U.S. Department of Transportation
Federal Transit Administration

Alternative Transportation in the Parks and Public Lands Program
Project Proposal for Fiscal Year 2008 Funds – Planning Project

BASIC PROJECT INFORMATION	
The White Mountain Trail Alternative Transportation Project: The White Mountain Transportation Working Group proposes to act upon the recommendations of the Interagency Transportation Assistance Group (TAG)(June 2007) and identify potential solutions to address traffic congestion, greenhouse gas emissions, and related impacts relative to existing and projected increased vehicular use of the White Mountain National Forest. ATPPL grant funding would enable the working group to gather, research and compile information pertinent to the current transportation situation, define options and alternatives, and convene a focus group of stakeholders to prioritize options for future actions.	
Proposed Funding Recipient: White Mountain National Forest	
Public land unit(s) involved: White Mountain National Forest (Including two New Hampshire State Parks located within the Forest Boundary)	Location of Project City: Numerous County: Grafton, Carroll, and Coos State: New Hampshire Congressional Districts: 1 and 2
Federal Land Management Agency managing the above unit(s): ☐ Bureau of Land Management ☐ Bureau of Reclamation ☐ Fish and Wildlife Service ☒ Forest Service ☐ National Park Service	Type of Planning Project: (Implementation projects, please use the alternate form) ☒ Planning
☒ Proposal is to plan for a possible new alternative transportation system where none currently exists. ☐ Proposal is to plan for a possible expansion or enhancement of an existing alternative transportation system.	
ATPPL Funding Requested during FY 2008 $150,000	**Total** Cost of Planning Project at Completion (All sources) $150,000
Were you awarded FY 2006 of FY 2007 ATPPL funds? ☐ Yes ☒ No If answer "Yes," please provide amount awarded: $	
Do you plan to request additional ATPPL funds in future years? ☒ Yes ☐ No **(Note: If you wish to compete for future ATPPL fiscal year funds you must reapply).** If answer "Yes," please specify ATPPL proposed funding levels for out years below:	

FY 2009 $**	FY 2010 $**	**Amounts to be determined after data gathering/analysis and planned Transportation Summit.

FY 2008 Funding Amounts from sources other than ATPPL funds? ☐ Yes ☐ No
If answer "Yes," please specify funding levels per source below:

State $	Local $	Federal (other than ATPPL) $5000	Private sources $

CONTACT PERSON	
Name: Bill Dauer	Phone: (603) 528-8723
Position: Forest Engineer/Technical Services Team Leader – White Mountain National Forest	E-mail: wdauer@fs.fed.us
Address: 719 North Main Street, Laconia, NH 03246	

OTHER PROJECT SPONSORS (In addition to funding recipient)

Appalachian Mountain club
Mount Washington Auto Road – Great Glen Trails Outdoor Center
New Hampshire Department of Transportation and Department of Resources and Economic Dev.
Numerous other Tourism and Transportation Related Partners Associated with the WMNF

REQUIREMENTS

☐ If a State, Tribal, or local government entity is proposing the project, the applicant has contacted the manager of the federal land unit(s) and has the consent of the Federal land management agency or agencies affected.
☒ The project is consistent with the metropolitan and statewide planning process.
☒ The project is consistent with agency plans.
☒ The planning project will analyze all reasonable alternatives, including a non-construction option.

BASIC PROJECT DATA	
Number of Visitors (Annual): 6-7 million	Daily Number of Visitors (Peak season): Varies Widely
Average Number of Vehicles per Day at Peak Visitation: Varies Widely	
Current Road Level of Service at Peak Visitation: (Please consult guidance where available on determining this variable. You may use observational accounts or pictures to provide an assessment of this datum for FY 2008 proposals).	
What time of the year does your land unit experience Peak Visitation? ☐ Spring ☒ Summer ☒ Fall ☐ Winter	
Current Carrying Capacity of Existing Roads: 2,700 (vehicles/hour) - varies widely	
What percent of that capacity is the site operating at during peak periods? % TBD	
Current parking shortages during peak visitation: Varies Widely	
Current Number of Persons who use the alternative transportation system (if one already exists) at peak visitation: N/A (average number of visitors/daily at peak)	

Estimated Annual Number of Persons who will use the alternative transportation system at project completion: TBD Following Analysis and Data Collection (anticipated number of riders or users/annually)
Average number of auto collisions with wildlife in the area? 500 collisions/year

Executive Summary

Please provide an executive summary of your proposal that is <u>no more than one page</u> in length.

The White Mountain National Forest (WMNF) attracts six to seven million visitors annually, making it one of the most popular National Forests in the country. The Forest is located within a half day's drive of 70 million people. Growth in visitation has led to increased automobile traffic throughout the WMNF region that is increasingly impacting the visitor experience, available parking, the Forest's natural resources, and air quality.

Following the initial project proposal submitted in 2002 and the preliminary field study by the Cambridge Systematics Group in 2003, a more detailed field investigation of the current transportation infrastructure and operations on the White Mountain National Forest was conducted June 27-29, 2007 by an Interagency Transportation Assistance Group (TAG) on behalf of the U.S. Forest Service (USFS). Their report, titled <u>Transportation Observations, Considerations, and Recommendations for White Mountain National Forest</u>, concluded that the WMNF is experiencing transportation impacts, and that opportunities exist to improve the visitor experience, prevent resource degradation, and partner with surrounding organizations, businesses and communities to mitigate these impacts. The team recommended further planning studies in several areas including the need to better define the problem, strengthen transportation planning coordination regionally, and develop long term opportunities to improve the overall visitor experience.

To address these needs, the WMNF has co-organized a WMNF Transportation Working Group comprised of the Appalachian Mountain Club (AMC), Mount Washington Auto Road/Great Glen Trails, and a NH state agency representative (to be named) with the purpose of identifying specific strategies that could be used to develop transportation options, mitigate impacts, improve the visitor experience and reduce greenhouse gas emissions from visitors.

The WMNF Transportation Working Group will use this grant to complete the following five objectives:

Objective 1: Compile additional data related to transportation dynamics within the WMNF region in order to more clearly display impacts and to facilitate the development of site-specific options that have a realistic chance to be successful;

Objective 2: Convene a WMNF Transportation Workshop/Summit of stakeholders, as recommended by the TAG, including local and regional mass transportation providers, major WMNF visitor destinations (e.g. ski areas), chambers of commerce and local governments to develop viable and concrete Action Steps;

Objective 3: Develop an ATPPL Implementation Grant for 2009;

Objective 4: Develop a web- based, visitor friendly information resource on existing public transportation options (routes and schedules) to and within the WMNF, with the intention of expanding this resource pending future ATPPL Implementation funding.

Objective 5: Secure the services of a Transportation Fellowship position similar to the fellowships being utilized by the US Park Service either through a partnership with the Park Service or through working with existing partnerships with either Plymouth State University Center for the Environment or the University of Maine.

Project Description

What activities would be funded by the requested ATTPL financial assistance? Please provide a project description that is <u>no more than one page</u> in length. You may attach up to two pages of maps or other illustrations that do not count towards the page limit.

Tourism is an important component of New Hampshire's economy and State tax base, and the WMNF is one of the focal points for this industry. The White Mountain National Forest (WMNF) encompasses approximately 800,000 acres in north-central New Hampshire and southwestern Maine and nationwide is one off the most-visited federal lands for recreation. The WMNF provides year-round recreational resources including hiking, camping, mountain biking, wildlife watching, fishing, hunting, picnicking, swimming, canoeing/kayaking, foliage viewing, snowshoeing, snowmobiling, alpine and nordic skiing, ice climbing, and the ever increasing activity of driving for pleasure. A number of major activity centers are also located immediately adjacent to the WMNF, which both generate their own visitation and share visitors with WMNF. Among these are major ski areas, Appalachian Mountain Club centers, State Parks, and a major outlet center in "tax free" North Conway, NH.

Access to the WMNF is primarily via Interstate 93 and state highways that encircle and pass through the region. The Kancamagus Highway (NH Route 112), Route 16 through Conway and North Conway, NH, and US Route 302, major transportation corridors for NH, are part of a 100-mile National Scenic Byway that transects the WMNF commonly known as the White Mountain Trail. Forest Service roads connect within this network and provide access to many recreational and cultural venues as well as activity centers.
It is difficult to accurately identify visitation patterns in the White Mountain region because there is no entrance station, and the roads are used for commercial and through traffic as well as destination visitation. Traffic volumes along these roadways do not capture usage of the numerous parking areas and turnouts along the way, or average vehicle occupancy. Better understanding of visitor demographics and visitation patterns are critical to understanding what kinds of transportation interventions will be successful. Stakeholders in and around WMNF generally agree on the issues and concerns that exist in the region, yet until now there has been no active coordination among them. A portion of this grant will be used to install strategically located permanent traffic counters that will give year round detailed traffic use information broken down into the 13 traffic categories which will allow for in depth analysis as well as allow for specific carbon calculations effecting the two Class 1 air sheds.

Visiting the WMNF is difficult for those without an automobile. Limited commercial (scheduled) bus service to Lincoln and North Conway exists and charter bus tours periodically bring visitors, but the independent traveler arriving at the WMNF without a private vehicle would be challenged to travel about within WMNF and between the surrounding towns. An existing patchwork of public and private transit and shuttle services are limited in scope and many operate only seasonally. It is therefore important for the Forest Service to coordinate with state and local agencies, private organizations, local tourist services and transportation providers to improve the efficiency for existing operations and the establishment of new services.

Pursuant to the recommendations of the Interagency TAG study, the WMNF together with its partners in the WMNF Transportation Working Group is now requesting an ATPPL planning grant to meet the following objectives:

Objective 1: Compile data related to transportation dynamics within the WMNF region in order to facilitate the development of site-specific options that have a realistic chance to be successful.

- A) Research and compile information pertinent to the current transportation situation:
  - (i) where WMNF visitors are coming from
  - (ii) where visitors are going to within the WMNF and immediate area
  - (iii) current transportation services and constraints
- B) Identify and define options and alternatives for further study:
  - (i) research existing National Park models and innovative transit options
  - (ii) identify and engage potential service providers and partnerships:
    - () mass transit providers from large urban areas to WMNF region
    - () public transit providers operating within the WMNF area for connecting visitors arriving by mass transit and in personal vehicles
  - (iii) study visitor behavior and identify incentives/disincentives for public transit

Objective 2: Convene a WMNF Transportation Workshop of stakeholders including local and regional mass transportation providers, major WMNF visitor destinations (e.g. ski areas), chambers of commerce and local governments to develop viable and concrete Action Steps:

A. Compare origin, destination, timing and numbers of visitors with existing mass transportation systems and possible new links, schedules and paradigms that could create viable alternatives
B. Review educational, incentive and disincentive plans to improve use of mass transit
C. Develop financially feasible business options and action plans

Objective 3: Develop an ATPPL Implementation Grant for 2009 as determined by the Action Plan

Objective 4: Develop a web-based, visitor friendly information resource on public transportation options (routes and schedules) to and within the WMNF;

a) Design template that identifies existing services
b) Expand this resource as future alternatives are implemented.

Objective 5: Establish a Transportation Fellowship to assist in the planning and coordination of the previous objectives as well as position this project for future pilot programs and potential implementation projects.

Alternative Transportation in the Parks and Public Lands
Planning Evaluation Criteria

(There are separate evaluation factors for implementation projects. Use the implementation project proposal template for implementation projects.)

Criteria	Points	Weight
1. Demonstration of Need		50%
a. Visitor mobility & experience	(1-5)	
b. Environmental condition as result of existing transportation system	(1-5)	
2. Methodology for Assessing: Visitor Mobility & Experience Benefits of Project		15%
a. Reduced traffic congestion	(1-5)	
b. Enhanced visitor mobility, accessibility, and safety	(1-5)	
c. Improved visitor education, recreation, and health benefits	(1-5)	
3. Methodology for Assessing: Environmental Benefits of Project		15%
a. Protection of sensitive natural, cultural, and historical resources	(1-5)	
b. Reduced pollution	(1-5)	
4. Methodology for Assessing: Operational Efficiency and Financial Sustainability of Alternatives		20%
a. Effectiveness in meeting management goals	(1-5)	
b. Financial plan and cost effectiveness	(1-5)	
c. Cost effectiveness	(1-5)	
d. Partnerships and funding from other sources	(1-5)	

Planning Justification
Your responses to these questions must total no more than eight pages.

1. Demonstration of Need

a. **Visitor mobility and experience:** Describe the site's current and/or anticipated transportation problem or opportunity for improvement. You should include information on issues such as traffic congestion, traffic delays, parking shortages, difficulty in accessing destinations, safety issues, lack of access for persons with disabilities, lack of access for individuals with lower incomes or without cars, and visitor frustration. Please cite reports, plans, studies, and other documentation to support your description.

As documented in the Transportation Assistance Group (TAG) Report[1], the WMNF sees 6-7 million visitors per year, and 70 million people live within a day's drive. Several NH state parks, state forests, non-profit recreation organizations, alpine and nordic ski areas and private tourist attractions exist within and adjacent to the region such that the WMNF visitor experience is blurred. Many towns and roads permeate the WMNF region with no controlled access points. Federal and state highways serve commuters, locals, and non-visitor travelers as well as visitors. Commercial inter-city buses offer two non-connecting routes to this region (Lincoln/Littleton, and Conway/Berlin), on a limited schedule, from the single originating point of Concord, NH (with connections to Boston, MA).

There typically are four types of visitors to the Forest: 1) visitors who enjoy driving for pleasure and wildlife viewing; 2) visitors who want to experience "casual" outdoor recreation, such as families picnicking or hiking with small children; 3) hikers who come to the WMNF specifically for outdoor recreation, such as day or backcountry hiking; and 4) alpine and nordic skiers who frequent the ski areas that operate under Forest Service Recreational Special Use Permits. This excludes those commuting through the Forest on public roads.

There are hundreds of roadside attractions and scenic vantage points to capture the interest of all visitors. The vast majority of these opportunities are not available to people without private vehicles. Over 300 trailheads, nearly 1200 miles of hiking trails, over 150 recreational facilities, 49 "Four-thousand-footers", the highest peak in the Northeastern US, and 7-1/2 square miles of alpine habitat all provide for a diverse range of dispersed recreational opportunities. Many hikers, snowshoers, x-c skiers come to the Forest via automobile for day hikes. In these cases, hikers will commonly "spot" a vehicle at both ends of their route requiring the use of two automobiles and parking at both ends of the trail.

During peak visitation periods, travelers can experience traffic congestion and severe parking constraints. At popular activity centers, this can result in parking outside of designated areas affecting the aesthetics of the scenery as well as public safety and law enforcement.

The transportation options available to visitors are extremely limited. In addition there is no single source of information that identifies flexible public transportation options, thus, those people that are willing to consider public transportation are disenfranchised to "do the right thing".

[1] Transportation Observations, Considerations, and Recommendations for White Mountain National Forest. Report of the Interagency Transportation Assistance Group (TAG). Plymouth, New Hampshire. June 27–29, 2007.

b. **Environmental condition as a result of the existing transportation system:** Describe the site's current or anticipated problem or opportunity for improvement of the environment in this area. You should include information on current or anticipated problems such as air pollution, noise pollution, run-off, water quality, harm to vegetation and wildlife, and other impacts or stressors on natural, scenic, cultural and/or historic resources caused by the existing transportation system. Please cite documentation in agency plans, studies, reports and other documentation that will help to support your description.

"Greening the White" is a WMNF goal.[1] However, increased automobile traffic throughout the WMNF region has the potential to seriously impact forest resources, visitor experience, and air quality. The WMNF is concerned about the environmental impacts of transportation to and within WMNF as visitation grows and tailpipe emissions, runoff, and other impacts increase.

The WMNF includes (2) Class-1 airsheds: Great Gulf and Presidential Range-Dry River Wildernesses. Reliance on private vehicles for travel to/from/within the WMNF exacerbates emissions and pollution. Under the current Forest Plan, the WMNF is required to monitor Air Quality Related Values (AQRV). By cooperative agreement, the Appalachian Mountain Club monitors air pollution including ozone and fine particles. The WMNF is currently challenged to maintain its AQRV's due to unhealthy ozone levels for hikers, visibility degradation, deposition of air pollutants and greenhouse gas emissions that may threaten the Forest's unique alpine ecosystems. [2,3]

[1] White Mountain National Forest Land and Resource Management Plan, 2005.
[2] White Mountain National Forest Monitoring and Evaluation Report. 2006.
[3] Appalachian Mountain Club Progress Report to NOAA - Climate Change and Air Pollutant Impacts to NE's Rare Alpine Zone. 2007.

Scope of Work and Methodology

The planning project's scope of work and methodology should include tasks that will assess the areas below in a thorough and professional manner. The planning project should have a scope of work and methodology at this proposal phase, although it may be refined later.

2. **Methodology for Assessing - Visitor Mobility & Experience Benefits of Project**
   Please address how the planning project's scope and methodology will assess the visitor mobility & experience benefits of a potential alternative transportation system improvement in the following areas:

a. **Reduced traffic congestion:** This criterion includes: reduced average number of daily motorized vehicle trips during peak visitation, time lost to traffic delays, visitor frustration, and the area's current capacity of the existing transportation system.

The WMNF Transportation Working Group proposes to research and compile information pertinent to the current transportation situation in order to build a better understanding of the current constraints and impacts. Data collection will be done by the AMC Research Department and university graduate research programs and will include visitor surveys, field observations, collaborations with NH state agencies (Department of Transportation, Office of Energy and Planning, Department of Tourism), and transportation providers.

- Traffic counts vs carrying capacity on federal and state highways servicing the region
- Through traffic (non-WMNF visitation) vs WMNF visitation
- Recreational travel vs commuter, commercial, and personal non-recreational travel
- Distribution of demand between high use and low use nodes (points of origination and destination)
- Current inter-city, regional, and local area transportation services
- How the number of private vehicles impacts the visitor experience

b. **Enhanced visitor mobility, accessibility, and safety:** This criterion includes enhanced intermodal interconnectivity, improved public access to resources, improved access for those with disabilities and low incomes, traffic safety, pedestrian/cycling safety, and safety in the case of catastrophic events (i.e., forest fires or security threats).

In addition to researching the current conditions that lead to congestion and resource impacts, the WMNF Transportation Working Group proposes to identify potential solutions and mitigation programs that might include:

- Potential interest in rideshare programs
- Incentives/disincentives for use of public transportation
- Interoperability and expansion of existing transportation services
- Business incentives to operate alternative public transportation services
- Evaluation of scheduled vs flex-schedule vs on-demand transit options
- Evaluation of existing National Park transportation models and their potential applicability to WMNF.

It is important for the WMNF Transportation Working Group to consider two different aspects of the transportation problem:

- Visitors from the largest metropolitan areas traveling to the WMNF region (e.g., it is estimated that 25% - 35% of the visitors to the WMNF come from the greater metropolitan Boston area)
- Visitors having the flexibility to pursue itineraries within the WMNF

c. **Improved visitor education, recreation, and health benefits:** Describe how the project's scope and methodology will assess improved visitor education, recreation and health benefits?

In order to address the behavioral characteristics that contribute to current transportation problems, the WMNF Transportation Working Group proposes to develop options with regard to the following:

- WMNF parking pass program improvements/incentives
- Educational awareness campaigns to educate users on the availability of public transportation options
- Educational awareness campaigns to motivate users regarding the benefits of public transportation options
- Experiential "value added" messaging and interpretive programs as incentives.

The WMNF Transportation Working Group will also work to develop a web-based information resource that will identify existing transportation services, and facilitate inter-modal connections. Pending future implementations, this web resource will be expanded to include new alternatives and information to encourage the use of public transportation.

3. **Methodology for Assessing - Environmental Benefits of Project**
Please address how the planning project's scope and methodology will assess the environmental benefits of a potential alternative transportation system improvement in the following areas:

a. **Protection of sensitive natural, cultural, and historical resources:** This criterion includes energy conservation, energy efficiency, ecosystem sustainability, preservation of archeological and/or historical resources, viewshed and watershed preservation, reduction in auto-wildlife collision rates, improved habitat connectivity, ensuring that visitation does not exceed an area's ability to handle increased levels of visitation or the "carrying capacity" of the land unit, and other protection benefits where applicable.

A primary concern relevant to the WMNF's natural and cultural resources is the impact of increased automobile traffic within the WMNF, particularly on the Kancamagus Highway, a designated National Scenic Byway.

Through arrangements with university graduate research programs, WMNF monitoring and evaluation protocols, field observations, and collaborations with NH state agencies (DoT, OEP, Tourism), the WMNF Transportation Working Group proposes to identify ways to reduce transportation impacts on forest resources through:

- traffic management
- education/awareness programs
- disincentive programs such as fees and partial road closures
- public and shared transportation alternatives

b. **Reduced pollution:** This criterion includes air pollution, water pollution, noise pollution, and visual pollution.

Through arrangements with university graduate research programs, WMNF and AMC monitoring protocols, field observations, and collaborations with NH state agencies (DOT, OEP, Tourism), the WMNF Transportation Working Group proposes to identify strategies to reduce air, water, noise, and visual pollution by:

- Reducing the number of private vehicles traveling to and within the WMNF
- Reducing the number of miles driven by private vehicles to and within the WMNF

Possible strategies to effect this reduction in travel-induced pollution include all the programs cited previously to address traffic congestion, visitor mobility, and visitor education, as well as considering the viability of alternative energy vehicles for public transportation.

4. **Methodology for Assessing - Operational Efficiency and Financial Sustainability**
Please address how the planning project's scope and methodology will assess the operational efficiency and the financial sustainability of a potential alternative transportation system improvement in the following areas:

a. **Operational efficiency:** This criterion includes considerations of how a potential alternative system may/may not meet identified management goals and objectives for this site, including consideration of multiple alternatives.

The goals of the WMNF Transportation Working Group are symbiotic with sections of the WMNF Monitoring and Evaluation Guide (March 7, 2006):

- Item #40: Perceived quality of experience and perception of crowding among Forest visitors.
- Item #37: Use at Developed Campgrounds, Day Use Areas and Ski areas.
- Item #13: Comparison of the level of expected socioeconomic outputs with actual levels (Socio-economic Assessment).

Methods and parameters for studying these items are prescribed in the Guide and will be referenced by the WMNF Transportation Working Group.

Furthermore, all partners involved in the WMNF Transportation Working Group are direct stakeholders and have a vested interest in positive outcomes. Potential solutions identified by the WMNF Transportation Working Group will be prioritized for their expected gains/benefits. Those showing the greatest promise will be vetted as

strawman solutions for acceptance, revision, removal or replacement at a WMNF Transportation Workshop that will include a larger set of stakeholders.

b. **Financial feasibility:** This criterion includes the development of a financial plan that will incorporate a potential alternative transportation system, including the evaluation of multiple alternatives.

This ATPPL grant will provide seed money to gather information, evaluate options and alternatives, and bring stakeholders together in WMNF Transportation Workshop to formulate specific implementation plans. It is imperative that the initial phase of the project compiles the relevant data so that the stakeholders' Workshop has an established framework, and private-sector partners have confidence that the issues and alternatives they are to consider represent credible solutions.

Funds from this grant will be allocated among the working group partners in a manner that best leverages the resources available. Future funding will be sought to carry out the recommended actions.

c. **Cost effectiveness:** This criterion includes the development of an analysis of cost effectiveness considerations that includes multiple alternatives.

One of the goals of the WMNF Transportation Working Group is to evaluate the cost/benefit of various options that address different aspects of the transportation situation in the WMNF. Each of these alternatives can be pursued in the future on a priority basis (independently or in combination) as resources and funding sources allow.

d. **Partnerships and funding from other sources:** This criterion includes planning projects that would be carried out or funded in partnership with other entities in addition to the sponsor and will receive points depending on the level of partnership. Documentation (e.g., partnership agreements, letters of partnership support, letters of confirmation of financial contribution, letters of in-kind contributions, etc.) that supports and verifies involvement of partners and level of partnership *must* accompany this proposal.

Many of the transportation issues impacting the WMNF are outside of its (or any one agency's) control. By working with partner agencies, the WMNF could bring together regional stakeholders to creatively develop approaches to the benefit of all. Increased communication would help facilitate agreement on issues such as planning coordination, transportation management, and applications for transportation funding.

This study phase will rely primarily on partnerships with the Appalachian Mountain Club, Mount Washington Auto Road/Great Glen Trails, NH state agencies (Department of Resources and Economic Development, NH Department of Transportation, NH Office of Energy and Planning), and graduate internships (Plymouth State University, University of Maine/Orono).

Additional stakeholders at the Workshop may include ski areas and resorts, White Mountains Attractions Association, NH Transit Association, Regional Planning Commissions, and various local and regional transportation providers.

Attachment #1
Location of White Mountain National Forest in New Hampshire illustrating access by public highways

Attachment #2
Location of the White Mountain National Forest in New England illustrating public highways and proximity to Canada and approximately 70 million population

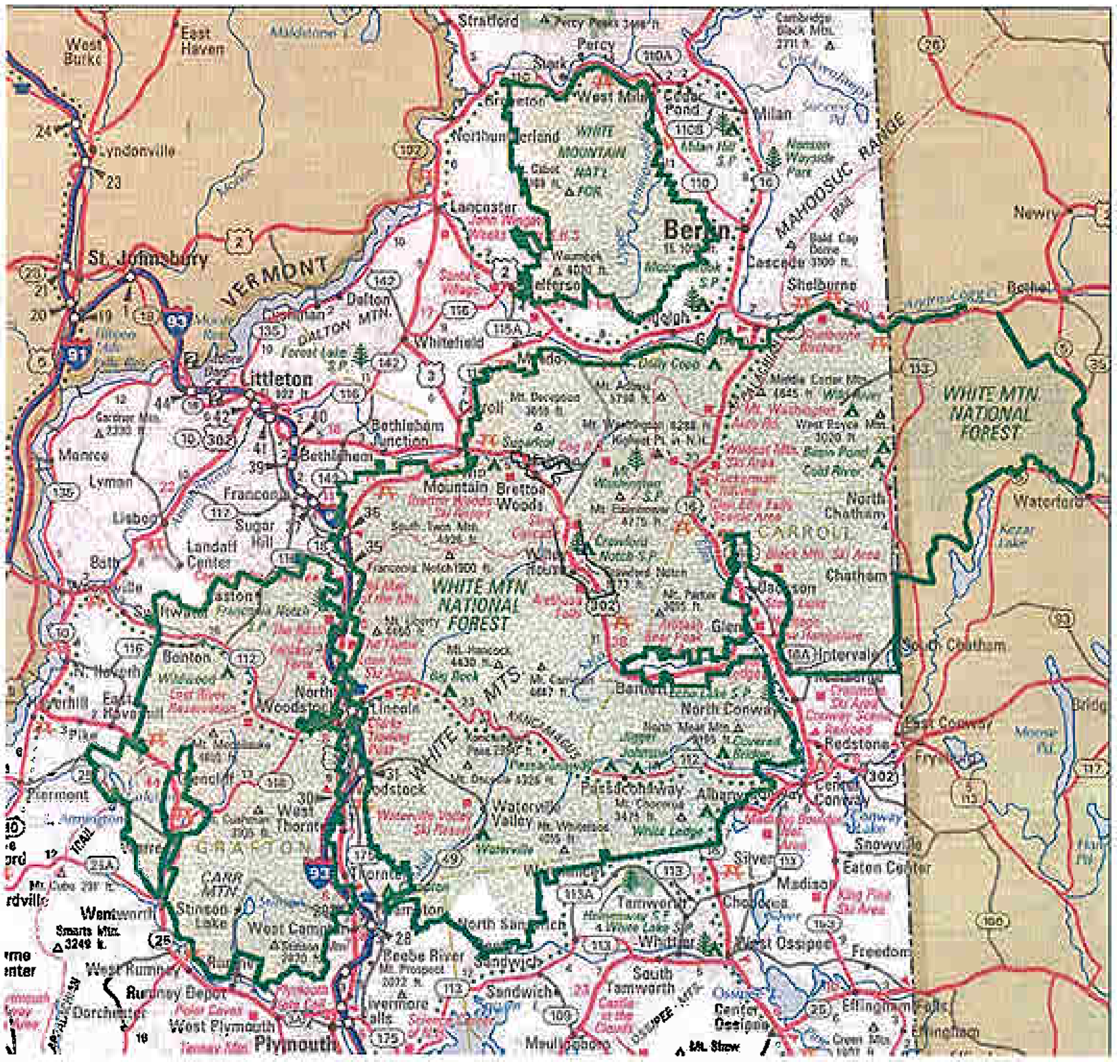
Attachment #3
Letter of support from the Appalachian Mountain Club

Attachment #4
Letter of support from the Mount Washington Auto Road and Great Glen Trails

Attachment #5
Final 2003 Field Report by Cambridge Systematics from their field review of the initial project proposal

Attachment #6
Final 2007 report entitled Transportation Observations, Considerations, and Recommendations for the White Mountain National Forest by the Interagency Transportation Assistance Group (TAG)

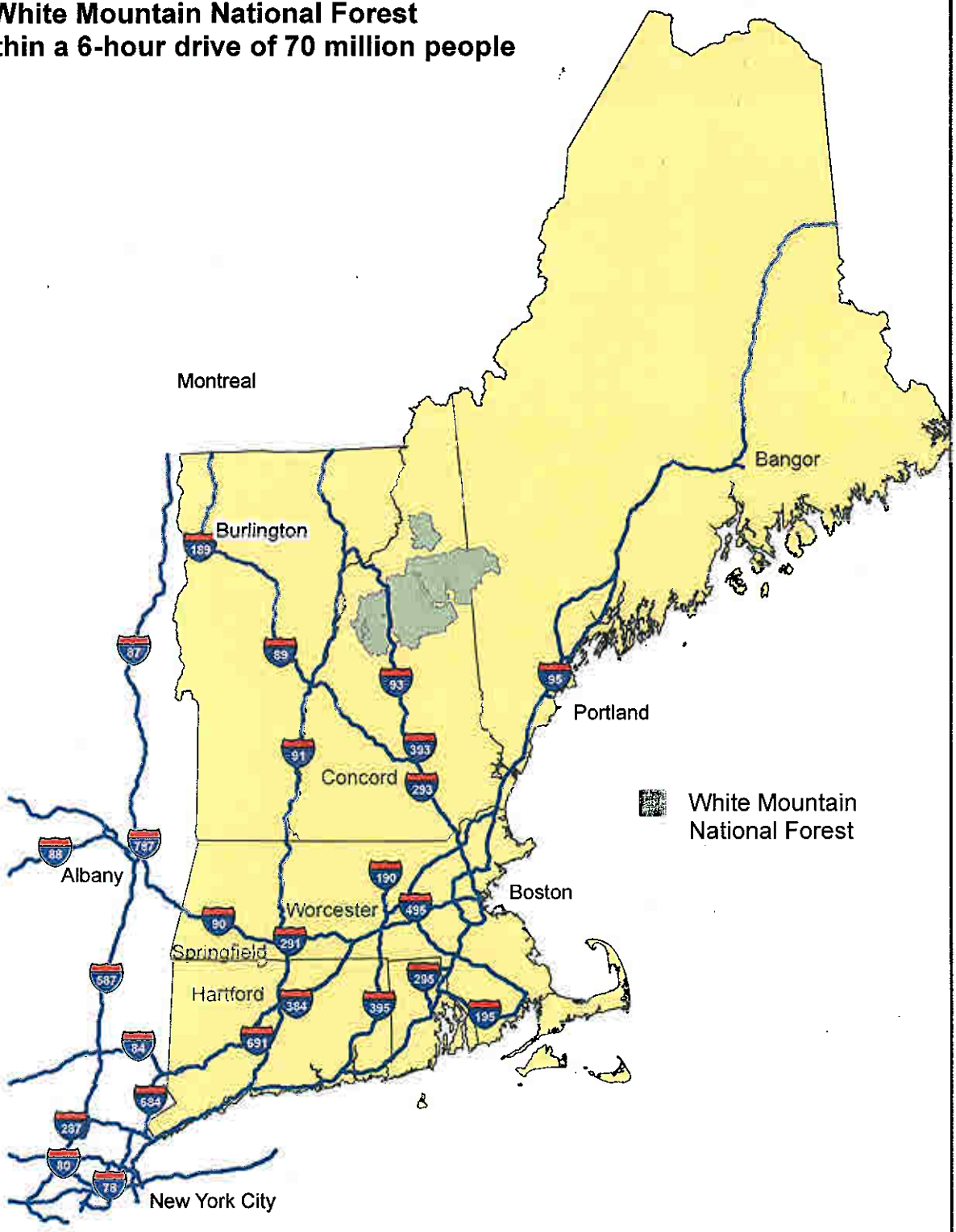
Attachment 1



Stratford
Percy
Stark
West Milan
Cedar Pond
Milan
Northumberland
WHITE MOUNTAIN NAT'L FOR.
Lancaster
Berlin
MAHOOSUC RANGE
Cascade
Shelburne
Gorham
Newry
Bethel
Lyndonville
St. Johnsbury
VERMONT
DALTON MTN.
Dalton
Whitefield
Jefferson
Littleton
Bethlehem
Bethlehem Junction
Twin Mountain
Bretton Woods
Franconia
Sugar Hill
Lisbon
Landaff Center
Monroe
Lyman
Bath
WHITE MTN. NATIONAL FOREST
CARROLL
Chatham
North Chatham
Waterford
Jackson
Glen
Bartlett
North Conway
Intervale
South Chatham
Conway
Redstone
Center Conway
Fryeburg
East Conway
Easton
Benton
North Woodstock
Lincoln
Woodstock
WHITE MTS.
Passaconaway
Waterville Valley
West Thornton
Thornton
GRAFTON
CARR MTN.
Stinson Lake
West Campton
Campton
Wentworth
West Rumney
Rumney Depot
Dorchester
West Plymouth
Plymouth
Beebe River
Livermore Falls
Sandwich
Tamworth
South Tamworth
Chocorua
Whittier
West Ossipee
Ossipee
Center Ossipee
Silver Lake
Madison
Eaton Center
Snowville
Freedom
Effingham Falls
Effingham
Moultonboro
Albany
Piermont
Pike
Haverhill
Mt. Washington 6288 ft.

Attachment 2

The White Mountain National Forest is within a 6-hour drive of 70 million people



Attachment 3

USDA United States Department of Agriculture | Forest Service | White Mountain National Forest | 719 N. Main Street Laconia, NH 03246 Comm: (603) 528-8721 TTY: (603) 528-8722

File Code: 7740
Date: February 26, 2008

Mr. Scott Faulk
ATPPL Coordinator
Federal Transit Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Mr. Faulk:

Enclosed is an Alternative Transportation in the Parks and Public Lands Program 2008 Grant Application with 6 attachments for planning funds for an exciting alternative transportation project here on the White Mountain National Forest. The project involves the White Mountain Trail which is a 100 mile loop of designated National Scenic Byways that transect the White Mountain National Forest. The Forest and our principle partner, the Appalachian Mountain Club, along with many other partners and cooperators, have been discussing ways to logically deal with annually increasing visitation and the traffic, carbon, and associated impacts it brings to the Forest and our two Class 1 air sheds.

This project was originally submitted for consideration in 2002 under the previous Transportation Bill and was selected for further study the following year. Since then, a preliminary field review was done by Cambridge Systematics in 2003 and an additional Field Review has been conducted by an Interagency Transportation Assistance Group led by the Volpe Center. Most recently, the project was presented at this year's 87th Annual Transportation Research Board meeting in Washington. We are excited about the opportunities these funds may bring towards moving this project forward to the next step.

Please contact Bill Dauer, Forest Engineer, at (603) 528-8723 or wdauer@fs.fed.us, if you have any questions pertaining to the application. Thank you.

Sincerely,

Wm A. Dauer
for THOMAS G. WAGNER
Forest Supervisor

Enclosure

Appalachian Mountain Club

February 22, 2008

Mr. Bill Dauer
White Mountain National Forest
719 North Main Street
Laconia, NH 03246-2772

Mr. Dauer,

Please accept this letter of enthusiastic support from the Appalachian Mountain Club (AMC) for the Planning Project Proposal being submitted to the U.S. Department of Transportation Federal Transit Administration's Alternative Transportation in the Parks and Public Lands Program (ATPPL).

As the nation's oldest conservation and recreation organization, the AMC is committed to responsible recreation and the stewardship of our natural resources. Our mission states, in part, our belief that the mountains and rivers have an intrinsic worth and also provide recreational opportunity, spiritual renewal, and ecological and economic health for the region. We encourage people to enjoy and appreciate the natural world because we believe that successful conservation depends on this experience.

The AMC has been operating recreational facilities in the White Mountain regions of New Hampshire and Maine for the public since 1888, and was instrumental in the passage of the Weeks Act in 1911 which authorized the formation of the White Mountain National Forest.

By cooperative agreement, the Appalachian Mountain Club monitors air pollution including ozone and fine particles in the White Mountains as part of the Forest Service's obligation under the Forest Plan to monitor Air Quality Related Values (AQRV). We have been monitoring our own carbon footprint since 2003 and are proactively implementing solutions and investigating future options to further reduce our carbon emissions.

The AMC, as a long-time partner of the USFS, is eager to play an active and significant role in seeking solutions to the reduction of vehicle impacts and emissions in the White Mountain region, and endorses this request for ATPPL funding.

Sincerely,

Andrew J. Falender
Executive Director, AMC

Main office • Five Joy Street, Boston, MA 02108-1490 617-523-0655
Pinkham Notch Visitor Center • Route 16, Box 298, Gorham, NH 03581-0298 603-466-2721
Highland Center at Crawford Notch • General Delivery, Route 302, Bretton Woods, NH 03575-9999 603-278-4453
www.outdoors.org

Attachment 4

February 24, 2008

Mr. William Dauer
White Mountain National Forest
719 North Main Street
Laconia, NH 03246-2772

Dear Mr. Dauer;

The Mount Washington Summit Road Co., comprised of the Mt. Washington Auto Road and Great Glen Trails Outdoor Center, wishes to go on record in support of the Planning Project Proposal being submitted to the U.S. Department of Transportation Federal Transit Administration's Alternative Transportation in the Parks and Public Lands Program.

The Mt Washington Summit Road Co completed the toll road to the summit of the Northeast's highest peak in August of 1861 and since that time has been entertaining and educating our guests with the wonders of Mt Washington. In 1995 the company started Great Glen Trails Outdoor Center, a division devoted to non-motorized outdoor recreation. As a company, we are focused on being good stewards of the property we hold within the White Mountain National Forest and are excited to be a working partner in the proposed study of transportation alternatives.

We believe the goals of the proposal to be sound and much needed as we seek ways to decrease our energy use, decrease green house gas emissions and address traffic congestion within the National Forest.

Sincerely,

Howie Wemyss
General Manager

PO Box 278 Gorham, New Hampshire 03581 (603) 466-3988 www.mt-washington.com

Attachment 5

Field Report
White Mountain National Forest

Figure 1. Sabbaday Falls

1.0 Summary

The White Mountain National Forest (WMNF) is located in north central New Hampshire and southwestern Maine, encompassing approximately 800,000 acres of spruce and northern hardwoods and paper birch. The WMNF was established in 1911 to provide resources for the American people and to protect and manage land for future generations. The

Forest includes 157 miles of road open to passenger car travel, 1,200 miles of hiking trails, 400 miles of snowmobile trails, 160 miles of the Appalachian Trail, 23 developed campgrounds, and numerous Nordic and alpine ski areas. Some of the most prominent physical features of the Forest include the Presidential Range of the Appalachian Mountains, which includes Mount Washington, the highest peak north of the Smokey Mountains and east of the Mississippi; Tuckerman Ravine which provides spring backcountry skiing and hiking opportunities; and the Kancamagus Highway, the primary sightseeing roadway through the WMNF. The WMNF provides year-round recreational resources, including hiking, camping, mountain biking, wildlife watching, fishing, hunting, picnicking, swimming, and canoeing/kayaking. During the winter, there is snowshoeing, snowmobiling, alpine and Nordic skiing, and ice climbing.

It is estimated that the WMNF attracts six to seven million visitors annually, making it one of the most popular National Forests in the country. Peak visitation occurs during the summer months and the fall foliage season. Growth in visitation has led to increased automobile traffic throughout the WMNF which, according to USFS, has the potential to seriously impact the visitor experience as well as forest resources, air quality, and currently available parking. This has been particularly apparent on the Kancamagus Highway.

Currently, limited shuttle bus services are operated in the WMNF by the Appalachian Mountain Club (AMC) to serve hikers and by the Mount Washington Hotel to serve hotel guests. The USFS envisions expanded shuttle services as an Alternative Transportation System (ATS) which could serve both hikers and sightseers, helping to reduce demand for private automobile use within the Forest while providing educational and interpretive opportunities related to visitor attractions and forest management.

Various configurations of the shuttle service are possible:

- A loop encompassing the White Mountain Trail National Scenic Byway;
- An extended loop encompassing the White Mountain Trail National Scenic Byway with an extension to Gorham and U.S. 2; or
- A limited two-way shuttle along the Kancamagus Highway between Lincoln and Conway, New Hampshire.

Service would operate during peak summer and fall foliage visitation periods with stops at key visitor attractions. The shuttle would provide an alternative to private automobile use, helping to reduce growth in vehicular traffic throughout the WMNF.

2.0 Background Information

2.1 Location

The WMNF is part of the U.S. Forest Service's Eastern Region (9), which is headquartered in Milwaukee, Wisconsin. The WMNF is located in north central New Hampshire and southwestern Maine. Figure 2 shows the location and layout of the Forest. Access to the WMNF primarily is via Interstate 93 and the U.S. and state highways that encircle and pass through the Forest. Forest roads connect within this network and provide access within and adjacent to the Forest. The primary communities in closest proximity to the major activity areas of the WMNF are Lincoln and Franconia, New Hampshire to the west Conway and North Conway, New Hampshire to the east, and Berlin and Gorham, New Hampshire to the north.

2.2 Physical Description

The WMNF encompasses approximately 800,000 acres in north central New Hampshire and southwest Maine. The woodlands include spruce hardwoods, northern hardwoods, and paper birch. The Forest includes 157 miles of road open to passenger car travel, 1,200 miles of hiking trails, approximately 400 miles of snowmobile trails, 160 miles of the Appalachian Trail, 23 developed campgrounds, six ski touring areas, and four alpine ski areas. There are five congressionally designated Wilderness Areas covering 115,000 acres. In addition, there are 12,000 acres of wetlands, 4,750 miles of streams, 67 lakes, and 35 watersheds. The Forest also provides habitat for big and small game, 184 species of birds, and Federally listed threatened and endangered species. Moose sightings are frequent throughout the Forest.

Some of the most prominent physical features of the Forest include the Presidential Range of the Appalachian Mountains which includes Mount Washington, the highest peak north of the Smokey Mountains and east of the Mississippi; Tuckerman Ravine which provides spring backcountry skiing and hiking opportunities; and the Kancamagus Highway, which runs 34.5 miles between the Pemigewasset River at Lincoln to the Saco River at Conway, New Hampshire.

The WMNF provides year-round recreational resources. Hiking is and historically has been the area's most popular recreational activity. Other popular activities include camping, mountain biking, wildlife viewing, fishing, hunting, picnicking, swimming, and canoeing/kayaking. During the winter, there is snowshoeing, snowmobiling, alpine and Nordic skiing, and ice climbing.

Although not within the Forest, a number of major activity centers are located immediately adjacent to the WMNF which generate and share visitation with the WMNF. Some of these attractions are shown in Figure 3. Franconia Notch State Park, located along I-93 includes a number of popular tourist attractions, including the Cannon Mountain Aerial Tramway, the Flume Gorge, and the (former) Old Man of the Mountain Viewing Area.

Crawford Notch State Park, located along U.S. 302, is a popular hiking and camping area and the location of the AMC's Highland Center at Crawford Notch, AMC's new lodge and outdoor education center. The towns of Conway and North Conway are popular vacation centers with golf courses, outlet shopping malls, and numerous commercial tourist attractions. Additional commercial tourist attractions are located along U.S. 3 in the vicinity of Lincoln and U.S. 2 in the vicinity of Gorham.

Figure 2. Regional Map

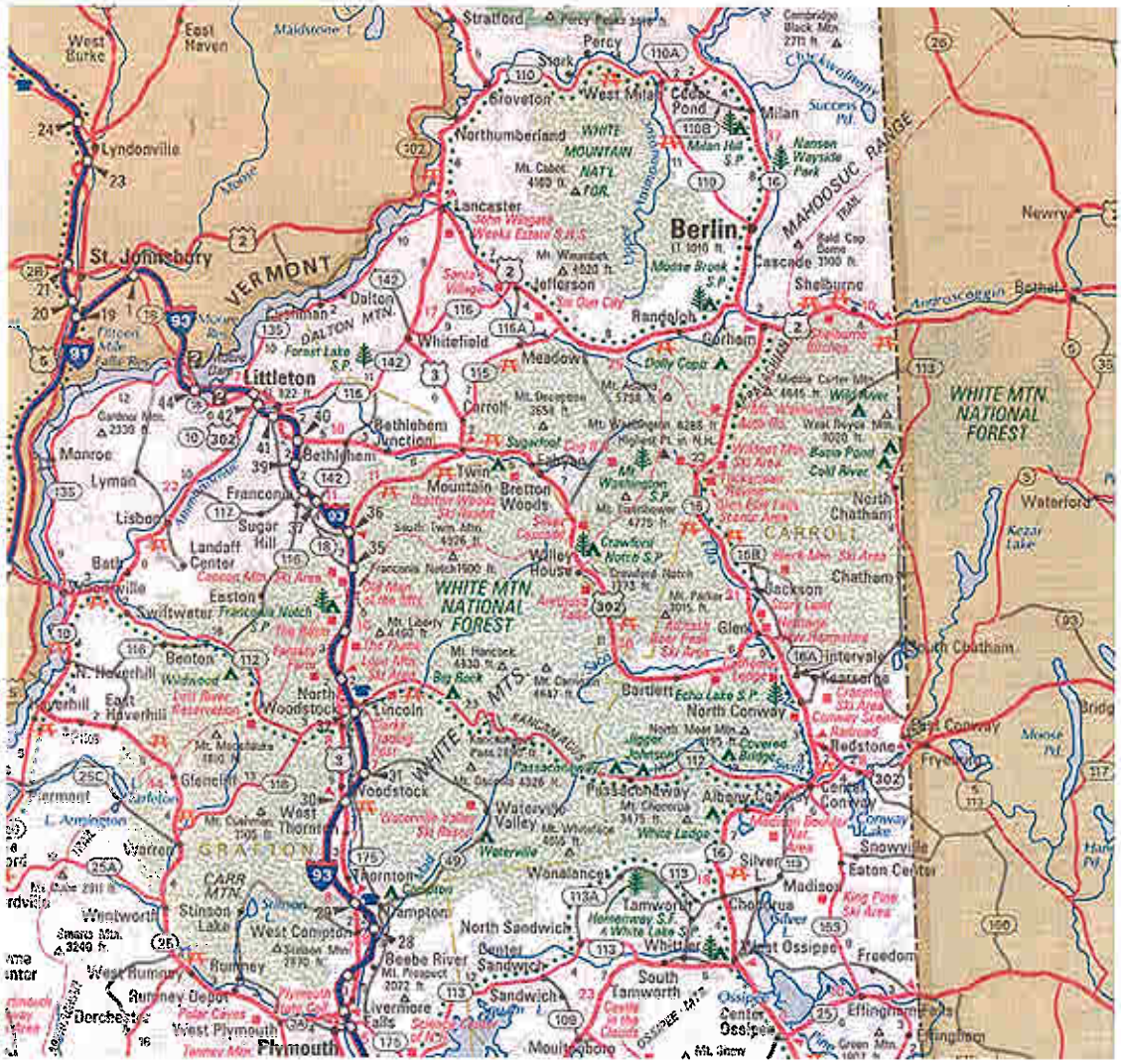
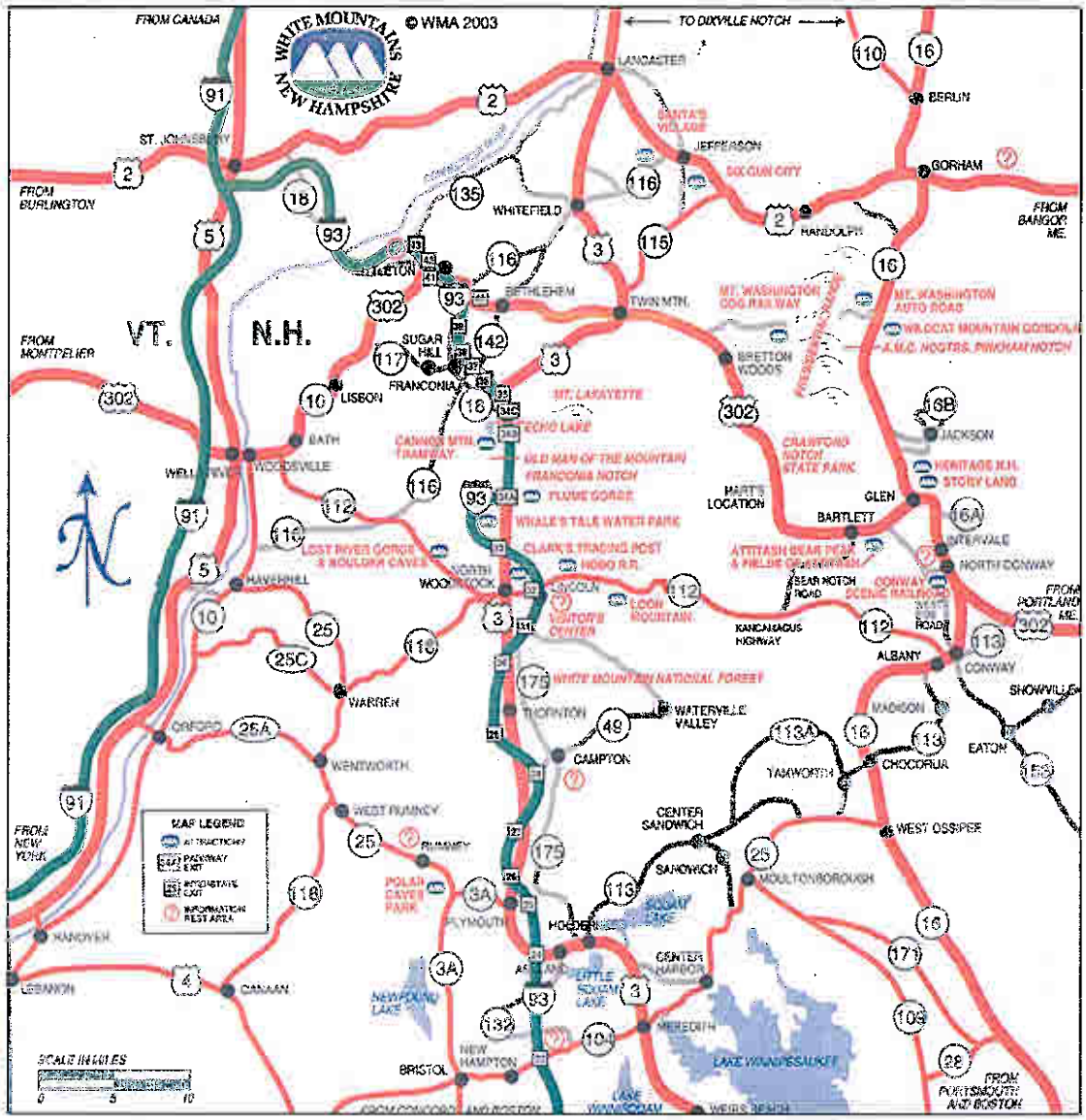


Figure 3. White Mountain Attractions



2.3 Mission and Goals of the Facility

The WMNF was established in 1911 after public outcry over uncontrolled logging and destructive forest fires led to the passage of the Weeks Act which allowed Federal purchase of private land east of the Mississippi River. National Forests were established to provide resources for the American people while also protecting and managing the land for future generations. Unlike National Parks which are established for the purpose of preservation, National Forests were set aside for conservation and the wise use of resources through a balance of activities, including recreation, wildlife habitat, water, timber, and wilderness.

Timber harvesting occurs on approximately 0.5 percent of the entire Forest at any given time, with current annual sales of approximately 19 million board feet. Harvesting is managed to improve recreation, create trails or vistas, create wildlife habitat, and to provide wood products.

2.4 Visitor Characteristics

Given the nature of the facility, the WMNF collects only limited visitation statistics. However, it is estimated that the Forest attracts six to seven million visitors annually, making it one of the most popular National Forests in the country. Visitors are attracted to the area from throughout the Northeastern U.S. and Canada. An annual increase in visitors from European countries also has been reported. The Forest is within a day's drive of 70 million people. There typically are three types of visitors to the Forest: 1) visitors who enjoy driving for pleasure and wildlife viewing; 2) visitors who want to experience some outdoor recreation, such as families with small children; and 3) hikers who come to the WMNF specifically for outdoor recreation, such as day or backcountry hiking.

Peak visitation generally begins with the end of the school year, extending through the summer months until the beginning of the school year in the fall. A second peak occurs during fall foliage season, generally from late September through mid-October. Visitation in winter is concentrated at the developed downhill and cross-country ski areas and along the 400 miles of snowmobile trails dispersed throughout the Forest.

3.0 Existing Conditions, Issues and Concerns

3.1 Transportation Conditions, Issues and Concerns

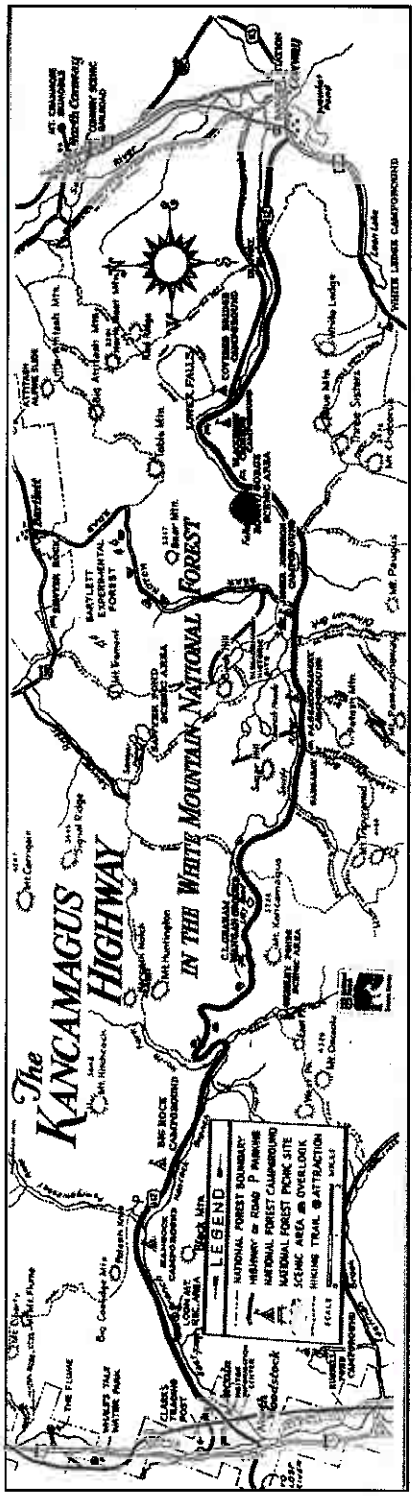
Although hiking and, to a lesser extent, bicycling are popular activities in the WMNF, access to and within the Forest is primarily by private automobile. To a more limited extent, school and church groups will travel to the Forest by bus, and a significantly increasing number of commercial tour buses also serve the area, primarily during the fall foliage season.

The White Mountains Trail Scenic Byway, which encompasses the Kancamagus Highway, is a 100-mile loop through the WMNF that provides views of some of the White Mountains' most spectacular scenery. The loop passes six National Forest campgrounds and the towns of Bartlett, Intervale, North Conway, Conway, and Lincoln. Nearby attractions include Franconia Notch, Crawford Notch, sights of the Presidential Range, the Presidential Range-Dry River Wilderness Area, and the Pemigewasset Wilderness Area. The Scenic Byway also passes across or in the vicinity of many of the most popular hiking trails in the White Mountains.

Figure 4. Pemigewasset Overlook

The Kancamagus Highway or "Kanc," a 34.5-mile portion of the Scenic Byway, is a two-lane facility which was opened to thru traffic in 1959 (not paved until the 1980s) and provides access to a wide range of recreational activities, scenic areas, overlooks, and hiking trails. Figure 5 shows the layout of the Kancamagus Highway and many of its more prominent features. There are numerous parking areas off and adjacent to the Kancamagus. Some of these parking areas recently have been reconstructed under a major Capital Improvement Project to accommodate tour buses and motor homes, others only are able to accommodate a limited number of conventional automobiles. Parking lots along the Kancamagus are not plowed during the winter. The Kancamagus currently is undergoing improvement in sections under the State of New Hampshire's 10-year State Transportation Improvement Plan (STIP) that was established in 1995. This includes repaving and the addition of wider shoulders to accommodate a four-foot bike lane in both directions. The STIP also included the upgrade and improvement of eight sites, construction of two new sites, addition of interpretive panels to tell the history of the White

Figure 5. Features of Kancamagus



Mountains along the route, and addition of modern displays at the White Mountain Attractions Visitor's Center. As upgrades and additions are made, the Forest Service is aiming to improve existing opportunities within the Forest and to establish new opportunities for persons with disabilities.

According to USFS staff, traffic volumes throughout the Forest have grown substantially, creating conditions which have the potential to impact the visitor experience. The New Hampshire Department of Transportation Bureau of Transportation Planning traffic report indicates an average annual daily traffic count along the western part of the Kancamagus Highway to range from 3,900 to 5,300 vehicles and along the eastern sections of the highway (outside of Conway, New Hampshire) to range between 1,800 to 2,800 vehicles during the past eight years. This growth in traffic volumes has been particularly apparent on the Kancamagus Highway which, during peak visitation periods, can experience traffic congestion and severe parking constraints. At popular activity centers, this can result in parking outside of designated areas, affecting the aesthetics of the scenery as well as public safety.

The USFS instituted a Congressionally approved parking pass fee program for designated parking areas throughout the WMNF road network. This controversial program was enacted as a Demonstration Project by Congress in 1996, and although it has yet to be designated as permanent legislation, it is still supported by Congress. An annual pass costs $20 and is displayed in a vehicle's windshield. Daily passes are sold for $3.00 through dispensers at most parking lots on an honors system, at a manned booth at the Lower Falls visitation area, at the Lincoln Woods Visitor's Center, at the White Mountain Attractions Visitor's Center in Lincoln, New Hampshire, and at the Ranger Station in Bethel, Maine. The fee is placed in an envelope which is then placed in a secured depository at the site. The envelope has a tear-off ticket which is placed on the dashboard of the vehicle which identifies the day of the week that the pass was purchased. The fee envelope is shown in Figure 6. According to USFS staff, this fee system generated approximately $700,000 in 2002, its first year of operation. These additional funds allowed the Forest Service to make improvements that would not have been possible through standard Congressional appropriations. Under the current system, revenue generated from this system is designated for future preservation or development of the WMNF instead of being absorbed by the Treasury. The USFS reports that there has been a high degree of compliance with, as well as resistance to, the fee program.

Perhaps counter intuitively, the activity of hiking in the WMNF generates particular transportation issues. While some of the hikers through the Forest are long-distance hikers, many come to the Forest via automobile for shorter duration or day hikes. In these cases, hikers will commonly "spot" a vehicle at both ends of their route for drop-off and pick-up so that the need to retrace the hike back to the hike origin to access an automobile is avoided. This requires the use of two automobiles (when only one is necessary to transport hikers) and the availability of parking at both ends of the trail.

Figure 6. Fee Envelope

The AMC currently operates a limited, seasonal shuttle service for hikers which operates in coordinated bidirectional routes, primarily along U.S. 302. The shuttle serves various trailheads, the Pinkham Notch Visitor Center, and the Mount Washington Hotel. It runs from June 4 to October 13 and consists of two vans based at the Pinkham Notch Visitor Center. The AMC currently owns one 20- and one 14-passenger van. They hope to upgrade to two 20-passenger vans within the next few years, as this size van allows for more passengers, greater comfort for passengers, and is equipped with roof storage for hikers' gear. Each route is run twice a day on a fixed schedule, covering approximately 250 miles daily, with multiple transfer points which enables travel to either end of the shuttle route regardless of which van was boarded. The schedule of the AMC shuttle is shown in Figure 7. The cost, regardless of distance, is $10 for AMC members and $11 for non-members. The majority of the shuttle reservations are made by hikers who utilize the AMC's hut service. Reservations are recommended, although walk-ons are accepted as space permits. Presently the shuttle system serves 4,000 to 5,000 users per year (June to October) and runs at 95 to 98 percent capacity during the months of July and August. The AMC's huts, however, serve about 40,000 visitors per year. This number has been increasing in recent years, and the AMC anticipates increased growth to the shuttle service as well. This service can help hikers avoid the need of a second automobile at one end of their route, although it also requires careful adherence to schedule. AMC recommends taking the shuttle at the start of a trip and hiking back to the car.

Bicycling also is becoming more popular in the WMNF. Road biking is more popular than mountain biking given the steep grade of most backcountry trails. Establishment of bike lanes on the Kancamagus Highway and U.S. 302 will encourage additional biking in the Forest, and it is believed that cyclists will prefer a route between Conway and Lincoln given the more gradual grade in the westerly direction.

Figure 7. AMC Schedule

2003 AMC Hiker Shuttle Schedule

SCHEDULE READS DOWN				*SCHEDULE READS DOWN*		
SHUTTLE ONE		**Departs**		**SHUTTLE TWO**		**Departs**
Pinkham Notch Visitor Center		8:00AM				
19 Mile Brook Trailhead		8:10AM				
Appalachia/Valley Way Trlhead		8:35AM		Pinkham Notch Visitor Center		8:00AM
Lafayette Place Campground		9:20AM		Appalachia/Valley Way Trlhead		8:30AM
Liberty Spring Trail / A.T.		9:30AM		Mt. Washington Hotel		9:05AM
Old Bridle Path Trailhead		9:40AM		Crawford Depot Visitor Center		9:15AM
Gale River Trailhead		10:00AM		Ammonoosuc Ravine Trail		9:40AM
Foster's Crossroads Store	TRANSFER	10:15AM	****	Foster's Crossroads Store	TRANSFER	10:15AM
Appalachia/Valley Way Trlhead		10:50AM		Zealand Trailhead		10:30AM
19 Mile Brook Trailhead		11:20AM		Crawford Depot Visitor Center		11:00AM
Pinkham Notch Visitor Center	ARRIVES	11:30AM		Webster Cliff Trail / A.T.		11:10AM
				Pinkham Notch Visitor Center	ARRIVES	12:00PM
			****			
Pinkham Notch Visitor Center	DEPARTS	12:00PM				
19 Mile Brook Trailhead		12:10PM		Pinkham Notch Visitor Center	DEPARTS	12:30PM
Appalachia/Valley Way Trlhead		12:35PM		Crawford Depot Visitor Center		1:15PM
Zealand Road at Rt. 302	TRANSFER	1:25PM	****	Zealand Road at Rt. 302	TRANSFER	1:25PM
Zealand Trailhead		1:35PM		Gale River Trailhead		1:40PM
Ammonoosuc Ravine Trail		2:05PM		Lafayette Place Campground		2:00PM
Mt. Washington Hotel		2:30PM		Liberty Spring Trailhead		2:10PM
Crawford Depot Visitor Center		2:40PM		Old Bridle Path Trailhead		2:20PM
Appalachia/Valley Way Trlhead		3:25PM		Appalachia/Valley Way Trlhead		3:15PM
19 Mile Brook Trailhead		3:50PM		Gorham Irving Gas Station		3:30PM
Pinkham Notch Visitor Center	ARRIVES	4:00PM		Great Gulf Trailhead		3:45PM
				19 Mile Brook Trailhead		3:50PM
				Pinkham Notch Visitor Center	ARRIVES	4:00PM

3.2 Community Development Conditions, Issues and Concerns

Traffic congestion periodically impacts roadways within or adjacent to the WMNF, particularly affecting New Hampshire Route 16 and, to a lesser extent, the Kancamagus Highway. During peak visitation periods in both the summer and winter, North Conway experiences high traffic volumes along New Hampshire Route 16, largely caused by the high volume of visitors to the area's outlet shopping facilities. This congestion often spills over into Conway. The New Hampshire Department of Transportation (DOT) has been considering options for a bypass route around North Conway, but has not developed a definitive plan due to community and environmental concerns.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

The primary concern cited by the USFS relevant to natural and cultural resources is the impact of increased automobile traffic within the WMNF, particularly on the Kancamagus Highway, and the impacts of increasing vehicle traffic on air quality conditions throughout the State. This is warranted by increased volumes of traffic on days of high visitation and greater demand on transportation infrastructure, particularly parking facilities at the more popular activity centers. Some recent projects have expanded parking capacity at a few locations, but the USFS recognizes the need to protect forest resources and the aesthetics of the WMNF while accommodating visitors and providing accessibility. As a result, the USFS has limited expansion of facilities as much as possible and has made an effort to consolidate or provide connections between facilities, so that visitors can park in one location and take a short hike to an adjacent facility without the use of an automobile. One potential project that could be supported by implementation of an ATS would be the construction of a quarter-mile trail connecting the Pemigewasset Overlook with the C.L. Graham Wangan Ground.

3.4 Recreation Conditions, Issues and Concerns

The WMNF provides a wide range of outdoor recreation activities, including hiking, driving for pleasure, skiing, camping, picnicking, mountain biking, and swimming. Hunting is allowed by permit. However, hiking is clearly the activity most closely associated with the facility with its 1,200 miles of hiking trails, including a section of the Appalachian Trail which crosses over the Presidential Range of the White Mountains. Elevation varies from 500 feet to 6,288 feet at the top of Mount Washington. Trails exist for all experience levels but can be extremely hazardous during winter. Certain hiking trails and the mountain huts maintained for overnight lodging along these trails can become quite crowded, diminishing the wilderness ambiance. There are 23 developed campgrounds within the WMNF, providing more than 700 campsites.

Skiing is a major activity in the winter. Many of New Hampshire's most popular downhill ski areas have special use permits to operate within the WMNF, including Waterville Valley, Loon Mountain, Attitash, and Wildcat. Nordic or cross-country skiing also is popular in the Forest, and opportunities for cross-country skiing exist on hiking trails, logging roads, and specially maintained trails. Some areas charge for the use of groomed trails, including the Jackson Ski Touring Center, Waterville Valley, Bretton Woods, and Great Glen. Snowmobiling is growing in popularity and trails are marked to avoid conflicts between cross-country skiers and snowmobilers.

Figure 8. Falls Pond Accessible by Hiking and Cross-Country Ski Trails

4.0 Planning and Coordination

The Land and Resource Management Plan (Forest Plan) for the WMNF was approved in 1986. The WMNF currently is revising its Forest Plan, in accordance with the National Forest Management Act (1976). Updates on the current revision process are provided by the Forest at: http://www.fs.fed.us/r9/white/3_WM_fpr_Web/forest_plan/revision/revision.htm.

The WMNF encompasses many communities and facilities operated by numerous entities. It is therefore important for the Forest Service to maintain coordination with state and local agencies as well as private organizations and local tourist services. Tourism is an important aspect of the State of New Hampshire's economy. The Institute for New Hampshire Studies (INHS) at Plymouth State College estimated that $3.7 billion was spent

by an estimated 27.5 visitors to the State in 2001.[1] The Forest Service and other entities that serve these visitors recognize the need to work together to ensure a positive experience for the State's visitors. Increased communication between the Forest Service and the New Hampshire Division of Parks and Recreation (which operates Crawford Notch and Franconia Notch State Parks) and the AMC would be beneficial to all parties and could help facilitate the implementation of alternative transportation services in the WMNF. Several agencies either operate or have tried to operate shuttle services in the area, including the AMC, Mount Washington Hotel, and Jackson Ski Touring. Coordination between these organizations could lead to improved efficiency for existing operations and cooperation in the establishment of new services.

5.0 Assessment of Need and System Options

5.1 Magnitude of Need

As noted above, more than six million people visit the WMNF annually. There are several concurrent efforts being made to attract more visitors to the State and specifically to the WMNF. The Forest is working to develop a new interpretive program which will provide a consistent theme and design to all interpretive signs throughout the Forest. At the WMNF Visitor Center in Lincoln, a contract for $350,000 has been awarded for the creation of interpretive displays. This center also is home to displays by local businesses and encourages economic development throughout the State. A new site is being developed along the Kancamagus Highway to educate visitors about the Forest Service's timber harvesting activities. The Discovery Site will be wheelchair accessible and kid-friendly, as the Forest Service anticipates use by many school groups. The Forest Service is taking a new approach to designing this site's parking area by creating spaces that will accommodate tour buses, thus allowing for more visitors to the site. Highway improvements also are being made. The Kancamagus Highway is undergoing a full reconstruction that is scheduled to be completed within 10 years. Four-foot shoulders are being added the entire length of the highway. This is an effort to encourage bicycle use and for assistance with winter snow plowing needs. The shoulders are being built slightly narrower than the ideal six- to eight-foot bicycle lanes in an effort to discourage automobile parking along the highway. Similar shoulders are being added to U.S. 302, as well.

Private-sector growth within the WMNF also is anticipated to attract more visitors. The Loon Mountain Ski Resort, located within the Forest, recently completed an Environmental Impact Statement (EIS) and is planning an expansion. AMC is scheduled to open their new outdoor adventure center, the Highland Center, this fall at Crawford Notch. The center will accommodate 122 overnight guests, with facilities for private and

[1] Economic and Labor Market Information Bureau, *Vital Signs 2003 Economic and Social Indicators for New Hampshire*, New Hampshire Employment Security, January 2003, page 38.

family rooms as well as conference meetings. The center is accessible by car and through the AMC's shuttle system.

The anticipated increase in visitors to the Forest may only compound the current issues facing the Forest. Traffic volumes throughout the Forest have grown substantially, creating conditions which have the potential to impact the visitor experience. This has been particularly apparent on the Kancamagus Highway which, during peak visitation periods, can experience traffic congestion and severe parking constraints. At popular activity centers, such as at the Lincoln Woods Visitor Center, parking outside of designated areas affects the aesthetics of the scenery as well as public safety.

5.2 Feasible Transit Alternatives

Shuttle services already operated by the AMC and Mount Washington Hotel corroborate the feasibility of shuttle bus services within the WMNF. A more extensive shuttle bus system is a possible alternative transportation measure that could help mitigate impacts of increased visitation to the WMNF. The service would serve tourists who would otherwise utilize their personal automobile for sightseeing and access to the area's attractions and also hikers who need access to and from trailheads. Various configurations of shuttle service are feasible with the potential to be integrated with existing services operated by the AMC and/or the Mount Washington Hotel. The most extensive shuttle system envisioned by WMNF staff would operate along the entire White Mountain Trail National Scenic Byway. A more limited system would operate only along the Kancamagus Highway.

The full shuttle route would follow the White Mountain Trail National Scenic Byway along the Kancamagus Highway, New Hampshire Route 16 between Conway and North Conway to Glen, then follow U.S. 302 through Crawford Notch State Park to I-93 through the Franconia Notch State Park. A possible extension of this route could encompass New Hampshire Route 16 from Glen to Gorham, then follow U.S. 2 to New Hampshire Route 15, connecting with U.S. 302 at Twin Mountain. Depending upon demand and traffic conditions in Conway, a bypass of Route 16 and the Conway area would be possible by utilizing Bear Notch Road between Bartlett and the Kancamagus Highway. A shuttle operating only along the Kancamagus Highway could run between the Visitor Center in Lincoln and a parking area in Conway, preferably on or near New Hampshire Route 16.

Although definite shuttle-stop locations have not been determined, several sites have been suggested as possible shuttle stops, including:

- Visitor Center, Lincoln;
- Lincoln Woods Visitor Center;
- Discovery Site;
- Hancock Trailhead and Overlook;
- Pemigewasset Overlook;

- Sabbaday Falls;
- Passaconaway/Russell Colbath House;
- Rocky Gorge Scenic Area;
- Lower Falls;
- Blackberry Crossing Campground;
- Albany Covered Bridge;
- Diana's Bath;
- Davis Path;
- Crawford Notch State Park, including the AMC's Highland Center; and
- Franconia Notch State Park.

Service would operate during peak summer and fall foliage visitation periods. The Visitor Center operated by White Mountain Attractions, located at the western end of the Kancamagus Highway in Lincoln, is a possible base for shuttle operations.

As an incentive to use the shuttle service, USFS staff believe that the system could provide additional interpretive programs, such as through an on-board interpretive staff guide. Interpretive information also could be provided through shuttle mounted audio and/or video systems. Consideration should be given to parking strategies which facilitate parking and access to shuttle services as well as a fee system which discourages use of private automobiles in favor of shuttle use.

In terms of operation, the Forest Service indicated that it would be necessary to have a concessionaire or outside vendor as operator of the shuttle service. Proving this as a viable, profitable business venture on a seasonal basis may be difficult. Possible coordination with area ski resorts and visiting school groups during the winter season, might make it a more viable business opportunity.

6.0 Bibliography

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USDA Forest Service, *National Visitor Use Monitoring Results, Region 9, White Mountain National Forest,* Final publication August 16, 2001.

White Mountain National Forest Service, *Analysis of the Management Situation (AMS)*, http://www.fs.fed.us/r9/white/3_WM_fpr_Web/forest_plan/revision/ams/analysis_of_the_management_situa.htm.

http://www.fs.fed.us/r9/white/.

7.0 Persons Interviewed

Bill Dauer, Forest Engineer, White Mountain National Forest, USDA Forest Service

Rebecca Oreskes, Recreation Staff Officer, White Mountain National Forest, USDA Forest Service

Chris Thayer, Director of Visitor Services, Appalachian Mountain Club

Lewis Baldwin, Visitor Services Supervisor, Appalachian Mountain Club

Johanna Lyons, Planning Director, New Hampshire State Parks

Attachment 6

Transportation Observations, Considerations, and Recommendations for White Mountain National Forest

Provided by the Interagency Transportation Assistance Group (TAG)

Plymouth, New Hampshire
June 27–29, 2007

A field investigation of the current transportation infrastructure and operations at White Mountain National Forest by the interagency Transportation Assistance Group (TAG) was conducted June 27-29, 2007, on behalf of the U.S. Forest Service (USFS). This TAG report was prepared subsequent to the site visit and documents the conditions observed, transportation issues and considerations, and recommendations arising from the TAG team's analysis. The site visit and the preparation of this report were facilitated and funded by USFS.

The TAG team concluded that White Mountain National Forest is experiencing transportation impacts stemming from peak visitation. Opportunities exist to improve the visitor experience, prevent resource degradation, and partner with surrounding businesses and communities to mitigate these impacts and improve the quality of life for all those who visit. The team recommended further planning studies in several areas, as well as exploration of partnership opportunities with the Appalachian Mountain Club, developing a relationship with tour bus operators, and creation of interpretive materials using new technologies.

I. BACKGROUND

White Mountain National Forest (WMNF) is located in north-central New Hampshire and southwestern Maine, encompassing approximately 800,000 acres of spruce and northern hardwoods and paper birch. WMNF includes 157 miles of road open to passenger car travel, 1,200 miles of hiking trails, 400 miles of snowmobile trails, 160 miles of the Appalachian Trail, 23 developed campgrounds, and numerous Nordic and alpine ski areas.

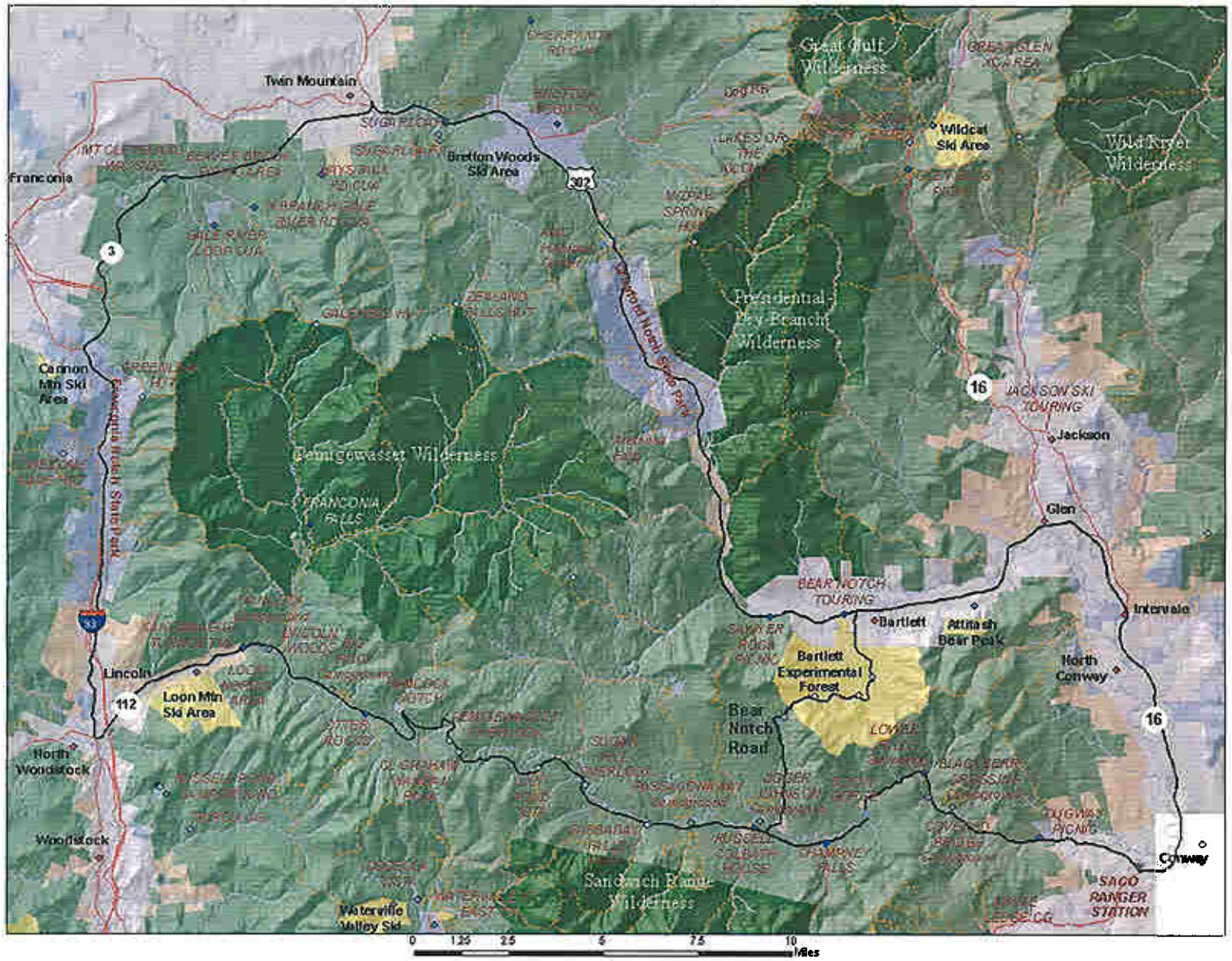
Some of the most prominent physical features of WMNF include the Presidential Range of the Appalachian Mountains, which includes Mount Washington, the highest peak north of the Great Smoky Mountains and east of the Mississippi; Tuckerman Ravine, which provides spring backcountry skiing and hiking opportunities; and the Kancamagus Highway ("the Kanc"), the primary sightseeing roadway. WMNF provides year-round recreational resources, including hiking, camping, mountain biking, wildlife watching, fishing, hunting, picnicking, swimming, and canoeing/kayaking. During the winter, there is snowshoeing, snowmobiling, alpine and Nordic skiing, and ice climbing.

It is estimated that WMNF and surrounding area attracts 5-7 million visitors annually*. There are two peak visitation periods: the summer months and the fall foliage season.

Access to WMNF is primarily via Interstate 93 and the U.S. and state highways that encircle and pass through. Forest roads connect within this network and provide access within and adjacent to WMNF. The primary communities in closest proximity to the major activity areas of WMNF, all in New Hampshire, are Lincoln and Franconia to the west; Conway and North Conway to the east; and Berlin and Gorham to the north.

* The National Visitor Use Monitoring program estimated 1,692,000 visitors to WMNF itself for FY2005.

Although not within WMNF, a number of major activity centers are located immediately adjacent, which both generate their own visitation and share visitors with WMNF. Franconia Notch State Park, located along I-93, includes a number of popular tourist attractions, including the Cannon Mountain Aerial Tramway, the Flume Gorge, and the (former) Old Man of the Mountain Viewing Area. Crawford Notch State Park, located along U.S. 302, is a popular hiking and camping area and the location of the Appalachian Mountain Club's Highland Center at Crawford Notch, the site of a lodge and outdoor education center. The towns of Conway and North Conway are popular vacation centers with golf courses, outlet shopping malls, and numerous commercial tourist attractions. Additional commercial tourist attractions are located along U.S. 3 in the vicinity of Lincoln and U.S. 2 in the vicinity of Gorham.


Twin Mountain
Franconia
Bretton Woods Ski Area
Wildcat Ski Area
Great Gulf Wilderness
Wild River Wilderness
Presidential-Dry Brancht Wilderness
Cannon Mtn Ski Area
Franconia Notch State Park
Pemigewasset Wilderness
Jackson
Glen
Intervale
Bartlett
Attitash Bear Peak
Bartlett Experimental Forest
North Conway
Lincoln
Loon Mtn Ski Area
North Woodstock
Woodstock
Bear Notch Road
Sandwich Range Wilderness
Waterville Valley Ski
Conway
SACO RANGER STATION
3
93
112
302
16
0 1.25 2.5 5 7.5 10 Miles

Recent planning studies

The **"Federal Lands Alternative Transportation Systems Study,"** a report sponsored jointly by the Federal Highway Administration and Federal Transit Administration and completed in 2003, assessed alternative transportation feasibility at WMNF. The study concluded that an extensive shuttle bus system is a possible alternative transportation measure that could help mitigate the impacts of future visitation to WMNF.

The **2005 Forest Plan** establishes direction for managing WMNF's natural resources for the next 10-15 years. It outlines the goals and objectives of WMNF, a direction for management, and specific monitoring and evaluation protocols. WMNF transportation system goals are to provide a safe, efficient, seamless transportation and parking system in place, and to continue to look for and analyze alternative transportation opportunities.

Transportation infrastructure

Access to and within WMNF is primarily by state, U.S., and interstate highways. Consequently, USFS is not able to monitor or control travel on the roadways. This contributes to difficulties in accurately monitoring visitation and also limits the ways in which the Forest Service is able to influence travel patterns.

National Scenic Byway
The Kancamagus National Scenic Byway is a 26.5 mile section of the Kancamagus Highway designated as a National Scenic Byway by the U.S. Secretary of Transportation. As such it is eligible for, and has received in the past, grants for various improvement projects. The interpretive features highlight the natural elements and their relationship with development, telling an ongoing story of forest regrowth and ecology. WMNF's transportation network also includes the White Mountain Trail National Scenic Byway, a 100-mile byway that connects with the Kancamagus Highway.

East-west connectivity
In New Hampshire, and New England generally, north-south travel tends to be easier than east-west travel. The Kancamagus Highway is an important regional east-west link in the surface transportation network; there are no comparable links nearby.

Recreation enhancement fee

Motorists visiting WMNF are required to pay a recreation enhancement fee in order to park at designated lots along the Kancamagus Highway. At each of these sites, motorists are instructed to place $3.00 into a special yellow envelope and deposit the envelope into a fee tube. They then affix a stub to their dashboard or vehicle that verifies their payment. The pass is good for the entire day at any WMNF site. The fee is on a per-vehicle basis and is the same for all vehicle types. Weekly and annual passes are also available from select vendors, USFS

offices, and information centers. According to USFS staff, this program generated approximately $700,000 in 2002, its first year of operation.

Existing transportation services

A patchwork of public and private transit and shuttle operators provide limited service in the WMNF area. These tend to target specific audiences and many operate only seasonally. For example, two private operators provide limited shuttle services in North Conway. Both are targeted to the tourist and outlet shopper. Other market segments include hikers and those needing human service transportation, as described below.

The **Appalachian Mountain Club (AMC)** operates a hiker shuttle from the beginning of June through mid-October along parts of the Appalachian Trail that run through WMNF. Two shuttle buses make a total of two loops each between AMC's visitor centers and lodges at Pinkham Notch and at Crawford Notch. A flat fare of $12 is charged for AMC members and $14 for non-members for any ride along the shuttle route. The service is designed so that hikers may park in one location and use the shuttle to return to their vehicle at the conclusion of their hike.

North Country Transit (NCT) operates public transportation services throughout Carroll, Grafton, and Coos Counties. NCT is also in the process of completing a public transportation feasibility study in Carroll County and received a grant from the Federal Transit Administration under their Public Transportation Participation (PTP) Pilot Program to develop an educational program on coordination of services among transit providers. NCT was also a co-sponsor, along with the North Country Council, of the Regional Coordinated Transit Plan for the North Country Council Planning Region, which was submitted to the New Hampshire Department of Transportation (NHDOT) in September 2006.

There are five **ski resorts** within WMNF and several more in the surrounding area. The resort areas generally own the land around their ground facilities but use the slopes (or upper slopes) under permit from USFS. These areas are major attractors during the winter months and at least two, Bretton Woods and Loon Mountain, operate and maintain internal shuttle systems. Loon Mountain shuttles also serve nearby hotels in the town of Lincoln. The shuttle buses are also used to take visitors on excursions to nearby attractions. During the summer months, these areas experience significantly less visitation. Due to the seasonal nature of activity at the ski areas, ski gondolas, buses, and parking areas seem to be much less used outside the winter months.

Environment / resource use
"Greening the White" is a USFS goal. WMNF has implemented a variety of measures to improve sustainability and is concerned about the environmental impacts of transportation to and within WMNF. As visitation grows, tailpipe emissions, runoff, and other impacts will increase.

Growth in visitation
As are many national forests and other public lands, WMNF is anticipating increased visitation in the coming years. As baby boomers retire, they are expected to drive growth in visitation to recreational areas. In addition, recent activity in the towns around WMNF will lead to increased facilities for tourists and could contribute significantly to increased visitation and related traffic. A new ski area expansion adjacent to Loon Mountain, called South Mountain, is being developed, outlet shopping has become an increasing attractor to Conway and North Conway, and the Bretton Woods ski resort is under new ownership by Celebration USA, which is expected to develop additional condominiums in the area.

Economic development
The local industrial economy has been in long-term decline, particularly in towns north of WMNF. Some towns around WMNF have come to rely increasingly on tourism and related services. In addition, New Hampshire's tax structure—no sales tax or personal-income tax—makes the "rooms-and-meals" tax a particularly important source of local revenue.

Partnerships
WMNF has worked to establish a number of partnerships. Local stakeholders appear to know and respect the WMNF, and these relationships can serve as a launching pad for further discussions on transportation issues (as will be discussed later in this report).

WMNF identity
USFS has facilities at both ends of the Kancamagus Highway in both Lincoln and Conway, as well as limited signage along I-93. The new regional office currently under construction in Campton provides an opportunity to further advance the identity of USFS, particularly to those who may not be coming to the region specifically to engage with WMNF as a "U.S. Forest Service" experience. Many visitors may in fact not be aware that they are within a national forest, and even many locals seem to regard WMNF not as a "national forest" but as a local or regional recreation area, often confused with or perceived to be part of the New Hampshire state park system, especially since several state parks are adjacent or otherwise nearby.

II. Transportation Issues/Problems

Visitation peaks and associated transportation impacts
While hard numbers are not available, WMNF staff and local stakeholders agree that visitation peaks on four holiday weekends: Memorial Day, 4th of July, Labor Day, and Columbus Day. The transportation impacts are primarily roadway congestion, parking facilities at or over capacity, and exceeding the capacity of the resources themselves.

- Heavy **traffic** at these times leads to congestion on surrounding roads, particularly on I-93 and Route 16, as well as negative impacts to the visitor experience and to increased emissions.
- As **parking** facilities reach capacity, visitors are more likely to park in unauthorized areas on the roadway shoulders. This creates a safety hazard, contributes to resource degradation, and can cause friction with local law enforcement.
- **Carrying capacity** of WMNF facilities becomes an issue, both in terms of visitor experience (especially the "wilderness" feeling) and resource impacts.

Figure 3: Spillover parking on the shoulder of the Kancamagus Highway

Understanding visitation patterns
It is difficult to accurately estimate visitation, in part because there is no entrance station, and the primary roadways are controlled by the state. Traffic volumes along these

roadways should be available from NHDOT, although these data will not capture usage of the numerous parking areas and turnouts along the way, or average vehicle occupancy. Better understanding visitor demographics and visitation patterns is critical to understanding what kinds of transportation interventions will be successful.

One particular user type of interest is tour groups. Currently, tour bus drivers are not required to apply for any kind of permit from, nor register or coordinate with, WMNF. If tour buses make use of facilities, they are required to pay the recreation enhancement fee, but on a per-vehicle basis, not a per-passenger one. Compliance is believed to be low. As noted above, recreational sites are dispersed and there are no systems in place for ongoing data collection.

Since there is a lack of detailed visitation data, and of visitor survey data regarding transportation, it is unclear what the demand might be for expanded shuttle systems as suggested in the 2003 Federal Lands Alternative Transportation Systems Study. Understanding this is essential for WMNF to fully address transportation issues.

Potential conflicts among road users
The roads in and around WMNF are used by WMNF visitors, other sightseers, commercial traffic, and resident commuters. Those visiting WMNF may be crossing the road on foot, cycling down the highway, or touring by private automobile. Especially during the fall foliage season, visitors may drive slowly to take in the views, even stopping in the middle of the highway to snap a photograph of the fall colors. In contrast are locals using the Kancamagus Highway as an east-west commuting route and commercial traffic; these groups merely want to reach their destinations as quickly as possible.

Recent and ongoing improvements to the Kancamagus Highway have added and are adding four-foot paved shoulders to each side of the road, where previously there may have been only gravel or no shoulder at all. It is hoped that these improvements will help alleviate conflicts between cyclists and vehicle traffic.

Pedestrian safety is also an issue, as visitors must sometimes cross the roadways on foot when navigating between trailheads, parking areas, and overlooks. There is the possibility of pedestrian and vehicle (car, truck, motorcycle, bicycle) conflicts, especially at popular activity nodes, where the circuitous highway alignments create limited sight distances.

Planning coordination
Though stakeholders in and around WMNF seem to generally agree on the issues and concerns that exist in the region, until now there has been no active coordination among them. The Regional Coordinated Transit Plan for the North Country Council Planning Region, jointly sponsored by the North Country Council and North Country Transit and submitted to NHDOT in September 2006, may help achieve better consensus and, ultimately, positive action on transportation issues in the WMNF region.

Coordination of existing transportation services
There is an existing patchwork of public and private transit and shuttle services. However, these tend to be limited in scope and many operate only seasonally. North Country Transit, through its Regional Coordinated Transit Plan, has begun to examine human service transportation in its service area.

Accessibility for non-motorists
Connecting citizens to the land is a goal of USFS Region 9. However, visiting WMNF is difficult for those without access to an automobile. This issue arises in relation to travel to and from WMNF and within it. Given the WMNF's proximity to large urban centers, which in general have lower rates of car ownership and use than suburban or rural areas, there is a sizable population of those who cannot or prefer not to drive. Charter bus tours periodically bring visitors, including visitors from urban areas, but there is no regular service for the independent traveler. And, as noted above, even if visitors were able to arrive at WMNF without a private vehicle, they would have difficulty in traveling within WMNF and between the surrounding towns.

Recreational enhancement fee collection
While the forest is currently working on a revised enforcement plan, many visitors may not be in full compliance, possibly because they do not understand the fee system. Enforcement is difficult for many reasons, including that the collection areas are dispersed, and many visitors may spend only a short time at a specific location. Because the current system is on a per-vehicle basis and does not discriminate between private and commercial vehicles, or by the number of axles, a single visitor in a car pays the same fee as the driver of a 45-passenger tour bus.

III. Analysis and Recommendations

WMNF is experiencing transportation impacts stemming from peak visitation. Opportunities exist to improve the visitor experience, prevent resource degradation, and partner with surrounding businesses and communities to mitigate these impacts and improve the quality of life for all those who visit and utilize WMNF.

Based on site visit observations and discussion with local stakeholders, the TAG team offers the following recommendations. Overall, the recommendations are intended to help the Forest Service better define the problem, to strengthen transportation planning coordination regionally, and to improve the visitor experience.

Some recommended activities are sequential in nature. For example, it would make sense to obtain existing data before undertaking a transportation summit. Other activities, such as working towards tour bus management, would benefit from the implementation of other recommendations, but could stand alone. Several complementary recommendations could be incorporated into the larger study described in recommendation 4. They are also listed separately, however, as the TAG team believes that the Forest Service could benefit even if the larger study is not implemented.

1. Obtain existing data and identify data needs and gaps.

The first step in getting a better understanding of current conditions and the possible demand for enhanced services is collecting existing data and identifying data needs to be addressed. Potential sources are listed in the "supporting documents and resources section" in this report (below). Partners may be able to supplement information about visitor demographics and visitation patterns.

2. Expand discussions with AMC.

AMC already operates a shuttle service and may be a partner in any expanded transit service. Initiating a discussion with AMC about their organizational needs and possibilities for partnerships is a logical early step. AMC may find benefit in consolidating operations and expanding its focus to include not only its members, but also the communities that host its facilities in northern New Hampshire.

3. Co-sponsor a regional transportation planning summit.

Many of the transportation issues impacting WMNF are outside of its (or any one agency's) control. By working with partner agencies, such as NHDOT, WMNF could bring together (or help to bring together) regional stakeholders to discuss issues such as traffic congestion, east-west connections, recreation, and economic development. The summit could be an opportunity to build on prior and ongoing studies and to work together to creatively develop approaches to the benefit of all. One outcome of the summit could be agreement, or movement toward agreement, on issues such as planning coordination, transportation management, and applications for transportation funding.

In addition to those mentioned earlier in this report, stakeholders may include ski areas and resorts, local retailers, Celebration USA, Storyland, and the various public transportation providers currently operating in the Mount Washington Valley.

4. Study transportation issues in WMNF and the surrounding area; consider a planning study centered on the Kancamagus Highway.

A transportation planning study centered on the Kancamagus Highway may form the basis for an application for project funding. Such a study could focus on areas such as visitor management, transportation operations, and vehicle/bicycle/pedestrian conflicts, and would tie the results of previous and ongoing work to WMNF's management objectives and broader USFS regional and national policy goals.

Elements could include:

- Data needs and gaps (as described in recommendation 1).
- Partnership discussions regarding planning and/or alternative transportation services (as, for instance, in recommendation 2).
- An investigation of recreation fees (as in recommendation 5).
- Strategies specific to the Kancamagus Highway, including access control alternatives for sustainable accommodation of commuter, commercial, recreational, and alternative-transportation traffic, in line with regional economic development efforts. The National Scenic Byways designation could be used as an anchor to develop a community based marketing partnership tied to businesses in town centers, following the model of Acadia National Park and Bar Harbor, Maine.

Possible funding sources for such a study include:

- Alternative Transportation in Parks and Public Lands Program (estimated application date for FY 2008 is January 2008)
- Federal Lands Highway Program
- National Scenic Byways Program

WMNF would need to consider how best to integrate this recommendation with other recommendations. Timing of each phase—of an application, possible receipt of funding, actual execution of planning work—would be a critical issue.

5. Study recreation enhancement fee structure.

A study of the current fee structure and implementation method will help WMNF to understand how well it is working today and if steps could be taken to simplify the system for visitors, while improving compliance and increasing fee collections. Such a study would need to incorporate several related components, such as data regarding visitor travel patterns within WMNF, average length of stay, number of sites visited per stay, and visitor demographics. (In that sense, this recommendation overlaps with recommendation 1, above.)

6. Work towards tour bus management by building relationships with companies and educating operators.

Developing a stronger relationship with the tour bus industry will help WMNF to understand the viewpoint of visitors and can create opportunities for providing more and better interpretation to visitors arriving by tour bus. It will also enable more effective management of such visitation within WMNF.

WMNF could begin by working with the national professional associations; USFS regional and/or headquarters staff may be helpful as conduits to these groups. Other initiatives could include directing on-site staff to talk with drivers and hand out materials, encouraging off-peak visitation with enhanced interpretive opportunities (such as on-vehicle talks by WMNF staff), and developing incentives for drivers to "check in" with WMNF when arriving. Incentives might include on-vehicle DVDs or other interpretive materials (see recommendation 6, below) to enhance the experience for visitors.

In the future, WMNF might explore revising its recreation enhancement fee structure to better reflect the usage by tour buses, possibly including options such as annual or multi-year permits for tour buses using WMNF facilities. (See recommendation 5, above.)

7. **Develop an audio or video tour that takes advantage of new technologies, and creates a unique opportunity for visitors to fully experience WMNF and its surrounding communities.**

Due to the dispersed nature of WMNF recreational facilities, visitors may not always be aware of all that WMNF has to offer. Just as the Kancamagus Interpretive Plan developed strong narratives along the Kancamagus Highway, by taking advantage of new technologies, such as podcasting or GPS, USFS may be able to strengthen its own interpretive message.

An audio tour interpreting the Kanc could be used either in-vehicle or at sites along the highway. One applicable technology may be a podcast for download from the WMNF web site. Tour buses might be offered the loan of an audio tour that they could plug into their on-board sound systems, GPS-keyed to each site. In addition, a video tour could be distributed for patrons to watch before arriving at WMNF.

In addition to the visitor-experience benefits, such interpretive materials may contribute to better management by WMNF of visitors, as it could be possible to more closely track visitor circulation within and between recreational sites, along the lines of what is presented by those materials. The use of GPS technologies also creates opportunities for better data collection and understanding of visitation patterns.

If these materials were linked to the provision of alternative transportation, the result could be a system that provides a unique experience for users and creates an incentive to encourage transit use.

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- Steve Knox, Business Enterprise Development Co.
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SUPPORTING DOCUMENTS AND RESOURCES

1. WMNF 2005 Plan,
   http://www.fs.fed.us/r9/forests/white_mountain/projects/forest_plan_revision/Downloads.php.
   The 2005 Forest Plan establishes direction for managing WMNF's natural resources for the next 10-15 years.

2. WMNF 2005 Plan, Appendix D: Transportation,
   http://www.fs.fed.us/r9/forests/white_mountain/projects/forest_plan_revision/pdf_documents/FEIS_PDF/D_FEIS_transportation.pdf.
   Defines various road classifications, current roads policy, decommissioning efforts, current conditions, and road system needs.

3. WMNF Field Report from the Federal Lands Alternative Transportation Systems Study.
   Field report completed by FHWA/FTA in 2003, which assesses alternative transportation feasibility at WMNF.

4. WMNF Socio-Economic Assessment,
   http://www.fs.fed.us/r9/forests/white_mountain/projects/forest_plan_revision/SocioEconomicAssessment.htm.
   This assessment characterizes the socio-economic environment of WMNF by investigating the relationship between WMNF and surrounding communities. Identifies four issues that have the potential to bring about accelerated socio-economic change in the WMNF region or its population of visitors: disparities within the region; changes in the forest products industries; changes in forest land ownership; and aging population effect on the demand for outdoor recreation.

5. WMNF Monitoring Reports,
   http://www.fs.fed.us/r9/forests/white_mountain/publications/monitoring_reports/index.php.
   Annual updates on progress made toward achieving goals set forth in the Forest Plan. A 2006 monitoring report is expected to be released in 2007.

6. WMNF 2006 Year in Review,
   http://www.fs.fed.us/r9/forests/white_mountain/publications/annual_reports/2006_annual_report_lo_res.pdf.
   Project updates and successes from 2006. Includes 2006 budget allocations by program area.

7. 2006 WMNF Recreation Fee Report.
   Lists the many uses of the revenues obtained from recreation fees. The successes could help to highlight how much more the WMNF could benefit from better enforcement of the recreation fees.

8. FHWA/FTA ATS Needs, WMNF Excerpt,
http://www.fta.dot.gov/documents/Fed_Lands_Forest_Service_SupplementATS_Needs.pdf, pg. 52 (4-19).
Highlights the importance of WMNF; the threat that the growth in visitation and associate automobile traffic have on forest resources, air quality, and parking; and a several possible options for a bus shuttle route through WMNF.

9. TAG one-pager from Bill Dauer, 15 June 2007.
Outlines the purpose of the June 27-29 TAG meeting, which was to move forward on transportation, using the 2003 FHWA/FTA field report as a starting point.

10. TAG Questionnaire.
Questionnaire filled out by Bill Dauer and WMNF as to the purpose of and need for the White Mountain TAG.

11. "Regional Coordinated Transit Plan for the North Country Council Planning Region,"
http://www.tccap.org/net_NCRT_Plan.pdf.
Jointly sponsored by NC Council and NC Transit, this 2006 coordinated planning effort was mandated by FTA. The plan includes an evaluation of all modes of transportation and identified needs of existing facilities. Recommendations fall into these five areas: Education, Data Gathering, State Initiatives, Planning and Analysis, and Marketing.

12. Kancamagus Interpretive Plan Case Study,
http://www.bywaysresourcecenter.org/images/resources/projects/best2003/Case_Study_-_Kancamagus.pdf.
May 2003 report from the America's Byways Resource Center. Noted elements of success include providing a quality experience for all ages, careful coordination of interpretation and facility design, engaging the public as an equal partner, and forging successful partnerships.

13. WM Attractions Visitors Center Interpretive Plan,
http://www.fs.fed.us/r2/cdi/portfolio/interpretive_products/interp_plans_strategies/pdfs/WhiteMtn_GatewayVC_Interp_Plan_2004_comp.pdf.
Discusses the interpretive goals of the Gateway Visitors Center, one of the "bookends" of the Kancamagus Highway, which provides insight into further interpretive opportunities along the Kanc.

14. North Country Council Scenic Byways Meetings,
http://www.nccouncil.org/pdf/scenicby_minutes_010907.pdf,
http://www.nccouncil.org/pdf/scenicbymin3_20_07_2.pdf.
Discussions of 2007 Scenic Byways grant applications submitted by stakeholders of the WMNF.

15. LSC Consultants Carroll County TAG Report,
http://www.lsccs.com/projects/carroll/tm1/Ch1.pdf.
Looked at demographics and public transit needs for Carroll County, which includes the eastern half of the Kanc, North Conway, Conway, and points south. There is a high need for service along Route 16 through Conway and North Conway, though other areas scored lower on the needs assessment. See page V-12. Some good data dispersed throughout.

16. AMC Comments re. WMNF Plan
http://www.outdoors.org/pdf/upload/deis_comments.pdf.
30-page letter offering comments on the Draft EIS and proposed Land and Resource Management Plan for WMNF. However, no direct mention of transportation or buses/shuttles.

17. NH DOT 2007-2016 Ten-year Plan: Congestion.
http://www.nh.gov/dot/bureaus/planning/documents/05_congestion.pdf.
Study shows that Route 16 from the Kanc north through Conway, North Conway, to the 16/302 split in Glen is among the 310 miles of 2,730 miles of major state highways in the state that are congested (LOS E or F). The Kanc itself is moderately congested (LOS C or D).

18. NH DOT Traffic Volume Reports.
http://www.nh.gov/dot/transportationplanning/traffic/index.htm.
Traffic counts included for I-93, NH 112 (Kancamagus Highway), NH 16, US 302, and several other major roadways throughout WMNF.

19. AMC Hiker Shuttle, http://www.outdoors.org/lodging/lodging-shuttle.cfm.
Shuttle running four times daily between Crawford Notch and Pinkham Notch; $12 for AMC members, $14 for non-members.

20. Concord Trailways NH,
http://www.concordtrailways.com/new_hampshire_bus_schedule.htm.
Twice-daily service from Berlin and Conway to Boston South Station and Logan Airport; another line serves Littleton-Franconia-Lincoln once daily.

21. North Country Transit, http://www.tccap.org/nct.htm.
Operates Berlin-Gorham Trolley and the Lancaster-Whitefield-Littleton Tri-Town Shuttle.

22. Conway Village Trolley, http://www.wmtransit.com/.
Trolley loops every 30 minutes through Conway and North Conway.

23. Conway Fast Taxi, http://www.fasttaxi.net/.
Hourly community shuttle through Conway and North Conway

ACKNOWLEDGMENTS

Success of this TAG field investigation/analysis, and, subsequently, the value of this report addressing transportation planning considerations and opportunities for White Mountain National Forest, reflects the successful preparations, logistics, facilitation skills and expertise contributed by those staff representatives listed above. The members of the TAG team collectively thank these individuals for their dedicated efforts, and for the contributions they made that greatly facilitated our work. The TAG team also would like to thank the U.S. Forest Service and the Federal Transit Administration for providing staffing and other support to this effort, as well as all stakeholders that participated in the TAG.

NOTICE

This Transportation Assistance Group (TAG) was convened at the request of the U.S. Forest Service. The TAG is an agency-independent effort that is intended to provide technical assistance in support of federal lands transportation and federal lands transportation programs, and does not imply, preference, or guarantee programmatic funding or project support, or further assistance of any kind. This document is disseminated in the interest of information exchange. The recommendations found herein reflect the collective expertise and consensus of the individual TAG members, do not represent regulatory or programmatic requirements, and do not in any way reflect the official opinion of any federal agency. The United States Government assumes no liability for the contents of this document or use thereof.

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