Transportation Observations, Considerations, and Recommendations for Mt. Baker-Snoqualmie National Forest and Mt. Rainier National Park

Provided by the Interagency Transportation Assistance Group (TAG) / Alternative Transportation in Parks and Public Lands (ATPPL) Program

North Bend, WA September 25 – 27, 2007

A field investigation of the current transportation infrastructure and issues at Mt. Baker-Snoqualmie National Forest and Mt. Rainier National Park by the interagency Transportation Assistance Group (TAG) was conducted September 25-27, 2007, on behalf of the USDA Forest Service (USFS) and the National Park Service (NPS). 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 the Alternative Transportation in Parks and Public Lands (ATPPL) program, administered by the Federal Transit Administration (FTA) in coordination with the Department of the Interior (DOI).

Background and Conditions

Forest overview

Mt. Baker-Snoqualmie National Forest is located along the western slopes of the Cascade Mountain range in western Washington State. The total National Forest area extends for more than 140 miles from the Canadian border to the northern boundary of Mt. Rainier National Park. Its 1.7 million acres cover portions of Whatcom, Skagit, Snohomish, King, and Pierce Counties. It is estimated by National Forest staff that, together with the other central Puget Sound counties, approximately 62 percent (about 3.63 million people) of the total population of the State of Washington lives within a 70-mile drive of the forest. It is further estimated that an additional 1.5 million people living in the Vancouver, British Columbia metropolitan area are also within easy reach of the northern part of the forest.

The total land area of the Mt. Baker-Snoqualmie National Forest is approximately 1.7 million acres. The forest contains a complex ecosystem that includes glacier-covered peaks, volcanoes, alpine lakes, old growth stands of timber, wild and scenic rivers, wilderness, and a multitude of plant, animal, and fish species. The area contains many scenic and historical points of interest. American Indian Tribes still utilize areas that were once inhabited by their ancestors, while other areas include remnants of past logging and mining activities.

From a physical standpoint, the northern portion of the forest is dominated by rugged mountains carved by ice-age glaciers. Some peaks rise above 7,000 feet, including two active volcanoes – Mt. Baker (10,781 feet) and Glacier Peak (10,541 feet). In addition to the mountain glaciers and snowfields, the forest includes more than 800 lakes, mostly located in alpine areas. Nearly 42 percent of the forest is designated Wilderness area, and provides clean water, solitude, and permanent protection for old-growth forests.

Mission and goals

The Mt. Baker-Snoqualmie National Forest is part of a group of national forests along the east and west sides of the Cascades Mountain range in Washington and Oregon. The forest works in close partnership with the National Park Service, along its shared borders with Mt. Rainier National Park and North Cascades National Park. The forest offers a wide variety of recreational sites, including more than 50 campgrounds, picnic areas and scenic viewpoints, water sports, and snow play areas. The forest manages four downhill ski areas, one each at Crystal Mountain, Snoqualmie Pass, Stevens Pass, and Mt. Baker. There are more than 1,500 miles of hiking trails within the forest, including portions of the Pacific Crest National Scenic Trail.

Along with its recreational programs, the forest has significant programs in fisheries and wildlife habitat, soils and watershed preservation and restoration, lands and minerals, wood fiber, and human and cultural resources. Nineteen Federally-recognized Indian tribes still utilize areas of the Mt. Baker-Snoqualmie National Forest that were once inhabited or used by their ancestors.

The broader USFS goal—connecting people (especially urban residents, and especially children) to nature—applies very much in the case of Mt. Baker-Snoqualmie. Urban national forests are taking advantage of their proximity to urban areas, enlisting new recruits in the conservation cause. The Urban and Community Forestry Program provides technical, financial, and other aid to cities, states, and nonprofit groups for maintaining and improving urban forests. Such forests are valuable learning laboratories. Changes in public values and new recreational trends often show up first in urban centers, so urban forest managers have a unique opportunity to study new trends and to test responses.

Also, one of the goals in the USFS *Open Space Conservation Strategy*, participation in community growth planning to reduce ecological impacts and wildfire risks, is: "Support and participate in local, regional, and transportation planning to conserve open space and retain ecosystem benefits."

Visitor characteristics

Because of its relative proximity to the large population of the Seattle/Tacoma metropolitan area, Mt. Baker-Snoqualmie is a relatively heavily visited unit of the National Forest System. Annual visitation is approximately 5 million. This makes Mt. Baker-Snoqualmie one of the most heavily visited national forest units in USFS Region 6, accounting for about 15 percent of the region's total national forest visits.

Approximately three-quarters of visitors come from Washington State; about 10 percent are international. The top five recreational activities are downhill skiing/snowboarding (reported by 64 percent of visitors in 2000-01), general relaxing (36 percent), viewing wildlife/nature (35 percent), viewing scenery (23 percent), and hiking/walking (21 percent).

Access is predominantly by private automobile.

TAG study area

The TAG focused on three east-west corridors in the southern part of the forest: U.S. Route 2 (US-2), traveling east from Everett through the Skykomish Ranger District; Interstate 90 (I-90), traveling east from Seattle over the Snoqualmie Pass, through the Snoqualmie District; and State Route 410 (WA-410), traveling east from Tacoma through Enumclaw, the Snoqualmie District, and Mt. Rainier National Park.



Figure 1: TAG study area.

US-2; Stevens Pass

Designated a Forest Highway, US-2 is the northernmost of the three east-west corridors observed during this site visit and provides the most direct route to the Mt. Baker-Snoqualmie National Forest from Seattle's northern suburbs. Attractions in the vicinity of US-2 include USFS recreation sites and the Stevens Pass Ski Area. The 69-mile section of US-2 was designated as a National Forest Scenic Byway in 1992 based on its outstanding natural qualities and its nationally significant historic resources.

Over its entire length through the forest, US-2 is a two-lane, rural highway. While discussions are ongoing with the Washington State Department of Transportation (WSDOT) to widen US-2, significant and growing congestion is making travel increasingly difficult. US-2 is also the most dangerous of the three corridors; 45 fatalities have occurred on the road in the past eight years.

Access to the Stevens Pass ski area is among the main concerns. Despite there being enough capacity at parking lots, the lack of a direct access road to the ski area and the fact that the ski resort area does not fall under any transit agency's service area have hindered comprehensive transportation planning in the area until now. Stevens Pass is a privately owned and operated ski area that has been in existence since the late 1930s. It operates under the terms and provisions of a Special Use Permit (SUP) issued by USFS. The ski facilities at Stevens Pass include 10 lifts, more than 1,125 acres of skiing terrain, 37 primary runs, and a base village with three day lodges: Granite Peaks, Pacific Crest, and Tye Creek. There are no overnight lodging facilities at Stevens Pass. A recently initiated ski area master plan anticipates expanded development at Stevens Pass, potentially including new guest parking areas.

As reported in 2003, visitation at the Stevens Pass Ski Area has been relatively steady over the past several years, ranging from a low of 307,484 during the 1995-1996 season to a high of 498,367 during the 2001-02 season: between about 3,000 and 4,000 people per day. The average annual visitation over the 1993-2003 period was about 400,000; visitation is sensitive to yearly snowfall.

Stevens Pass Ski Area provided information on the 2002-03 use of the Sultan Shuttle for skiers, which began during the 2000-01 season as a free service (a \$5 fare is now charged). During the 2002-2003 season, the midweek shuttle transported a total of 1,200 riders during its 48 days of operation, or an average of 25 riders per day. The weekend shuttle transported a total of 5,480 riders during its 21 days of operation, or an average of 261 riders per day. Assuming that the total average daily skier visitation during the 2002-03 season of 3,157 persons is somewhat representative of a typical weekend visitation level, the visitor shuttle use percentage would be equal to approximately 8.3 percent.

Anecdotal information provided by Stevens Pass Ski Area staff indicate that visitors have expressed an interest in expanded bus use, especially during peak winter months when many visitors would prefer not to drive their own vehicles along US-2. Other anecdotal information from Stevens Pass staff indicates that about 90 percent of total ski area

visitation comes from the west, with the remaining 10 percent from the east. Conversely, the distribution of employee residential location is estimated to be about 50/50 east-west.

I-90; Snoqualmie Pass

Interstate 90 is the main east-west thoroughfare in the state of Washington, terminating in downtown Seattle. I-90 is designated as the Mountains to Sound Greenway National Scenic Byway; the only interstate highway to have received National Scenic Byway designation. Given the many state parks and hiking trails in addition to the most visited ski area in the Pacific Northwest with over 500,000 visitors per year, the Summit at Snoqualmie, I-90 is a year-round corridor. (Snoqualmie is the closest ski facility to an urban area and is the most accessible in the entire Cascades.)

Although there is some lodging available, this is largely a daily-use, day-trip area. Peak season runs for six weekends from the beginning of January through mid-February, attracting 14,000 visitors per day on average. During the peak, there are 1,200-1,400 employees per week, in addition to 70-100 ski instructors.

Primary access is by automobile. A metro bus from Seattle is also available on a limited schedule. Private bus tours have been tried in the past; however, these were discontinued due to the unpredictability of use, primarily in lesser snow years. The ski area is lower in elevation than some of the other areas in the Northwest. The ski area had an employee shuttle in the past that helped reduce parking problems; however, it was discontinued due to high insurance and liability issues.

WA-410; Mt. Rainier; Crystal Mountain

WA-410 is the lone east-west route that goes directly through Mt. Rainier National Park (MORA), and is also the main route to the nearby Crystal Mountain ski area. However, WA-410 is closed through MORA in winter months due to treacherous driving conditions. Different sections of WA-410 are designated scenic byways: the Chinook Scenic Byway and the Mather Memorial Parkway. The Chinook Scenic Byway was designated an "All American Road" by the Federal Highway Administration in 1998.

The National Park Service is conducting strategic transportation studies at MORA, which currently has temporary shuttles in place as part of construction mitigation through the Paradise area. The shuttles have been well-received by the public, and many visitors are calling for the shuttle to be continued even after construction is complete. The town of Enumclaw has been identified as a location for a welcome center and transit hub along WA-410 that can serve the many visitors from the north and west.

Crystal Mountain, which operates under a 40-year Special Use Permit issued in 1992, has a new, approved Master Plan which would decrease the size of its 3,000-space parking lot and still contain excess capacity that could potentially be utilized by MORA during its

summer peak season. There is a plan to provide discount parking for multi-occupancy vehicles. Parking is the limiting factor in terms of skier capacity.

Visitation to Crystal Mountain has been relatively steady over the past several years: between 231,000 (the 2000-01 season) and 342,000 (2001-02). Visitation is highly dependent on seasonal snowfall. Access to the ski area is predominantly by private automobile, but some bus service is provided by the ski area, including weekend services from both Seattle and Tacoma.

Development plans include summertime activities, a privately-funded tram, and a mountaintop restaurant intended to be a major regional attraction. Transportation-related mitigation measures in the plan include the development of a shuttle system from the ski area to Sunrise, within MORA; the shared use of Crystal Mountain's parking area for MORA visitors during the park's peak summer season; and use of the Enumclaw welcome center as a transit center.

There is a planning study underway to determine the feasibility of providing rail service from Tacoma to the vicinity of Mt. Rainier, as part of the Upper Nisqually Valley Rural Transportation Plan.

Transportation Issues/Problems

There are a number of issues common to all three corridors.

- All three corridors are close to the Pacific Crest Trail, which is a 2,638-mile trail that passes from Mexico to Canada through California, Oregon, and Washington.
- All three roads carry additional designations:
 - o The 69-mile section of US-2, which is a Forest Highway, was designated a National Forest Scenic Byway in 1992.
 - o I-90 is designated as the Mountains to Sound Greenway National Scenic Byway; the only interstate highway to have received National Scenic Byway designation.
 - Different sections of WA-410 are designated scenic byways: the Chinook Scenic Byway and the Mather Memorial Parkway. The Chinook Scenic Byway was designated an "All American Road" by the Federal Highway Administration in 1998.
- For all three corridors, there is an opportunity to integrate scenic-byway funding and corridor planning with transportation planning.

- All three corridors experience seasonal congestion, especially in connection with the three ski areas, as well as growing traffic due to changing development, recreation, and commutation patterns.
- All three corridors—and the Seattle metropolitan area in general ("Pugetropolis") are expected to see continued growth in population, and new suburban-sprawl development, that will increase visitation to the national forest and to the ski areas.

US-2; Stevens Pass

- ❖ Congestion and safety. The 2003 "Section 3039 report" lists WSDOT traffic numbers; the road is often at or over capacity. Also, because there is no ski-area access road, during the ski season, traffic bound for Stevens Pass backs up on US-2 itself, and this is particularly hazardous during snowy or icy conditions, especially given the grading of the road. The worst congestion does occur during the 2-3 month winter peak period. US-2 is the most dangerous of the three corridors; there have been 45 fatalities in the last 8 years. There are ongoing discussions with WSDOT about widening US-2.
- ❖ Ski-area parking and overall capacity. There is a general strong resistance to parking fees, although fees are in effect for the closest and most desirable parking lot. Stevens Pass has 9 lots, with many entries; the logistics of parking-fee collection for all lots would be difficult. The number of parking spaces is less of an issue than the vehicle flow and traffic congestion issues. The parking lots have more capacity than the lifts and lodges, but the overflow parking lot (Yokin) is typically used 7-8 times per year, and approximately twice a year, all lots are at full capacity and guests are turned away. The use of a shuttle bus for satellite parking often upsets and frustrates guests. Pedestrian travel from parking areas can involve uphill climbing and considerable distance; there are limited opportunities for guest shuttles to ski-area entrances.

There is a proposal to increase capacity on the ski slope (more facilities for skiers), which would need to be approved by USFS. However, there is no overnight lodging available.

- ❖ Transit. Currently, Stevens Pass is not served by any transit agency. However, a successful employee shuttle is operational (more than 800 employees are at the facility during peak conditions), and the Sultan Shuttle for skiers does provide useful ridership data. Ridership dropped when a fare was instituted. There is the risk of loss of the Chevron parking area in Sultan; this may need to be relocated to Monroe or to the Evergreen State Fairgrounds, which are both more distant from the slope. A one-year experimental shuttle was run from Seattle (2000-01); this may be tried again.
- ❖ *Planning and partnerships*. Stevens Pass is updating its master plan. Proposals include an expansion of parking (from about 7,400 to 8,700 spaces), summer mountain-biking activities, modernizing the parking areas, and improving US-2

ingress and egress. An efficiency study is being done to improve circulation, traffic patterns, and parking. Phase 1 (planning) is slated for 2008-09, with construction in 2010.

I-90; Snoqualmie Pass

- ❖ Congestion and safety. Since I-90 is a multi-lane interstate, congestion is less of an issue than for the other corridors, although each of the parking areas at the four main ski area bases have bottlenecks during the peak winter months. Currently, most visitors use the first exit off of I-90 for the ski area, even though they may often reduce their travel time and decrease congestion by exiting elsewhere; variable message signs or other traveler-information mechanisms could help with this. The four separate parking areas at each of the four ski bases create congestion bottlenecks.
- ❖ Parking and overall capacity. There are capacity and management issues surrounding the urban wilderness areas along the corridor, which are sensitive resources.
- ❖ *Transit.* There is no current transit service, although the ski area operates their own intra-resort shuttle system (5-6 buses) to move people between parking areas and skier facilities. Prior attempts at alternative transportation to the ski area have been unsuccessful. The ski area does attract somes buses from area schools. One transit operator, Bellaire, has 8 scheduled runs daily (4 east, 4 west) between Seattle and Ellensburg, and may be willing to stop en route.
- ❖ *Planning and partnerships*. The Mountains to Sound Greenway National Scenic Byway provides a partnership opportunity. There are also ongoing efforts to secure National Heritage Corridor designation. I-90 is the only interstate designated as a National Scenic Byway and is also the only byway to the region from Seattle.

Given the many state parks and hiking trails in addition to the USFS land, this is a year-round corridor. Land acquisition has resulted in contiguous USFS ownership, although there is some privately-owned land in the area, with further plans for private development. Recreational planning is underway for trailhead access, road decommissioning, and trails conversion along the corridor. While there are no plans to expand the ski area, it was once a multi-season venue with a mountain biking element in the warmer months. There may be plans to restart a mountain biking operation.

The Final Environmental Impact Statement (FEIS) for the master plan is expected in spring 2008.

Currently there exists no visitor information center convenient to I-90. There is a proposed heritage center at Snoqualmie Point just off I-90 at the intersection with WA-18. At Snoqualmie Pass, an old garage currently serves as the USFS visitor

center. It could be expanded to include year-round environmental education programs.

WA 410; Mt. Rainier; Crystal Mountain

- ❖ *Congestion and safety.* Congestion is of growing concern. USFS staff have expressed a desire to reduce vehicular/wildlife accidents (especially elk kills) along WA-410.
- ❖ Parking and overall capacity. The Crystal Mountain parking area (~3,000 spaces) may provide an opportunity for a park-and-ride for MORA/Sunrise. Though the parking area will be shrunk as part of the new master plan, there is currently excess capacity. Currently, MORA has a two-month peak season during July and August, while Crystal Mountain has a four-month peak season from December through March.
- ❖ *Transit*. Private charter/tour bus services access Crystal Mountain, but there are no general-use public transit services, although the ski area would like to see some form of transit serving the site. There is a shuttle service on-site to transport skiers and their equipment from the parking lots to the entrance gates.
 - MORA has temporary shuttles in place as part of Paradise construction mitigation. Visitors are requesting that the shuttle be continued even past construction.
- ❖ Planning and partnerships. There is a desire to maximize the use of the new regional Welcome Center/transit park-and-ride facility in Enumclaw. This would provide both a convenient transfer point for forest and park visitors who drive to the area to access forest/park transit services, and a means by which visitors using the existing public transit services operated by King County and Pierce County to link Enumclaw with the Seattle/Tacoma area could gain access to the forest and park.

Also, the Upper Nisqually transportation study could be a factor in future transitservice development.

Transportation recommendations should not interfere with the mitigation measures that appear in the approved Crystal Mountain master plan.

A new General Management Plan (GMP) for MORA is underway.

Analysis and Recommendations

Overall

Because the TAG study area is so large, and several plans and studies have been produced over the past 10 years, there is a need to consolidate and update all relevant information in order to produce a single, strategic vision for transportation in and around Mt. Baker-Snoqualmie National Forest, focusing on the three study corridors and taking account of recent data, developments, plans, partnerships, and other information. Therefore, the TAG's primary overall recommendation is to apply to the Alternative Transportation in Parks and Public Lands (ATPPL) Program for FY2008 funds for a comprehensive transportation planning study to address the following issues:

- ❖ *Visitor mobility*: origins, demographics, travel patterns.
- ❖ *Visitor capacity* within the forest and the three ski areas; visitor management, especially during peak periods.
- Parking accessibility/capacity.
- * *Traffic congestion* and *safety* issues, as quantified by available data.
- ❖ The *visitor experience*: preserving, restoring, and/or improving it, as applicable.
- ❖ As noted earlier in this report, *advancing USFS management goals*—such as expanding access to forest areas, especially for underserved communities, reduction of the transportation-related carbon footprint, and preservation of natural resources (including wilderness areas) and open spaces.
- ❖ Partnerships with state and local governments, the private sector, and transit operators (e.g., with Puget Sound Regional Council, employers like Microsoft operating their own shuttles), especially in context with the concept that the forest (and MORA) actually act as parks/open spaces for the entire "Pugetropolis," and their transportation needs depend on the whole region. Consideration of future administrative structures: a possible Mt. Baker-Snoqualmie Regional Transit Coordinating Council, to set up an umbrella organization including forests, parks, cities, transit operators, MPOs, WSDOT, WSTA, ski areas, and user groups/constituencies. This kind of partnership can serve as an umbrella group or structure for further long-term transportation planning work, and could, in the long term, lead to the establishment of a more formal Mt. Baker-Snoqualmie Regional Transit Authority.
- ❖ Funding availability for future improvements (and the effects of, for instance, scenic byway designations). Possible use of Northwest Forest pass revenue for transportation purposes? Increasing ski-area lift ticket prices, and apportioning funds toward transportation? Establishing a check-off system for transportation donations

(lodging/lift ticket/online for season pass); possible funding from the Gates Foundation.

- ❖ Transit *marketing*: how to sell it to potential riders? What is the "value added"—that is, why should visitors consider transit? Fare/fee analysis: ride-sharing or transit discounts at ski areas? Making transit attractive: having transit vehicles drop visitors off at the lodge, or having a ski lift just for transit riders? Instituting parking fees at ski areas? Promoting ride sharing on rideshareonline.org.
- ❖ Defining the *business case* for transit: quantifying the expense/difficulty of operating long-distance transit (Sultan to Stevens Pass, Enumclaw to Crystal Mountain, Snoqualmie/North Bend to Summit at Snoqualmie). Comparing the capacity of transit vs. capacity of ski-area parking lots: can enough people travel by transit to make a difference?
- ❖ Use of *ITS* on all three corridors to provide traveler information aimed at reducing congestion.
- ❖ Validating/updating the findings, data, and recommendations of the "3039 reports" from 2001-04.

Additional recommendations

US-2; Stevens Pass

- ❖ This corridor is eligible for Forest Highway (FH) Program funding to address safety issues, including road widening, ITS, turnout lanes, and a pedestrian overpass. Mt. Baker-Snoqualmie applied for several projects in an FH Program Call for Safety Projects for Washington State that was conducted in the fall of 2007. Projects throughout the state were ranked. The following is the preliminary ranking of the Stevens Pass area projects:
 - 1. Turn and/or queuing lane(s) at Stevens Pass Ski Area: The goal is to get vehicles into the parking lot more quickly and reduce the slowing of and conflicts with through traffic on US-2. This project ranked very highly and is likely to be funded.
 - 2. Variable Message Informational Signs on both side of Stevens Pass on US-2 (two proposals): The goal is to provide information to motorists to slow down due to congestion, weather conditions, or to provide other information. These projects ranked well, but may not be funded due to lack of contributing funds. The FH Program needs to fairly spend limited funding throughout the state and likely will not fully fund these in addition to the Turn Lane proposal listed above.

3. Durable paint lines in Stevens Pass vicinity: The goal is to provide long lasting pavement striping and delineation. In addition to using highly durable paint or thermoplastic markings, the markings would be recessed in the pavement to reduce the ongoing problem of repainting several times a year due to damage from plowing and sanding. This project ranked well but the cost proposed appears to be much too high for the proposed work. Actual cost of this work is being verified. Likely to be funded if the cost is verified to be more reasonable.

The Washington State Forest Highway Tri-Agency will need to make final approval of these preliminary rankings at a meeting to be held on April 15, 2008. The Tri-Agency is composed of representatives from the Federal Highway Administration Western Federal Lands Highway Division, USFS, and WSDOT.

In addition to the proposed projects above, a pedestrian overpass has been approved for funding in a prior FH Call for Projects. Funding contributions are shared by the FH Program, WSDOT, and the Stevens Pass Ski Area operator. FH funding is obligated for 2008. Other funding is also programmed. WSDOT will construct the project. Construction will begin when final environmental clearance issues are resolved. The overpass will reduce or eliminate the need for and danger to ski areas users crossing US-2 from the parking lots on the other side of the highway.

- ❖ An ITS plan should be considered for this corridor, coordinated with the WSDOT corridor safety plan. If there is a transit tie-in, such a plan could be eligible for ATPPL funding as a separate initiative from the overall plan suggested above.
- Consider how the employee shuttle, as well as a possible shuttle for regular skiers, could be run as a large-scale vanpool—in other words, cooperative "transit." (ATPPL funding would not be required for this effort.)

WA 410; Mt. Rainier; Crystal Mountain

- ❖ As with the US-2 corridor, the WA-410 corridor is eligible for FH Program funding.
 - o Crystal Mountain Boulevard Rock Slope Mitigation: The goal of this project is to reduce impacts to skiers from rocks in the roadway, via maintenance activities to clean up the recurring problem. This project did not rank high in preliminary ranking since there was no anecdotal or documented accident history provided, and the problem was identified as being normally confined to slides blocking the roadside ditch. The proposed cost may be too low and other areas of the route also have rock slide problems to a lesser degree. It is a valid potential safety concern; however, it did not initially rank well compared to the many other proposals in the states for very limited funds.

This project will also be considered at the Tri-Agency meeting on April 15, 2008.

- Once more specific transit plans are established for the Enumclaw welcome center, ATPPL can potentially contribute to capital costs, if a funding application is approved.
- ❖ The summer use of the Crystal Mountain parking area for access to a shuttle to Sunrise should be further explored. Shuttle vehicles could be used in winter for the ski area and in summer for the park. A transit partnership/working group to operate this service should be established. Potential funding mechanisms include a vehicle fee increase for Mt. Rainier (a \$5 increase is already being discussed), funding from the Crystal Mountain ski area (being derived from new revenues as a result of implementing the master plan), sales tax revenues that could be collected as a result of the establishment of a new public-transportation benefit area, and/or a transient/hotel-occupancy tax.

I-90; Snoqualmie Pass

- ❖ An ITS plan and/or partnership with WSDOT should be considered for this corridor, so that real-time traveler information using variable-message signs can be provided to drivers, advising them which exit will be the least crowded way to access the ski area.
- ❖ The ski area should consider providing an employee shuttle, as at Stevens Pass. Any liability concerns should be addressed. (ATPPL funds could not be used for this initiative.)
- ❖ Discussions should continue regarding the possible creation of a Snoqualmie Point heritage center, at the intersection of I-90 and WA-18. Such a facility could be a center for both transit and traveler information.
- ❖ Coordination will be essential in connection with any plans by WSDOT for I-90 realignment east of Snoqualmie Pass.

TAG Participants

Transportation Assistance Group (TAG)

- Lou DeLorme, Alternative Transportation Coordinator, Department of the Interior
- Pat Hendrix, Federal Transit Administration, Region X
- Ellen LaFayette, Transportation Engineer, USDA Forest Service
- Kate Mattice, Chief, Policy Review and Development Division, Federal Transit Administration
- John Murphy, Forest Highway Program Manager, Western Federal Lands Highway Division, Federal Highway Administration
- Bill Ramos, Federal Transit Administration, Region X
- Floyd Thompson, National Program Lead, Recreation Planning, USDA Forest Service
- Eric Plosky, Community Planner, Volpe National Transportation Systems Center

U.S. Department of Agriculture Forest Service

- Kate D'Ambrosio, Intern, Mt. Baker-Snoqualmie National Forest
- Aleta Eng, Partnership Specialist, Mt. Baker-Snoqualmie National Forest
- Jim Franzel, Snoqualmie District Ranger, Mt. Baker-Snoqualmie National Forest
- Becky Hutchins, Regional Equipment Engineer & Forest Highway Coordinator, Region 6
- Rob Iwamoto, Forest Supervisor, Mt. Baker-Snoqualmie National Forest
- Michael Miller, Landscape Architect, Mt. Baker-Snoqualmie National Forest
- Felix Nishida, Engineer, Mt. Baker-Snoqualmie National Forest
- Doug Schrenk, North Bend Ranger District, Mt. Baker-Snoqualmie National Forest
- Terry Slider, Landscape Architect/Planner, USDA Forest Service, Region 6
- Jerry Zimmerman, Skykomish Ranger District, Mt. Baker-Snoqualmie National Forest

Other Participants

- Mark Bauer, Administrator, City of Enumclaw
- Dave Beckwith, Marketing Director, Summit at Snoqualmie
- Bryan Bowden, Community Planner, Mt. Rainier National Park, National Park Service
- Rob Fellows, King County Metro Transit
- Tom Hanson, Washington Department of Transportation
- Mika Imori, King County Metro Rideshare Program
- Chet Marler, Stevens Pass Ski Area
- George Patton, Pierce County Transit
- Cathy Rigg, Enumclaw Chamber of Commerce
- Brent Russell, Transportation System Planner, Community Transit, Snohomish County
- Bill Steel, Planning Director, Crystal Mountain Ski Area

Supporting Documents

Federal Lands Alternative Transportation Systems Study Document Field Reports ("Section 3039" reports), 2003-04

• Mt. Baker-Snoqualmie National Forest: Stevens Pass Ski Area Transit Expansion

There appears to be a high potential for the successful implementation of Alternative Transportation Systems (ATS) at the Skykomish Ranger District area of the Mt. Baker-Snoqualmie National Forest and the Stevens Pass Ski Area. This potential is based on large and growing visitation levels, and successful efforts to create and operate a winter season visitor transportation system for Stevens Pass. The original ATS proposal identified by Mt. Baker-Snoqualmie National Forest staff has substantial merit and, at a minimum, a more detailed feasibility study is warranted.

Mt. Baker-Snoqualmie National Forest: Mt. Rainier Transit System

Based on the findings of a preliminary site investigation, this is the original ATS proposal identified by the Mt. Baker-Snoqualmie National Forest staff during the development of the Environmental Impact Statement (EIS) for the Crystal Mountain Master Plan for the implementation of a transit service linking the Enumclaw Welcome Center with the Crystal Mountain Ski Area is supported. In addition, the General Management Plan (GMP) for Mt. Rainier National Park identifies a need for alternative transportation for those visitors willing to leave their personal vehicles behind when they visit the park. Therefore, it appears that a single combined visitor transportation system could be developed to accommodate the needs of both winter visitors to Crystal Mountain Ski Area and summer visitors to Mt. Rainier National Park.

• *Mt. Rainier National Park (report completed in 2001)*

Visitor use in the most popular destinations in the park results in parking demand that exceeds supply of parking on sunny summer weekends. Visitors park along roadsides, which causes damage to fragile plants and soils and exposes visitors to hazards from passing traffic. The transportation alternatives being considered in the park's GMP include shuttle services in locations where there is insufficient parking.

Wenatchee National Forest

This field report supports the ATS proposal identified by the Okanogan and Wenatchee National Forest staffs for the development of a bike-hike trail along the Stephen P. Mather Memorial Scenic Byway (WA-410), and the development of an accessible hiker/biker trail leading from the Scenic Byway to recreational opportunities in the adjoining Bumping River drainage area. However, it must be noted that the severe topography and the sensitive natural environment pose significant engineering challenges.

Other Related Documents

Chinook Scenic Byway Charrette: September 2000

In September of 2000, a team of planning and design professionals met to discuss opportunities and needs along the 85 miles of WA-410 and US-2 from Enumclaw to Naches, Washington, which was designated as an All-American Road in 1998. The two-week charrette led to specific recommendations at 38 locations along the route, as well as a concept plan for a transit shuttle system. The proposed system consists of separate, but coordinated routes. The East Side Shuttle would run from Naches to Sunrise, while the West Side Shuttle concept includes three different routes that would appropriately serve to mitigate congestion at Sunrise during the summer months and at Crystal Mountain Resort during winter months. Further information about these shuttle routes can be found on pages 39-42 of this document. Finally, a significant outcome of the charrette was naming of the WA-410/US-2 All-American Road the "Chinook Scenic Byway."

Nisqually Road Corridor Charrette: January and April 2001

In early 2001, a team of planning and design professionals met to discuss opportunities and needs along the Nisqually Road Corridor. Nisqually Road itself is a 26-mile stretch of Washington State Route 7 and Washington State Route 706 between Eatonville and the Nisqually Entrance at Mt. Rainier National Park, though for the purposes of this study it extends up the mountain to Paradise and from the Eatonville vicinity out to "feeder routes" into the Nisqually Basin, where they eventually tie to the Interstate 5 corridor. The charrette team modeled alternative transportation system options under three different growth scenarios. The options range from a voluntary shuttle service under a low growth scenario to passenger train service under a high growth scenario. Further information about these options can be found on pages 19-21 of this document.

Mt. Rainier National Park Transportation Feasibility Study: May 1995

This comprehensive 1995 study evaluated various alternative transportation options that included both voluntary and involuntary shuttle systems to relieve congestion at parking facilities. Passengers would board shuttles near each of the park's four entrance stations for all travel within the park. A total of six transit routes were developed to provide visitor access to all of the major activity areas. Details of this evaluation can be found on pages 9-37 of the executive summary of this document.

Crystal Mountain Master Plan: September 2007

The Crystal Mountain Master Plan contains an evaluation of the effects of six transportation alternatives on traffic, parking, and transit conditions from Enumclaw to Crystal Mountain. The impacts of each alternative are described in section 4.3.5 of the Master Plan.

 Rural Transportation Feasibility Study For the Upper Nisqually Valley: Existing Conditions Report: April 2007

This report examines potential benefits, opportunities, and challenges of constructing a new regional rural transportation system in the Upper Nisqually Valley. It was conducted in parallel with the Train to the Mountain Study, which assesses the feasibility of re-establishing passenger excursion train service between Tacoma and the Mt. Rainier area. The study found that there are several needs common to area stakeholders. These needs include a regional intercity bus for both tourists and local residents; an internal shuttle at Mt. Rainier National Park; local bus service that would allow transit to be a viable option for shopping and recreational destinations; and a park-community shuttle that can accommodate tourists lodging in local gateway communities.

• Mt. Rainier National Park Paradise Construction Project Shuttle Guide: June 2007

Paradise is the most popular visitor destination within Mt. Rainier National Park. This guide provides important shuttle information for visitors wishing to visit Paradise throughout a year-long construction phase, during which time the historic Paradise Inn is being rehabilitated and a new visitor center is being constructed. One shuttle runs approximately every 30 minutes along Paradise Valley Road, while another shuttle runs every 30-45 minutes from Longmire to Paradise.

National Park Service (NPS) Transportation Assistance Group (TAG) Site Visit to Mt.
 Rainier National Park: July 2003

This original TAG report recommended approval of \$75,000 in NPS Alternative Transportation Program (ATP) funds in FY 2004 for Intelligent Transportation Systems (ITS) planning, and \$250,000 in FY 2005 ATP funds for ITS implementation.

ACKNOWLEDGMENTS

Success of this TAG field investigation/analysis, and, subsequently, the value of this report addressing transportation planning considerations and opportunities for Mt. Baker-Snoqualmie National Forest and Mt. Rainier National Park, 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—especially Aleta Eng and Mike Miller, who took the lead in all the necessary organization—for their dedicated efforts, and for the contributions they made that greatly facilitated our work. The TAG team also would like to thank the USDA Forest Service, the National Park Service, and the Federal Highway Administration for providing staff and other support to this effort.

NOTICE

The Transportation Assistance Group (TAG) is convened at the request of the recipient agency. The TAG is an agency-independent effort that is intended to provide technical assistance in support of the ATPPL program and does not imply, preference, or guarantee programmatic funding or project support. 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.
