additional funding will be sought through BLM channels and also through partnering to leverage grants or other available funds.

2. As enforcement efforts move into new areas, inappropriate use could migrate back to areas where it is not desired. Therefore, this behavior pattern will be monitored by volunteers.

TABLE 8: IMPLEMENTATION TIME TABLE

ACTION	COMPLETION TIME	COMMENTS
Information campaign with on-the-ground presence Sign open route network Close Agua Fria river to vehicles Implement shooting restriction	Year 1	Grant funding secured Hire a contract park ranger Begin partnerships / volunteer projects
Install informational kiosks and interpretive signing	Year 1	Grant funding secured Use BLM and volunteer labor.

Develop and publish maps and brochures.	Year 1 - Ongoing	Grant funding secured Use maps in this plan first, then create new public map.
Begin maintaining tread on open route network.	Year 1 - Ongoing	Grant funding secured. Use partnership agreement to complete.
Begin development of area facilities and campground. Routinely maintain signs, kiosks, routes, maps and brochures.	Year 2 - Ongoing	Some grant funding secured. Apply for additional grants / appropriated funding,
Pursue funding for route rehabilitation.	Year 2 - Ongoing	This would likely come from both Federal appropriations and external sources.
Pursue funding and full time employee for enforcement, visitor services, and maintenance	Year 3 - Ongoing	BLM works on a 3-year budget cycle – Apply for appropriated funds in FY 2011. Partnerships may be required.

2.

Foreseeable Projects

The following projects could be necessary in the future to meet plan objectives and desire future conditions.

1. Installation of hardened, low water crossings on the Agua Fria River. Two locations could be improved including private land on BLM Road 9999 and on BLM land on the BLM Road 9998.

2. Installation of additional kiosk message boards to facilitate increased use of the area.

3. Implementation of new technology to improve area monitoring such as aerial surveys by aircraft of unmanned aerial vehicle.

Funding Strategy

Significant funding will be needed for labor costs to provide law enforcement, recreation visitor services, and to cover maintenance and operational costs (supplies, materials, tools, equipment, vehicles, communications etc.). Operations funding for cultural surveys, land health assessments, wildlife surveys, transportation maintenance, and related costs will be determined on an ongoing project basis which will be planned annually. A preliminary engineering summary indicates that the facilities and road improvements will total approximately $2,000,000, if contracted out entirely. The BLM will strive to lower the costs through partnerships, in-house labor and careful engineering. Funds for labor, supplies and equipment will be pursued through the BLM budget process, and will be subject to appropriation of funds. Funding sources may include BLM Damaged Lands accounts, State OHV gas tax funds, and grant monies available to non-profit groups. Funding will be pursued though Challenge Cost Share projects, an agency program that matches other funding sources, assistance agreements, or plans to leverage external contributions to the greatest extent possible. Grants from various sources will be pursued, including state, Federal, and private funding sources. Appropriate agreements will need to be created.

Standard Operating Procedures

The following Standard operating procedures will be implemented during all phases of plan implementation.

General

- Any significant future modifications of this plan could only occur through NEPA compliance, public involvement, interagency coordination, and the preparation of a decision document for the amendment.

- A visitor access guide will be published and made available as full-size hard copy maps for sale; smaller maps will be available for free and posted virtually on the internet.

- Appropriate NEPA analysis will be obtained prior to any ground disturbance not discussed in this plan, as well as impacts to cultural resources, or other resource values, that may be discovered which will be mitigated or avoided.

Routes

- Standards and guidelines will be developed for BLM road and primitive road maintenance, new construction, or reconstruction. The standards and guidelines for

primitive roads will be based on the functional requirements of the various types of recreational motorized users. The BLM will not develop, endorse or publish road or trail ratings. The BLM will simply describe the physical aspects of a route or recreation site such as those for technical vehicles.

- Maintenance standards for each designated route will be documented with route modifications identified and recommended, if necessary. Maintenance will be completed only to the identified maintenance intensity level to support resource and public protection.

- Maintenance of routes may be done to minimize soil erosion and other resource degradation. This maintenance will be done on a case-by-case basis, depending upon annual maintenance funding.

- Maintenance procedures for physical barriers will be developed, once the number and type of barriers is determined.

- Minor modifications of the road network during plan implementation are allowed without a plan amendment. The FLPMA allows BLM RMPs (such as the ARMP/ROD) to be "maintained as necessary to reflect minor changes in data" (Section 1610.5-4). Plan maintenance is limited in that it cannot result in the expansion of the scope of resource uses or restrictions, or change the terms, conditions, and decisions of the ARMP/ROD. It is limited to further refining or documenting a previously approved decision incorporated in the plan.

- In view of these limitations, "minor realignments" of the route network would be considered to be Plan Maintenance. The term "minor realignment" refers to a change of no more than one quarter (1/4) mile of one designated route. It could include the opening of an existing, but previously "closed" route that serves the same access need as the "open" route that is to be "realigned". It does not include the construction of a new route involving new ground disturbance, except where new construction is necessary to avoid a cultural resource site or sensitive species. "Minor realignments" include the following:
  - Minor realignments of a route where necessary to minimize effects on cultural resources.
  - Minor realignments of a route necessary to reduce impact on sensitive species or their habitats.
  - Minor realignments of a route that would substantially increase the quality of a recreational experience, while not affecting sensitive species or their habitat, or any other sensitive resource value.

- Minor realignments must be documented in the official record. The reason for the alignment change shall be recorded and kept on file in the HFO.

- Opening or "limited" opening of a route where valid rights-of-way or easements of record were not accurately identified in the route designation process.

- Any person, organization or governmental body may propose that any current route designations be changed to another designation. This means from "open", "closed" or "limited" to another designation of "open", "closed" or "limited." Until such time that specific application materials are developed, request to change route designations must be submitted in writing to the field manager.

- Upon receipt of a route change proposal, it will be reviewed by the authorized officer. Since the designation of routes is a discretionary action the authorized officer may determine whether the proposal has merit, and whether the proposal constitutes a significant or minor modification. If the application is rejected, a letter will be sent to the applicant indicating the reasons for rejection. If accepted, the application will be forwarded to the appropriate BLM staff. The application will be reviewed and a recommendation shall be made to the authorized officer as to appropriateness of the proposal and magnitude of NEPA requirements. Further, a recommendation shall be forwarded as to whether the proposed action is significant or minor. If the authorized officer determines that staffing/funding is lacking, the authorized officer may reject one or all proposals.

- The proposed BLM Roads consist of roads or primitive roads that provide the principal access from the public highway system to public lands in the planning area. These routes are the main connectors of the planning area's existing travel route network under current and foreseeable traffic patterns. These routes function as BLM Local, although road standards may vary depending on type of use or to meet specific management objectives. These routes will generally be the priorities for pursuing legal access acquisition (or adjudicating existing access rights) across non-Federal land, and for completing maintenance to ensure long term, legal public access to the public lands in the planning area. These routes will generally be the highest transportation maintenance priority. Road segments from the public highways to the public land may be posted with 'Public Land Access Route' signs.

- When accepting a proposal, the authorized officer should consider cost recovery. Only after NEPA analysis has occurred will a formal decision to accept or reject a specific route change be made.

- Hand raking and disguise of prominent "closed" routes, including planting commonly found plants on "closed" routes will be employed to help discourage use.

- Proactive route rehabilitation work would be utilized where the first phase has not proven to be successful or where route conditions were clearly beyond the capability of the first phase to be addressed.

- Having route designations in place enhances the availability of funds, and would allow the BLM to pursue external sources of rehabilitation funding such as State OHV Grants, the National Fish and Wildlife Habitat Fund (USFWS), and contributions of volunteer labor from local, state, and national interest organizations.

- Focus on signage of the open route network so that it highly visible; thus discouraging interest in closed routes. The signing of closed routes will be done very infrequently,

since closed routes have been found to be more of an attractant than a deterrent to unauthorized use.

Easements, Rights-of-Way, and Permissive access license agreements

- Acquisition of road or trail easement, or issuance of a right-of-way on an existing or historic physical access, will be pursued only in areas where those actions will contribute to the protection of natural resources, and not for the sole enhancement of recreation opportunity.

- Easements may be acquired through donation following the procedures set forth in *BLM Manual 2100- Acquisition*.

Target Shooting Buffer Closures

Closed shooting sites will be rehabilitated and returned to a natural condition. This will be achieved by one or more of the following actions:

- Ripping compacted soils with a tractor and sowing native seed;

- Placing a physical barrier such as three strand wire fence, concrete "jersey" barriers or dirt ditch/berm, which will be removed when the area is reclaimed and no longer needed; or

- Signage including "entering/ leaving shooting buffer zone." Signs redirecting shooters to open areas will be employed; closed area signs will be used sparingly. Reference to accepted messages will be used (*Responsive Management*, 2006).

Special Recreation Permits

A Special Recreation Permit (SRP) is required for use of public land in connection with commercial, competitive, and organized group activities in accordance with public land regulations. Permits are not required for private, non-commercial recreational use.

Restoration and Rehabilitation

One or multiple techniques described below will be used to restore routes and areas.

- "Closed" routes on BLM land will typically be allowed to reclaim naturally, when at all feasible. Most of these routes include lightly travelled routes that serve "limited" access purpose. The HFO recognizes that simply posting a "closed" sign has little effect on user behavior and that for a route closure to be most effective, the specific route should be obliterated from public view -- to at least the visual horizon, as seen from the intersection with an "open" route. The application of rehabilitation techniques to "closed" routes, may be used where necessary, to speed the healing process, discourage use of "closed" routes,

and minimize the impact on visual resources. Monitoring will drive the need for heavier forms of restoration.

- "Closed" routes in sensitive areas, or those that are causing unacceptable impacts will generally receive a higher priority for reclaiming the route to the visual horizon. Some of these routes may be ripped, ditched, re-graded or re-contoured entirely or in part to aid reclamation, if site conditions indicated that it is necessary to do so. In only rare situations will a "closed" route be rehabilitated beyond the visual horizon.

- Other methods to close routes may include techniques as posting with signs and/or blocking with barriers to prevent vehicle entry as determined reasonable. In a low desert environment, it is difficult to block a route with simple barriers or tank traps because the terrain allows for circumvention of the barrier.

- Install some form of barrier and reclaim the portion of the route that is visible from all intersections with "open" routes.

- Seeding will be conducted where necessary to aid rehabilitation of "closed" routes. Appropriate seed mixtures will be selected for each site based on individual site conditions. Native species only are allowed for reclamation. Vegetation may be transplanted from other nearby areas.

- Recommended reclamation techniques include ripping the road surface with a small dozer to break up compacted soil and allow maximum moisture retention. Broadcast seeding will generally be conducted in the fall. After the seed has been distributed uniformly over the area by mechanical broadcasting devices, the ground would be raked or dragged to cover the seed. After the first year, seeded areas would be fertilized if seedling establishment is sparse. Techniques such as hydraulic seeding, seed drilling, mulching, water barring, pitting, roughening, contour furrowing, or similar methods may be used as appropriate on a case-by-case basis.

- Vegetation removed during the construction of new roads/trails may be transplanted to disturbed areas. Depending upon size and access to remove vegetation, not all of the disturbed area will be transplanted.

- Weed treatment and control measures would be implemented as needed to promote re-vegetation with native plants and prevent any new weed establishment and/or control of existing weed sources.

Monitoring and Evaluation

The success of the Table Mesa RMZ Recreation and Travel Management Plan is best determined through monitoring and evaluation. The BLM will develop and implement a monitoring and evaluation program for the area which will be designed to identify and address emerging issues that may adversely impact the resource and/or visitor experience. The data monitoring will be used to evaluate implementation progress and the effectiveness of the Plan in achieving desired outcomes and conditions as well as to identify adaptive measures should adverse impacts be discovered. The monitoring effort shall identify specific actions, including timeframes, methods,

and anticipated resource needs for environmental monitoring. The evaluation and monitoring program will be used for the following:

- Determine if recreation objectives are being met;
- Determine visitor satisfaction;
- Determine use patterns and volumes;
- Determine the condition of roads and trails, the condition of public use areas, and compliance with planned designations and use restrictions; and
- Determine efficacy of cross-jurisdictional enforcement.

Limits of Acceptable Change indicators, or triggers, requiring adjustments to this management plan are as follows:

- Desired recreation experiences over a five-year period are not being met as determined by surveys, visitor sign-in logs or other data-gathering process conducted in the planning area.

- Unauthorized routes, whether created by motor vehicle or non-motorized means, cannot be rehabilitated at the same rate as their creation with available funding or personnel.

- Priority / Special Status species habitat conditions are in a downward trend over a five-year period and are determined to be a result of recreation or travel impacts.

- Riparian condition trend is not improving over a five-year period and is determined to be a result of recreation or travel impacts.

- Visitor safety and assumed risk for non-shooters is determined by the BLM to be unacceptable as determined by data collection and surveys conducted in the planning area.

Some features of the monitoring plan will include:

- The BLM employees and volunteers will be encouraged to use the OHV Observation report booklets while in the field to document vehicle use, and assist in monitoring and compliance.

- Photo-monitoring points will be established in key locations to monitor implementation actions and their effectiveness. For example, photo points can be established to monitor where cross-country travel has occurred, activity on "closed" routes has occurred, success of rehabilitation projects, extent of erosion mitigation areas, as well as areas of good road quality for future reference. Photo monitoring points will be documented using GPS and a monitoring schedule will be established.

- The monitoring data collected will be used to assess the effectiveness of the plan and associated implementation actions.

- "Closed" routes would be monitored for indications of use; rehabilitated routes will be monitored to determine effectiveness of seeding and water drainage; and the plan area

will be monitored for signing conditions. Modifications to the plan would be considered if monitoring indicates that the goals and objectives are not being met.

- Recreation demand/preference will be captured by survey as funding and staffing allow. This type of project is well-suited.

- Upland health assessments will be conducted as warranted

- Riparian health assessments will be conducted every three to five years.

- To maintain simplicity, hard copy binders backed up with digital data will be created and stored for a period of ten consecutive years. After ten years, only select photos and data will be retained for long term monitoring.

- Surveys would be conducted in the planning area to ensure accurate feedback and may be conducted by the BLM staff, or contracted to an appropriate entity. Surveys may not be conducted on a regular basis unless part of a larger survey effort such as National Visitor Use Monitoring (NVUM).

The BLM maintains the authority to temporarily or permanently, partially, or completely suspend any activity at the Table Mesa RMZ based on safety issues and adverse resource impacts. All open routes and shooting areas remain under a "conditionally open" status. Acceptable uses will be allowed only if the use does not degrade the condition and health of the land.

Appendix 7: BLM Travel and Transportation Management Signage

Travel management signage is an important way of communicating with public land users. Signing of travel and transportation networks is necessary for adequate management of the public lands. Directional and informational signs, and placement of these signs, are critical for the safety and enjoyment of the lands, for compliance of rules and regulations, and protection of resources. Proper signing can improve the visitor's experience by providing the necessary information to ensure users are aware of regulations, safety, and uses. Road and trail users want to know what modes of travel are allowed or not allowed on the route they would like to use. Different state or field office sign protocols are often confusing to visitors as they travel across the public lands. Within a region, inconsistency between different adjacent land management agencies (i.e., USFS and BLM) can create confusion when trails cross agency boundaries. Creating a consistent approach to signing would benefit these visitors by providing the information needed to make responsible choices during their recreational pursuits.

Sign plans are the primary document in the BLM signage efforts and are a required component of a travel management plan. As written in the BLM Sign Guidebook (2004), "a sign plan provides for the systematic and uniform development and maintenance of a sign system for a given area." A sign plan is necessary to ensure that signs placed in an area are consistent with land use and other planning documents; that they are designed to be consistent with all applicable laws, regulations, and policies; and that all signs adhere to a consistent theme. A sign plan should include the goals, objectives, and responsibilities for the placement of signs, as well as an inventory of existing signs and may include a process for designing/locating new signs.

Signing is a key element to managing and implementing comprehensive travel and transportation plans on-the-ground. This attachment provides basic guidance for the BLM comprehensive TTM "on-the-ground" signing effort.

The objectives of this guidance are to:

- Incorporate TTM into existing sign plans;
- Strongly support the need for consistency of signing throughout the BLM;
- Support the requirement for each state office to develop a sign policy for travel management;
- Encourage states, district/field offices, and NLCS units to consult and work with their constituents and adjoining agencies when developing sign plans or policies; and
- Define core common elements that state sign policies should include.

States are to use this guidance in addition to the BLM Sign Manual, M-9130, January 8, 2004. Refer to www.blm.gov/wy/st/en/Sign_Center.html.

Sign Elements

Field Offices are encouraged to follow some basic elements when developing signs:

- Use positive messaging;
- Use signs to show which roads, primitive roads, and trails are open and closed to use (and the use type);
- Use universal recreation symbols. Sign Guidebook (2004), Appendix 6 contains the approved recreation symbols. Do not deviate from established standards; and
- Use clear and simple messages.

Types of Signs

There are several types of signs that states or field offices should consider when developing sign policy and implementing travel management plans. Efforts should include identification and information signs at trailheads and entrances, and along trails, roads, primitive roads, intersections, authorized and closed areas.

Trail Signs

Trail signs apply to signage for linear routes managed for human-powered, stock, or motorized vehicle forms of transportation or for heritage values. Major types of trail signs include allocation signs, directional/reassurance markers and kiosks. Allocation signs show the permitted uses and/or the uses of the trail that are not permitted. These signs are used at trailheads, where a trail begins, intersections or anywhere there is a change in use type.

Directional signs are located at trailheads and trail intersections. These signs usually indicate destinations (e.g. trail endpoint feature and or intersection with another trail) with or without mileages and trail name and/or number. Reassurance markers are provided along a trail at points where a trail user may be confused as to the direction of the trail. These can be in the form of signs or markers in areas where the trail passes by other non-trail routes or a guide pole or cairn (*large stack of rocks*) in areas where the trail tread is not clearly defined or often buried in snow.

Trailhead kiosks are large signs or bulletin boards provided at the beginning of a trail or trail system that provide trail information, regulations, user ethics information, safety information, and interpretive information. These signs are used to notify the public of the travel management strategy or designation of the area they are entering, such as "areas limited to designated routes" or "open areas". Often regulatory or fee information is located on a separate sign board from interpretive information.

Other types of signs often used in trail management settings include:

Warning Signs – Warning signs are used to caution trail users of upcoming hazards and would be placed close to the trail so they are easy to see. Warning signs may include locations where trails

cross ROWs or high-speed roads, challenging terrain or technical trail features, or alert trail users of upcoming gates or nearby private property.

Difficulty-Level Signs – Difficulty-level signs will typically be placed at each trailhead and at, or just after, each trail segment entry point. While these signs are typically small, they should clearly display the difficulty-level and route length. Difficulty-level signs may be included with user type and trail number/name signs. Signs that use standard difficulty-level symbols for ski, OHV, and mountain bike systems should be selected that are consistent with other local established trail systems. If used, difficulty-level signs are particularly critical at the intersections of trails with differing difficulty-levels. An example of difficulty-level symbols includes:

- Easiest (White Circle)
- Easy (Green Circle)
- More Difficult/Moderate (Blue Square)
- Very Difficult (Black Diamond)
- Extremely Difficult (Double Black Diamond)

Regulatory Signs – Regulatory signs delineate rules, such as allowable uses of a trail, seasonal or temporary closures, or allowable direction/speed of travel.

Interpretive/Educational Signs – These signs interpret natural or cultural points of interest along a trail and should be placed further from the trail tread than other signs. Other key educational signs include trail sharing signs, based on the IMBA trail yield sign standard.

Road Signs

Road signs apply to signage for linear routes managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use. The Manual on Uniform Traffic Control Devices standards apply to these roads. **Note**: There are cases where some roads will be open to unlicensed off-highway vehicles. Signs for these roads are marked in a manner that notifies or warns the public of mixed uses.

Primitive Road Signs: Primitive road signs apply to signage for linear routes managed for use by four-wheel drive or high-clearance vehicles. These routes do not normally meet any BLM road design standards.

Designations

There are three special off-highway designations that the BLM must account for through signing. These designations are open, limited, and closed, and should be clearly identified through signing.

- Open Areas: Open areas are areas where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342. Open area signs are used for specific areas with identifiable boundaries in which travel is allowed both on and off roads. In most cases, entrance or area signs should be installed at all access points into a specified open area. Boundary signs along the area perimeter should be considered.

- Limited Areas: Limited areas are restricted at certain times, in certain areas, or to certain vehicular use. These restrictions may be of any type but can generally be accommodated within the following categories: numbers of vehicles; time or season of vehicle use; permitted or licensed use only; use on designated roads and trails; and other restrictions.

The main type of 'limited' area designation is 'limited to designated roads, primitive roads, and trails'. These areas are identified by the BLM where some type of motorized vehicle use is appropriate and allowed either seasonally or year-long. Under a typical designated travel and transportation system, motorized travel modes would be limited to operating on roads, primitive roads and trails that are identified on travel maps and/or signed as routes that are available for specified types of uses. The following bullets are guidelines to follow for this category:

- Designated roads, primitive roads, trails, and areas will be identified in a TTM use map;

- The TTM use maps are developed during the TTM planning process, and should be supported with the development of Supplementary Rules, if needed, through the Federal Register;

- Supplementary Rules are required to enforce route and area designations for non-motorized uses on the TTM use maps; and

- Signs need to support a TTM use map.

Closure signs are used in areas or for routes that are closed to select, or all use types. Rationale for the closure is encouraged to be incorporated on the sign. It is preferable to obliterate/rehabilitate routes that are not identified in a travel plan as part of the transportation system. Ideally, route rehabilitation work will render such routes indistinguishable from the surrounding landscape, and therefore eliminate the need for a 'road closed' sign.

Design of Signs

Transportation systems on public lands need signs to assist in educating visitors on direction and safety information, while protecting resources. The **BLM Sign Guidebook** covers location and placement, along with speed of travel in Chapter 4, Design Standards. The development of signs should consider the following:

- Useful information to the public land user, such as what do they need and want to know; a clear, positive, and simple message to invite the public to read them;

- Location and placement of a sign that makes it obvious and easy to read at the speed and height from which the sign will be typically viewed;

- Lettering size may be dictated by vehicle speed based on the standard MUTCD system, which is used by the National Sign Center (reference BLM SIGN Guide Book, Table 4-3, Chapter 4 Design Standards). Signs for hiking/equestrian trails generally use 1" to 1½" lettering;

- Consider a variety of material to fit the unique character of the local area. For example, in high use areas, a fiberglass sign post could be used; in Southern Utah, red stone could be used; and in forested areas, wooden posts could be used. Natural materials should generally be used; especially in backcountry/primitive type settings (i.e. routed natural wood routed signs vs. decals). Material: Travel management signs will not be constructed on paper or poster type materials. For additional information, reference the BLM Sign Guidebook;

  Allow sufficient size and color contrast between the message and background so the sign can be seen and read within the setting;

- Use of international symbols and MUTCD standards;

- Agency logo should be placed at top rather than at the bottom of vertical display to maintain consistency on vertical signs, and to promote a positive image by identifying the agency that manages the road. The BLM agency logo would be followed by route number or identifier with international symbols located below route number identifier for open and closed.

- Travel management signing need not be on every trail sign along the trail corridor. Travel management signs should be placed at the trailhead, and at trail junctions where travel management is changing, or needs reinforcement.

Appendix 8: Trail Planning and Standards

The BLM currently lacks established or uniform trail standards and planning methodologies for different types of trails (OHV, equestrian, mountain bike, etc.). For TMAs where specific types of trails are identified, the issue of trail standards often comes up. Trail designations may include specified difficulty levels that need to be created or maintained, and trail standards allow for implementation, maintenance and monitoring of the trail system. Trail standards must be based on the established trail management objectives for a particular trail.

Development of trail standards can be done during the planning process, particularly during activity or implementation level plans for specific trail systems. Review of USFS, NPS and other trail standards created by other agencies, trail user groups and advocacy organizations will help to develop standards (*see references at the end of this section*). Trail Standards may apply to specific types of trails, trail use areas, or entire systems to be developed in the future (in implementation plans). Broad trail design criteria may include:

- Create loops and avoid dead-end trails.
- Identify control points and use them to guide trail design and layout.
- Positive control points (features that people want to get to).
- Negative control points (sensitive areas, or areas where use can easily be diverted).
- Avoid changes to difficulty levels mid-way through a trail segment.
- Consider bypass trails where difficulty levels change mid-way on a trail segment.
- Manage access by providing a limited number of designated trailheads.
- Design trails to increase saddle time and reduce speeds.
- Use cross slopes and avoid flat ground and the direct bottom of draws whenever possible.
- Use vegetation and topography to conceal trails, absorb noise and retain trail difficulty levels.
- Provide adequate sight distance and signage at trail intersections.

Trail standards may include direction on system implementation. For example, trail standards in the Cline Buttes Recreation Area on the Prineville BLM District in Oregon provided guidance on doing trail system construction and undesignated route decommissioning in a matched ratio, to avoid increases in existing route density in certain areas. Other BLM trail implementation plans specify that certain non-motorized trail uses can occur cross-country until a designated trail system is developed.

For intensively used trail systems, a specific monitoring plan or schedule may be identified to review trail conditions and resource issues. It is important to conduct annual trail reviews prior to the start of the heaviest use season in order to identify required annual maintenance tasks. Annual maintenance is defined as the tasks accomplished on a regular basis to keep assets in acceptable condition. Trail monitoring is useful to review safety issues, verify trail difficulty levels, ensure that needed signs are in place, and assess any constructed features. Transportation planning can also identify specific trail maintenance triggers, such as:

- A downgrade of specified trail difficulty levels (i.e., trail conditions become easier than specified in the trail plan and require restoration work to restore difficulty levels);
- Presence of short-cutting of turns or switchbacks;
- Vegetation cover loss;
- Unauthorized constructed features;
- Alteration or damage to authorized technical trail features;
- Widening or braiding;
- Trail incision or soil loss; and
- Rock slides or tree falls that block trails.

References for Trail Planning and Standards:

Guidelines for a Quality Built Environment. (2010). Bureau of Land Management.

Basch, D., Duffy, H., Giordanengo, J., & Seabloom, G. (2007). *Guide to Sustainable Mountain Trails: Trail Assessment, Planning & Design Sketchbook.* Washington, D.C.: National Park Service.

Crimmins, T. M. (2006). *Management Guidelines for OHV Recreation.* National Off-Highway Vehicle Conservation Council.

Fogg, G. E. (2002). *Park Guidelines for Off-Highway Vehicles.* National Recreation and Park Association; National Off-Highway Vehicle Conservation Council.

Foti, P., White, D., Brodehl, G., Waskey, T., & Brown, E. (2006). *Planning and Managing Environmentally Friendly Mountain Bike Trails.* Shimano American Corporation.

Hancock, J. J., Bradshaw, S., Coffman, J. D., & Engelmann, J. (2007). *Equestrian Design Guidebook for Trails, Trailheads, and Campgrounds.* Missoula, MT: USDA Forest Service Technology and Development Program.

Parker, T. S. (2004). *Natural Surface Trails by Design: Physical and Human Design Essentials of Sustainable, Enjoyable Trails.* Boulder, CO: Natureshape LLC.

Weber, P. M. (2004). *Trail Solutions: IMBA's Guide to Building Sweet Singletrack.* Boulder, CO: International Mountain Bicycling Association.

Weber, S. E. (2007). *Managing Mountain Biking: IMBA's Guide to Providing Great Riding.* Boulder, CO: International Mountain Bicycling Association.

Additional information can be found at the following websites:

1. Federal Highway Administration; Manuals and Guides for Trail Design, Construction, Maintenance, and Operation
   http://www.fhwa.dot.gov/environment/rectrails/manuals.htm#flmarp

2. American Trails
   http://americantrails.org/

3. National Off-Highway Vehicle Conservation Council, Tools
   http://www.nohvcc.org/Tools.aspx

4. International Mountain Bicycling Association, Resources
   http://www.imba.com/resources

Appendix 9: GIS Tools for TTM Planning

GIS application in Travel Management Planning

The GIS has proven to be beneficial and crucial for the development of an efficient and comprehensive travel plan. A framework in GIS with accurate and complete datasets along with the proper ability to manipulate data will provide ID teams with sufficient information to evaluate routes, document evaluation decisions to supplement the administrative record, and support a method for continued monitoring and implementation of the travel plan. The GIS aids in identifying conflict zones and provides a starting point for establishing TMAs.

The GIS supports the travel plan in four main aspects throughout the process: inventory, public involvement, evaluation/decision-making, and monitoring/maintenance.

- In inventory, GIS maintains the information of where the routes exist and provides a method for uniquely identifying all routes, that is, the baseline route inventory.

- In public involvement, GIS serves as the platform to disseminate information either by static maps or providing interactive spatial data.

- In evaluation/decision-making, GIS ties the route evaluation process and the designation decision-making process to the route inventory.

- In maintenance and implementation, GIS tracks monitoring data or other changes made in the field to the archived decision data.

This appendix provides examples of GIS use and application from several field offices that have completed travel plans.

I. Inventory

Route
The fundamental element to any travel plan is a clean, accurate and complete route dataset. This is the best representation of which routes actually exist in the field so that proper route discussion, evaluation, and designation can be derived without requiring that every member of the travel planning team visit each route in the field. Route inventory often requires the greatest amount of time for the GIS specialist. The necessity of a good route inventory for travel planning has been reiterated by GIS specialists, travel planning leads and managers as the most important aspect of producing a quality travel plan. A route inventory can be developed in several ways. Baseline dataset sources include:

- State and local government data (state, county);
- Existing GTLF dataset (the corporate dataset representing the compilation of all BLM linear transportation features);

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- Digitization via NAIP or other remote sensing data; and
- 100k data.
- GPS surveys

Contractors or BLM staff can use GPS equipment to survey routes and document attributes such as road type, condition and usage while collecting lines. Also, field data collection can ground truth or verify existing datasets. Field checking data can verify the accuracy of the attributes of the routes, whether or not the routes exist, or if special conditions are required to access the routes, in matters such as vehicle classification (4WD) or easements.

Whichever method has been chosen to create the inventory, another decision should be made early in the process regarding the inclusion of non-BLM jurisdiction routes (i.e., private, county, state, or other Federal agencies) in the inventory. Most field offices have chosen to include them. These routes serve as part of the local transportation network and provide access to BLM jurisdiction routes. Also, these routes often serve as connections between BLM-maintained roads and can render some BLM routes redundant. Inclusion of these routes also helps identify routes where easements or right-of-ways exist or might need to be acquired in the event of travel planning decisions.

An issue with existing datasets is that they often require much time to clean up. For example, there will be segments of a route that, after verification, extend on to non-BLM land, but may be less than 20 meters. Decisions must be made whether to treat such short segments as separate from the BLM jurisdiction route to be evaluated, or for it to remain as one route (i.e. to lump or split). Another issue is routes in the inventory that are not connected to the route network. In the interest of consistency, basic rules should be established on whether to lump or split or whether to include short spurs to dispersed camp sites or not.

It is also important to require that data being gathered from the field using GPS units be cleaned up to ensure that all route segment data are directly and accurately intersecting adjacent route segments.

Route Identification

Maintaining a route inventory with GIS also incorporates methods for creating or storing unique route names/numbers and retrieving those routes throughout the process as well as afterwards when archived. The unique route identifier (route ID) can serve as a foreign key for many other tables and datasets, and can also provide labels for planning maps. The route ID should be kept throughout the process between alternatives, especially when producing maps for the public. Tracking routes across alternatives can prove to be difficult at times, especially regarding seasonal closures. For example, if one route is designated as open in one alternative all year, closed halfway down the road for winter range habitat protection during certain times of the year, or limited to certain traffic beyond a point along the road in other alternatives, it can be difficult to maintain this information tied to a single, unique route. Therefore, a decision regarding naming this road as two different roads (i.e. rt 111 and rt 112), two tied roads (111a

and 111b), or just one road (111) should be made so that it can be kept consistent throughout the entire process (or just something to consider on a route by route basis).

Photographs

A practice employed by select field offices during route collection and inventory is the capture of 'geo-tagged' photos, or photos that store a point location. Photographs were taken at the beginning of each route, at points along the route where the road changed properties (e.g., the road changed from gravel to paved, from two-track to single-track) and at the end of the route. These photos identify the natural setting of the route, help verify that the attributes of the route are correct and verify the current endpoint of the route. The geo-referenced photographs can be linked to each of the routes or stored as an attribute value. These images can serve many purposes, but specifically assist in route evaluation and discussion and temporal monitoring. A photographic monitoring system can be set up where applicable. It has proven beneficial both in route identification and monitoring environmental impact.

There are a few options of capturing the geographic location with corresponding images, including Geo-locating cameras, GPS units, or other GPS based software. Geo-locating cameras have an internal GPS unit that when the photo is taken, the latitude and longitude is stored as well, thereby preserving the actual location. Also, GPS units can take a point where every photo was taken. In some cases, cameras can be synched with the receiver to further automate this process. Thirdly, if no GPS information is available, notes can be taken for which road corresponds to which photo and can be later identified over aerial imagery as a last resort for finding the digital location of the photo.

Specialist data

In addition to route inventory, other datasets are beneficial to determining purpose and need or resource conflict. The GIS lead has often been referred to as the "internal project manager," as they spend much time organizing not only the route inventory data, but pursuing the rest of the specialist data from the ID team members. Sometimes, the data has to be created or digitized to aid discussion, as, for example, a wildlife biologist might have only a list of habitat sightings in a notebook. To aid discussion and evaluation with regard to geographic location, this data must be created within a GIS so that it is easier to determine whether or not, for example, a species breeding ground falls within 50 feet of an existing route.

Gathering, creating, or digitizing all of the specialist datasets, such as recreation sites, wildlife habitats, breeding grounds, soil type, elevation models, cultural/archeological corridors, VRM data, and others, and digitizing the data have proved to be time consuming. However, the cumulative assistance these datasets provide is almost irreplaceable in both maintaining information and utility for analysis. Selection queries or intersects can identify routes that could cause conflict to one or more specialist areas. The specialist data should include but not be limited to the data identified in the EA.

Inventory Management

At the start of the TTM route evaluation process, each dataset, including the route inventory, should be 'frozen,' or prevented from further changes to ensure that the people working with data have the current datasets. A static dataset also serves as a record of the initial dataset for part of the administrative record. If datasets require editing, the GIS specialist should make the changes or delegate the task and distribute the updated dataset accordingly. Maintaining a frozen record of each route alternative also aids the documentation process. Thus, there should be several frozen datasets to track progress throughout the planning process, including:

- An initial route inventory and specialist data,
- Route alternative(s) data,
- Recommended alternative route dataset, and
- A final, signed dataset that is archived and only changed through maintenance or correction.

II. Public Involvement

Since public involvement is required in each travel management planning process, disseminating information is further aided by GIS. Members of the public spend time on BLM lands. As such, they may possess certain knowledge of routes that could prove beneficial to the planning team in the inventory and evaluation process. Field offices have published their route inventory so the public may "drive" the routes using GIS viewer software, helping to verify existing routes or identify routes that may have been missed. Field offices have begun to build web-based applications, interactive GTLF systems, to remove the necessity of third party viewing software. These web-based GIS systems can provide another connection to the public for comment collection.

III. Discussion, Evaluation, and Record

Discussion

The GIS and the GIS lead's role in the discussion and evaluation part of the travel management process is to facilitate, encourage, and promote discussion by presenting the routes individually during evaluation and to display relevant specialist data as requested throughout the process. In addition to route and specialist data presentation, prior spatial analysis with all limiting datasets, such as the recreation opportunity spectrum matrix or other spatial analysis, can provide insight on route impact beyond the natural setting of that particular route. The key to an efficient, streamlined, and productive meeting is clean, accurate, and complete spatial data. Without having ensured data quality, there can be several moments where the cleanup happens during evaluation. Examples from previous travel planning sessions include segments that are

disconnected from the true segment, arcs that extend only two feet in the middle of space, or having duplicate features.

The most frequently used method of displaying route and other data via GIS in route evaluations is connecting a laptop to a projector and visually displaying the route against a base map, whether that be aerial photography, jurisdictional boundaries, or other data that helps the ID team recognize the location of the route. Both field office staff and contractors hired by field offices to aid with travel planning have used this projector method. It is suggested by most to be the best way of identifying which route is being discussed. This way, each route can be selected and cycled through one by one, displaying through them on screen.

In some cases, not all of the specialist data is displayed on the main display. Specialists brought laptops with GIS software and their respective data loaded to the conference room so that they could see the routes and further explore implications of routes based on their resource area.

Evaluation

Attribute fields can be used to track resource conflict for part of evaluation. Preliminary analysis ahead of the ID team evaluation meeting can quickly populate these fields as a potential method of identifying routes that could be a conflict to certain resources. However, many specialists may not rely on this procedure to adequately capture whether a road poses a conflict. One way to capture the concern is by adding enough attribute fields to the inventory dataset to accommodate each ID team specialist's comments. This way, whenever a route is being discussed, a specialist and project managers can see that there was a potential resource conflict brought to the table by the specialist in a route by route process. The fields can be either a Yes/No option, or a numeric scale to document a range of conflict potential, such as one being low and five being high conflict. By storing this as an attribute within the dataset, it also serves as a record that a potential resource conflict has been considered in the decision process.

The decision of a route's designation status by alternative can be stored in a GIS dataset. Adding two to three fields to the inventory dataset can capture a route's designation (open, limited, or closed) and also indicate type of limitation (mode and/or seasonal). For example, one field can be used to document whether a route is open, limited, or closed, while a second field indicates the type of limitation (limited to OHV, pedestrian, high clearance, mountain bike, etc.). A third field can denote seasonal restrictions.

Each step along the travel planning process should be documented so that each decision or GIS map can be accessed to answer potential questions as to reasons for a route designation, or to eliminate any discrepancies between public maps published at different dates, resulting in potentially different route names. Tying datasets to specific map documents and publications is one way of maintaining this administrative record.

By using version tracking software, project leads can easily track changes between documents and files and see which user made the edits. Datasets can be stored using this software and

frozen so that no changes can be made to that particular dataset to serve as a record. Map documents can be used to separate each process so that all of the selection criteria are available to see, as well as the datasets in the legend or the model that were used in the decision or processes.

Record

Ensuring that the final decision and planning discussion comments have been documented in an attribute text field, as well as documented in databases joining the decision to the route dataset by the unique route identifier such as Route ID is an important part of creating an auditable administrative record. The database method was used for interoperability ease since the decision record can be viewed without proprietary licenses.

Once the final decision has been made, the dataset should be frozen and archived so that no changes can be made except by an editor. This dataset reflects the analysis of the ID team and the decision made by the appropriate line officer. Any changes must meet NEPA decision analysis requirements.

IV. Maintenance/Implementation

As decisions are carried from the evaluation process and implemented in the field, monitoring and tracking of any changes need to be documented over time. Also, to make adjustments to the travel plan, a travel plan maintenance form should be created so that it can be approved by the appropriate manager. It must contain the name/ID of the route in question. If it is a mapping error or road adjustment that would render the digital representation of that route in the inventory incorrect, the GIS manager can assign an appropriate person the task of changing the route in the archived dataset.

Appendix 10: Example of Area and Route Evaluation Documentation

It is important to keep in mind that the example 'form' below does not imply that a hard copy for each route must be completed. The example forms provided here are only intended to help the ID team develop a process that results in a thorough evaluation for each route. For the sake of efficiency, the process should be automated utilizing GIS and/or other information technologies.

Example Evaluation for Interdisciplinary Route Analysis

Example Evaluation Form for Interdisciplinary Route Analysis									
1	**Route ID**					**2**	**Length**			
3	**Location**					**4**	**Date**			
5	**ID Team**									
6	**Route Type**	Road		Primitive Road		Trail			Way	
7	**Purpose & Need of Motorized and Non-Motorized Travel on the Route:**									
	Additional Comments Regarding the Purpose & Need of Motorized and Non-Motorized Travel on the Route:									
8	**Potential Resource and/or User Conflicts from Motorized and Non-Motorized Travel on the Route:**									
	Additional Comments Regarding Potential Resource and/or User Conflicts from Motorized and Non-Motorized Travel on the Route:									
9	**Route Designation Alternatives**									
	No Action		**Alternative B**		**Alternative C**			**Proposed Action**		
	Comments:									

10	Recommended Mitigation Measures for Each Alternative:

11	Summary Regarding the ID Team's Proposed Action Recommendation:

<table>
<tr><th colspan="6" style="text-align:center">Example Evaluation Checklist
for Interdisciplinary Route Analysis</th></tr>
<tr><th colspan="3">Purpose & Need Criteria</th><th colspan="3">Designation Criteria</th></tr>
<tr><td colspan="3">Administrative Uses</td><td>Resource</td><td>Potentially Affected?</td><td>Comment</td></tr>
<tr><td>Use</td><td>Yes</td><td>Comment</td><td></td><td></td><td></td></tr>
<tr><td>Compliance/Enforcement Monitoring</td><td></td><td></td><td>* Air Quality - Dust</td><td></td><td></td></tr>
<tr><td>Fire Suppression</td><td></td><td></td><td>* Air Quality - Non-Attainment Area</td><td></td><td></td></tr>
<tr><td>Predator Control</td><td></td><td></td><td>* Wildlife</td><td></td><td></td></tr>
<tr><td>Public Safety</td><td></td><td></td><td>* Special Status Species #1 Habitat</td><td></td><td></td></tr>
<tr><td>Training Area/Facility</td><td></td><td></td><td>* Proximity to Special Status Species #1 Habitat</td><td></td><td></td></tr>
<tr><td>Vegetation Treatment Area</td><td></td><td></td><td>* Special Status Species #2 Habitat</td><td></td><td></td></tr>
<tr><td>Wildlife Water</td><td></td><td></td><td>* Proximity to Special Status Species #2 Habitat</td><td></td><td></td></tr>
<tr><td>Other Administrative Uses</td><td></td><td></td><td>In a Wash</td><td></td><td></td></tr>
<tr><td colspan="3">Commercial Uses</td><td>Wash Crossing</td><td></td><td></td></tr>
<tr><td>Use</td><td>Yes</td><td>Comment</td><td>Proximity to a Wash</td><td></td><td></td></tr>
<tr><td>Ranching</td><td></td><td></td><td>Other Wildlife</td><td></td><td></td></tr>
<tr><td>Mining</td><td></td><td></td><td>Herd Management Area</td><td></td><td></td></tr>
<tr><td>Mineral/Materials</td><td></td><td></td><td>* Vegetation</td><td></td><td></td></tr>
<tr><td>Fluid Minerals</td><td></td><td></td><td>* Special Status Plant Species #1</td><td></td><td></td></tr>
<tr><td>Renewable Energy</td><td></td><td></td><td>* Special Status Plant Species #2</td><td></td><td></td></tr>
<tr><td>Right-of-Way</td><td></td><td></td><td>Invasive Non-Native Vegetation</td><td></td><td></td></tr>
<tr><td>Utility</td><td></td><td></td><td>Other Vegetation</td><td></td><td></td></tr>
<tr><td>Special Recreation Permits</td><td></td><td></td><td>* Soils</td><td></td><td></td></tr>
<tr><td>Other Commercial Uses</td><td></td><td></td><td>Erosive Soils</td><td></td><td></td></tr>
<tr><td colspan="3">Public Uses</td><td>Other Sensitive Soils</td><td></td><td></td></tr>
<tr><td>Use</td><td>Yes</td><td>Comment</td><td>* Watershed</td><td></td><td></td></tr>
<tr><td>Property Access</td><td></td><td></td><td>Water Quality</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td>Stream Crossing</td><td></td><td></td></tr>
<tr><td>Other Public Uses</td><td></td><td></td><td>* Cultural Resource Site</td><td></td><td></td></tr>
<tr><td colspan="3">Recreational Uses</td><td>Proximity to Cultural Resource Site</td><td></td><td></td></tr>
<tr><td>Use</td><td>Yes</td><td>Comment</td><td>High Probability Cultural Resource Area</td><td></td><td></td></tr>
<tr><td>OHV Use</td><td></td><td></td><td>* Paleontological Resources</td><td></td><td></td></tr>
</table>

Trailhead Access			* Visual Resource Management Class		
Loop Trail			Known Visual Scar		
Dispersed Camping			* ACEC		
Developed Camping			* Wilderness		
* Hunting			* Wilderness Study Area		
* Recreational Shooting			* Natural Area		
* Fishing			Wilderness Characteristics		
* Equestrian			Other Wilderness Characteristic Considerations		
* Mountain Biking			* Wild & Scenic River		
* Hiking			* National Historic Trail		
Permitted OHV Events			Special Recreation Management Area		
Wildlife Viewing			Recreation Management Zone		
Rock hounding			Prescribed Recreation Setting (ROS)		
Picnicking			* Conflicts with Other Recreational Users		
Pullouts			* Noise		
Woodcutting			* Adjacent Communities		
Other Recreational Uses			Other Criteria		

<table>
<tr><td colspan="10" align="center">*Instructions for*
Example Evaluation Form for Interdisciplinary Route Analysis</td></tr>
<tr><td>1</td><td>**Route ID**</td><td colspan="3">*Assign a Route ID for planning purposes. The Route ID should be consistently referenced in the plan, GIS, and other supporting documents in the administrative record. Include any common names.*</td><td>2</td><td>**Length**</td><td colspan="3">*Length in miles.*</td></tr>
<tr><td>3</td><td>**Location**</td><td colspan="3">*Identify the county and any other major geographic features of the area the route is in.*</td><td>4</td><td>**Date**</td><td colspan="3">*Date(s) the ID team evaluation took place.*</td></tr>
<tr><td>5</td><td>**ID Team**</td><td colspan="8">*All ID team members present during the evaluation.*</td></tr>
<tr><td>6</td><td>**Route Type**</td><td>Road</td><td></td><td>Primitive Road</td><td></td><td>Trail</td><td></td><td>Way</td><td></td></tr>
<tr><td></td><td></td><td colspan="8">*Refer to the Roads and Trails Terminology Report for route type definitions:*
http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2006.Par.69739.File.dat/im2006-173attach2.pdf</td></tr>
</table>

7	**Purpose & Need of Motorized and Non-Motorized Travel on the Route:**

- *Identify all known forms of motorized and non-motorized travel that currently occur on the route including, but not limited to, four- wheel drive vehicles, two-wheel drive vehicles, ATVs, mountain bikes, horseback riding, motorcycles, snowmobiles, sand rails, rock crawlers, etc.*
- *On the attached checklist, identify the purpose and need of any existing commercial, administrative, and/or recreational forms of travel on the route. Include any substantiated purposes and needs identified through public scoping comments.*
- *Identify any statutory, regulatory, and/or existing authorizations that would mandate some form of motorized or non-motorized travel on the route.*

Additional Comments Regarding the Purpose & Need of Motorized and Non-Motorized on the Route:

8	**Potential Resource and/or User Conflicts from Motorized and Non-Motorized on the Route:**

- *On the attached checklist, identify all known or potential resource and user conflicts from motorized and non-motorized travel on the route. Include any substantiated conflicts identified through public scoping comments.*
- *Ensure that all resources and users encompassed under the BLM's multiple-use mission are considered. Resource and user conflicts that MUST be evaluated for every OHV Area proposal include, but are not limited to:*
  - *The designation criteria outlined in 43 CFR 8342.1; subparts a,b,c,d focused on minimization of resource and user conflicts identified;*
  - *Any resources that must be considered under applicable statutes, regulations, or executive orders;*
  - *The goals and objectives for resource values and uses established in the applicable RMP;*
  - *Any objects or values the BLM is required to manage/protect under statute or proclamation;*
  - *Any recognized purpose and need of each route, including, but not limited to, recreational, administrative, and/or authorized motorized travel; and*
  - *Any other local issues that should be addressed.*

Additional Comments Regarding Potential Resource and/or User Conflicts from Motorized and Non-Motorized on the Route:

9	**Route Designation Alternatives:**

- *Potential route designations include, but are not limited to, Open to All Forms Travel, Open with Mitigation, Open to Specific Vehicle Types, Limited to Non-Motorized Forms of Travel, Limited Seasonally, and Closed.*
- *If appropriate, route designations should be further classified to address over-the-snow travel. This may result in different types of overlapping designations for the same route based on season.*

No		**Alternative B**		**Alternative C**		**Proposed Action**	

	Action							
	Comments:							
10	**Proposed Mitigation Measure for Each Alternative:** *Describe any recommended mitigation measures for the route and whether they would vary by each alternative. Briefly describe how the mitigation measures would minimize the existing or potential resource and user conflicts.*							
11	**Summary Regarding the ID Team's Proposed Action Recommendation:** *Highlight how the team weighed the primary purposes and needs for travel on the route, along with any proposed mitigation measures, against any major resource and user conflicts. Identify any other key route designations in the Proposed Action that warranted the ID team's recommendation for this route. Summary should discuss how the route designation best fits the BLM's multiple-use mission.*							

Example RMP OHV Area Alternative Development Documentation Form

Example RMP OHV Area Alternative Development Documentation Form				
ID Team				
RMP Alternative and Theme			**Date**	
What sensitive resources/areas are being protected under this alternative by specific management proposals?				
Proposed?	**Sensitive Resource/Area**	**Other Protective Measures proposed for this area under the RMP alternative (e.g., closed or NSO for leasing, closed to saleable minerals, Rights of Way Avoidance or Exclusion Area, proposed mineral withdrawal, VRM I or VRM II, closed to woodcutting, closed to grazing, etc.)**		**Would a Closed OHV Area Proposal be consistent with the other proposals for this area under the RMP alternative? Why or why not?**
	Sensitive soil areas			
	Threatened or Endangered Species Habitat			
	Other Crucial Wildlife and Plant Habitats			
	Areas of Critical Environmental Concern			
	Cultural Resources			
	Sensitive Watersheds			
	Riparian Habitat			
	National Historic Trail			
	Suitable Wild and Scenic River Segments			
	Paleontological Resources			
	Wilderness Characteristics Lands			
	Wilderness Study Areas			
	Special Recreation Management Areas			
	Others?			
Are there other areas that should be considered for a Closed OHV Area proposal consistent with the goals and objectives of this RMP alternative? Consider the need to minimize noise, dust, and recreational user conflicts, promote public safety, and the compatibility of OHV use with adjacent communities.				

Area	Issue	Other Protective Measures Proposed for this Area Under the RMP Alternative (e.g., closed or NSO for leasing, closed to saleable minerals, ROW Avoidance or Exclusion Area, proposed mineral withdrawal, VRM I or VRM II, closed to woodcutting, closed to grazing, etc.)	Would a Closed OHV Area Proposal be consistent with the other proposals for this area under the RMP alternative? Why or why not?

Are Open OHV Areas proposals consistent with the goals and objectives of this RMP alternative?		
Area	Why or Why Not Consistent?	If consistent, identify any mitigation measures that should be built into the Open OHV Area proposal to minimize resource and user conflicts.

Appendix 11: Reference Documents for Travel and Transportation Management

A. General References

1. U.S.C. 1534 – State, Local and Tribal Government Input
2. U.S.C. 552 – Public Information; Agency Rules, Opinions, Orders, Records, and Proceedings
3. 16 U.S.C. 1001 et seq. – Watershed Protection and Flood Prevention
4. 16 U.S.C. 1601 et seq. – Forest and Rangeland Renewable Resources Planning
5. 42 U.S.C. 4332 – Cooperation of Agencies
6. Departmental Manual 512 DM 2 – Departmental Responsibilities for Indian Trust Resources
7. Departmental Manual 516 DM – National Environmental Policy Act Manual
8. BLM Manual 1601 – Land Use Planning
9. BLM Manual 2930 – Recreation Permits and Fees
10. BLM Manual 3600 – Mineral Materials Disposal
11. BLM Manual 3800 – Mining Claims Under the General Mining Laws
12. BLM Manual 4180 – Land Health
13. BLM Manual 5000 – Forest Management
14. BLM Manual 6840 – Special Status Species Management
15. BLM Manual 8110 – Identifying and Evaluating Cultural Resources
16. BLM Manual 8120 – Native American Consultation
17. BLM Manual 8130 – Planning for Uses of Cultural Resources
18. BLM Manual 8140 – Protecting Cultural Resources
19. BLM Manual 8270 – Paleontological Resource Management
20. BLM Manual 8300 – Recreation Management
21. BLM Manual 8351 – Wild and Scenic Rivers
22. BLM Manual 8550 – Interim Management Policy for Lands Under Wilderness Review
23. BLM Manual 8560 – Management of Designated Wilderness Areas
24. BLM Manual 9011 – Chemical Pest Control
25. BLM Manual 9100 – Facilities Planning, Design, Construction, and Maintenance.
26. BLM Manual 9112 – Bridges
27. BLM Manual 9113 – Roads
28. BLM Manual 9114 – Trails
29. BLM Manual 9130 – Sign Manual
30. BLM Handbook H-1601-1 – Land Use Planning Handbook
31. BLM Handbook H-1790-1 – NEPA Handbook
32. BLM Handbook H-2930-1 – Recreation Permit Administration
33. BLM Handbook H-4180-1 – Rangeland Health Standards
34. BLM Handbook H-8120-1 – General Procedural Guidance for Native American Consultation
35. BLM Handbook H-8270-1 – General Procedural Guidance For Paleontological Resource Management
36. BLM Handbook H-8410-1 – Visual Resources Inventory
37. BLM Handbook H-8550-1 – Interim Management Policy for Lands Under Wilderness Review
38. BLM Handbook H-8560-1 – Management of Designated Wilderness Areas
39. BLM Handbook H-9112-1 – Bridge Construction, Design and Maintenance
40. BLM Handbook H-9112-2 – Bridge Condition Assessment Protocols
41. BLM Handbook H-9112-3 – Bridge Inspection Report

42. BLM Handbook H-9112-4 – Major Culvert Inspection Protocols
43. BLM Handbook H-9112-5 – Major Culvert Inspection Form
44. BLM Handbook H-9113-1 – Road Design Handbook
45. BLM Handbook H-9113-2 – Roads Condition Assessment Protocols
46. BLM Handbook H-9114-1 – Trails
47. BLM Handbook H-9211-1 – Fire Management Activity Planning
48. BLM Handbook H-9214-1 – Prescribed Fire Management Handbook
49. BLM Technical Reference 9113-1 – Planning and Conducting Route Inventories
50. Executive Orders 11644 and 11989 – Off-Road Vehicle Management Policies
51. Executive Order 12088 – Federal Compliance with Pollution Control Standards
52. Executive Order 13195 – Trails for America
53. 36 CFR 800 – Protection of Historic and Cultural Properties
54. 40 CFR 1500 – Council on Environmental Quality
55. 43 CFR 4 – Department Hearings and Appeals Procedures
56. 43 CFR 1600 – Planning, Programming, Budgeting
57. 43 CFR 2200 – Exchanges: General Procedures
58. 43 CFR 2300 – Land Withdrawals
59. 43 CFR 2400 – Land Classification
60. 43 CFR 2520 – Desert Land Entries
61. 43 CFR 2530 – Indian Allotments
62. 43 CFR 2610 – Carey Act Grants
63. 43 CFR 2620 – State Grants
64. 43 CFR 2710 – Sales: Federal Land Policy and Management Act
65. 43 CFR 2740 – Recreation and Public Purposes Act
66. 43 CFR 2800 – Rights-of-way, Principles, and Procedures
67. 43 CFR 2910 – Leases
68. 43 CFR 2920 – Leases, Permits, and Easements
69. 43 CFR 3100 – Oil and Gas Leasing
70. 43 CFR 3160 – Onshore Oil and Gas Operations
71. 43 CFR 3420 – Competitive Leasing
72. 43 CFR 3461 – Federal Lands Review: Unsuitability For Mining
73. 43 CFR 3809 – Surface Management
74. 43 CFR 4100 – Grazing Administration
75. 43 CFR 4180 – Rangeland Health
76. 43 CFR 4740 – Wild Horses and Burros: Motor Vehicles and Aircraft
77. 43 CFR 5003 – Effect of Decisions
78. 43 CFR 6300 – Wilderness Management
79. 43 CFR 8340 – Off-Road Vehicles
80. 43 CFR 8342 – Off-Road Vehicles: Designation Procedures
81. 43 CFR 8364 – Visitor Services: Closure and Restriction Orders
82. 50 CFR 402 – Interagency Coordination—Endangered Species Act of 1973, as amended

B. BLM Strategic Plans/Directives/Technical References

1. BLM's National Management Strategy for Motorized Off-highway Vehicle Use on Public Lands (January 2001).
2. National Mountain Bicycling Strategic Action Plan (BLM/WY/PL-0303/001+1220).
3. National Scenic and Historic Trails Strategy and Work Plan (BLM-WO-GI-06-020-6250).
4. The BLM's Priorities for Recreation and Visitor Services (Purple Book May 2003).
5. BLM's Unified Strategy to Implement ―BLM's Priorities for Recreation and Visitor Services‖ (January 2007).
6. Planning and Conducting Route Inventories (BLM Technical Reference 9113-1).
7. Roads and Trails Terminology, U.S. Department of the Interior, Bureau of Land Management, Washington DC, 20240 (Technical Note 422).
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