Background: Roads Analysis and the Motorized Travel Planning Process

On January 10, 2003 a Forest-Wide Roads Analysis was completed for the Dixie and Fishlake National Forests. An opportunity to supplement the 2003 Roads Analysis occurred as the Dixie National Forest evaluated all motorized routes in the development of a Motorized Travel Plan. While the 2003 Roads Analysis assessed only the higher development level roads (Levels 3, 4 and 5[1]), the Dixie National Forest Motorized Travel Planning effort would evaluate all motorized routes across the Forest. The following describes the Motorized Travel Planning process and formulation of this Roads Analysis Supplement.

Starting early fall of 2004, the Dixie National Forest involved a number of qualified agency specialists located at the District and Supervisor's Office to begin answering detailed questions about each motorized route on the Forest. These questions were designed to provide information that would be needed to carry the Motorized Travel Plan through the environmental assessment process that would follow. Additionally, in order to analyze routes as a supplement to the 2003 Roads Analysis, the questions were based upon those suggested in the Forest Service publication titled *Roads Analysis: Informing Decisions about Managing the National Forest Transportation System (1999).*

In order to break the Forest into more manageable sub-units, the Motorized Travel Plan utilizes 23 geographic areas developed through agency and public input during the early stages of the Dixie's Forest Plan Revision process. Questions were written for evaluation by each resource specialist area, by geographic area, and for each route on the inventory. A spreadsheet was made to ask each question to Forest Service specialists and capture their responses. An extensive GPS (Global Positioning System) route inventory served as the base data layer for this process, and the careful review of routes also served to identify gaps in information, such as routes missing form the inventory. As a result, the GPS inventory work continued until determined complete in the summer of 2005. The task of forming District route evaluation teams and filling out spreadsheets took more than a year to complete, ending before the New Year 2006. In many cases, the employees most knowledgeable of on the ground field conditions and management were also responsible for numerous other responsibilities, often leading to scheduling difficulties in this process.

Meanwhile, the Dixie National Forest obtained the services of a company called Advanced Resource Solutions, Inc. (ARS) to help organize the tremendous amount of information being collected for the Motorized Travel Planning effort. ARS specializes in providing support to land management agencies that undergo the travel planning process, and in assisting agency staff with addressing the legal and environmental concerns encountered throughout the process. ARS developed the Route Evaluation Tree Process[©], a systematic flowchart-based system that collects and organizes data necessary to undertake the many steps in travel management planning, which Dixie National Forest utilized for this process. ARS also provides a database for organizing and retrieving information to be utilized in the route evaluation/designation process.

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[1] These maintenance levels are described in *FSH 7709.58 – Transportation System Maintenance Handbook* and are as follows:

Level 3 – Roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material.

Level 4 – Roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated.

Level 5 – Roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated.

By mid 2004, ARS had undertaken the tasks of both entering the spreadsheet data collected by the Dixie National Forest and in conducting additional research of potential issues. Beginning in the fall of 2005, ARS assisted the Dixie National Forest Motorized Travel Plan interdisciplinary team as they reviewed and refined the agency information collected over the previous months. As part of this assistance, ARS captured additional data identified during the evaluative discussion, while updating the database for environmental analysis and the project record. This work accounted for over six weeks of time with the interdisciplinary team (ending in February 2006). The team evaluated possible management scenarios, which led to the development of a proposed action. Ultimately, the proposed action was finalized upon completion of a detailed follow-up review by each Ranger District, which occurred during the summer and fall of 2006.

Route Reports are a product of the evaluation process, generated by the Route Evaluation Tree© software. The sections below describe the proper use and understanding of Route Reports as the instruments that supplement the 2003 Roads Analysis. Please refer to the attached Sample Route Report and appendices while reviewing these instructions.

Route Reports in the Dixie NF Motorized Travel Plan

Route reports reflect data captured throughout the route evaluation process. Each route has an associated report that identifies general information about the route, how evaluation questions were answered, and individual data items identified for each route. Individual routes may have been divided into multiple segments to assist with the evaluation process; therefore a single route (e.g., route 45125) may have multiple route reports corresponding to individual segments of the longer route (e.g., 45125A, 45125B, 45125C).

The information gathered during route evaluation was derived from direct agency input (e.g., previous planning documents, professional or personal knowledge by agency management or line staff), hard-copy maps, and electronic maps and data (i.e., GIS-based data). Input was also provided by members of the general public, organizations and local governments through a variety of workshops and meetings held over the past three years, and from formal and informal comments received during that time.

Each route report is broken into five main information groups, displaying the answers to the questions asked about each route. The questions about each route are asked in a sequential non-hierarchical format to systematically cover the same topical issues for each route (these topics are discussed further below). However, the specific questions asked about a route can vary slightly in structure, depending upon how each question is answered by the agency staff, thus tailoring the next question(s) to the specific route issues.

To better understand the information provided in each report, please remember a key point when reviewing the route reports:

"Yes" or "No" shows a response given to a categorical question, indicating that certain known or potential conditions are believed to exist or not to exist. Answers reflect the professional judgment of Forest Service employees based on their familiarity with the route, area and conditions.

To further clarify the response given to a categorical question, specific issues, uses, benefits, and concerns related to the routes were also identified. These specific items that received a "Yes" response appear on the Route Report. Items with further research needs are may also be identified. A "No" response to an item would indicate that the issue does not exist or it is unknown. However, due to the large number of potential "No" responses that could appear, those items do not appear on each route report (see Appendix A, B, and C for a complete list of those potential items as further discussed below).

If additional information is received by Dixie National Forest regarding a "Yes" or "No" response, or regarding a condition that remain unknown, the data will be reviewed and updated accordingly.

Section 1 – Route Overview

The first section of the route report shows basic information about the route:

- Route number ("Other/Common Name" to the left refers to the Forest Service route number, as it is found on project maps. The bold number on the right begins with two letters that correspond to the geographic area in which the route is located)

- Who assisted with the evaluation

- Route characteristics (e.g., length, evidence of construction)

- Which entity has jurisdiction of the land over which the route passes

- Whether any group or individual has offered a proposal as to the designation for the route

- Any additional notes about the route

Section 2 - Commercial, Administrative, Property, and Economics (CAPE)

The second section of the route report identifies information on actual or potential commercial, administrative, or property-access uses, needs or impacts, as well as actual or potential economic impacts of the route (e.g., the route is a timber harvesting haul-route, is a tourism destination point, or the route provides a right-of-way).

As described earlier in this document, the Forest Service was prompted by the Route Evaluation Tree Process© to consider potential commercial, administrative, property, and economics-access (CAPE) uses and needs for each route and the surrounding area. These items were identified by selecting drop-down menu items within the Route Evaluation Tree© software. CAPE drop-down menu items are shown in Appendix A. For each route, the Forest interdisciplinary team identified known or potential commercial, administrative, property, and economics issues by specifying whether the route was primary (P), secondary (S), or tertiary (T) for the use in question.

- "Primary" or "P" indicates that the route is the main or only route for accessing the CAPE issue identified; for items that do not relate to an access level, "Primary" or "P" indicates the level for the item was high on or from that route.

- "Secondary" or "S" indicates that the route may be utilized for accessing the CAPE issue identified, but is not the primary route utilized for access; for items that do not relate to an access level, "Secondary" or "S" indicates the level for the item was moderate on or from that route.

- "Tertiary" or "T" indicates that the route may be utilized for accessing the CAPE issue identified, but it is not the primary or secondary route utilized for access; for items that do not related to an access level, "Tertiary" or "T" indicates the level for the item was low on or from that route.

At the beginning of the Motorized Travel Planning Process, Forest Service employees answered questions relating to CAPE issues. Answers to these questions for each route were compiled in a spreadsheet (Excel file) and the data subsequently incorporated into the Route Evaluation Tree© software. Forest Service employees primarily answered the questions as "Yes" or "No", without a determination of whether the access use, need, or impact was primary, secondary, or tertiary. Therefore, those questions were all imported into the Route Evaluation Tree© software as "Primary", but determinations of primary, secondary, or tertiary were made later, during the interdisciplinary team route evaluation.

Section 3 – Special Resources

This section shows information about known or potential resource impacts, concerns and benefits. It prompts the interdisciplinary team to think about potential methods to avoid, mitigate, or minimize known and potential impacts.

By utilizing the Route Evaluation Tree Process[©] and its software the interdisciplinary team was systematically prompted to consider known or potential resource impacts and concerns, as well as any known benefits for each route, individually and in consideration with the surrounding routes and landscape. These were identified by selecting from a list of drop-down menu items in the Route Evaluation Tree[©] software, shown in Appendix B. If the item was identified as "yes", it appears on the route report. If there was a question about whether an item is a "yes" or "no", memos indicating such were added to the appropriate question to indicate the uncertainty. These memos are used as a reference point for further research needs. If the item was not identified affirmatively as a potential concern/impact, it could mean that either the item was not a concern or that the agency interdisciplinary team was not aware of any specific concerns at the time of evaluation (e.g. cultural resource concerns).

At the beginning of the motorized travel planning process, Forest Service employees answered questions relating to special resources. Answers to the questions for each route were compiled in a spreadsheet and incorporated into the Route Evaluation Tree[©] software for later evaluation by the interdisciplinary team. Determinations of primary (P), secondary (S), or tertiary (T) are not relevant here, so do not appear on this section of the Route Report.

Section 4 – Public Uses

This section provides information on public uses of the route. The drop-down menu items considered are shown in Appendix C. At the beginning of the motorized travel planning process, Forest Service employees answered questions about recreation and public uses. Answers to the questions for each route were compiled in a spreadsheet and incorporated into the Route Evaluation Tree[©] software for later evaluation by the interdisciplinary team. For each route, the interdisciplinary team identified known or potential public uses by specifying whether the route was primary (P), secondary (S), or tertiary (T) as defined above under the discussion for Section 2.

Section 5 – Route Redundancy

This section asks the interdisciplinary team to consider whether the commercial, private-property, or public uses of this route can be adequately met by another route that minimizes impacts (direct, indirect, and cumulative) to sensitive resources.

This question may appear in one of three formats on the Route Reports, depending upon the responses provided to the CAPE and public uses questions asked at an earlier stage in the process:

- **Both CAPE and public use** items were identified for a route in consideration of the route individually and collectively with surrounding routes and areas:

    This question is asked as: *Can the commercial, private-property or public uses of this route be adequately met by another route that minimizes impacts to the sensitive resources identified above or that minimizes cumulative effects on various other resources?*

- **Only CAPE items** (no public uses) were identified for a route in consideration of the route individually and collectively with surrounding routes and areas:

This question is asked as: *Can the commercial or private-property uses of this route be adequately met by another route that minimizes impacts to the sensitive resources identified above or that minimizes cumulative effects on various other resources?*

- **Only public use items** (no CAPE) were identified for a route in consideration of the route individually and collectively with surrounding routes and areas:

  This question is asked as: *Can the public uses of this route be adequately met by another route that minimizes impacts to the sensitive resources identified above or that minimizes cumulative effects on various other resources?*

Section 6 – Opportunities / Recommendations

The Opportunities / Recommendations are displayed as one of 3 potential designations for the route. Each designation identifies specific information relating to that designation type:

- **Close** - identifies that the route will be closed to all motorized travel and allowed to naturally reclaim or if there will be some restoration work necessary.
- **Limit** - identifies the type of limit for the route as limit by user, transportation type, season or some combination of those.
- **Open** - identifies that the route would be available for all legal uses.

Summary

A route report has been prepared for each route, or each segment of the route as discussed above. Route Reports generally identify both the known, as well as potential issues, needs, concerns and benefits identified by the Dixie National Forest for Motorized Travel Planning. These route reports are reviewed not only by the Dixie National Forest, but also by cooperating agencies, community organizations, and other members of the public. The input from these agencies, organizations, and members of the public is a very important part of the Motorized Travel Planning process.

If you wish to comment on a route or provide the Forest with additional information, please use the form provided in Appendix D. These forms will then be compiled and reviewed by Dixie National Forest as part of the Motorized Travel Planning process.

Appendix A
Commercial, Administrative, Property and Economics (CAPE)
Drop-Down Menu Items

Uses	Specifically	Questions Answered by FS on Original Spreadsheet[2]
Vegetation (Timber and Fuels) - Sales and Management	Does the route provide access to on-going timber sales, firewood gathering opportunities, or post-and-pole products?	x
Vegetation (Timber and Fuels) - Sales and Management	Does the route provide access to on-going timber sales?	x
Vegetation (Timber and Fuels) - Sales and Management	Does the route specifically assist in fuels management?	x
Vegetation (Timber and Fuels) - Sales and Management	Does the route provide access for future vegetation management projects?	x
Vegetation (Timber and Fuels) - Sales and Management	Necessary route, possible haul route, long term needed	x
Vegetation (Timber and Fuels) - Sales and Management	Convenient route or not needed for 5 years or more, but leave prism	x
Vegetation (Timber and Fuels) - Sales and Management	Not needed for 20-30 years but leave prism	x
Vegetation (Timber and Fuels) - Sales and Management	Not likely to be needed in foreseeable future	x
Range	Does the road access permitee camps, water developments, and other improvements (fences, corrals, salt/mineral blocks, troughs)?	x
Range	Does the road access permitee camps, water developments, and other improvements?	x
Range	Does the route hinder livestock management (i.e. gated)?	x
Range	Does the route aid or hinder (i.e., gates being left open) livestock management?	x
Range	Does the route have noxious weed issues?	x
Range	Necessary route, long term needed	x
Range	Convenient route or not needed for 5 years or more, but keep prism	x
Range	Not needed for 20-30 years, but keep prism	x
Range	Not likely to be needed in forseeable future	x
Wildland Fire	Does the route serve as a main access for firefighting?	x
Wildland Fire	Does the route serve as an escape route for Wildland Urban Interface (could include cabins, campgrounds, etc)?	x
Wildland Fire	Does the route serve as an escape route for Wildland Urban Interface?	x
Wildland Fire	Does the route provide access to legal water sources?	x
Wildland Fire	Does the route provide access to repeaters, weather stations, look-outs, etc?	x
Wildland Fire	Accesses a lookout or helibase or a large geographic area; provides a level of safety to public or firefolks	x
Wildland Fire	Necessary road. Provides access to lookout, helibase, large geographic area; provides a level of safety to public or firefolks	x
Wildland Fire	Provides convenient access only	x
Wildland Fire	Provides duplicate access or access to a small area	x
Lands / Special Uses	Does the route provide access to private or other agency land?	x
Lands / Special Uses	Is there an easement or legal right-of-way? Alternative route available?	x

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[2] The specific wording of the question from the Forest Service spreadsheets may have evolved as the spreadsheet process progressed so some items have similar wording. The questions were converted to affirmative statements in the route reports for a clearer representation of how the question was answered by the Forest Service staff.

Uses	Specifically	Questions Answered by FS on Original Spreadsheet[2]
Lands / Special Uses	Is there an easement or legal right-of-way? Alternative route available? S.U.	x
Lands / Special Uses	Is there an easement or legal right-of-way?	x
Lands / Special Uses	Does the route provide access for recreation or non-recreation special uses?	x
Lands / Special Uses	Necessary route	x
Lands / Special Uses	Route provides convenient access	x
Lands / Special Uses	Route not necessary	x
Commercial Ranching Facility	Corral / Handling Pen	
Commercial Ranching Facility	Diversion Dam	
Commercial Ranching Facility	Enclosed Tank, Trick Tank	
Commercial Ranching Facility	Fence	
Commercial Ranching Facility	Pond, Reservoir	
Commercial Ranching Facility	Range Pipeline	
Commercial Ranching Facility	Spring Head Works	
Commercial Ranching Facility	Tank	
Commercial Ranching Facility	Trough	
Commercial Ranching Facility	Well	
Commercial Ranching Facility	Cattleguard	
Commercial Ranching Facility	Gate	
Commercial Ranching Facility	Ranch HQ	
Commercial Ranching Facility	Ranch Shack	
Commercial Ranching Facility	Salt Lick	
Commercial Ranching Facility	Spring Development	
Commercial Ranching Facility	Trailing Route	
Commercial Ranching Facility	Water Catchment	
Commercial Ranching Facility	Windmill	
Commercial Ranching Facility	Other	
Administrative Uses	Administrative Site	
Administrative Uses	10A# - Research Natural Areas	
Administrative Uses	Other	
Administrative Uses	Compliance/Enforcement	
Administrative Uses	Fire Suppression	
Administrative Uses	Monitoring Site	
Administrative Uses	Predator Control	
Administrative Uses	Resource Treatment	
Administrative Uses	Vegetation Treatment	
Administrative Uses	Weather Station	
Administrative Uses	Weed Abatement	
Administrative Uses	Wildlife Agency Facility	
Administrative Uses	Wildlife Agency Monitoring	
Administrative Uses	Wildlife Resource - Frequent	
Administrative Uses	Wildlife Resource - Infrequent	
Administrative Uses	Wildlife Water / Guzzler	
Utilities	Oil Well	
Utilities	Hydrologic Ram	
Utilities	Municipal Supply Watersheds	
Utilities	Radio Facility	
Utilities	Cell Site / Communication Site	
Utilities	Communication Site	

Uses	Specifically	Questions Answered by FS on Original Spreadsheet[2]
Utilities	Electrical Transmission	
Utilities	Gas Pipeline	
Utilities	Irrigation Canal	
Utilities	Telephone	
Utilities	Water Pipeline	
Utilities	Wind Energy	
Utilities	Other	
Mining	Oil Well	
Mining	Active Mine	
Mining	Inactive Mine	
Mining	Mining Claim	
Mining	Notice	
Mining	Mineral Material Site	
Mining	Other	
Future Timber Potential	In or Through	
Private Property	Access	
Private Property	Other	
Officially Recognized in Federal Planning Document and Maintained		
Military Facility	Emitter Site	
Military Facility	Ordinance Area	
Military Facility	Bombing Site	
Military Facility	Target Zone	
Military Facility	Other	
RS 2477	County Assertion	
RS 2477	Other Assertion	
RS 2477	Perfected Claim	
RS 2477	Other	
Other Uses	Firewood Gathering	
Other Uses	Post / Pole Cutting	
Other Uses	Airport / Airstrip	
Other Uses	Other	
Tourism	Route is recognized as contributing to the local economy (e.g. recognized in a local plan)	

Appendix B
Special Resources Drop-Down Menu Items

Special Status Species	Specifically	Questions Answered by FS on Original Spreadsheets [3]
Engineering	Is the route substantially brushed in, in very poor condition or a particular burden for maintenance?	x
Engineering	Is this route the cause of safety concerns?	x
Engineering	Is the route duplicated within 0.5 mile?	x
Engineering	Necessary road, long term needed	x
Engineering	Not needed for 20-30 years but leave prism	x
Engineering	Route not needed for 5 years or more, but leave prism	x
Engineering	Not likely to be needed in forseeable future	x
Hydrology	Does the route impact wetlands or riparian areas?	x
Hydrology	Does the route impact channels, floodplains, wetlands or riparian areas?	x
Hydrology	Does the route impact channels, floodplains on wetlands?	x
Hydrology	Does the route cause soil erosion or mass failure?	x
Hydrology	Does the route contribute to erosion or slope failure?	x
Hydrology	Low risk of failure. Few to no sediment sources and erosional features. Seasonally maintained.	x
Hydrology	None or Low risk to soil & water resources	x
Hydrology	None to low risk to soil & water resources	x
Hydrology	Low risk of failure. Some sediment sources and erosional features.	x
Hydrology	Moderate risk of failure. Some sediment sources and erosional features. Partially maintained.	x
Hydrology	Moderate risk to soil & water resources	x
Hydrology	Moderately High risk of failure. Known sediment sources. Numerous erosional features. Not maintained.	x
Hydrology	High risk of failure. Known sediment sources. Numerous erosional features. Not maintained.	x
Hydrology	High risk to soil & water resources	x
Hydrology	High Risk to Soil & Water Resources	x
Wildlife / Botany	Does the route encroach on a sensitive area or impact TES/MIS species?	x
Wildlife / Botany	Does the route encroach on a sensitive area or impact important TES species?	x
Wildlife / Botany	Does the route impact specific wildlife/plant habitat or security?	x
Wildlife / Botany	Does the route impact specific wildlife habitat or security?	x
Wildlife / Botany	Route has little/no impact on wildlife habitat and/or habitat effectiveness.	x
Wildlife / Botany	Route could be closed to enhance big game habitat effectiveness by maintaining road density below GA standard. Minimal or no TES/MIS habitat at risk.	x
Wildlife / Botany	Route could be closed to enhance habitat, effectiveness by maintaining road density below GA standard. Minimal or no TES/MIS habitat at risk.	x
Wildlife / Botany	Close to meet big game habitat effectiveness road density standards within GA or to protect important TES/MIS habitat (e.g., Nesting, breeding, roosting).	x

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[3] The specific wording of the question from the Forest Service spreadsheets may have evolved as the spreadsheet process progressed so some items have similar wording. The questions were converted to affirmative statements in the route reports for a clearer representation of how the question was answered by the Forest Service staff.

Special Status Species	Specifically	Questions Answered by FS on Original Spreadsheets [3]
Wildlife / Botany	Close to meet habitat effectiveness, road density standards within GA or to protect important TES/MIS habitat (e.g., Nesting, breeding, roosting).	x
Wilderness/Roadless	Does the route encroach on wilderness?	x
Wilderness/Roadless	Is the Route in an Inventoried Roadless Area (IRA)?	x
Wilderness/Roadless	Necessary road, long term needed	x
Wilderness/Roadless	Route has little or no impact on resource	x
Wilderness/Roadless	Not needed for 20-30 years but leave prism	x
Wilderness/Roadless	Route has medium impact on resource	x
Wilderness/Roadless	Not likely to be needed in forseeable future	x
Wilderness/Roadless	Route should be closed to protect resource	x
Cultural / Heritage	Does the route impact cultural or archeological resources?	x
Cultural / Heritage	Is the route needed to provide for specific symbolic, spiritual, sacred, traditional values for groups of people?	x
Cultural / Heritage	Is the route needed to provide for specific traditional American Indian functions?	x
Cultural / Heritage	Is there a social conflict associated with this route?	x
Cultural / Heritage	Route has little or no impact on resource	x
Cultural / Heritage	Route has medium impact to resource	x
Cultural / Heritage	Route should be closed to resource	x
VRM	Does the route conflict with scenery objectives?	x
Cultural	Known Cultural Site (in or through)	x
Cultural	Known Cultural Site (proximate)	x
Cultural	Possible Cultural Site (in or through)	x
Cultural	Possible Cultural Site (proximate)	x
Known Cultural Sites	Proximate (within 1/2 mile)	
Known Cultural Sites	Through	
Known Cultural Area/Polygon	Proximate (within 1/2 mile)	
Known Cultural Area/Polygon	In or Through	
Suspected, Modeled Cultural Sites	Proximate (within 1/2 mile)	
Suspected, Modeled Cultural Sites	In or Through	
Areas of Critical Environmental Concern (ACEC)	Proximate (within 1 mile)	
Areas of Critical Environmental Concern (ACEC)	In or Through	
Areas of Critical Environmental Concern (ACEC)	Proximate (within 1mile) of a Proposed ACEC	
Areas of Critical Environmental Concern (ACEC)	In or Through a Proposed ACEC	
Back Country Proposal (Forest Plan Revision)	Impacts Back Country Proposal	
Inventoried Roadless Area	In or Through	
Recreation Opportunity Spectrum (ROS)	Primitive	
Recreation Opportunity Spectrum (ROS)	Semi-Primitive Non-Motorized	
Recreation Opportunity Spectrum (ROS)	Semi-Primitive Motorized	
Recreation Opportunity Spectrum (ROS)	Roaded Natural	
Recreation Opportunity Spectrum (ROS)	Rural	
Recreation Opportunity Spectrum (ROS)	Urban	

Special Status Species	Specifically	Questions Answered by FS on Original Spreadsheets[3]
Wilderness / Wilderness Study Areas	In	
Wilderness / Wilderness Study Areas	Leads to Wilderness/WSA (Wilderness Study Area)	
Wilderness / Wilderness Study Areas	Boundary Road	
Wilderness / Wilderness Study Areas	Proximate (within 1 mile)	
Wilderness / Wilderness Study Areas	Impacts Recommended Wilderness	
Streams and Lakes	4A - Fish Habitat Emphasis	
Streams and Lakes	Cut Throat Trout Lakes	
Streams and Lakes	Cut Throat Trout Streams	
Streams and Lakes	Whirling Disease Streams	
Streams and Lakes	Channel	
Streams and Lakes	Floodplains	
Streams and Lakes	Wetlands	
Streams and Lakes	Within 200' of Stream(s)	
Streams and Lakes	Stream Crossing	
Riparian (MIS)	9A - Riparian Management	
Riparian (MIS)	9B - Intensive Riparian Management	
Riparian (MIS)	In, Along (within the banks or high water mark)	
Riparian (MIS)	Proximate (within 1/2 mile)	
Riparian (MIS)	Cross	
Wash	In	
Wash	Cross	
Wash	Proximate	
Soils	Soil compaction concerns	
Soils	Area of Erosive Soils	
Soils	Known Erosion Scar	
Soils	Route Subject to Erosion Concerns	
Route Proliferation Area	In or Through	
Route Proliferation Area	Concern	
Route Proliferation Area	Proximate	
Antelope	Critical Habitat	
Antelope	Critical Summer Range	
Antelope	Critical Winter Range	
Antelope	Critical Year-Long Range	
Antelope	High Habitat	
Antelope	High Summer Range	
Antelope	High Winter Range	
Antelope	High Year-Long Range	
Antelope	Limited Habitat	
Antelope	Other	
Antelope	Spring/Fall Range	
Antelope	Substantial Habitat	
Antelope	Summer Range	
Antelope	Summer/ Fall Range	
Antelope	Winter Range	
Antelope	Winter/Spring Range	
Antelope	Year Long Range	

Special Status Species	Specifically	Questions Answered by FS on Original Spreadsheets [3]
Bighorn Sheep	Habitat - Proximate (within 1 mile)	
Bighorn Sheep	Habitat - In or Through	
Bighorn Sheep	Lambing	
Bighorn Sheep	Winter Habitat - In or Through	
Bighorn Sheep	Winter Habitat - Proximate (within 1 mile)	
Bighorn Sheep	High year-long range	
Desert Tortoise (TES)	In D1 Habitat	
Desert Tortoise (TES)	Occupied Habitat	
Desert Tortoise (TES)	Critical Habitat	
Desert Tortoise (TES)	C-1 Habitat	
Desert Tortoise (TES)	DT DWMA	
Desert Tortoise (TES)	DT ACEC	
Desert Tortoise (TES)	C-2 Habitat	
Desert Tortoise (TES)	C-3 Habitat	
Desert Tortoise (TES)	Other	
Elk (MIS)	Critical Habitat	
Elk (MIS)	Critical Summer Range	
Elk (MIS)	Critical Winter Range	
Elk (MIS)	Critical Year-Long Range	
Elk (MIS)	High Habitat	
Elk (MIS)	High Summer Range	
Elk (MIS)	High Winter Range	
Elk (MIS)	High Year-Long Range	
Elk (MIS)	Limited Habitat	
Elk (MIS)	Other	
Elk (MIS)	Spring/Fall Range	
Elk (MIS)	Substantial Habitat	
Elk (MIS)	Substantial Summer Range	
Elk (MIS)	Substantial Winter Range	
Elk (MIS)	Substantial Year-Long Range	
Elk (MIS)	Summer Range	
Elk (MIS)	Summer/Fall Range	
Elk (MIS)	Winter Range	
Elk (MIS)	Winter/Spring Range	
Elk (MIS)	Year Long Range	
Goshawk (MIS) (TES)	In or Through Territory	
Goshawk (MIS) (TES)	In or Through Post Fledgling Area	
Goshawk (MIS) (TES)	Foraging	
Goshawk (MIS) (TES)	Habitat	
Goshawk (MIS) (TES)	Suitable	
Goshawk (MIS) (TES)	Other	
Mexican Spotted Owl (TES)	Potential habitat	
Mexican Spotted Owl (TES)	In/Through Mexican Spotted Owl Critical Habitat	
Mountain Quail	In Historic Habitat	
Mule Deer (MIS)	Critical Habitat	
Mule Deer (MIS)	Critical Summer Range	
Mule Deer (MIS)	Critical Winter Range	
Mule Deer (MIS)	Critical Year-Long Range	
Mule Deer (MIS)	High Habitat	
Mule Deer (MIS)	High Summer Range	

Special Status Species	Specifically	Questions Answered by FS on Original Spreadsheets [3]
Mule Deer (MIS)	High winter Range	
Mule Deer (MIS)	High Year-Long Range	
Mule Deer (MIS)	Limited Habitat	
Mule Deer (MIS)	Limited Winter Range	
Mule Deer (MIS)	Other	
Mule Deer (MIS)	Spring/Fall Range	
Mule Deer (MIS)	Substantial Habitat	
Mule Deer (MIS)	Substantial Summer Range	
Mule Deer (MIS)	Substantial Winter Range	
Mule Deer (MIS)	Substantial Year-Long Range	
Mule Deer (MIS)	Summer Range	
Mule Deer (MIS)	Summer/Fall Range	
Mule Deer (MIS)	Winter Range	
Mule Deer (MIS)	Winter/Spring Range	
Mule Deer (MIS)	Year Long Range	
Pygmy Rabbit (TES)	Proximate (within 1/2 mile)	
Pygmy Rabbit (TES)	In or Through	
Raptors	Raptors Generally	
Raptors	Nesting Area	
Raptors	Historic Nesting Area	
Raptors	Ground or Burrowing Raptors	
Raptors	Other	
Sage Grouse (TES)	In or Through Brood Rearing Area	
Sage Grouse (TES)	In or Through Lekking Area	
Sage Grouse (TES)	In or Through Nesting Area	
Sage Grouse (TES)	In or Through Winter Range	
Sage Grouse (TES)	Occupied Habitat	
Sage Grouse (TES)	Other	
Sage Grouse (TES)	Proximate to Brood Rearing Area (within 1 mile)	
Sage Grouse (TES)	Proximate to Lekking Area (within 2 miles)	
Sage Grouse (TES)	Proximate to Nesting Area (within 2 miles)	
Sage Grouse (TES)	Proximate to Winter Range (within 1 mile)	
Snowshoe Hare	Critical Year-Long Range	
Snowshoe Hare	High Year-Long Range	
Utah Prairie Dogs	In/Through Known Sites	
Utah Prairie Dogs	Potential Habitat (In/Through)	
Utah Prairie Dogs	Proximate to Known Sites (1/4 mile)	
Wild Turkey (MIS)	Critical Summer Range	
Wild Turkey (MIS)	Critical Winter Range	
Wild Turkey (MIS)	High Summer Range	
Wild Turkey (MIS)	High Winter Range	
Wild Turkey (MIS)	High Year-Long Range	
Wild Turkey (MIS)	Substantial Year-Long Range	
Other Wildlife	Wild Horse Territory	
Other Wildlife	Bats - In Habitat	
Other Wildlife	Other	
Special Status Plant Species	Other	
Special Status Plant Species	Type 1 or 2 - Proximate (within 1/4 mile)	
Special Status Plant Species	Type 1 or 2 - In or Through	
Special Status Plant Species	Type 3 or 4 - Proximate (within 1/4 mile)	

Special Status Species	Specifically	Questions Answered by FS on Original Spreadsheets[3]
Special Status Plant Species	Type 3 or 4 - In or Through	
Special Status Plant Species	Watch List - Proximate (within 1/4 mile)	
Special Status Plant Species	Watch List - In or Through	
Sensitive Species Polygons	Proximate	
Sensitive Species Polygons	In or Through	
Exemplary Plant Communities	Other	
Illegal Dumping	In or through illegal dump site	
Illegal Dumping	Proximate to illegal dump site	
Illegal Dumping	Illegal dumping concern	
High Density Route Polygon	4 to 8 miles per square mile	
High Density Route Polygon	Over 8 miles per square mile	
High Density Route Polygon	In or Through	
High Density Route Polygon	Proximate	
Habitat Fragmentation	In or Through	
Habitat Fragmentation	Proximate	

Appendix C
Public Uses Drop-Down Menu Items

Recreation	Questions Answered by FS on Original Spreadsheets[4]
Does the route conflict with desired condition or ROS class?	x
Does the route conflict with desired condition, ROS class or scenery objectives?	x
Is the route a primary recreation access route, a designated system route, or a route with pending designation status (i.e., Markagunt & High Desert trails?) Motorized	x
Does the route have unique destination (i.e. overlook campsite, historical site)?	x
Does the route have unique destination and/or provide a satisfying experience for its type and setting? (i.e., good scenery, overlook, campsite, historical site, water body)	x
Does this route provide an opportunity to improve a trail system or other recreational activity?	x
Does this route provide an opportunity to improve a trail system (motorized or non-motorized) or other recreational activity?	x
Does the route provide an opportunity for non-motorized recreation activities? Could it be converted to a trail?	x
Does this route provide a satisfying experience for its route type and setting? (i.e. good scenery, picnic spots, overlooks, etc)	x
Is this route valued for providing a satisfying experience for its route type and setting?	x
Is there a social conflict associated with this route?	x
Is there a social conflict associated with this route? (i.e., Motorized vs. non motorized)	x
High use (summer or winter); part of summer loop route; part of designated route system; no alternate route to destination or area	x
High use (summer or winter); part of summer loop route; part of designated winter system; no alternate route to destination or area	x
High use thru routes	x
Medium to heavy (summer or winter use)	x
Medium to heavy (summer or winter use); "unofficial routes" (not groomed)	x
Medium use rec routes	x
Closed or low current use; alternate route available to area	x
Low use	x
ATV Load/Unload	
ATV Use	
Birding	
Boating	
Boating and Water Access	
Camping - Developed	
Camping - Primitive	
Christmas Tree Cutting	
Commercial Recreation Permit	
Dispersed Camping Site	
Dual Sport Touring	
Equestrian	
Family Camp/ Group Camp	
Firewood Gathering	
Fish View Site	
Fishing	
Group Picnic	
Hiking	

[4] The specific wording of the question from the Forest Service spreadsheets may have evolved as the spreadsheet process progressed so some items have similar wording. The questions were converted to affirmative statements in the route reports for a clearer representation of how the question was answered by the Forest Service staff.

Recreation	Questions Answered by FS on Original Spreadsheets[4]
Horse Camp	
Hunting	
Motorcycle Use	
Motorized Use Generally	
Mountain Biking	
Mountain, Rock Climbing	
Observation Site	
OHV Hill-Climbing	
OHV Touring	
Parking Area	
Parking Area / Trailhead	
Permitted Equestrian	
Permitted Motorcycle / ATV	
Permitted Mountain Bike	
Pinon Nut Gathering	
Post/Pole Gathering	
Public Use Site Access / Interpretative Panel	
River and Stream Access / Put In-Out	
Rockcrawling	
Rockhounding	
Shooting	
Snowmobile	
Special Recreation Use Permits	
Staging Area	
SUV Touring	
Technical 4 WD	
Trailheads	
Unauthorized Geocaching	
Visitor Center	
Vistas, Sightseeing, Photography	
Wilderness / WSA Access	
Wildlife Watching	
Other	

Appendix D
Route Report Feedback Form
(Please complete a separate form for each route)

When complete, please return to:
Noelle Meier, Team Leader
Dixie National Forest
1789 Wedgewood Lane
Cedar City, UT 84720

1. Route ID: _____

2. Map Name: _____

3. Commenter: _____
    Organization/Dept.: _____
    Address: _____
    _____
    Phone: _____
    Email: _____

4. Suggested Modification(s) to Data Identified on Route Report (please be as
    specific as possible; attach additional pages if necessary):

    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____

DNF Review

1. Suggested Modification to Data Incorporated?   Yes   No

2. Rationale:

    _____
    _____
    _____
    _____

3. _____   _____
    By   Date