

United States  
Department of  
Agriculture

Forest Service



# Travel Analysis Process Report Addendum

## LEADVILLE RANGER DISTRICT

Located in Lake and Chaffee Counties, Colorado

USDA Forest Service, Pike and San Isabel National  
Forests, Cimarron and Comanche National  
Grasslands

Final

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Certification: This document was prepared  
under my supervision and has been completed  
in accordance with FSH 7709.55, Chapter 20  
and 36 CFR 212.5(b).

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*2015.02.10*

Date

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## **INTRODUCTION:**

This report is an addendum to the 2009 Pike and San Isabel Forest-wide Travel Analysis Process (2009 PSI TAP) and is provided in an abbreviated form. It is valuable to have the 2009 PSI TAP to review along with this document. It can be accessed online at:

[http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5323696.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5323696.pdf)

## **BACKGROUND**

Travel analysis is an integrated ecological, social, and economic science-based approach to transportation planning that addresses existing and future road and motorized trail management options. A complete science-based travel analysis will inform management decisions about the benefits and risks of: constructing new routes in unroaded areas; relocating, stabilizing, changing the standards of, or decommissioning unneeded routes; access issues; and increasing, reducing, or discontinuing route maintenance. An appropriate balance between the benefits of access to National Forest System lands and the risks of route-associated effects to ecosystems is necessary to develop an optimum transportation system. One of the top priorities of the U.S. Forest Service (Forest Service) is to provide road and motorized trail systems that are safe for the public, responsive to public needs, environmentally sound, affordable, and efficient to manage. Completing the TAP is a key step to meeting this objective.

The TAP is designed to define route-related issues important to the public and to forest managers. It provides a set of analytical questions to be used in fitting analysis techniques to individual situations. The detail of the analysis should be appropriate to the intensity of the issues addressed. Travel analysis provides information to line officers by disclosing the important issues and effects relevant to route management proposals. Any actual route management decision made as a result of this TAP must be determined in a National Environmental Policy Act (NEPA) document.

Relevant rules, regulations, directives, reports, guidance, and documents associated with the TAP are as follows:

- USDA Forest Service Miscellaneous Report FS-643, August 1999
- USDA Forest Service Rocky Mountain Region 2, R2 Roads Analysis Supplement to FS-643, June 16, 2003
- 36 CFR Part 212
- Forest Service Manual FSM 7700, Chapters 7703, 7710 & 7712
- Forest Service Handbook 7709.55

This TAP for the Leadville Ranger District was developed using the approach from the Forest-wide Pike and San Isabel National Forests Travel Analysis Process Report. The Leadville Ranger District TAP was prepared to inform a travel management plan for the study area.

## **PROCESS AND PRODUCTS**

See Section 1.2 of the 2009 PSI TAP.

In addition to the six steps described in the 2009 TAP, another product that will be prepared in this addendum is a Travel Analysis Report (TAR) and map (Step 6.0). These products will be used to inform future proposed actions subject to NEPA compliance.

## 1.0 SETTING UP THE ANALYSIS

### 1.1 Objectives of the Analysis

The primary objective of this travel analysis is to provide the San Isabel National Forest, Leadville Ranger District, managers with an appropriate level of information to manage and maintain a road and motorized trail system that is safe and responsive to public and agency needs, affordable and efficiently managed, environmentally sound, and in balance with available funding. This travel analysis develops, organizes, and displays information about Operational Maintenance Level 1 & 2 National Forest System Roads (NFSR), as well as combining that data with Operational Maintenance Level 3-5 data from the 2009 PSI TAP to create a Travel Analysis Report (TAR) and Map. This TAP analyzes all existing system roads as identified on the current Leadville Ranger District Motor Vehicle Use Map (MVUM) as well as administrative and maintenance level 1 roads.

Other objectives of this travel analysis are:

- To meet the requirements of providing a travel analysis for the Pike and San Isabel National Forests Plan Revision, and to give direction for the revision effort
- Inform a forest travel management plan for the Leadville Ranger District
- To support subforest scale and project level analyses
- To help identify the minimum road system needed for public and agency access in order to achieve forest and resource management goals and safeguard ecosystem health
- To identify opportunities and provide recommendations for improving the Forest transportation system
- To help prioritize route maintenance needs

### 1.2 Interdisciplinary Team Members and TAP Responsibilities

<u>Name</u>	<u>TAP Area(s) of Responsibility</u>
Tami Conner	Leadville District Ranger – Line Officer
Ralph (Jerry) Stevenson, P.E.	Forest Engineer
Gary Morrison, P.E.*	Forest Transportation Planner, TAP ID Team Leader
Lisa Corbin*	Overall District TAP Co-Coordinator, Fire/Fuels Access, Timber Access, Watershed Risk
Jeni Windorski*	Overall District TAP Co-Coordinator, Resource Management/Range Access, Wildlife Risk
Bill Mulholland*	Recreational Use, Special Use Access
Michelle Mueggler	Recreational Use
Chris Naccarato	Fire/Fuels Access
Dave Lovato	Special Use Access
Nicholas Gerich	Watershed Risk
Steve Olson	Botany Risk
Meghan Mulholland	Archaeology Risk
Catherine Kamke	Archaeology Risk
Jamie Vigil*	Financial Burden/Public Health & Safety
Norma Palider	INFRA Database Manager

\* Core TAP Team Member

### **1.3 Information Needs**

The following information and database sources were used for this TAP:

- The Pike and San Isabel National Forests Land and Resource Management Plan (aka Forest Plan, 1984, and associated Environmental Impact Statement and Record of Decision)
- INFRA Roads Database
- GIS spatial databases for roads, land ownership, 6th level watersheds, streams, riparian areas, soil types, architectural sites, invasive species, recreation sites, T&E species, etc.
- 2012 Leadville RD MVUM
- 2009 Pike and San Isabel National Forest Travel Analysis Process Report

### **1.4 Analysis Plan**

See the 2009 PSI TAP for more details.

The analysis plan for the Leadville Ranger District was built on to the 2009 Pike and San Isabel National Forests Travel Analysis Process. Information critical to the Leadville Ranger District has been added to the appropriate sections of this addendum. A core team was assembled to define an analysis plan for the Leadville Ranger District. The core team completed an initial rapid analysis of all routes using the criteria defined in the Forest-wide TAP. This rapid analysis was completed during a one-day workshop in which the team reviewed GIS data, INFRA data, and filled out a TAP Matrix spreadsheet. The core team collectively ranked each route based on the TAP criteria, which allowed for an iterative, collaborative, and rapid analysis process. While the core team members are not experts on each of the criteria, their substantial experience in the Ranger District allowed them to make an initial judgment on the route criteria. The draft TAP matrix table was then distributed to each ID team member for their detailed and specialized review of the analysis. Changes recommended by individual ID team members were incorporated and the TAP was redistributed to the entire ID team for a final review. This rapid analysis method was effective and allowed completion of the TAP with limited budget and time.

The main focus of this TAP is to evaluate all existing National Forest System Roads on the Leadville Ranger District. According to Forest Service Manual 7700-2003-2 (FSM 7712.13b), this type of analysis is required to inform land management planning decisions when preparing a travel management plan or revising an existing land and resource management plan.

The first step was to identify the most important road-related issues on the Leadville Ranger District and the information needed to address these concerns. The issues include environmental, social, and economic components. It was important to understand how these issues arose and how they have been addressed in the past. Consensus among the ID team resulted in the final list of issues that were used to drive the analysis. See Chapter 3.0 of this report for a list and description of these issues.

The next step in the process required ID team members to assess each road with respect to its relative benefits and associated risks. High, moderate, and low benefit ratings were assigned for each road with respect to its recreational use, fire/fuels access, timber access, special use access, and resource management/range access. High, moderate, and low risk ratings were assigned for each road with respect to its potential to adversely impact watersheds, wildlife, botany, and archeological sites. A similar risk rating was also assigned to each road with respect to financial burden/public health and safety. Numerical indices were then applied to each high, moderate, and low rating, resulting in a benefit factor and risk factor for each road. The benefit factors and risk factors were then summed to determine “Total Benefit” and “Total Risk” factors for each road.

For example, let’s say Road 000 was rated as High Benefit for recreational use and Low Risk for archeology. The High Benefit rating for recreation would be assigned a benefit factor of 2, and the Low Risk rating for archeology would be assigned a risk factor of 0. The Total Benefit factor would be determined for that road by adding all five of the benefit factors, and the Total Risk factor would be determined for that road by adding all five risk factors. In this example, let’s say that the Total Benefit factor was determined to be 10, and the Total Risk factor was determined to be 0.

The Total Benefit and Total Risk factors were then assigned to one of four possible road management categories as follows:

- High Benefit/High Risk (H/H)
- High Benefit/Low Risk (H/L)
- Low Benefit/High Risk (L/H)
- Low Benefit/Low Risk (L/L)

The High Benefit roads identify those roads with a high potential for future investment, and the Low Benefit roads identify those roads with a low potential for future investment. High Risk roads identify those roads with a high potential for negative impacts, and Low Risk roads identify those roads with a low potential for negative impacts. Road management options for each category helped the ID team to prioritize road options and develop strategies to move toward a well-balanced transportation system.

In the example above, a 10 Total Benefit factor (score) was determined to be a High Benefit, and a 0 Total Risk factor was determined to be a Low Risk. Therefore, Road 000 was assigned to the High Benefit/Low Risk road management category. For details on how index numbers were assigned to each rating and how the road management categories were determined from total factor numbers, see Chapter 5.0 of this report.

The next step was for ID team members to review and update the answers to the 73 questions contained in the R2 Roads Analysis Supplement to FS-643, which was prepared for the 2009 PSI TAP. During this step, if a specialist decided that a specific road rating needed to be revised, the revised rating was submitted to the team leader with a reason for the change.

The final step involved synthesizing all the information, finalizing the ratings and factors for each specific road, finalizing the road management category for each road analyzed and preparing a Travel

Analysis Report and Map. This step described the opportunities to improve the transportation system and identified priorities to help the decision makers in managing the roads within their jurisdiction. Key findings and recommendations are summarized in Chapter 6.0 of this report to highlight the results from this analysis.

## **1.5 Public Involvement**

Public involvement related to road issues is a continuous process. Some of the issues identified in this TAP are a direct result of dialogue with concerned citizens, user groups, and other public agencies.

The draft TAP was made available for public review and comment on October 10, 2014. It was posted on the PSICC website. During the 30 day comment period that ended on November 10, 2014, the agency received a total of four electronic messages in response to the posted draft TAP. Some responses resulted in changes to the draft report, matrix table and maps. See Appendix B for a list of the comments and responses.

## **2.0 DESCRIBING THE SITUATION**

### **2.1 The Analysis Area**

See the 2009 PSI TAP.

The Leadville Ranger District (LDVLRD) is located in Lake and Chaffee Counties. The majority of the 289,000 acre district is above 10,000 feet and located within inventoried roadless areas or Congressionally designated Wilderness Areas. The District is the highest ranger district in the Forest Service System. Elevations range from 8,000 to 14,400 feet.

The Leadville Ranger District has a regionally significant developed recreation program consisting of fifteen campgrounds. There are four wilderness areas, of which the District is the lead unit on three areas. There are over one hundred miles of trails, including the Continental Divide National Scenic Trail and the Colorado Trail. There are 9 fourteen-thousand foot peaks, including Colorado's tallest peak: Mount Elbert, topping out at 14,433 ft. A family oriented ski and snowboard area, Ski Cooper Ski Area, is located at the top of Tennessee Pass.

The Leadville Ranger District has a diverse Natural Resource program comprised of: vegetation management of forest communities and watersheds, management of one range allotment, wildlife, and water rights. A destination hunting area, the district is home to highly sought after big game including Rocky Mountain elk, mule deer, pronghorn, black bear and moose. The Lands and Minerals Programs are very complex with historic operational ditches, mining claims, current mining operations, Rights of Ways, encroachments, and land exchange opportunities. Historic resources on the District include many miles of old railroad grades that were built in the 1800's. Miner's cabins and old mine claims dot the mountainsides.

## 2.2 The National Forest Transportation System

See the 2009 PSI TAP for more information.

The following table summarizes the Forest Service system roads that were evaluated in this TAP.

**Table 2-1  
Existing National Forest Service System Roads on the Leadville Ranger District**

Road Class	Objective Road Maintenance Level				Total Miles
	1	2	3	4	
Roads Closed to All Vehicular Traffic (Operational Maint Level 1)	9.57	0	0	0	9.57
Administrative Roads (Closed to Public Use)	0.45	47.20	1.73	0	49.38
Roads Open to Highway Legal Vehicles Only	0	0	0	0	0
Roads Open to Highway Legal Vehicles Only with Seasonal Closure	0	0	0	0	0
Roads Open to All Vehicles	0	92.74	33.62	8.83	135.19
Roads Open to All Vehicles with Seasonal Closure	0	25.71	1.63	0	27.34
Total Miles	10.02	165.65	36.98	8.83	221.48

### 2.2.1 Motorized Trail Statistics

The Leadville Ranger District TAP Addendum is not addressing Motorized Trails.

See the 2009 PSI TAP for general information on PSI Trails.

### 2.2.2 Road Statistics and Details

See the 2009 PSI TAP for more information.

### 2.2.3 Motorized Mixed Use

See the 2009 PSI TAP for more information.

On the Leadville Ranger District, all National Forest System roads allow motorized mixed use (full-sized vehicles and OHVs). The total miles of mixed use roads open for public use is 162.53.

### 2.2.4 Road Management Objectives

See the 2009 PSI TAP.

## 2.3 Meeting Forest Plan Objectives

See the 2009 PSI TAP.

## 2.4 Current Budget

### Maintenance Funding

All National Forest System Roads(NFSRs) are assigned a specific maintenance level that is based on a set of criteria which describes how each individual road will be maintained. This criterion includes consideration for resource protection, user comfort, design speed, season of use, traffic volume and type, and need for dust abatement.

This discussion displays dollar estimates for annual maintenance which includes blading, cleaning culverts and cattle guards, and maintaining draining structures and signing on level 2-5 roads. This recurring maintenance is important for keeping the surface drivable (blading out ruts and washboards), and limiting resource damage that could occur from blocked culverts or improper drainage. In addition to annual maintenance are various other funding needs such as checking level 1 roads periodically, installing or fixing gates, unexpected events such as windthrows, mudslides or slumps, brushing, and surface replacement on level 3, 4 and 5 roads. These intermittent and deferred funding needs are discussed in general terms following the dollar figures for the annual maintenance budget, and are included in the calculations in Tables 2-5 and 2-6.

### Current Maintenance Funding

The table below describes maintenance level, intervals and costs in estimated mileages and dollars. These cost estimates are based on recent estimates for annual maintenance such as blading, cleaning culverts and maintaining drainage structures.

**Table 2-2**  
**Current Average Annual Maintenance Costs by Maintenance Level on the LDVLRD**

<b>Operational Maintenance Level</b>	<b>Cost/Mile</b>	<b>Actual Interval*</b>	<b>Average Annual Maintenance Cost/Mile**</b>
1	\$0	N/A	\$0
2	\$1,000	3-10 years	\$167
3	\$600	1-4 years	\$200
4	\$350	1 year	\$350

\*Note: Level 2 roads are calculated on a 6 year interval, Level 3 roads are calculated on a 3 year interval, and Level 4/5 roads are calculated on a 1 year interval. Maintenance level 1 roads are not typically maintained annually.

\*\*An average annual estimated maintenance cost per mile was determined for each road level so it could be used to calculate the average annual maintenance budget (see Table 2-3).

**Table 2-3**  
**Current Average Annual Maintenance Budget on the LDVLRD**  
 (Does not include intermittent and deferred items listed below)  
 (Does not include the salaries of Forest Service personnel)

Operational Maintenance Level	Road Miles	Average Annual Cost Per Mile	Total Cost Per Year
1	9.57	\$0	\$0
2	166.10	\$167	\$27,739
3	36.98	\$200	\$7,396
4	8.83	\$350	\$3,091
TOTAL	221.48	---	\$38,226

### Intermittent Funding Needs

Intermittent and deferred funding needs in addition to the regular annual maintenance include the following:

- Brushing is needed every 10 years, and is important for safety on Level 3 and 4 roads.
- Maintaining and replacing signs and signposts on system roads, gates, and cattleguards.
- Gate replacement and repairs on Level 1 roads, and or roads seasonally closed.
- Damage from unexpected events such as slides or slumps is normally corrected with maintenance dollars unless the damage is large enough to qualify for alternative funding.
- Surface rock replacement on Level 3 and 4 roads requires a large influx of funds for the year the rock is replaced. Many of these roads require surface rock replacement, at least every 10 years.
- Paved roads typically require surface replacement at approximately every 25 years. This cost is not included in the annual maintenance budget.

### Desired Maintenance Funding

The following tables describe the desired funding needed to maintain Level 2-4 roads consistently and

according to maintenance level specification. These costs estimates are based on deferred maintenance estimates and annual maintenance expenditures.

**Table 2-4  
Desired Annual Maintenance Costs by Maintenance Level on the LDVLRD**

<b>Operational Maintenance Level</b>	<b>Cost/Mile</b>	<b>Desired Interval</b>	<b>Annual Maintenance Cost/Mile</b>
1	\$300	3 years	\$100
2	\$1,300	3 years	\$433
3 (unpaved)	\$800	annual	\$800
3/4 (paved)	\$20,805***	annual	\$20,805

\*\*\* This number is based on an average cost to maintain paved roads. It represents typical maintenance costs of \$605/mile/year plus an annual crack sealing cost of \$9,000/mile plus a surface replacement cost of \$280,000/mile once every 25 years (\$11,200/mile/year).

**Table 2-5: Estimated Desired Annual Road Maintenance Need on the LDVLRD**

<b>Operational Maintenance Level</b>	<b>Miles</b>	<b>Annual Cost/Mile</b>	<b>Total Cost Per Year</b>
1	9.57	\$100	\$957
2	166.10	\$433	\$71,921
3 (unpaved)	35.68	\$800	\$28,544
3/4 (paved)	10.13	\$20,805	\$210,755
TOTAL	221.48	---	\$312,177

Due to the disparity between the estimated desired annual road maintenance need and the current annual average maintenance budget, it is necessary to prioritize road maintenance expenditures based on annual input from district specialists and engineering staff. Also, this disparity points out the need to find alternative sources of funding for maintenance of roads, both from public and private sources, and to consider decommissioning and/or other actions that will help reduce overall maintenance costs for roads identified in the TAP with low benefit ratings and/or high risk ratings.

During future travel planning NEPA compliance actions, the responsible official/line officer will use this data to inform that process and to help identify a minimum road system that will reflect long-term funding expectations.

## **3.0 IDENTIFYING THE ISSUES**

### **3.1 Description of the issues**

See the 2009 Forest-wide TAP for more information.

The ID team and line officers identified the most important road-related issues. Information gathered from previous public responses from a variety of project proposals was incorporated into this list of issues. The issues are listed by three general categories: Environmental, Sociocultural, and Economic.

#### *Category #1: Environmental Issues*

- Effects on stream water quality and aquatic habitat due to increased sediment loads from roads.
- Impacts to aquatic species due to the presence of roads near streams.
- Impacts to certain terrestrial wildlife living in the forest due to roads through terrestrial wildlife habitat and travel corridors.
- Impacts to plant species in certain areas of the forest due to the presence of roads.
- Impacts of road-related activities due to the spread of invasive species on the forest.
- Adequacy of forest access to meet fuels management and fire suppression goals and objectives.
- Adequacy of forest access to meet timber management objectives and goals.
- Adequacy of forest access to meet range allotment goals and objectives.

Data needed to address these concerns:

- Various GIS coverages for roads, etc.
- INFRA databases for roads, etc.
- Management Objectives
- Management Area Prescriptions

#### *Category # 2: Sociocultural Issues*

- Impacts on paleontological, archeological, and historic sites within the forest due to the current system of roads.
- Adequacy of roads to satisfy the variety of motorized recreational needs on the forest.
- Impacts on non-motorized recreation activities due to the amount of roads on certain parts of the forest.
- Adequacy of forest access to meet the demand for special uses on the forest.

- Adequacy of forest access to meet administrative management objectives and goals.
- Effects on public water supplies due to increased sediment loads from roads.

Data needed to address these concerns:

- GIS coverages for roads and heritage sites
- INFRA databases for roads and heritage sites
- SUDS database for special uses
- Management Objectives (Forest Plan)
- Management Area Prescriptions (Forest Plan)

Category #3: Economic Issues

- Adequacy of funding for road maintenance for the current road system under Forest Service jurisdiction.

Data needed to address these concerns:

- GIS coverages for roads
- INFRA databases for roads and condition survey data
- Forest Service records for road and trail maintenance

## **4.0 ASSESSING BENEFITS, PROBLEMS AND RISKS**

The 2009 PSI TAP provides detailed answers to approximately 73 questions related to the benefits and risks of National Forest System roads and trails (See 2009 PSI TAP). No additional District-specific answers were submitted for this addendum report. The categories of questions are as follows:

- 4.1 Aquatic, Riparian Zone, and Water Quality (AQ)
- 4.2 Terrestrial Wildlife (TW)
- 4.3 Ecosystem Functions and Processes (EF)
- 4.4 Economics (EC)
- 4.5 Commodity Production: Timber, Minerals, Range, Water Production, Special Forest Products, and Special Use Permits (TM), (MM), (RM), (WP), (SP), (SU)
- 4.6 General Public Transportation (GT)
- 4.7 Administrative Uses (AU)
- 4.8 Protection (PT)
- 4.9 Recreation: Unroaded and Road-Related (UR), (RR)
- 4.10 Social Issues, Cultural and Heritage, Civil Rights and Environmental Justice (SI), (CH), (CR)

Leadville District-specific answers to some of the 73 questions were submitted for this addendum report as follows: None

## **5.0 DESCRIBING OPPORTUNITIES AND SETTING PRIORITIES**

### **5.1 Introduction**

In order to identify opportunities to improve the transportation system, the Leadville Ranger District, San Isabel National Forest Objective Maintenance Level 1 – 2 system roads were evaluated based on key benefits and risks associated with each individual road. Also, Maintenance Level 3-4 roads were confirmed or re-evaluated from the original benefit/risk ratings in the 2009 PSI TAP. Each road was assigned a High, Moderate, or Low benefit rating for five priority management areas: recreational use, fire/fuels access, timber access, special use access, and resource management/range access. Each road was also assigned a High, Moderate, or Low risk rating to show the degree of risk it posed to watersheds, wildlife, botany, archeology, financial burden/public health and safety. Those ratings were then converted to numerical indices so that numerical value factors (score) could be totaled to produce a weighted Total Benefit Factor, and numerical risk factors could be totaled to produce a weighted Total Risk Factor. The protocols utilized to assign benefit and risk ratings and indices are described below.

In a few cases, a double high rating score was applied to categories when a resource condition should be strongly emphasized. This causes either the total benefit or total risk ranking to automatically be rated as high. An example would be a short spur road that has a very high recreation value because it provides access to a campsite, but does not have other benefits that would cause its total benefit rank to be a high value. Some routes (based on their route number) have been divided into two or more segments and each of the segments has been analyzed individually.

### **Benefits:**

#### **5.2 Criteria for Recreational Use Benefit**

Recreational Use Benefit:

- High Benefit = 2
- Moderate Benefit = 1
- Low Benefit = 0

The recreational use ratings for roads are based on the location of and access to developed recreation sites/facilities and to dispersed recreation areas.

A High (H) rating was assigned to roads that are the primary access routes to developed recreation sites/facilities, or primary access routes to popular dispersed recreation areas, or the road has a high value as a recreation experience.

A Moderate (M) rating was assigned to roads that are the primary access routes to other dispersed recreation areas.

A Low (L) rating was assigned to roads that are secondary access routes to recreation areas, or to roads not leading to any recreation areas.

### **5.3 Criteria for Fire/Fuels Access Benefit**

Fire/Fuels Access Benefit:

- High Benefit = 2
- Moderate Benefit = 1
- Low Benefit = 0

The fire/fuels access ratings for roads are based on factors such as ridgelines, canyons, private lands/homes, fuels projects, water sources, structures, etc. The roads allow rapid access for equipment and, in many instances, are used as firebreaks.

A High (H) benefit rating was assigned to roads that are primary access routes to ridges, canyons, private property, fuels projects, water sources, and other structures.

A Moderate (M) benefit rating was assigned to secondary access roads to the above-mentioned areas.

A Low (L) benefit rating was assigned to small spur roads or to roads in areas with multiple access roads in better condition.

### **5.4 Criteria for Timber Access Benefit**

Timber Access Benefit:

- High Benefit = 2
- Moderate Benefit = 1
- Low Benefit = 0

Timber access benefit was rated based on a number of relevant factors, including but not limited to:

A High (H) benefit was given to those segments of roads that give access or are needed for access to remove timber.

A Moderate (M) benefit was given to those segments of roads that would benefit timber for access but were not necessarily needed, especially if they conflicted with another resource or a temporary road could be used to obtain the same access.

A Low (L) benefit was given to those segments of roads that do not benefit timber access.

### **5.5 Criteria for Special Use Access Benefit**

Special Use Access Benefit:

- High Benefit = 2
- Moderate Benefit = 1
- Low Benefit = 0

Special use access benefit was rated based on a number of relevant factors, including but not limited to:

- Current authorization or permit
- Proposed authorization or permit
- Long-term or short-term use

A High (H) benefit rating was assigned to roads with a current or proposed authorization or permit.

A Moderate (M) benefit rating was assigned to a few select roads used for access, and where an authorization or permit was needed but had not been requested or granted.

A Low (L) benefit rating was assigned to roads without an authorization or permit.

## **5.6 Criteria for Resource Management/Range Access Benefit**

Resource Management Benefit:

- High Benefit = 2
- Moderate Benefit = 1
- Low Benefit = 0

Resource management access benefit was rated based on the anticipated needs of each specialist for monitoring and managing forest lands, assuming that no other FS roads were available for motorized access.

A High (H) rating was assigned to roads providing important access for range, managing the wildlife, botany, archeology, and water assets on the forest.

A Moderate (M) rating was assigned to roads providing an important secondary access for range, managing the wildlife, botany, archeology, and water assets on the forest.

A Low (L) rating was assigned to all other roads.

Note: Roads that are Important in Managing the Forest's Heritage Resources: This priority was viewed in the context of access to significant heritage resources and staff responsibilities to monitor individual resources, and if necessary, conduct necessary repairs and stabilization. Road access may also be important in the context of visitor accessibility: roads may be the only available means for experiencing heritage sites for some segments of the public, particularly those segments with disabilities.

## **Risks:**

### **5.7 Criteria for Watershed Risk**

Watershed Risk:

- High Risk = 3
- Moderate Risk = 1
- Low Risk = 0

The risk factors are higher for watersheds than other resource types. The justification for this is that watersheds have a higher relative risk of impact compared to all other resource types.

A rating of 3 (High) was assigned to roads where site-specific reasons such as length within the watershed, length within 300' of a stream, length within highly erodible soils or number of stream crossings justified a High rating. In some cases where the risk was determined to be extremely high, the value assigned on the Road Matrix Table was HH, which by itself justified a High Total Risk Factor.

A rating of 1 (Moderate) was assigned to roads where the numbers were slightly lower for: length within watershed, length within 300' of a stream, length within highly erodible soils, and number of stream crossings.

A rating of 0 (Low) was assigned to roads where there were few to no crossings, and a low percentage for the soils and streams categories.

This TAP integrates the Watershed Condition Classification (WCC) system evaluation to determine specific road watershed risk ratings. The WCC system uses 12 indicators related to watershed processes. One of those 12 indicators is "Roads and Trails". This structure provides a direct linkage between the classification system and management or improvement activities that the forest conducts on the ground. After a watershed is evaluated with the 12 indicators, it is assigned a condition rating of 1, 2 or 3. A Condition rating of 1 is synonymous with "Good" condition. Condition rating 2 is synonymous with "Fair" condition. Condition rating 3 is synonymous with "Poor" condition.

### **5.8 Criteria for Wildlife Risk**

Wildlife Risk:

- High Risk = 2
- Moderate Risk = 1
- Low Risk = 0

Wildlife risk was rated based on a number of relevant factors, including but not limited to:

- RFSS (Regional Forester's Sensitive Species List)
- Listed threatened or endangered species habitat

A High (H) rating was assigned to roads that directly accessed special habitat areas and had the potential to introduce disturbance during critical seasons for nesting/spawning, etc.

- Roads in winter range without effective or any seasonal closure
- Roads that go through lynx habitat that would be considered new use or new compaction (is not on the current compaction map)
- Roads next to known or high quality boreal toad breeding sites
- Roads that parallel a creek or cross a stream
- Double High rating for:
  - Roads in winter range of more than one big game species without effective seasonal closure. (i.e. mule deer and elk)
  - Roads that go through winter range without seasonal closure and lynx habitat not on compaction map
  - Roads that fragment an otherwise large block of undisturbed habitat

A Moderate (M) rating was assigned to roads that indirectly accessed special habitat areas and had a lower potential to introduce disturbance during critical seasons for nesting/spawning, etc.

- Roads that go through lynx habitat that have historical winter use on that road. (i.e. it is on the winter compaction map)

A Low (L) rating was assigned to roads that do not access special habitat areas or roads that have a high background level of disturbance from other factors, such as being near county/state/US highways or campgrounds, or residential subdivisions or commercial enterprises.

- Roads in winter range with current, effective seasonal closure
- Administrative roads in any kind of habitat (effectively managed as such with gates)
- Very short roads
- Roads that have highly disturbed adjacent areas

## 5.9 Criteria for Botany Risk

Botany Risk:

- High Risk = 2
- Moderate Risk = 1
- Low Risk = 0

Four factors were considered in determining risks. The NatureServe rounded global rank of 1 through 5 was used. The lower the Global-rank, the rarer the species. Similarly, the next factor was

the rounded S-rank. Since the Colorado Natural Heritage Program (CNHP) generally tracks only S-ranks 1 through 3, these rankings were used. The third factor was the precision of records in the CNHP data. Species given general location information were rated 3, moderate specificity of species locations were rated 2, and specific locations were rated 1. The fourth factor was the year of the most recent observation of a species at the documented occurrence. Records from 1995 to 2006 were rated 1; 1975 to 1994 were rated 2; 1900 to 1974 were rated 3; and records before 1900 were rated 4. A cumulative total for each species record along roads was summed. As a result, the lowest total provides the highest risk factor for each road segment. Where several species occur within the proximity of a road, the lowest ranked species determined the risk level. High risk road segments had at least one species with a cumulative total of 9 or lower. Moderate risk road segments carried a total of 10 or above. Low risk road segments had no documented species occurrences nearby.

### **5.10 Criteria for Archaeology Risk**

Archaeology Risk:

- High Risk = 2
- Moderate Risk = 1
- Low Risk = 0

NFSRs rated as high risk include cases where use and maintenance of the road have and continue to affect archeological deposits on the road's surface or on its margins, and where the impact has been documented. Also rated as high risk are cases where the road intersects an archeological site and impacts are suspected but not documented. These NFSR roads might be changed to low or moderate risk pending field examination and documentation of the suspected impacts.

The moderate risk roads comprise cases where the road itself is a historic resource, and cases where the road passes through the defined area of a historic property or is adjacent to the property. In moderate risk cases, maintaining current public use levels and the present level/intensity of routine maintenance will not affect the cultural property. However, improvements or other new construction, or increasing public use or maintenance levels might affect the property.

Most of National Forest System roads rated as low risk generally do not intersect or are not in proximity to a historic property listed in or eligible for listing in the National Register of Historic Places. In some cases the road was in proximity to a listed or eligible property, but public use or routine maintenance of the road, or new construction of all or a portion of the road would not affect the property. It should be noted that the Forest Service has not examined all or even most of the NFSRs for impinging historic properties and possible effects. Also, not all NFSR roads have been evaluated in terms of intrinsic historic significance. The analysis was done on the state of knowledge to date.

### **5.11 Criteria for Public Health & Safety / Financial Burden Risk**

Public Health & Safety/Financial Burden

- High Risk = 2
- Moderate Risk = 1

- Low Risk = 0

The Public Health & Safety/Financial Burden risk for roads is based on the estimated annual maintenance cost per mile, the maintenance level of the road and the presence of potentially dangerous conditions. The annual maintenance cost per mile was calculated from actual annual road maintenance costs. If no actual maintenance costs were available, then no cost was assigned.

Public health and safety issues for roads include the overall width of the roadway, the slope, sight distance, number of vehicles per day, adjacent grazing areas, populated areas, and other such hazards and geometric conditions. Roads with major public health and safety issues and/or large maintenance costs were rated with a High Risk; roads with less safety concerns and lower maintenance costs received a Moderate Risk; and roads with little to no safety concerns and average or lower maintenance costs received a Low Risk rating.

## 5.12 Road Management Opportunities and Priorities

The Total Benefit factors and Total Risk factors discussed above resulted in a total benefit/risk number for each road. The Total Benefit factors range from 0 to 10, and the Total Risk factors range from 0 to 11. Those roads with a Total Benefit factor greater than 3 represent high benefit roads, and those roads with a Total Risk factor greater than 4 represent high risk roads. Based on this analysis, each road was assigned to one of four road management categories as follows:

- High Benefit/High Risk (H/H)
- High Benefit/Low Risk (H/L)
- Low Benefit/High Risk (L/H)
- Low Benefit/Low Risk (L/L)

Roads with a high benefit represent those roads that constitute the potential minimum road system for management and access on the forest. Those roads with a low benefit are potentially not needed for management and access on the forest, at least not at their current maintenance level.

Roads with a high risk represent those roads that may be causing unacceptable resource and financial impacts. Those roads with a low risk represent roads that are not a major resource impact concern.

Road management options for each of the four road management categories are as follows:

- High Benefit/High Risk – Priority roads for capital improvements
- High Benefit/Low Risk – Roads with ideal conditions
- Low Benefit/High Risk – Priority roads for in-depth benefit/risk analysis
- Low Benefit/Low Risk – Priority roads for reducing maintenance level

Generally, high benefit roads, if associated risks can be adequately mitigated, will be part of the minimum road system for the forest. Roads with low benefits will generally not be a part of the minimum road system.

## 6.0 TRAVEL ANALYSIS REPORT (TAR)

### 6.1 Key Findings

The roads analyzed in this report have been separated into four road management categories shown in Table 6.1.

Travel Analysis Outcomes: Road Numbers		Minimum Road System		May not be Needed as Part of a Minimum Road System	
		High Benefit / High Risk	High Benefit/Low Risk	LowBenefit/ High Risk	Low Benefit/ Low Risk
Road Classification	Administrative Roads (Closed to Public Use) and ML1 (Closed to All Motor Vehicles)	<b>OBJ. ML1:</b> 369.C, 381 <b>OBJ. ML2:</b> 111, 111, 111, 111, 111.A, 111.B, 131, 151, 387.B, 387.C, 387.D, 387.E, 424, 424.A, 424.A, 429, 429.A, 429.B	<b>OBJ. ML1:</b> 101.B, 175.C <b>OBJ. ML2:</b> 103.B, 103.C, 104.G, 104.J, 105.E, 107.A, 107.B, 116, 130.S, 179, 425.A, 425.A, 425.A, 425.A, <b>OBJ. ML3:</b> 104.T, 113	<b>OBJ. ML1:</b> 370, 379, 379, 381 <b>OBJ. ML2:</b> 110, 125.C, 174.A, 392, 392.A, 392.B, 393.A, 394, 397, 397.C	<b>OBJ. ML1:</b> 137.B, 139, 399, 399.A, 399.B <b>OBJ. ML2:</b> 110.K, 112.EA, 130.D, 135, 138, 138.A, 147, 160.A, 160.B, 391.A, 391.B <b>OBJ. ML3:</b> 103.A, 112.E, 112.W, 135
	Roads Open to all Vehicles	<b>OBJ. ML2:</b> 102, 109, 109, 110, 110.J, 110.J, 111, 111, 122, 125.B, 125.D, 125.F, 125.G, 131, 140, 145, 189, 368, 368, 369, 369.A, 369.B, 380, 381, 381, 382, 386, 387, 387, 387.A, 390, 390.A, 390.A, 391, 394, 396, 397, 397, 397.A, 397.B, 398, 398.B, 399, 422 <b>OBJ. ML3:</b> 103, 110.H, 113, 135, 175, 390, 398, 398, 398 <b>OBJ. ML4:</b> 175	<b>OBJ. ML2:</b> 101.C, 104.E, 105, 105.A, 107, 109, 110.A, 110.A, 110.B, 110.D, 110.E, 110.EA, 130, 130.A, 130.B, 130.C, 130.D, 130.S, 134, 136, 137, 137.A, 160, 399 <b>OBJ. ML3:</b> 100, 103, 104.B, 104.F, 104.H, 104.I, 104.QA, 105.B, 110, 110.F, 110.FA, 110.FB, 110.FC, 110.G, 110.H1, 110.I, 110.L, 112.S, 116, 116.A, 116.B, 125.A, 125.AA, 125.AB, 125.AC, 125.AD, 125.AE, 125.AF, 125.AG, 125.AH, 126, 126.A, 170, 170.A, 170.B, 171, 171.A, 171.B, 171.C, 172, 172, 172.A, 172.AA, 172.B, 172.C, 173, 173, 176, 177, 177, 377 <b>OBJ. ML4:</b> 104.D, 104.DA, 104.K, 104.KA, 104.L, 104.M, 104.N, 104.O, 104.P, 104.Q, 104.R, 104.RA, 104.U, 104.UA, 104.UB, 104.V, 104.VA, 104.W, 104.WA, 104.WB, 127.A, 170	<b>OBJ. ML2:</b> 124, 124, 150, 153, 174, 398.A <b>OBJ. ML3:</b> 175.A, 175.B	<b>OBJ. ML2:</b> 110.C, 125.C, 135.A, 393 <b>OBJ. ML3:</b> 104.A
	<b>Total Miles</b>	111.18	72.73	20.96	16.61

Table 6-1. Summary of Roads by Benefit and Risk (Total Miles = 221.48)

Note: Some road numbers may appear in multiple table cells. In these cases, the road was divided into 2 or more segments and each segment was analyzed separately (see matrix table).

## 6.2 Recommendations

Using the above Summary of Roads by Benefit and Risk table, the Leadville Ranger District should consider those roads listed in the H/H (High Benefit and High Risk) category for future capital improvements. These roads are needed as part of the minimum road system, and at the same time they are causing unacceptable resource and/or financial impacts. Action should be taken in order to reduce the risk impacts along these roads.

Roads in the H/L (High Benefit and Low Risk) category are ideal roads and are needed as part of the minimum road system.

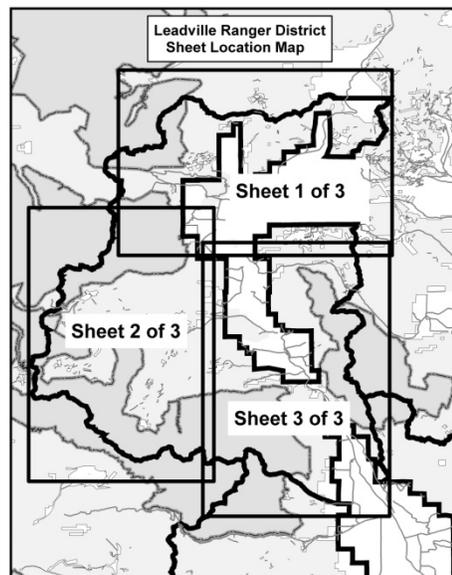
Roads in the L/H (Low Benefit and High Risk) category should be analyzed in depth and potentially eliminated from the system completely unless mitigation measures can be easily implemented that will change the high risk to a low risk. When decommissioning occurs, the risk impacts need to be addressed so they are eliminated or greatly reduced as a result of the decommissioning process. These roads are not needed as part of the minimum road system and they cause resource and/or financial impacts.

Roads in the L/L (Low Benefit and Low Risk) category should be reviewed by Leadville Ranger District and considered for maintenance level reduction, conversion to motorized trails, administrative use only, or decommissioning. These roads are not needed as part of the minimum road system; but since they are not causing significant resource damage, they may be useful at a lower level of maintenance.

The information obtained from a complete project level travel analysis process sets the context for improving the road and motorized trail system on National Forest lands.

## 6.3 Travel Analysis Report (TAR) Map

The following TAR map covers the Leadville Ranger District in three 11" x 17" sheets. Each benefit/risk category as shown in Table 6-1 above is displayed in a different color.



San Isabel National Forest  
Leadville Ranger District

# Road Benefit/Risk Assessment

Sheet 1 of 3

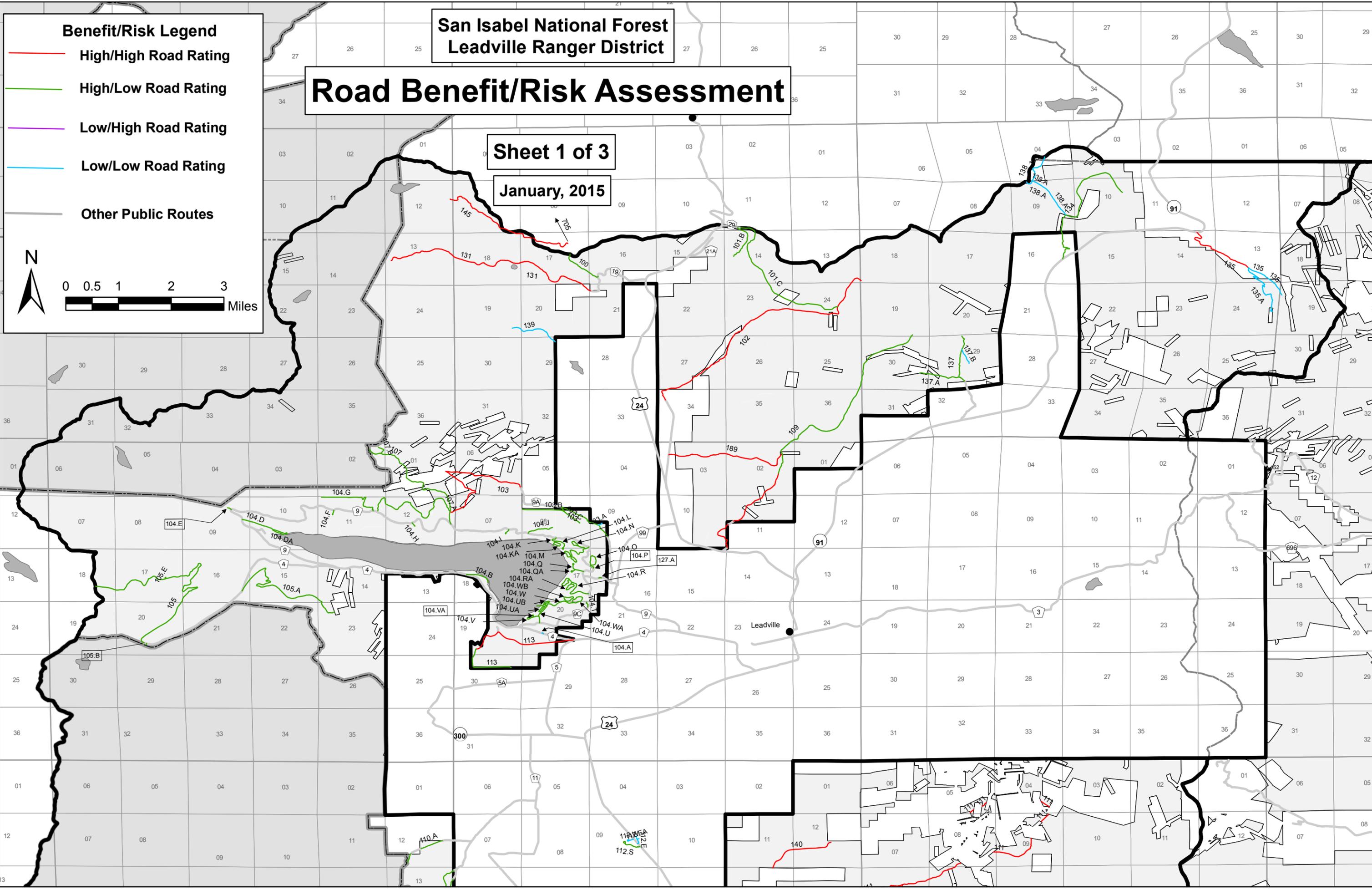
January, 2015

**Benefit/Risk Legend**

- High/High Road Rating
- High/Low Road Rating
- Low/High Road Rating
- Low/Low Road Rating
- Other Public Routes

N

0 0.5 1 2 3 Miles

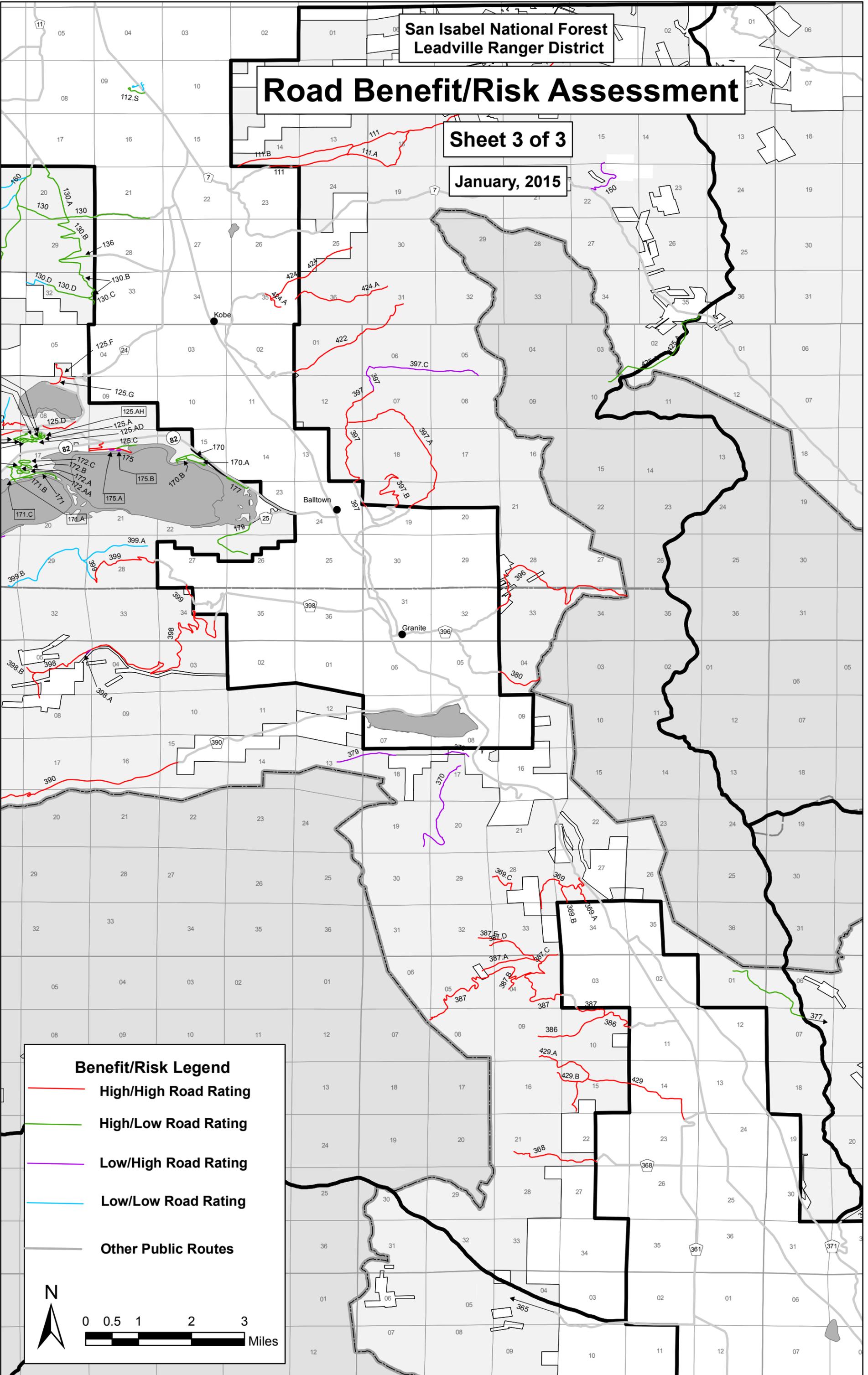




# Road Benefit/Risk Assessment

Sheet 3 of 3

January, 2015



### Benefit/Risk Legend

- High/High Road Rating
- High/Low Road Rating
- Low/High Road Rating
- Low/Low Road Rating
- Other Public Routes



## Appendix A. Final TAP Matrix Table

Following is the matrix table which shows the benefit and risk ratings for each road under analysis.

TAP Matrix Table LEADVILLE RANGER DISTRICT								ROAD BENEFIT RATINGS High, Moderate, or Low (2/H, 1/M, 0/L)							ROAD RISK RATINGS High, Moderate, or Low							FINAL			COMMENTS/RECOMMENDATIONS						
ROAD NUMBER - NFSR	ROAD NAME	FS JURISDICTION (Mileposts)	ROAD LENGTH (FS Jurisdiction Miles)	OBL. MTC LEVEL	SURFACTYPE	ADM/SUP/REC SITE/ SEASONAL RD (A,S,R,SE)	ANNUAL MAINTENANCE COST/MILE	RECREATIONAL USE	FIRE/FUELS ACCESS	TIMBER ACCESS	SPECIAL USE ACCESS	RESOURCE MANAGEMENT/RANGE ACCESS	WATERSHED RISK 3/H=High, 1/M=Moderate, 0/L=Low	WILDLIFE RISK 2/H=High, 1/M=Moderate, 0/L=Low	BOTANY RISK 2/H=High, 1/M=Moderate, 0/L=Low	ARCHAEOLOGY RISK 2/H=High, 1/M=Moderate, 0/L=Low	FINANCIAL BURDEN /PUBLIC HEALTH & SAFETY 2/H=High, 1/M=Moderate, 0/L=Low	Total Benefit Score (0-10) If score is >3, then rating = H	Total Risk Score (0-11) If score is >4, then rating = H	Combined Rating (H/H, H/L, L/H, L/L)											
100	WURTS DITCH	0.92-1.59	0.67	3	NAT	R	***	2	H	2	H	2	H	2	H	0	L	0	L	2	H	0	L	0	L	0	L	8	2	H/L	Rec Site Access
101.B	BURTON DITCH SOUTH	0-0.80	0.80	1	AGG		***	0	L	1	M	1	M	1	M	2	H	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Recommend closing to public
101.C	COOPER LOOP	0-2.61	2.61	2	NAT		***	2	H	1	M	2	H	2	H	0	L	1	M	1	M	0	L	1	M	0	L	7	3	H/L	
102	EAST TENNESSEE	1.70-6.10	4.40	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	3	H	1	M	1	M	1	M	0	L	8	6	H/H	Seasonal, Schedule A Road
103	SAINT KEVIN	0.90-1.80	0.90	3	NAT		***	2	H	2	H	2	H	2	H	0	L	0	L	0	L	2	H	1	M	0	L	8	3	H/L	
103	SAINT KEVIN	2.70-5.20	2.50	3	NAT		***	2	H	2	H	2	H	2	H	0	L	3	H	1	M	2	H	1	M	0	L	8	7	H/H	Schedule A Road
103.A	PUMP STATION	0-0.10	0.10	3	NAT	A	***	0	L	0	L	0	L	0	L	1	M	0	L	1	M	0	L	0	L	0	L	1	1	L/L	Admin Rd
103.B	POWERLINE/WEST	0-0.70	0.70	2	NAT	A	***	0	L	1	M	1	M	2	H	1	M	0	L	1	M	0	L	0	L	0	L	5	1	H/L	Admin Rd
103.C	POWERLINE/EAST	0-0.70	0.70	2	NAT	A	***	0	L	1	M	1	M	2	H	1	M	0	L	1	M	0	L	0	L	0	L	5	1	H/L	Admin Rd
104.A	SOUTH PORTAL SIGN	0-0.03	0.03	3	AC		***	2	H	0	L	0	L	0	L	0	L	0	L	1	M	0	L	0	L	2	H	2	3	L/L	Info Kiosk Pullout, Recommend keeping open for rec site access
104.B	ABE LEE	0-0.39	0.39	3	NAT	R	***	2	H	0	L	1	M	1	M	0	L	1	M	1	M	0	L	0	L	0	L	4	2	H/L	Rec Site Access
104.D	MAY QUEEN CG	0-0.78	0.78	4	AC	R	***	2	H	1	M	1	M	2	H	0	L	0	L	2	H	0	L	0	L	2	H	6	4	H/L	Rec Site Access
104.DA	BUTCHER BOY PG	0-0.19	0.19	4	AC	R	***	2	H	1	M	0	L	2	H	0	L	0	L	2	H	0	L	0	L	2	H	5	4	H/L	Rec Site Access
104.E	TIMBERLINE LAKE TRHD	0-0.10	0.10	2	NAT	R	***	2	H	1	M	0	L	2	H	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
104.F	SHIMMERING POINT O/L	0-0.11	0.11	3	AGG	R	***	2	H	0	L	1	M	1	M	0	L	0	L	0	L	0	L	0	L	0	L	4	0	H/L	Rec Site Access
104.G	BEAR CREEK	0-1.10	1.10	2	NAT	A	***	0	L	1	M	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	6	1	H/L	Admin Rd
104.H	MOSQUITO VIEW OVERLOOK	0-0.09	0.09	3	AGG	R	***	2	H	0	L	1	M	1	M	0	L	0	L	0	L	0	L	0	L	0	L	4	0	H/L	Rec Site Access
104.I	VALLEY VIEW OVERLOOK	0-0.13	0.13	3	AGG	R	***	2	H	0	L	1	M	1	M	0	L	0	L	0	L	0	L	0	L	0	L	4	0	H/L	Rec Site Access
104.J	TANK ACCESS	0-0.40	0.40	2	NAT	A	***	0	L	1	M	2	H	0	L	2	H	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Admin Rd
104.K	TABOR BOAT RAMP	0-0.21	0.21	4	AC	R	***	2	H	2	H	1	M	1	M	0	L	0	L	1	M	0	L	0	L	2	H	6	3	H/L	Rec Site Access
104.KA	TABOR BOAT RAMP PA	0-0.23	0.23	4	AC	R	***	2	H	2	H	1	M	1	M	0	L	0	L	1	M	0	L	0	L	2	H	6	3	H/L	Rec Site Access
104.L	LADY OF THE LAKE PG	0-0.32	0.32	4	AC	R	***	2	H	2	H	1	M	1	M	0	L	0	L	1	M	0	L	0	L	2	H	6	3	H/L	Rec Site Access
104.M	BABY DOE CG	0-1.14	1.14	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.N	FATHER DYER CG	0-0.40	0.40	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.O	PRINTER BOY GROUP CG	0-0.47	0.47	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.P	SANITARY STATION	0-0.06	0.06	4	AC		***	2	HH	0	L	0	L	0	L	0	L	0	L	1	M	0	L	0	L	2	H	2	3	H/L	
104.Q	BELLE OF COLO CG	0-0.30	0.30	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.QA	BELLE OF COLO CG SW LOOP	0-0.13	0.13	3	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	
104.R	MOLLY BROWN CG	0-1.03	1.03	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.RA	MOLLY BROWN CG SOUTH LOOP	0-0.38	0.38	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.T	SEWAGE PLANT	0-0.12	0.12	3	AGG	A	***	0	L	0	L	0	L	2	H	2	H	0	L	1	M	0	L	0	L	0	L	4	1	H/L	Admin Rd
104.U	MATCHLESS BOAT RAMP	0-0.53	0.53	4	AC	R	***	2	H	2	H	1	M	2	H	0	L	0	L	2	H	0	L	0	L	2	H	7	4	H/L	Rec Site Access
104.UA	MATCHLESS BOAT RAMP SOUTH LOOP	0-0.31	0.31	4	AC	R	***	2	H	2	H	1	M	2	H	0	L	0	L	2	H	0	L	0	L	2	H	7	4	H/L	Rec Site Access
104.UB	MATCHLESS BOAT RAMP NORTH LOOP	0-0.23	0.23	4	AC	R	***	2	H	2	H	1	M	2	H	0	L	0	L	2	H	0	L	0	L	2	H	7	4	H/L	Rec Site Access
104.V	MAID OF ERIN PG	0-0.26	0.26	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	2	H	0	L	0	L	2	H	5	4	H/L	Rec Site Access
104.VA	MAID OF ERIN PG SMALL LOOP	0-0.08	0.08	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	2	H	0	L	0	L	2	H	5	4	H/L	Rec Site Access
104.W	SILVER DOLLAR CG	0-0.34	0.34	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.WA	SILVER DOLLAR CG EAST LOOP	0-0.54	0.54	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
104.WB	SILVER DOLLAR CG WEST LOOP	0-0.39	0.39	4	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	1	M	0	L	0	L	2	H	5	3	H/L	Rec Site Access
105	HAGERMAN PASS	3.65-7.96	4.31	2	NAT	R, SE	***	2	H	2	H	2	H	2	H	0	L	1	M	1	M	0	L	1	M	0	L	8	3	H/L	Rec Site Access, Seasonal, Schedule A Road
105.A	SUGARLOAF MTN	0-2.65	2.65	2	NAT		***	1	M	2	H	2	H	2	H	0	L	1	M	2	H	0	L	0	L	0	L	7	3	H/L	
105.B	NATIVE TRAIL LOT	0-0.03	0.03	3	NAT	R	***	2	H	1	M	0	L	2	H	0	L	0	L	0	L	0	L	1	M	0	L	5	1	H/L	

TAP Matrix Table LEADVILLE RANGER DISTRICT								ROAD BENEFIT RATINGS High, Moderate, or Low (2/H, 1/M, 0/L)							ROAD RISK RATINGS High, Moderate, or Low							FINAL			COMMENTS/RECOMMENDATIONS						
ROAD NUMBER - NFSR	ROAD NAME	FS JURISDICTION (Mileposts)	ROAD LENGTH (FS Jurisdiction Miles)	OBL. MTC LEVEL	SURFACTYPE	ADM/SUP/REC SITE/ SEASONAL RD (A,S,R,SE)	ANNUAL MAINTENANCE COST/MILE	RECREATIONAL USE	FIRE/FUELS ACCESS	TIMBER ACCESS	SPECIAL USE ACCESS	RESOURCE MANAGEMENT/RANGE ACCESS	WATERSHED RISK 3/H=High, 1/M=Moderate, 0/L=Low	WILDLIFE RISK 2/H=High, 1/M=Moderate, 0/L=Low	BOTANY RISK 2/H=High, 1/M=Moderate, 0/L=Low	ARCHAEOLOGY RISK 2/H=High, 1/M=Moderate, 0/L=Low	FINANCIAL BURDEN /PUBLIC HEALTH & SAFETY 2/H=High, 1/M=Moderate, 0/L=Low	Total Benefit Score (0-10) If score is >3, then rating = H	Total Risk Score (0-11) If score is >4, then rating = H	Combined Rating (H/H, H/L, L/H, L/L)											
105.E	10TH MTN HUT	0-0.04	0.04	2	NAT	A	***	2	H	2	H	0	L	2	H	0	L	0	L	0	L	0	L	6	0	H/L	Admin Rd, recommend public access				
107	BEAR LAKE	0-2.30	2.30	2	NAT	R	***	2	H	2	H	2	H	2	H	0	L	0	L	1	M	0	L	1	M	0	L	8	2	H/L	Rec Site Access, Schedule A Road
107.A	MARKUSS	0-2.05	2.05	2	NAT	A	***	0	L	2	H	2	H	2	H	0	L	1	M	0	L	1	M	0	L	6	2	H/L	Admin Rd		
107.B	10TH MTN HUT	0-0.18	0.18	2	NAT	A	***	2	H	2	H	0	L	2	H	0	L	0	L	1	M	0	L	0	L	6	2	H/L	Admin Rd, recommend public access		
109	MT. ZION 4WD	0.10-0.70	0.60	2	NAT		***	2	H	2	H	2	H	2	H	0	L	0	L	2	HH	0	L	0	L	1	M	8	3	H/H	
109	MT. ZION 4WD	0.80-2.00	1.20	2	NAT		***	2	H	2	H	2	H	2	H	0	L	0	L	2	HH	0	L	0	L	1	M	8	3	H/H	
109	MT. ZION 4WD	2.00-5.80	3.80	2	NAT		***	2	H	2	H	2	H	2	H	0	L	0	L	2	H	0	L	0	L	1	M	8	3	H/L	
110	HALFMOON	3.37-6.74	3.37	3	NAT	R	***	2	H	2	H	2	H	2	H	0	L	0	L	1	M	0	L	1	M	1	M	8	3	H/L	Rec Site Access, Schedule A Road
110	HALFMOON	6.74-11.91	5.17	2	NAT	R	***	2	H	2	H	2	H	2	H	0	L	2	HH	2	H	0	L	1	M	0	L	8	5	H/H	Rec Site Access
110	HALFMOON	11.91-12.86	0.95	2	NAT	A	***	0	L	1	M	0	L	2	H	0	L	1	M	2	H	1	M	1	M	0	L	3	5	L/H	Admin Rd.
110.A	WILLOW CR	0.43-0.78	0.35	2	NAT	R	***	2	H	2	H	2	H	2	H	0	L	0	L	0	L	0	L	0	L	0	L	8	0	H/L	Rec Site Access
110.A	WILLOW CR	0.96-1.14	0.18	2	NAT	R	***	2	H	2	H	2	H	2	H	0	L	0	L	0	L	0	L	0	L	0	L	8	0	H/L	Rec Site Access
110.B	WEST SIDE	0.05-1.30	1.25	2	NAT		***	2	H	2	H	2	H	1	M	0	L	1	M	0	L	0	L	1	M	0	L	7	2	H/L	
110.C	KILN	0-0.26	0.26	2	NAT		***	1	M	0	L	2	H	0	L	0	L	1	M	0	L	0	L	1	M	0	L	3	2	L/L	
110.D	MEADOW LOOP	0-0.30	0.30	2	NAT		***	2	H	1	M	2	H	1	M	0	L	0	L	2	H	0	L	0	L	0	L	6	2	H/L	
110.E	CREEK ACCESS	0-0.16	0.16	2	NAT		***	2	H	1	M	1	M	1	M	0	L	1	M	2	H	0	L	0	L	0	L	5	3	H/L	
110.EA	CREEK ACCESS SPUR	0-0.19	0.19	2	NAT		***	2	H	1	M	1	M	1	M	0	L	1	M	2	H	0	L	0	L	0	L	5	3	H/L	
110.F	HALFMOON CG	0-0.28	0.28	3	AGG	R	***	2	H	1	M	1	M	1	M	0	L	0	L	2	H	0	L	0	L	0	L	5	2	H/L	Rec Site Access
110.FA	HALFMOON CG SW LOOP	0-0.12	0.12	3	AGG	R	***	2	H	1	M	1	M	1	M	0	L	0	L	2	H	0	L	0	L	0	L	5	2	H/L	Rec Site Access
110.FB	HALFMOON CG NE LOOP	0-0.21	0.21	3	AGG	R	***	2	H	1	M	1	M	1	M	0	L	0	L	2	H	0	L	0	L	0	L	5	2	H/L	Rec Site Access
110.FC	HALFMOON EAST CG	0-0.14	0.14	3	AGG	R	***	2	H	1	M	1	M	1	M	0	L	0	L	2	H	0	L	0	L	0	L	5	2	H/L	Rec Site Access
110.G	EMERALD LAKE PG PKG	0-0.05	0.05	3	NAT	R	***	2	H	1	M	1	M	1	M	0	L	0	L	1	M	0	L	0	L	0	L	5	1	H/L	Rec Site Access, Schedule A Road
110.H	ELBERT CR CG	0-0.22	0.22	3	AGG	R	***	2	H	1	M	1	M	1	M	0	L	3	H	2	H	0	L	0	L	0	L	5	5	H/H	Rec Site Access
110.H1	ELBERT CR CG EAST LOOP	0-0.22	0.22	3	AGG	R	***	2	H	1	M	1	M	1	M	0	L	1	M	2	H	0	L	0	L	0	L	5	3	H/L	Rec Site Access
110.I	MT. ELBERT TH	0-0.06	0.06	3	AGG	R	***	2	H	1	M	0	L	2	H	0	L	3	H	0	L	0	L	0	L	0	L	5	3	H/L	Rec Site Access, Schedule A Road
110.J	SOUTH HALFMOON 4WD	0-3.60	3.60	2	NAT		***	1	M	1	M	1	M	2	H	0	L	3	HH	1	M	0	L	0	L	2	H	5	6	H/H	
110.J	SOUTH HALFMOON 4WD	3.60-4.60	1.00	2	NAT		***	1	M	1	M	1	M	2	H	0	L	3	HH	2	H	0	L	0	L	2	H	5	7	H/H	
110.K	MILL	0-0.30	0.30	2	NAT	A	***	0	L	1	M	0	L	2	H	0	L	1	M	1	M	0	L	2	H	0	L	3	4	L/L	Admin Rd
110.L	MT. MASSIVE TH	0-0.05	0.05	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	1	M	0	L	0	L	0	L	0	L	4	1	H/L	Rec Site Access, Schedule A Road
111	DRY UNION	0.80-1.10	0.30	2	NAT		***	2	H	2	H	1	M	1	M	2	H	0	L	2	HH	0	L	1	M	0	L	8	3	H/H	Schedule A Road
111	DRY UNION	1.13-4.07	2.94	2	NAT		***	2	H	2	H	1	M	1	M	2	H	0	L	2	HH	0	L	1	M	0	L	8	3	H/H	Schedule A Road
111	DRY UNION	5.28-5.35	0.07	2	NAT	A	***	0	L	2	H	1	M	1	M	2	H	1	M	2	HH	0	L	1	M	0	L	6	4	H/H	Admin Rd
111	DRY UNION	5.47-5.59	0.12	2	NAT	A	***	0	L	2	H	1	M	1	M	2	H	1	M	2	HH	0	L	1	M	0	L	6	4	H/H	Admin Rd
111	DRY UNION	6.24-6.40	0.16	2	NAT	A	***	0	L	2	H	1	M	1	M	2	H	1	M	2	HH	0	L	1	M	0	L	6	4	H/H	Admin Rd
111	DRY UNION	6.56-6.74	0.18	2	NAT	A	***	0	L	2	H	1	M	1	M	2	H	1	M	2	HH	0	L	1	M	0	L	6	4	H/H	Admin Rd
111	DRY UNION	7.10-7.93	0.83	2	NAT	A	***	0	L	1	M	1	M	1	M	1	M	1	M	2	HH	2	H	1	M	0	L	4	6	H/H	Admin Rd, Recommend decommissioning
111.A	DRY UNION LOOP	0-1.50	1.50	2	NAT	A	***	0	L	1	M	1	M	1	M	2	H	1	M	2	HH	0	L	1	M	0	L	5	4	H/H	Admin Rd
111.B	DRY UNION RIDGE	0-1.90	1.90	2	NAT	A	***	0	L	1	M	1	M	2	H	2	H	1	M	2	HH	0	L	2	H	0	L	6	5	H/H	Admin Rd
112.E	CRYSTAL LAKES EAST	0-0.16	0.16	3	AGG	A	***	0	L	0	L	0	L	0	L	2	H	0	L	0	L	0	L	0	L	0	L	2	0	L/L	Admin Rd, Schedule A Road, Recommend keeping as admin use only
112.EA	CRYSTAL LAKES EAST B/H	0-0.03	0.03	2	AGG	A	***	0	L	0	L	0	L	0	L	2	H	0	L	0	L	0	L	0	L	0	L	2	0	L/L	Admin Rd, Recommend keeping as admin use only

TAP Matrix Table LEADVILLE RANGER DISTRICT								ROAD BENEFIT RATINGS High, Moderate, or Low (2/H, 1/M, 0/L)							ROAD RISK RATINGS High, Moderate, or Low							FINAL			COMMENTS/RECOMMENDATIONS						
ROAD NUMBER - NFSR	ROAD NAME	FS JURISDICTION (Mileposts)	ROAD LENGTH (FS Jurisdiction Miles)	OBL. MTC LEVEL	SURFACTYPE	ADM/SUP/REC SITE/ SEASONAL RD (A/S/R/SE)	ANNUAL MAINTENANCE COST/MILE	RECREATIONAL USE	FIRE/FUELS ACCESS	TIMBER ACCESS	SPECIAL USE ACCESS	RESOURCE MANAGEMENT/RANGE ACCESS	WATERSHED RISK 3/H=High, 1/M=Moderate, 0/L=Low	WILDLIFE RISK 2/H=High, 1/M=Moderate, 0/L=Low	BOTANY RISK 2/H=High, 1/M=Moderate, 0/L=Low	ARCHAEOLOGY RISK 2/H=High, 1/M=Moderate, 0/L=Low	FINANCIAL BURDEN /PUBLIC HEALTH & SAFETY 2/H=High, 1/M=Moderate, 0/L=Low	Total Benefit Score (0-10) If score is >3, then rating = H	Total Risk Score (0-11) If score is >4, then rating = H	Combined Rating (H/H, H/L, L/H, L/L)											
112.S	CRYSTAL LAKES FA	0-0.36	0.36	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	1	M	0	L	0	L	0	L	4	1	H/L	Rec Site Access, Schedule A Road
112.W	CRYSTAL LAKES WEST	0-0.15	0.15	3	AC	A	***	0	L	0	L	0	L	0	L	2	H	0	L	0	L	0	L	1	M	0	L	2	1	L/L	Admin Rd, Recommend keeping as admin use only
113	DDH HEADGATES	0-1.74	1.74	3	NAT		***	2	H	2	H	2	H	2	H	0	L	3	H	1	M	0	L	2	H	0	L	8	6	H/H	Schedule A Road
113	DDH HEADGATES	1.74-2.65	0.91	3	NAT	A	***	2	H	2	H	2	H	2	H	0	L	0	L	1	M	0	L	0	L	0	L	8	1	H/L	Admin Rd, Recommend public access
116	PARRY PEAK CG	0-0.36	0.36	3	NAT	R	***	2	H	2	H	1	M	1	M	0	L	0	L	0	L	0	L	0	L	0	L	6	0	H/L	Rec Site Access
116	PARRY PEAK CG	0.36-0.80	0.44	2	NAT	A	***	0	L	1	M	1	M	1	M	2	H	1	M	0	L	0	L	1	M	0	L	5	2	H/L	Admin Rd
116.A	NORTH CG LOOP	0-0.16	0.16	3	AGG	R	***	2	H	1	M	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	4	0	H/L	Rec Site Access
116.B	SOUTH CG LOOP	0-0.11	0.11	3	AGG	R	***	2	H	1	M	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	4	0	H/L	Rec Site Access
122	LILLY POND	0-2.50	2.50	2	NAT		***	2	H	2	H	2	H	2	H	0	L	1	M	2	HH	0	L	0	L	0	L	8	3	H/H	Schedule A Road
124	GORDON GULCH	0-0.10	0.10	2	NAT		***	0	L	1	M	0	L	2	H	0	L	1	M	2	HH	0	L	1	M	0	L	3	4	L/H	
124	GORDON GULCH	0.10-1.00	0.90	2	NAT	S	***	0	L	1	M	0	L	2	H	0	L	1	M	2	HH	0	L	0	L	0	L	3	3	L/H	SUP Road
125.A	LAKEVIEW CG	0-0.86	0.86	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AA	LAKEVIEW CG LOOP A	0-0.22	0.22	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AB	LAKEVIEW CG LOOP B	0-0.13	0.13	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AC	LAKEVIEW CG LOOP C	0-0.23	0.23	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AD	LAKEVIEW CG LOOP D	0-0.21	0.21	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AE	LAKEVIEW CG LOOP E	0-0.25	0.25	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AF	LAKEVIEW CG LOOP F	0-0.13	0.13	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AG	LAKEVIEW CG LOOP G	0-0.11	0.11	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.AH	LAKEVIEW CG HOST	0-0.06	0.06	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
125.B	MT. ELBERT	0-1.80	1.80	2	NAT	R	***	2	H	2	H	1	M	2	H	2	H	1	M	2	HH	0	L	0	L	1	M	9	4	H/H	Rec Site Access
125.C	HOLLENBECK	0-1.10	1.10	2	NAT		***	1	M	1	M	0	L	1	M	0	L	1	M	1	M	0	L	0	L	1	M	3	3	L/L	Schedule A Road
125.C	HOLLENBECK	1.10-2.70	1.60	2	NAT	A	***	0	L	0	L	0	L	1	M	2	H	3	H	1	M	0	L	1	M	2	H	3	7	L/H	Admin Rd
125.D	FOREBAY DISPERSED CAMP'G	0-0.60	0.60	2	NAT		***	2	H	2	H	2	H	2	H	0	L	1	M	2	HH	0	L	0	L	0	L	8	3	H/H	
125.F	CORSKE CREEK	0-0.50	0.50	2	NAT		***	2	H	2	H	1	M	1	M	0	L	0	L	2	HH	0	L	0	L	0	L	6	2	H/H	
125.G	NORTH DAM	0-0.25	0.25	2	NAT		***	2	H	2	H	1	M	1	M	0	L	0	L	2	HH	0	L	0	L	0	L	6	2	H/H	
126	TWIN PEAKS CG	0-0.31	0.31	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
126.A	TWIN PEAKS CG EAST LOOP	0-0.43	0.43	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
127.A	NORTH PORTAL SIGN	0-0.04	0.04	4	AC		***	2	HH	0	L	0	L	0	L	0	L	0	L	1	M	0	L	0	L	0	L	2	1	H/L	
130	LODGEPOLE FLATS	0.40-2.45	2.05	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	0	L	0	L	0	L	0	L	0	L	8	0	H/L	Seasonal
130.A	CONDUIT NORTH	0-1.07	1.07	2	NAT		***	2	H	2	H	2	H	2	H	0	L	1	M	2	H	0	L	0	L	0	L	8	3	H/L	
130.B	CONDUIT SOUTH	0-2.80	2.80	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	1	M	1	M	0	L	0	L	0	L	8	2	H/L	Seasonal
130.C	CHLOBER HILL	0-0.17	0.17	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	1	M	1	M	0	L	0	L	0	L	8	2	H/L	Seasonal
130.D	DOC'S	0-0.71	0.71	2	NAT		***	2	H	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	0	L	7	0	H/L	
130.D	DOC'S	0.71-1.05	0.34	2	NAT	A	***	0	L	1	M	2	H	0	L	0	L	0	L	0	L	0	L	0	L	0	L	3	0	L/L	Admin Rd
130.S	LODGEPOLE FLATS SOUTH	0-2.00	2.00	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	0	L	0	L	0	L	1	M	0	L	8	1	H/L	Seasonal
130.S	LODGEPOLE FLATS SOUTH	2.00-4.28	2.28	2	NAT	A	***	0	L	2	H	0	L	2	H	0	L	0	L	0	L	0	L	2	H	0	L	4	2	H/L	Admin Rd
131	WEST TENNESSEE	0.40-1.80	1.40	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	0	L	2	HH	0	L	0	L	0	L	8	2	H/H	Seasonal
131	WEST TENNESSEE	1.80-4.00	2.20	2	NAT	A	***	0	L	2	H	1	M	2	H	0	L	0	L	2	HH	0	L	0	L	0	L	5	2	H/H	Admin Rd
134	CHALK MTN	0-2.90	2.90	2	NAT		***	2	H	1	M	0	L	1	M	0	L	3	H	1	M	0	L	0	L	0	L	4	4	H/L	
135	STORKE PORTAL	0-1.31	1.31	3	NAT		***	1	M	2	H	0	L	1	M	0	L	3	H	2	H	0	L	1	M	0	L	4	6	H/H	
135	STORKE PORTAL	1.31-1.60	0.29	3	NAT	A	***	0	L	2	H	0	L	1	M	0	L	1	M	0	L	0	L	1	M	0	L	3	2	L/L	Admin Rd

TAP Matrix Table LEADVILLE RANGER DISTRICT								ROAD BENEFIT RATINGS High, Moderate, or Low (2/H, 1/M, 0/L)								ROAD RISK RATINGS High, Moderate, or Low								FINAL			COMMENTS/RECOMMENDATIONS
ROAD NUMBER - NFSR	ROAD NAME	FS JURISDICTION (Mileposts)	ROAD LENGTH (FS Jurisdiction Miles)	OBL. MTC LEVEL	SURFACTYPE	ADM/SUP/REC SITE/ SEASONAL RD (A,S,R,SE)	ANNUAL MAINTENANCE COST/MILE	RECREATIONAL USE	FIRE/FUELS ACCESS	TIMBER ACCESS	SPECIAL USE ACCESS	RESOURCE MANAGEMENT/RANGE ACCESS	WATERSHED RISK 3/H=High, 1/M=Moderate, 0/L=Low	WILDLIFE RISK 2/H=High, 1/M=Moderate, 0/L=Low	BOTANY RISK 2/H=High, 1/M=Moderate, 0/L=Low	ARCHAEOLOGY RISK 2/H=High, 1/M=Moderate, 0/L=Low	FINANCIAL BURDEN /PUBLIC HEALTH & SAFETY 2/H=High, 1/M=Moderate, 0/L=Low	Total Benefit Score (0-10) If score is >3, then rating = H	Total Risk Score (0-11) If score is >4, then rating = H	Combined Rating (H/H, H/L, L/H, L/L)							
135	STORKE PORTAL	1.60-2.00	0.40	2	NAT	A	***	0	L	2	H	0	L	1	M	0	L	1	M	0	L	3	2	L/L	Admin Rd		
135.A	MT. ARKANSAS	0-1.37	1.37	2	NAT		***	0	L	0	L	0	L	1	M	0	L	1	M	0	L	1	2	L/L			
136	SAGE DRAW	1.25-1.75	0.50	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	0	L	1	M	0	L	8	2	H/L	Seasonal
137	BUCKEYE GULCH	0.70-1.80	1.10	2	NAT		***	1	M	2	H	0	L	2	H	0	L	1	M	0	L	5	3	H/L	Rec Site Access		
137.A	BUCKEYE SPUR	0-0.60	0.60	2	NAT		***	1	M	2	H	0	L	2	H	0	L	1	M	0	L	5	3	H/L			
137.B	ROB'S	0-0.30	0.30	1	NAT		***	0	L	0	L	0	L	0	L	0	L	0	L	0	L	0	0	L/L			
138	COLUMBINE DITCH	0-0.73	0.73	2	AGG	A	***	0	L	1	M	0	L	0	L	2	H	0	L	0	L	3	2	L/L	Admin Rd		
138.A	COLUMBINE SPUR	0-0.83	0.83	2	NAT	A	***	0	L	1	M	0	L	0	L	2	H	3	H	1	M	0	L	3	4	L/L	Admin Rd
139	LONGS GULCH	1.82-2.61	0.79	1	NAT		***	0	L	0	L	0	L	0	L	0	L	1	M	1	M	0	L	0	2	L/L	
140	BEAVER LAKES	1.80-2.90	1.10	2	AGG	S	***	2	H	2	H	2	H	2	H	2	H	0	L	2	HH	0	L	10	2	H/H	SUP Road
145	SLIDE LAKE 4WD	0.00-2.35	2.35	2	NAT	S, SE	***	2	H	2	H	1	M	2	H	0	L	3	H	1	M	1	M	7	7	H/H	SUP Road, Seasonal
147	FOREBAY SERVICE	1.16-1.65	0.49	2	NAT	A	***	0	L	1	M	1	M	0	L	0	L	1	M	2	H	0	L	2	3	L/L	Admin Rd
150	GOLD BASIN	0-1.00	1.00	2	NAT		***	1	M	1	M	0	L	1	M	0	L	3	H	2	H	0	L	3	6	L/H	
151	LACKAWANNA	0-0.35	0.35	2	NAT	A,R	***	2	H	1	M	0	L	2	H	0	L	3	HH	0	L	0	L	5	3	H/H	Rec Site Access, Admin Rd
153	OLD WAGON	0-0.80	0.80	2	NAT		***	1	M	1	M	0	L	0	L	0	L	3	H	2	H	0	L	2	5	L/H	
160	LODGEPOLE FLATS NORTH	0-0.80	0.80	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	1	M	1	M	0	L	8	2	H/L	Seasonal
160.A	EIDEWILD	0-1.80	1.80	2	NAT	A	***	0	L	1	M	2	H	0	L	0	L	0	L	0	L	0	L	3	0	L/L	Admin Rd
160.B	LOST ACRE	0-0.60	0.60	2	NAT	A	***	0	L	1	M	2	H	0	L	0	L	0	L	0	L	0	L	3	0	L/L	Admin Rd
170	DEXTER POINT REC AREA	0-0.20	0.20	4	AC	R	***	2	H	1	M	0	L	2	H	0	L	0	L	2	H	0	L	5	4	H/L	Rec Site Access
170	DEXTER POINT REC AREA	0.20-0.54	0.34	3	AGG	R	***	2	H	1	M	0	L	2	H	0	L	0	L	2	H	0	L	5	2	H/L	Rec Site Access
170.A	SUNNYSIDE FISHING ACCESS	0-0.40	0.40	3	AGG	R	***	2	H	1	M	0	L	2	H	0	L	0	L	2	H	0	L	5	2	H/L	Rec Site Access
170.B	DEXTER POINT BOAT RAMP PARKING	0-0.15	0.15	3	AGG	R	***	2	H	1	M	0	L	2	H	0	L	0	L	2	H	0	L	5	2	H/L	Rec Site Access
171	UPPER LAKE ACCESS	0-1.05	1.05	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	H	0	L	4	2	H/L	Rec Site Access
171.A	RED ROOSTER BOAT RAMP	0-0.06	0.06	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	H	0	L	4	2	H/L	Rec Site Access
171.B	PRAYING ANGEL FISHING ACCESS	0-0.20	0.20	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	H	0	L	4	2	H/L	Rec Site Access
171.C	RED ROOSTER LOOP	0-0.07	0.07	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	H	0	L	4	2	H/L	Rec Site Access
172	WHITESTAR CG	0-0.07	0.07	3	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	5	2	H/L	Rec Site Access
172	WHITESTAR CG	0.07-0.22	0.15	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
172.A	WHITESTAR CG-SAGE LOOP ENTR	0-0.19	0.19	3	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	2	H	5	2	H/L	Rec Site Access
172.AA	WHITESTAR CG-SAGE LOOP	0-0.47	0.47	3	AC	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	2	H	5	2	H/L	Rec Site Access
172.B	WHITESTAR CG-N.VALLEY LP	0-0.40	0.40	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
172.C	WHITESTAR CG-RIDGE LOOP	0-0.30	0.30	3	AGG	R	***	2	H	2	H	1	M	0	L	0	L	0	L	0	L	0	L	5	0	H/L	Rec Site Access
173	MOACHE FISHERMAN PARKING	0-0.10	0.10	3	AC	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	H	0	L	4	4	H/L	Rec Site Access
173	MOACHE FISHERMAN PARKING	0.10-0.30	0.20	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	H	0	L	4	2	H/L	Rec Site Access
174	WILLOW STUMP	0-1.07	1.07	2	NAT	SE	***	0	L	1	M	0	L	1	M	0	L	3	HH	2	HH	0	L	2	6	L/H	Seasonal, Recommend for decommissioning
174.A	WILLOW STUMP SPUR	0-0.85	0.85	2	NAT	A	***	0	L	1	M	0	L	1	M	1	M	3	H	2	HH	0	L	3	6	L/H	Admin Rd, Recommend for decommissioning
175	WHISTLER POINT FISHERMAN PRKG	0-0.40	0.40	4	AC	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	HH	0	L	4	4	H/H	Rec Site Access
175	WHISTLER POINT FISHERMAN PRKG	0.40-1.08	0.68	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	2	HH	0	L	4	2	H/H	Rec Site Access
175.A	MT ELBERT PICNIC AREA	0-0.15	0.15	3	AGG	R	***	2	H	0	L	0	L	1	M	0	L	0	L	2	HH	0	L	3	2	L/H	Rec Site Access, Recommend keeping open for rec site access
175.B	BIG MAC FISHERMAN PRKG	0-0.13	0.13	3	AGG	R	***	2	H	0	L	0	L	1	M	0	L	0	L	2	HH	0	L	3	2	L/H	Rec Site Access, Recommend keeping open for rec site access

TAP Matrix Table LEADVILLE RANGER DISTRICT								ROAD BENEFIT RATINGS High, Moderate, or Low (2/H, 1/M, 0/L)							ROAD RISK RATINGS High, Moderate, or Low							FINAL			COMMENTS/RECOMMENDATIONS							
ROAD NUMBER - NFSR	ROAD NAME	FS JURISDICTION (Mileposts)	ROAD LENGTH (FS Jurisdiction Miles)	OBL. MTC LEVEL	SURFACTYPE	ADM/SUP/REC SITE/ SEASONAL RD (A,S,R,SE)	ANNUAL MAINTENANCE COST/MILE	RECREATIONAL USE	FIRE/FUELS ACCESS	TIMBER ACCESS	SPECIAL USE ACCESS	RESOURCE MANAGEMENT/RANGE ACCESS	WATERSHED RISK 3/H=High, 1/M=Moderate, 0/L=Low	WILDLIFE RISK 2/H=High, 1/M=Moderate, 0/L=Low	BOTANY RISK 2/H=High, 1/M=Moderate, 0/L=Low	ARCHAEOLOGY RISK 2/H=High, 1/M=Moderate, 0/L=Low	FINANCIAL BURDEN /PUBLIC HEALTH & SAFETY 2/H=High, 1/M=Moderate, 0/L=Low	Total Benefit Score (0-10) If score is >3, then rating = H	Total Risk Score (0-11) If score is >4, then rating = H	Combined Rating (H/H, H/L, L/H, L/L)												
175.C	CABIN COVE	0-0.30	0.30	1	AGG		***	0	L	0	L	0	L	0	L	2	HH	0	L	0	L	0	L	2	H	0	L	2	2	2	H/L	Recommend administrative access
176	TWIN LAKES REST STOP	0-0.15	0.15	3	AC	R	***	2	H	0	L	0	L	2	H	0	L	0	L	0	L	2	H	4	2	H	4	2	H/L	Rec Site Access		
177	MTN VIEW FISHERMAN PRKNG	0-0.01	0.01	3	AC	R	***	2	H	0	L	0	L	2	H	0	L	0	L	1	M	0	L	0	L	2	H	4	3	H/L	Rec Site Access	
177	MTN VIEW FISHERMAN PRKNG	0.01-0.51	0.50	3	AGG	R	***	2	H	0	L	0	L	2	H	0	L	0	L	1	M	0	L	0	L	0	L	4	1	H/L	Rec Site Access	
179	TWIN LAKES GATE ACCESS	0.60-1.80	1.20	2	NAT	A	***	0	L	2	H	2	H	2	H	0	L	0	L	0	L	0	L	1	M	0	L	6	1	H/L	Admin Rd	
189	NO NAME	0-2.05	2.05	2	NAT	SE	***	2	H	2	H	2	H	2	H	0	L	3	H	2	HH	0	L	0	L	0	L	8	5	H/H	Seasonal	
368	THREE ELK	1.40-2.10	0.70	2	NAT	R	***	2	H	2	H	2	H	2	H	0	L	0	L	2	HH	0	L	0	L	0	L	8	2	H/H	Rec Site Access	
368	THREE ELK	2.10-2.80	0.70	2	NAT		***	0	L	2	H	2	H	2	H	0	L	0	L	2	HH	0	L	0	L	0	L	6	2	H/H		
369	SCHOOL HOUSE	0-1.50	1.50	2	NAT		***	1	M	2	H	2	H	0	L	0	L	3	H	2	HH	0	L	0	L	0	L	5	5	H/H		
369.A	PVT ACCESS NO. 1	0-0.40	0.40	2	NAT		***	1	M	2	H	2	H	0	L	0	L	0	L	2	HH	0	L	0	L	0	L	5	2	H/H		
369.B	PVT ACCESS NO. 2	0-0.40	0.40	2	NAT		***	1	M	2	H	2	H	0	L	0	L	0	L	2	HH	0	L	0	L	0	L	5	2	H/H		
369.C	ANDERSON DITCH ACCESS	0.56-1.10	0.54	1	NAT		***	1	M	2	H	0	L	2	H	0	L	0	L	2	HH	0	L	2	H	0	L	5	4	H/H		
370	DRY COLUMBIA GULCH 4WD	0.30-2.60	2.30	1	NAT		***	0	L	2	H	0	L	0	L	0	L	0	L	2	HH	0	L	0	L	0	L	2	2	L/H		
377	HOMESTAKE PIPELINE	1.26-2.89	1.63	3	NAT	S, SE	***	2	H	2	H	1	M	2	H	0	L	0	L	0	L	0	L	0	L	0	L	7	0	H/L	SUP Road, Seasonal	
379	COLUMBIA GULCH 4WD	0.20-0.60	0.40	1	NAT		***	0	L	0	L	0	L	0	L	0	L	3	H	2	HH	0	L	0	L	0	L	0	5	L/H		
379	COLUMBIA GULCH 4WD	1.40-2.30	0.90	1	NAT		***	0	L	0	L	0	L	0	L	0	L	3	H	2	HH	0	L	0	L	0	L	0	5	L/H		
380	SAWMILL GULCH	1.34-2.09	0.75	2	NAT		***	0	L	2	H	1	M	1	M	0	L	1	M	2	HH	0	L	0	L	0	L	4	3	H/H		
381	CLOYSES LAKE 4WD	0-0.10	0.10	2	NAT	R	***	2	H	2	H	0	L	1	M	0	L	3	H	2	H	0	L	2	H	0	L	5	7	H/H	Rec Site Access	
381	CLOYSES LAKE 4WD	0.10-2.75	2.65	2	NAT		***	2	H	2	H	0	L	1	M	0	L	3	HH	2	H	0	L	2	H	1	M	5	8	H/H		
381	CLOYSES LAKE 4WD	2.75-3.20	0.45	1	NAT	A	***	0	L	1	M	0	L	1	M	0	L	3	H	0	L	0	L	2	H	1	M	2	6	L/H	Admin Rd, Op ML2	
382	SAYRES GULCH 4WD	0-1.72	1.72	2	NAT	R	***	1	M	2	H	1	M	2	H	0	L	3	H	2	H	0	L	0	L	0	L	6	5	H/H	Rec Site Access	
386	FRENCHMAN CR	0.80-2.61	1.81	2	NAT	R, SE	***	1	M	2	H	2	H	2	H	0	L	1	M	2	HH	0	L	0	L	0	L	7	3	H/H	Rec Site Access, Seasonal	
387	MORRIS CREEK	0-0.60	0.60	2	NAT		***	1	M	2	H	2	H	1	M	0	L	0	L	2	HH	0	L	0	L	0	L	6	2	H/H		
387	MORRIS CREEK	1.00-5.00	4.00	2	NAT		***	1	M	2	H	2	H	1	M	0	L	0	L	2	HH	0	L	0	L	0	L	6	2	H/H		
387.A	WAPAKA	0-1.50	1.50	2	NAT		***	1	M	2	H	2	H	0	L	0	L	3	H	2	HH	0	L	1	M	0	L	5	6	H/H		
387.B	PRIMROSE	0-0.60	0.60	2	NAT	A	***	0	L	2	H	2	H	0	L	1	M	3	H	2	HH	0	L	2	H	0	L	5	7	H/H	Admin Rd	
387.C	SPRINGER ACCESS	0-0.28	0.28	2	NAT	A	***	0	L	2	H	2	H	0	L	1	M	3	H	2	HH	0	L	2	H	0	L	5	7	H/H	Admin Rd	
387.D	MCFADDEN SPUR	0-0.90	0.90	2	NAT	A	***	0	L	2	H	2	H	0	L	1	M	3	H	2	HH	0	L	2	H	0	L	5	7	H/H	Admin Rd	
387.E	MCFADDEN SPUR NORTH	0-0.40	0.40	2	NAT	A	***	0	L	2	H	2	H	0	L	1	M	3	H	2	HH	0	L	2	H	0	L	5	7	H/H	Admin Rd	
390	CLEAR CREEK	4.69-11.85	7.16	3	AGG	R	***	2	H	2	H	2	H	2	H	2	H	3	H	2	HH	1	M	1	M	1	M	10	8	H/H	Rec Site Access	
390	CLEAR CREEK	11.85-13.89	2.04	2	NAT	R	***	2	H	2	H	2	H	2	H	2	H	3	H	2	HH	1	M	1	M	1	M	10	8	H/H	Rec Site Access	
390.A	N FORK CLEAR CR 4WD	0-0.40	0.40	2	NAT	R	***	2	H	2	H	1	M	2	H	0	L	3	H	2	H	1	M	2	H	0	L	7	8	H/H	Rec Site Access	
390.A	N FORK CLEAR CR 4WD	0.40-2.16	1.76	2	NAT	R	***	2	H	2	H	1	M	2	H	0	L	3	H	2	H	1	M	1	M	0	L	7	7	H/H	Rec Site Access	
391	SOUTH FORK LAKE CR	0-5.72	5.72	2	NAT	R	***	2	H	2	H	1	M	2	H	0	L	3	H	2	H	0	L	2	H	0	L	7	7	H/H	Rec Site Access, Schedule A Road	
391.A	SPEAR POINT PVT ACCESS	0-0.40	0.40	2	NAT	A	***	0	L	2	H	0	L	0	L	0	L	3	H	0	L	0	L	0	L	0	L	2	3	L/L	Admin Rd	
391.B	L&L BY CHANCE PVT ACCESS	0-0.90	0.90	2	NAT	A	***	0	L	2	H	0	L	0	L	0	L	3	H	0	L	0	L	0	L	0	L	2	3	L/L	Admin Rd	
392	EAST RED MTN 4WD	0-3.70	3.70	2	NAT	A	***	0	L	1	M	0	L	0	L	0	L	3	HH	0	L	0	L	0	L	0	L	1	3	L/H	Admin Rd	
392.A	EAST RED MTN SPUR	0-0.51	0.51	2	NAT	A	***	0	L	1	M	0	L	0	L	0	L	3	HH	0	L	0	L	0	L	0	L	1	3	L/H	Admin Rd	
392.B	UPPER SPUR	0-1.00	1.00	2	NAT	A	***	0	L	1	M	0	L	0	L	0	L	3	HH	0	L	0	L	0	L	0	L	1	3	L/H	Admin Rd	
393	PEAKABOO GULCH	0-2.00	2.00	2	NAT		***	1	M	2	H	0	L	0	L	0	L	3	H	0	L	0	L	0	L	0	L	3	3	L/L		
393.A	HARDING SPUR	0-0.10	0.10	2	NAT	A	***	0	L	2	H	0	L	0	L	0	L	3	HH	0	L	0	L	0	L	0	L	2	3	L/H	Admin Rd	
394	MC NASSAR GULCH 4WD	0-1.10	1.10	2	NAT		***	1	M	2	H	0	L	1	M	0	L	3	H	2	H	0	L	0	L	0	L	4	5	H/H		

TAP Matrix Table LEADVILLE RANGER DISTRICT								ROAD BENEFIT RATINGS High, Moderate, or Low (2/H, 1/M, 0/L)							ROAD RISK RATINGS High, Moderate, or Low							FINAL			COMMENTS/RECOMMENDATIONS						
ROAD NUMBER - NFSR	ROAD NAME	FS JURISDICTION (Mileposts)	ROAD LENGTH (FS Jurisdiction Miles)	OBL. MTC LEVEL	SURFACTYPE	ADM/ SUP/ REC SITE/ SEASONAL RD (A/S/R/SE)	ANNUAL MAINTENANCE COST/MILE	RECREATIONAL USE	FIRE/FUELS ACCESS	TIMBER ACCESS	SPECIAL USE ACCESS	RESOURCE MANAGEMENT/RANGE ACCESS	WATERSHED RISK 3/H=High, 1/M=Moderate, 0/L=Low	WILDLIFE RISK 2/H=High, 1/M=Moderate, 0/L=Low	BOTANY RISK 2/H=High, 1/M=Moderate, 0/L=Low	ARCHAEOLOGY RISK 2/H=High, 1/M=Moderate, 0/L=Low	FINANCIAL BURDEN /PUBLIC HEALTH & SAFETY 2/H=High, 1/M=Moderate, 0/L=Low	Total Benefit Score (0-10) If score is >3, then rating = H	Total Risk Score (0-11) If score is >4, then rating = H	Combined Rating (H/H, H/L, L/H, L/L)											
394	MC NASSAR GULCH 4WD	1.10-2.70	1.60	2	NAT	A	***	0	L	0	L	0	L	1	M	0	L	3	HH	0	L	1	M	0	L	0	L	1	4	L/H	Admin Rd
396	GRANITE BURN	1.80-5.35	3.55	2	NAT	R	***	1	M	2	H	2	H	2	H	0	L	1	M	2	HH	0	L	0	L	0	L	7	3	H/H	Rec Site Access
397	TWOBIT	2.92-3.01	0.09	2	NAT	R	***	1	M	2	H	1	M	1	M	0	L	1	M	2	HH	0	L	2	H	0	L	5	5	H/H	Rec Site Access
397	TWOBIT	3.42-5.57	2.15	2	NAT	R	***	1	M	2	H	1	M	1	M	0	L	1	M	2	HH	0	L	2	H	0	L	5	5	H/H	Rec Site Access
397	TWOBIT	5.57-6.14	0.57	2	NAT	A	***	0	L	2	H	0	L	0	L	0	L	1	M	2	HH	0	L	2	H	0	L	2	5	L/H	Admin Rd
397.A	POACHER'S LOOP	0.60-3.60	3.00	2	NAT		***	1	M	2	H	1	M	1	M	0	L	0	L	2	HH	0	L	1	M	0	L	5	3	H/H	
397.B	RADIO TOWER SPUR	0.60-1.92	1.32	2	NAT		***	0	L	2	H	1	M	1	M	0	L	3	H	2	HH	0	L	0	L	0	L	4	5	H/H	Recommend closing to public
397.C	BLACK MTN SPUR	0-1.59	1.59	2	NAT	A	***	0	L	1	M	1	M	0	L	0	L	3	HH	2	HH	0	L	0	L	0	L	2	5	L/H	Admin Rd
398	LOST CANYON	3.27-4.36	1.09	3	NAT		***	2	H	2	H	1	M	2	H	0	L	1	M	2	HH	0	L	1	M	0	L	7	4	H/H	
398	LOST CANYON	4.44-4.46	0.02	3	NAT		***	2	H	2	H	1	M	2	H	0	L	1	M	2	HH	0	L	1	M	0	L	7	4	H/H	
398	LOST CANYON	4.50-7.40	2.90	3	NAT		***	2	H	2	H	1	M	2	H	0	L	1	M	2	HH	0	L	1	M	0	L	7	4	H/H	
398	LOST CANYON	7.40-10.10	2.70	2	NAT		***	2	H	2	H	1	M	2	H	0	L	1	M	2	HH	0	L	1	M	0	L	7	4	H/H	
398.A	MINE ACCESS	0-0.29	0.29	2	NAT		***	0	L	2	H	0	L	0	L	0	L	1	M	2	H	0	L	1	M	0	L	2	4	L/H	
398.B	LENNIE'S OVERLOOK	0-0.20	0.20	2	NAT		***	1	M	2	H	0	L	2	H	0	L	1	M	2	H	0	L	1	M	0	L	5	4	H/H	
399	FLUME GULCH	0.90-1.16	0.26	2	NAT		***	2	H	2	H	2	H	2	H	0	L	1	M	2	HH	0	L	1	M	0	L	8	4	H/H	
399	FLUME GULCH	1.96-3.50	1.54	2	NAT		***	2	H	2	H	2	H	2	H	0	L	1	M	2	H	0	L	1	M	0	L	8	4	H/L	
399	FLUME GULCH	3.50-3.94	0.44	1	NAT		***	0	L	2	H	0	L	1	M	0	L	1	M	0	L	0	L	1	M	0	L	3	2	L/L	
399.A	CACHE CR DITCH EAST	0-1.10	1.10	1	NAT		***	0	L	2	H	0	L	0	L	0	L	1	M	0	L	0	L	1	M	0	L	2	2	L/L	
399.B	CACHE CR DITCH WEST	0-1.70	1.70	1	NAT		***	0	L	2	H	0	L	0	L	0	L	1	M	0	L	0	L	1	M	0	L	2	2	L/L	
422	SAWMILL RIDGE	1.86-4.10	2.24	2	NAT		***	1	M	2	H	1	M	1	M	0	L	1	M	2	HH	0	L	1	M	0	L	5	4	H/H	
424	SPRING CREEK	0.98-2.74	1.76	2	NAT	A	***	0	L	2	H	0	L	0	L	2	H	1	M	2	HH	0	L	2	H	0	L	4	5	H/H	Admin Rd
424.A	BRUSH CREEK	0-0.28	0.28	2	NAT	A	***	0	L	2	H	0	L	0	L	2	H	0	L	2	HH	0	L	2	H	0	L	4	4	H/H	Admin Rd
424.A	BRUSH CREEK	0.55-2.15	1.60	2	NAT	A	***	0	L	2	H	0	L	0	L	2	H	0	L	2	HH	0	L	2	H	0	L	4	4	H/H	Admin Rd
425.A	SOUTH PEAK ACCESS	0-0.41	0.41	2	NAT	A	***	0	L	2	H	0	L	0	L	2	H	0	L	0	L	1	M	1	M	0	L	4	2	H/L	Admin Rd
425.A	SOUTH PEAK ACCESS	0.48-0.57	0.09	2	NAT	A	***	0	L	2	H	0	L	0	L	2	H	0	L	0	L	2	H	1	M	0	L	4	3	H/L	Admin Rd
425.A	SOUTH PEAK ACCESS	0.84-1.00	0.16	2	NAT	A	***	0	L	2	H	0	L	0	L	2	H	0	L	0	L	1	M	1	M	0	L	4	2	H/L	Admin Rd
425.A	SOUTH PEAK ACCESS	1.57-2.23	0.66	2	NAT	A	***	0	L	2	H	0	L	0	L	2	H	0	L	0	L	2	H	1	M	0	L	4	3	H/L	Admin Rd
429	HECKENDORF	0-2.70	2.70	2	NAT	A	***	0	L	2	H	2	H	0	L	2	H	1	M	2	HH	0	L	0	L	0	L	6	3	H/H	Admin Rd
429.A	HECKENDORF NORTH SPUR	0-1.27	1.27	2	NAT	A	***	0	L	2	H	2	H	0	L	2	H	1	M	2	HH	0	L	1	M	0	L	6	4	H/H	Admin Rd
429.B	HECKENDORF WEST SPUR	0-0.40	0.40	2	NAT	A	***	0	L	2	H	2	H	0	L	2	H	1	M	2	HH	0	L	1	M	0	L	6	4	H/H	Admin Rd
		Total Mileage =	221.48																												

Note: \*\*\* indicates that actual costs for maintenance are not available

## **Appendix B. Public Comments:**

On October 10, 2014, the Forest Service posted a draft TAP for the Leadville Ranger District on the PSICC webpage seeking public comments. The Forest Service received a total of four electronic messages in response to the posted draft TAP. Following are the comments from those four individuals/organizations, along with Forest Service responses. Some responses resulted in changes to the draft report, matrix table and maps.

### **Leadville TAP Comments & Answers**

#### **Comment #1: An uneven breakpoint scoring method exists for overall risk and benefits.**

**Answer #1:** It is true that the scoring method used in the Leadville TAP Addendum differs from what is used in the 2009 PSI forest-wide TAP. The reason for this difference is that when specialists started looking at what type of scoring method best fits into a sub-forest analysis, minor adjustments were needed to better reflect an accurate picture of the benefits and risks to roads on the PSI.

There is no need to use the same breakpoint scoring for both the Total Benefit and Total Risk ratings. The method for the scoring of roads that has been used in this TAP Addendum was developed so that informed management decisions can be made in the process of determining an optimum transportation system.

#### **Comment #2: Motorized use in 3A management areas poses high risks and should be limited to non-motorized uses. Specifically, roads 110, 110.J, 198.A, 442, 135.A, 153, & 398 enter 3A areas and should have a HH risk rating and be closed to all motorized use.**

**Answer #2:** The issue of roads located in a 3A management area is being addressed in the ongoing MVUM lawsuit settlement process. The Leadville District will fully comply with the final decision for these routes.

#### **Comment #3: A “high value recreation experience” for a road must be properly defined.**

**Answer #3:** In Section 5.2 of the TAP, a High Benefit Recreational Use is described as follows:

*A High (H) rating was assigned to roads that are the primary access routes to developed recreation sites/facilities, or primary access routes to popular dispersed recreation areas, or the road has a high value as a recreation experience.*

The ID team believes that a high volume of motorized use is not necessarily essential for a road to be assigned a High Recreational Benefit rating.

**Comment #4: The recreational benefit of roads that access quiet trails is not necessarily high. (A list of 24 specific roads to look at was provided)**

**Answer #4:** Recreational use ratings for the twenty four specific roads were re-evaluated and the results of that re-evaluation are as follows:

- Change Rec Use rating for NFSR 110.J from High to Moderate
- Change Rec Use rating for NFSR 137 from High to Moderate
- Change Rec Use rating for NFSR 137.A from High to Moderate
- Divide NFSR 368 into two segments; from 1.40 – 2.10 & 2.10 to 2.80; change Rec Use on second segment from High to Low
- Change Rec Use rating for NFSR 381 (MP 0.10-2.75) from Moderate to High
- Change Rec Use rating for NFSR 382 from High to Moderate
- Change Rec Use rating for NFSR 386 from High to Moderate
- Change Rec Use rating for NFSR 387 from High to Moderate
- Change Rec Use rating for NFSR 396 from High to Moderate

**Comment #5: Mixed motorized use on certain roads creates additional risk. (A list of 6 specific roads to look at, along with adjacent spur roads, was provided)**

**Answer #5:** The risk ratings for Public Health & Safety took into consideration the presence of motorized mixed use on the roads on the Leadville Ranger District. On campground roads, OHV use is only allowed for the purpose of entering or leaving the site (36 CFR 261.16(o)). Financial Burden/Public Health & Safety risk ratings for the six specific roads and spurs were re-evaluated and the results of that re-evaluation are as follows:

- No changes are needed to the ratings for Financial Burden/Public Health & Safety

**Comment #6: The risks posed by unauthorized motorized use off designated roads must be fully considered. Specifically, roads 109, 110, 111, 111.A, 111.B, 113, 380, 381, 369, 387, 387.D, 398, 427, 427.A, 427.B & 429 show evidence of unauthorized use and should have elevated risks.**

**Answer #6:** See the 2009 PSI TAP, Section 4.7, Question and Answer AU(2), and a District-specific answer to that question as follows:

Unauthorized motorized use off designated routes is an enforcement issue, which is a growing concern on the Leadville Ranger District. The Leadville MVUM specifically states that, "This motor vehicle travel map identifies those roads, trails, and areas designated for motor vehicle use under 36CFR 212.15 for

the purpose of enforcing the prohibition at 36CFR 261.13". Further, the MVUM states, "This MVUM shows the National Forest System roads, National Forest System trails, and areas on National Forest System lands in the LRD that are designated for motor vehicle use pursuant to 36 CFR 212.51." Therefore, unauthorized motorized use off of designated routes is prohibited, and the risks associated with unauthorized routes will not be considered in this TAP.

**Comment #7: Impacts of noise must be fully considered in this TAP.**

**Answer #7:** See the 2009 PSI TAP, Section 4.3, Question and Answer EF(5), and a District-specific answer to that question as follows:

Motorized and non-motorized uses are equally legitimate uses on the National Forest roads system, and motorized use noise is to be expected in areas open to motorized use. In 2010 a law in the state of Colorado took effect requiring ATV's and dirt bikes operating on public lands to meet sound limits of 93dB(A). While in some areas it is feasible to separate the motorized from the non-motorized, in other areas total separation is unlikely as there is limited resource.

The roads listed by the respondents that they state are causing conflicts with quiet recreationists are roads open to all vehicles and are popular with OHV's and high clearance vehicles. Noise from motorized vehicles should be expected on these roads.

**Comment #8: Public Use of administrative roads poses additional risks that must be fully considered.**

**Answer #8:** See answer to Question # 6 above.

**Comment #9: Roads in or near roadless and Wilderness pose additional risks for those areas.**

**Specifically, roads 109, 110.J, 135.A, 137, 137.A, 380, 381, 382, 387, 391, 393, 397, 398 & 399 are near roadless or Wilderness areas and should have higher risk ratings.**

**Answer #9:** Impacts to Roadless and Wilderness areas are considered when determining Wildlife and Botany risk ratings, as well as Recreational Use benefit ratings. All roads identified by the commenters were re-evaluated for Wildlife and Botany risk ratings, as well as Recreational Use benefit rating, and the results of that re-evaluation are as follows:

- All roads were assessed according to the criteria described for wildlife risks. Nine of these fourteen roads listed here have a rating of "2", which is the highest risk rating available. The exceptions to this are roads 110.J, 135.A, 137, 137.A, and 393. The appropriate risk ratings were applied to these roads through the criteria outlined in the document.
- No changes are needed to the ratings for Botany Risk

- Change Rec Use rating for NFSR 110.J from High to Moderate
- Change Rec Use rating for NFSR 137 from High to Moderate
- Change Rec Use rating for NFSR 137.A from High to Moderate
- Change Rec Use rating for NFSR 380 from Moderate to Low
- Change Rec Use rating for NFSR 381 (MP 0.10-2.75) from Moderate to High
- Change Rec Use rating for NFSR 382 from High to Moderate
- Change Rec Use rating for NFSR 387 from High to Moderate

**Comment #10: Road density and the impacts on wildlife needs to be fully considered. Specifically, all the roads at the east end of Turquoise Lake are having a negative impact to wildlife.**

**Answer #10:** Route density information was used throughout this report to inform ratings to ensure compliance with specific direction in the Forest Plan. The roads at the east end of Turquoise Lake are part of the Turquoise Lake Recreation area and provide essential access to campgrounds and other recreational sites. Individually, the effects of these roads are negligible. However, it is true that the network of campground roads does create a high density of roads and could have negative effects for wildlife using the area. Each road should have a rating increase on the east end of Turquoise Lake to a “1”, reflecting this effect. This applies to roads 103.A, B, C; 104.A, K, KA, L, M, N, O, P, Q, QA, T, and 127.A. Other roads in this area not listed here already have a rating of 1 or more and do not need to be increased.

All roads identified by the commenters were re-evaluated for wildlife risk rating, and the results of that re-evaluation are as follows:

- Change Wildlife Risk rating for NFSR 103.A from Low to Moderate
- Change Wildlife Risk rating for NFSR 103.B from Low to Moderate
- Change Wildlife Risk rating for NFSR 103.C from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.A from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.K from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.KA from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.L from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.M from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.N from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.O from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.P from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.Q from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.QA from Low to Moderate
- Change Wildlife Risk rating for NFSR 104.T from Low to Moderate
- Change Wildlife Risk rating for NFSR 127.A from Low to Moderate

**Comment #11: Roads with inadequate seasonal closures in elk production areas require a higher risk rating. Specifically, roads 130, 130.B, 130.C, 136, 160 & 386 have inadequate seasonal closures and should have a higher wildlife risk rating.**

**Answer #11:** FR 130 and 386 are not within mapped elk production range. The remaining roads have closures from Dec 1- June 1<sup>st</sup>. Though there are currently effective closures in place, they do not extend into the complete closure dates stated in the Forest Plan (Through June 30<sup>th</sup>.) Therefore the ratings for roads 130.B, 130.C, 136, and 160 should be increased from 0 to 1.

All roads identified by the commenters were re-evaluated for wildlife risk rating, and the results of that re-evaluation are as follows:

- Change Wildlife Risk rating for NFSR 130.B from Low to Moderate
- Change Wildlife Risk rating for NFSR 130.C from Low to Moderate
- Change Wildlife Risk rating for NFSR 136 from Low to Moderate
- Change Wildlife Risk rating for NFSR 160 from Low to Moderate

**Comment #12: Roads in bighorn sheep lambing areas pose a higher risk to wildlife (110.J, 381, and 390).**

**Answer #12:** Approximately 1 mile of the end of road 110.J goes into lambing range. This last mile portion (from milepost 3.60-4.60) should be split to an “H” but the majority of the road is not within lambing habitat and the majority of this road will remain as originally rated. Less than 0.5 miles of the beginning of road 381 is within lambing habitat and this road is already designated as an “H” risk for wildlife and does not need changed. The majority of the road is not within lambing habitat. Road 390 does warrant a “HH” rating due to the fact that multiple species winter range as well as lambing habitat is passed through.

All roads identified by the commenters were re-evaluated for wildlife risk rating, and the results of that re-evaluation are as follows:

- Divide NFSR 110.J into two segments; from 0.00 – 3.60 & 3.60 – 4.60; change Wildlife Risk on second segment from Moderate to High
- Change Wildlife Risk rating for NFSR 390 from High to Double High

**Comment #13: Roads in Big Game winter range pose a high risk to wildlife. Specifically, roads 102 & 110.A pass through big game areas and should have high wildlife risk ratings.**

**Answer #13:** 102 does not pass through mapped big game winter range. The beginning portion that passes through winter range is a county road. For road 110.A, approximately 0.2 miles of this road passes through mapped winter range. This road virtually does not get any use except during the summer months for hiking and mainly during fall hunting season. The road doesn't pose a threat to the elk winter range because of the pattern of use does not coincide Road.

All roads identified by the commenters were re-evaluated for wildlife risk rating, and the results of that re-evaluation are as follows:

- No changes are needed to the Wildlife Risk ratings. Specifically, NFSR 102 does not pass through big game winter range and NFSR 110.A doesn't pose a risk because of minimal use during winter

**Comment #14: The benefit of roads for hunting may be over-rated.**

**Answer #14:** The use for hunting purposes is one consideration in evaluating the recreational use benefit of roads. Hunting is a legitimate dispersed recreational use of public lands. Many roads provide access into hunting areas and allow for removal of harvested big game animals. Certain roads may provide ATV access for older hunters and others who may no longer be able to hike long distances. No road was given a recreational use rating based solely on use by hunters.

**Comment #15: A list of roads was submitted where the recreational use benefit rating was questioned. The road numbers are: 105.E, 110, 110.J, 113, 137, 153, 380, 381, 368, 369 & 369.C.**

**Answer #15:** All roads identified by the commenters were re-evaluated for recreational use benefit rating, and the results of that re-evaluation are as follows:

- Change Rec Use rating for NFSR 110.J from High to Moderate
- Change Rec Use rating for NFSR 137 from High to Moderate
- Change Rec Use rating for NFSR 380 from Moderate to Low
- Divide NFSR 368 into two segments; from 1.40 – 2.10 & 2.10 to 2.80; change Rec Use on second segment from High to Low
- Change Rec Use rating for NFSR 381 (MP 0.10-2.75) from Moderate to High

**Comment #16: A list of roads was submitted where the fire/fuels access benefit rating was questioned. The road numbers are: 110.J, 153, 381 & 398.**

**Answer #16:** All roads identified by the commenters were re-evaluated for fire/fuels access benefit rating, and the results of that re-evaluation are as follows:

Road 110.J is the only motor vehicle access into the South Halfmoon Creek Drainage. Road 381 is similar in that it provides the only motorized access into the Lake Fork Drainage and Trail Head which provides access into the adjacent wilderness. Road 398 provides access into the Lost Canyon area. There is a private home and a mine that is accessed by this road and used for emergency services. The ability for emergency responders to utilize these roads is necessary to provide access for fire suppression and search and rescue operations.

- No changes are needed to the Fire/Fuels Access ratings

**Comment #17: A list of roads was submitted where the timber access benefit rating was questioned. The road numbers are: 381 & 398.**

**Answer #17:** Road 381 is bordered on both sides by wilderness and therefore this rating should be downgraded to "0", a low benefit for timber access. Road 389 does access an area where there have been mountain pine beetle outbreaks in the past and it is not inconceivable that this area could provide quality timber products. The rating of "1" is appropriate for this road.

All roads identified by the commenters were re-evaluated for timber access benefit rating, and the results of that re-evaluation are as follows:

- Change Timber Access rating for NFSR 381 from Moderate to Low

**Comment #18: A list of roads was submitted where the watershed risk rating was questioned. The road numbers are: 110, 111.A, 111.B, 137, 387.D, & 429.**

**Answer #18:** All roads identified by the commenters were re-evaluated for watershed risk rating, and the results of that re-evaluation are as follows:

Road 110 known as the Halfmoon Road is a highly used and complex road system. In this new travel analysis the road was broken down into sections to reflect changes in road conditions, use and watershed risk potential. The road conditions west of the Mt. Massive trailhead at the junction of 110 and 110.J begins to limit the amount and type of vehicular traffic that precedes westward. Both water

crossings are relatively stable as indicated by monitoring and water quality testing conducted over the years westward from County Road 11 to the Champion Mine site. As noted, these water crossings further reduce the amounts and types of vehicular traffic thus reducing potentially negative environmental impacts. I do not see a need to change the current rating at this time. This does not rule out changes to the watershed risk rating in the future in response to changes in environmental factors, road conditions and use patterns.

Roads 111.A and 111.B: There are erosion concerns at where 111.A meets 111.B and connects with 111. This was previously closed off to force traffic to use the eastern entrance to 111.A leading to 111.B which is more stable. This closed off section was not rehabilitated and is still prone to continued natural erosive processes. Only this small section of 111.A and 111.B were areas of concern while the remainder of the road is stable posing a low watershed risk. Thus an overall moderate watershed risk was deemed moderate. I do not see a need to change the current rating at this time. This does not rule out changes to the watershed risk rating in the future in response to changes in environmental factors, road conditions and use patterns.

The 137 road into Buckeye Gulch does go through private before entering forest and this does limit vehicular use which is beneficial in the long run. It must be realized that the road does allow access to mining claims and is a popular access for sportsmen and sports women, and hikers. Though there are a few spots that have the potential for erosion and sedimentation, the majority of the road is stable and thus a moderate rating was reached. I do not see a need to change the current rating at this time. This does not rule out changes to the watershed risk rating in the future in response to changes in environmental factors, road conditions and use patterns.

It is agreed that road 387.D is difficult to enforce and does receive some illegal ATV traffic from residents living along the eastern border of the National Forest. Last inspection showed that there was little overall use of this spur. The concern was over its crossing a creek and some low lying areas in the road that seasonally wet/boggy. A major concern would be if use increases drastically for whatever reason. This road has a value for timber and for firefighting access. I do not see a need to change the current rating at this time. This does not rule out changes to the watershed risk rating in the future in response to changes in environmental factors, road conditions and use patterns.

Road 492 is being rehabilitated after providing access for a series of proscribed burns in the 4 Elk area. It has been proposed to close it off where it forks to create a turn around. This will remediate many concerns about watershed risks associated with leaving 429.A and 429.B open. The first steep section of 429 entering the forest was already repaired and stabilized. I do not see a need to change the current rating at this time. This does not rule out changes to the watershed risk rating in the future in response to changes in environmental factors, road conditions and use patterns.

**Comment #19: A list of roads was submitted where the wildlife risk rating was questioned. The road numbers are: 109, 110, 110.J, 111.A, 111.B, 124, 125.B, 131, 382, 387.D, 390.A & 429.**

**Answer #19:** 109- CPW habitat maps of winter range are used in lieu of 5B management areas – they do not have additive in effects. However, the lower portion of this road does pass through both mule deer and elk winter range and therefore should be afforded “HH” for the portion of this road to which it applies. This would be the first 2 miles of road 109 from Highway 24. 110.J - Approximately 1 mile of the end of road 110.J goes into lambing range. As stated in comment 9, this last mile portion should be split to a “2” rating but the majority of the road is not within lambing habitat and the rating for the majority of the road will not change. 111.A and 111.B – the wildlife rating is already a “HH” and cannot go any higher. 124, 125.B, and 131 – These three roads should have their ratings elevated from “H” to “HH” because they lack effective seasonal closures in more than two big game species winter or parturition ranges. 382- This road was designated as H due to the fact that of the proximity of the breeding pond. There are no additional species of concern (winter range etc.) to elevated it further. 387.D – this road is already designated a “HH” and cannot go any higher. 390.A – The comment states, “Road 390.A should be elevated to HH because it passes through both elk production and bighorn winter range”. Though this is true, they do not overlap at any point so the H rating is correct. 429 – this road has already been designated as “HH” and cannot go any higher.

All roads identified by the commenters were re-evaluated for wildlife risk rating, and the results of that re-evaluation are as follows:

- Divide NFSR 109 into three segments; from 0.10-0.70, 0.80-2.00, and 2.00-5.80; change Wildlife Risk rating on first and second segments from High to Double High
- Divide NFSR 110.J into two segments; from 0.00 – 3.60 & 3.60 – 4.60; change Wildlife Risk on second segment from Moderate to High
- Change Wildlife Risk rating for 124 from High to Double High
- Change Wildlife Risk rating for 125.B from High to Double High
- Change Wildlife Risk rating for 131 from High to Double High

**Comment #20: One road was submitted where the archaeology risk rating was questioned. The road number is: 390.A.**

**Answer #20:** The road identified by the commenter was re-evaluated for archaeology risk rating, and the results of that re-evaluation are as follows:

- Divide NFSR 390.A into two segments; from 0.00 – 0.40 & 0.40 – 2016; change Archaeology Risk rating on first segment from Moderate to High

**Comment #21:** A list of roads was submitted where the Financial Burden/Public Health & Safety risk rating was questioned. The road numbers are: 103, 104, all 104 spur roads, 110, 110.J, 111.A, 111.B, 113, 135.A, 153, 381, 368, 369, 387.D, 390, 398 & 429.

**Answer #21:** All roads identified by the commenters were re-evaluated for Financial Burden/Public Health & Safety risk rating, and the results of that re-evaluation are as follows:

- No changes are needed to the Financial Burden/Public Health & Safety Risk ratings

**Comment #22:** Roads that are seldom used should be considered for decommissioning. Specifically, roads 110.J, 135.A, 380 & 137.A, 109 & 399 are little used and should have low value.

**Answer #22:** The amount of use that a road receives does not necessarily correlate with the benefit ratings in the TAP. There are various reasons for rating a road as having a high or low value, not just the number of vehicles that are perceived to be using it. This entire process of rating the roads helps draw conclusions on which roads should be decommissioned or switched to an administrative road. When a rating of a road returns a value of “low benefit” and “high risk”, then that would be at the top of the list to look at for these types of actions. However, none of the roads stated here have received that type of rating.

**Comment #23:** The Minimum System doctrine is a guideline that is necessary to accurately rate the roads in the TAP.

**Answer #23:** One of the many objectives of this TAP is to help identify the minimum road system needed for public and agency access in order to achieve forest and resource management goals and safeguard ecosystem health. The results from the TAP will provide agency decision makers with the data needed to improve the transportation system by addressing the risks associated with important minimum road system roads and by deciding the future for roads that may not be needed as part of the minimum road system.