



## FOREST SERVICE HANDBOOK NATIONAL HEADQUARTERS (WO) WASHINGTON, DC

### FSH 7709.55 - TRAVEL PLANNING HANDBOOK

#### CHAPTER 20 - TRAVEL ANALYSIS

**Amendment No.:** 7709.55-2009-2

**Effective Date:** January 8, 2009

**Duration:** This amendment is effective until superseded or removed.

**Approved:** CHARLES MYERS  
Associate Deputy Chief, NFS

**Date Approved:** 10/26/2008

**Posting Instructions:** Amendments are numbered consecutively by handbook number and calendar year. Post by document; remove the entire document and replace it with this amendment. Retain this transmittal as the first page(s) of this document. The last amendment to this handbook was 7709.55-2009-1 to 7709.55\_10.

<b>New Document</b>	7709.55_20	11 Pages
<b>Superseded Document(s) by Issuance Number and Effective Date</b>	20 thru 28 (FSH 3/88)	6 Pages

#### **Digest:**

20 - Removes direction on participation in land management planning in its entirety, and replaces it with direction on travel analysis, consistent with the roads rule and the travel management rule at 36 CFR Part 212, Subparts A and B, and FSM 7712.

20.2 - Adds as the objectives of travel analysis to inform decisions related to identification of the minimum road system per 36 CFR 212.5(b)(1); designation of roads, trails, and areas for motor vehicle use per 36 CFR 212.51; and regulation of over-snow vehicle use per 36 CFR 212.81.

20.3 - Adds policy requirements for travel analysis.

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**Digest--Continued:**

21 - Adds description of the travel analysis process. Adds cross-references to exhibits in section 21.6 on travel analysis in the context of environmental analysis and the six steps of travel analysis.

21.1 - Adds a section entitled "Step 1: Setting Up the Analysis," which requires the responsible official to establish an interdisciplinary process, develop a schedule and a list of data needs, identify the appropriate scope and scale of travel analysis, complete an inventory of NFS roads and NFS trails, identify the appropriate depth of analysis, and consider integration of travel analysis with landscape assessments.

21.11 - Adds a section entitled "Considerations When Setting Up Travel Analysis," which identifies factors to be considered for travel analysis. Adds direction on public involvement.

21.12 - Adds direction on considering time frames of effects and demographic and economic changes.

21.13 - Adds requirements for assessing available data.

21.2 - Adds criteria for describing the situation (Step 2), including a list of what must be produced.

21.3 - Adds the requirement to identify key issues (Step 3) and the data needed for key issue analysis.

21.4 - Adds criteria for assessing benefits, problems, and risks (Step 4).

21.5 - Adds requirements for describing opportunities and setting priorities (Step 5).

21.6 - Adds requirements for documenting travel analysis, including a prioritized list of proposed changes to travel management direction. Adds an exhibit on travel analysis.

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## **20.2 - Objectives**

1. Conduct travel analysis to inform decisions related to:
  - a. Identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System (NFS) lands per 36 CFR 212.5(b)(1).
  - b. Designation of roads, trails and areas for motor vehicle use per 36 CFR 212.51.
2. Travel analysis may be used to inform regulation of over-snow vehicle use (36 CFR 212.81) and non-motorized use of roads and trails.

## **20.3 - Policy**

1. Travel analysis should be science-based. Analysts should locate, correctly interpret, and use readily available and relevant scientific literature in the analysis. Disclose any assumptions made during the analysis, and reveal the limitations of the information on which the analysis is based.
2. Responsible officials must choose the appropriate scope, scale, and depth for travel analysis.
3. Use travel analysis to assess the current condition of the portion of the forest transportation system under analysis and associated travel management direction.
  - a. Assess the current condition and existing travel management direction in the context of existing uses, other public and private transportation systems, and land ownership patterns. Compare current travel management direction to the desired condition identified in the land management plan to identify the need for change.
  - b. Expand the analysis as necessary to include adjacent and connecting transportation systems.
4. Use travel analysis, as applicable, to inform travel management decisions (See FSM 7712). Travel analysis may be used to inform decisions to manage over-snow vehicle use and non-motorized use and to plan for maintenance of NFS roads and NFS trails.

## **21 - TRAVEL ANALYSIS**

1. Travel analysis informs travel management decisions by examining key issues related to the portion of the forest transportation system under analysis, as well as management options and priorities.

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2. Responsible officials shall participate in travel analysis.
3. Travel analysis neither produces decisions nor allocates NFS lands for specific purposes. Rather, responsible officials, with public involvement, make travel management decisions that are informed by travel analysis (sec. 21.6, ex. 01).
4. Travel analysis consists of six steps (sec. 21.6, ex. 01).
5. Travel analysis may involve feedback among steps as the analysis develops.

### **21.1 - Step 1: Setting Up The Analysis**

The responsible official should:

1. Establish an interdisciplinary team that includes specialists from relevant disciplines.
2. Develop a list of data needs and a schedule for completing the analysis.
3. Identify the appropriate scope of analysis. The scope of analysis refers to the range of potential actions to be considered, for example, whether only additions to the existing forest transportation system will be considered, whether only the existing forest transportation system will be analyzed, or whether only motorized trails will be considered for changes.
4. Identify the appropriate scale of analysis.
  - a. Scale refers to the level at which the analysis is conducted, for example, at the level of an administrative unit, ranger district, or watershed. Determine the appropriate scale based on the issues to be addressed.
  - b. Broad-scale analysis can establish greater context; provide more comprehensive support for decisions; serve as a basis for allocation of budgets and expertise and establishing schedules and accountability; and address issues that cross administrative boundaries. Different scales of analysis may be appropriate for different issues in the same travel analysis.
5. Establish a complete and accurate inventory of NFS roads and NFS trails managed for motor vehicle use in the portion of the forest transportation system under analysis.
6. Identify the appropriate depth for travel analysis based on the skills and resources available and the complexity and scope of the issues prompting the analysis. For less complex and comprehensive questions, analysis may consist of no more than a judgment by the interdisciplinary team on the issues presented. At other times, the complexity,

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scope, and scale of the issues or the potential severity of effects may be sufficient to justify using the latest analytical tools. Interdisciplinary teams should conduct travel analysis that is as simple and cost-effective as possible and still produces sufficient information for decision-making.

7. Consider opportunities to integrate travel analysis with any watershed analysis or landscape assessments.

### **21.11 - Considerations When Setting Up Travel Analysis**

1. The following factors should be considered, as applicable, when preparing to conduct travel analysis:

- a. Agency objectives and priorities.
- b. Environmental issues, such as soil and water resources, invasive species, and biological communities.
- c. Conflicts among uses, public access, user safety, and accessibility.
- d. Right-of-way acquisition needs.
- e. The interrelationship of state, county, tribal, and other federal agency transportation facilities and travel management decisions on adjacent administrative units.
- f. Transportation investments necessary to meet land management plan objectives.
- g. The criteria for designating roads, trails, and areas, including the availability of resources for maintenance and administration of designated roads, trails, and areas. Grants, agreements, and volunteers may be used to extend Forest Service resources.
- h. Previous administrative decisions regarding travel management made under authorities other than 36 CFR 212.51, including restrictions and prohibitions on motor vehicle use (36 CFR 212.50(b)).
- i. Economic costs and benefits.
- j. Needs of landowners in areas of intermingled ownership.
- k. Ability to meet user needs and desires.

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1. Anticipated future levels of motor vehicle use and changes in motor vehicle technology.
  - m. Existing or potential law enforcement issues.
2. Consider whether to address issues pertaining exclusively to the minimum road system (36 CFR 212.5(b)(1)), exclusively to route and area designations (36 CFR 212.51), or to both.
3. As appropriate, obtain input from external groups, other members of the public, and other governmental agencies.
4. Consider factors that affect the timeframe for analysis, such as the need for expertise, public input, and coordination with other agencies. The time needed for travel analysis can vary widely depending on the management situation, the issues presented, and the availability and quality of data concerning forest transportation facilities and current use in the administrative unit or ranger district under analysis.

#### **21.12 - Timeframe**

1. Consider the duration of effects from changes to the forest transportation system.
2. Consider the timeframe for implementing land management plan direction and potential changes to the forest transportation system.
3. Consider the timeframe over which demographic and economic changes occur in the portion of the forest transportation system under analysis.

#### **21.13 - Available Data**

1. Determine if any relevant analyses have already been conducted and if relevant data are available. Existing data and assessments should be used whenever they are accurate and available. Information needed for travel analysis may differ according to the issues presented. Prepare the travel analysis in a format that can be shared.
2. Determine whether additional information and analyses are needed. Some needed information may be acquired during the analysis; some may be too difficult or costly to obtain. Some may never be available, and the analysis must proceed without it. The travel analysis should acknowledge any known deficiencies in the information and assumptions made and should describe remaining uncertainties. Uncertainties should be used to guide future data acquisition and analyses and should be considered when developing program work plans and setting budget priorities.

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**21.2 - Step 2: Describing the Situation**

1. Summarize current land management and travel management direction.
2. For the portion of the forest transportation system under analysis, produce:
  - a. A map;
  - b. An inventory of NFS roads and NFS trails and areas on NFS lands managed for motor vehicle use;
  - c. An assessment of existing motorized and non-motorized uses;
  - d. A description of public and administrative access needs;
  - e. An assessment of motorized recreation opportunities;
  - f. Information about environmental, social, and other issues;
  - g. A summary of existing travel management decisions;
  - h. An assessment of available resources to maintain and operate the forest transportation system; and
  - i. A summary of available applicable accident and law enforcement data.
3. Consider motor vehicle use both on the part of the forest transportation system under analysis and on adjacent or connecting authorized transportation systems.
4. Consider the effects of motor vehicle use on the portion of the forest transportation system under analysis, using the general and specific criteria for designating NFS roads, NFS trails, and areas on NFS lands for motor vehicle use (36 CFR 251.55; FSM 7715.5).

**21.3 - Step 3: Identifying Issues**

1. Identify key issues affecting the portion of the forest transportation system under analysis. Use appropriate public involvement to identify these issues.
2. To identify key issues, determine in the context of the analysis:
  - a. The primary public concerns related to travel management;
  - b. The primary management concerns related to travel management;



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- c. The primary legal constraints on travel management; and
  - d. The amount of resources and skills available to conduct the analysis.
3. Determine the data needed to analyze the key issues and whether the data are available or must be obtained.

**21.4 - Step 4: Assessing Benefits, Problems, and Risks**

1. Examine the major uses and environmental, social, and economic effects of the portion of the forest transportation system under analysis. Analyze the risks and benefits associated with the current situation.
2. Consider the general criteria for designating NFS roads, NFS trails, and areas on NFS lands (36 CFR 212.55(a); FSM 7715.5, para. 1). Consider, with the objective of minimizing, the effects of motor vehicle use on the specific criteria for designating NFS trails and areas on NFS lands (36 CFR 212.55(b); FSM 7715.5, para. 2), and consider the specific criteria for designating roads (36 CFR 212.55(c); FSM 7715.5, para. 3).

**21.5 - Step 5: Describing Opportunities and Setting Priorities**

1. Identify management opportunities and priorities and formulate proposals for changes to the forest transportation system that respond to the issues, risks, and benefits identified in the preceding steps.
2. Compare motor vehicle use of the portion of the forest transportation system under analysis with desired conditions established in the applicable land management plan, and describe options for modifying the forest transportation system that would achieve desired conditions.
3. Identify any unauthorized roads and trails that should be considered for designation based on the analysis in paragraph 2.

**21.6 - Step 6: Reporting**

Document travel analysis in a report including:

1. A list of the key issues;
2. A prioritized list of the risks and benefits associated with changing the part of the forest transportation system under analysis;
3. A prioritized list of opportunities for addressing those risks and benefits;

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4. If applicable, a prioritized list of actions or projects that would implement the minimum road system; and
5. If applicable, a list of proposed changes to current travel management direction, including proposed additions to or deletions from the forest transportation system.

The report provides the basis for developing proposed actions to implement the minimum road system and/or to change existing travel management decisions. These proposals are subject to appropriate public involvement and environmental analysis under NEPA before travel management decisions are made. Site-specific environmental analysis should build on and incorporate relevant information developed during travel analysis.

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**21.6 – Exhibit 01**

**TRAVEL ANALYSIS STEPS**

