

Mount Baker - Snoqualmie National Forest Denny Creek Area Parking Impact Assessment

Final Report April 2015



Schoolbus unloading young MBSNF visitors near Denny Creek. Source: Volpe Center

REPORT DOCUMENTATION PAGE		Form Approved			
		OMB No. 0704-0188			
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.					
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE		3. REPORT TYPE AND DATES COVERED		
	04 -	2015		Final	
4. TITLE AND SUBTITLE	a. FUNDING NUMBERS				
Mount Baker – Snoqualmie Natior Phase III: Denny Creek Area Parkir	nal Forest Alternative Transportatio ng Impact Assessment	n Feasibility Study		VXM7	
6. AUTHOR(S) Lindsey Morse, Benjamin Cotton, Monty	Gina Filosa, Jonathan Frazier, David	Daddio, Logan Nash, and		o. CONTRACT NUMBER	
7. PERFORMING ORGANIZATION NAME	(S) AND ADDRESS(ES)		8.	PERFORMING ORGANIZATION	
U.S. Department of Transportation			R	EPORT NUMBER	
John A. Volpe National Transportation 55 Broadway, Cambridge, MA 02142	Systems Center			OT-VNTSC-USDA-17-02	
9. SPONSORING/MONITORING AGENCY Mount Baker-Snoqualmie National Fo 2930 Wetmore Avenue, Suite 3A Everett, Washington 98201	D. SPONSORING/MONITORING GENCY REPORT NUMBER				
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION/AVAILABILITY STATE Public distribution/availability	12a. DISTRIBUTION/AVAILABILITY STATEMENT Public distribution/availability 12b. DISTRIBUTION CODE				
13. ABSTRACT (Maximum 200 words) The Mount Baker-Snoqualmie National Forest is located near the Puget Sound metro area and is facing a number of transportation issues, such as increasing congestion and lack of access, which were identified in the Volpe Center's Phase I report. The Phase III report focuses on parking management in the forest along the I-90 corridor. It is a focused follow-on to Phase II, which identified the unlimited supply of overflow parking along road shoulders as a major disincentive for visitors to take transit. The Phase III report describes existing parking enforcement and design at the forest, and describes changes that would limit parking to designated					
parking areas. These policy changes would have a variety of environmental, fiscal, and transportation impacts to the forest and its visitors which are detailed in the report. The Volpe team finished this analysis in April 2015.					
14. SUBJECT TERMS alternative transportation, transportation planning, forests, recreation, transit, parking, Denny Creek			15. NUMBER OF PAGES 19		
				16. PRICE CODE	
17. SECURITY CLASSIFICATION	18. SECURITY CLASSIFICATION	19. SECURITY CLASSIFICAT	ION	20. LIMITATION OF ABSTRACT	
OF REPORT	OF THIS PAGE	OF ABSTRACT	.511		
None	None	None		N/A	

NSN 7540-01-280-5500

Table of Contents

Report Notes	iii
Acknowledgements	iv
Background	6
Parking Management	6
Parking Area Improvements	7
Operations and Maintenance	8
New Parking Concepts: Task 4	9
Recommendations: Task 5	12
Appendix A: Task 1-3 Interim Memo	13
Background	13
MBSNF Current Parking Management Strategies	14
Current Parking Design Policies	14
Recreation Fees	15

List of Tables

Table 1: Estimated Improvement Costs: Parking Concept 1	10
Table 2: Estimated improvement costs: Parking Concept 2	11
Table 3: Comparison of Northwest Forest Pass Revenue for Concept 1 and Co	oncept 2 at 60,
80, and 90 percent compliance	12
Table 4: MBSNF Recreation Fee Revenues (FY11-FY13)	16
Table 5: MBSNF Recreation Fee Expenditures (FY11-FY13)*	17

Report Notes

This report was funded by the U.S. Forest Service Engineering.

Participants in the development of this report included Aleta Eng, Felix Nishida, and Dave Redman of the Mount Baker-Snoqualmie National Forest, and Benjamin Cotton and Gina Filosa of the U.S. Department of Transportation Volpe National Transportation Systems Center. A description of each agency follows:

- Mount Baker-Snoqualmie National Forest (MBSNF) (Everett, WA). The Forest is located east of Seattle and consists of 1.7 million acres that cover portions of Whatcom, Skagit, Snohomish, King, and Pierce Counties.
- U.S. Department of Transportation (DOT) Volpe National Transportation Systems Center (Volpe Center) (Cambridge, MA). The Volpe Center is a Federal, fee-for-service organization that performs transportation work for Federal, state, local, and international public agencies and entities.
- U.S. Forest Service (USFS) Pacific Northwest Region (Region 6) (Portland, OR). Region 6 provides technical assistance to the 18 national forests and four other Forest Service sites located within Oregon and Washington.

Acknowledgements

The study partners wish to thank the following numerous entities who graciously provided their time, knowledge, and guidance in the development of this report:

Jocelyn Biro

Developed Recreation, National Recreation Reservation Service, Fees, Caves & Karsts Programs Pacific Northwest Region - Recreation, Lands, & Minerals

Aleta Eng

Partnership Specialist Mt. Baker-Snoqualmie National Forest

Hailu Gabriel

Civil Engineer
-Mt. Baker-Snoqualmie National Forest

Carol Gladsjo

Public Service Manager Darrington Ranger District Mt. Baker-Snoqualmie National Forest

James V. Griffin

Patrol Captain, #1808 Mt. Baker-Snoqualmie & Olympic National Forest

Jeffrey McIntosh

Law Enforcement Officer Mt. Baker-Snoqualmie National Forest

Felix Nishida

Assistant Forest Engineer Mt. Baker-Snoqualmie National Forest

Gary Paull

Wilderness & Trails Coordinator

Mt. Baker-Snoqualmie National Forest

Santino Pascua

South Zone Road Manager and Project Leader Mt. Baker-Snoqualmie National Forest

Dave Redman

Outdoor Recreation Planner/Recreation Budget Coordination Mt. Baker-Snoqualmie National Forest

Mike Schlafmann

Public Services Staff Officer Mt. Baker-Snoqualmie National Forest

Background

In April 2014, the Mount Baker-Snoqualmie National Forest (MBSNF) completed an Alternative Transportation Feasibility study that partly focused on transit feasibility in the I-90 corridor between Seattle and Snoqualmie Pass. Recommendations from the study suggest that in order to implement transit service, MBSNF should consider new ways of managing parking in order for transit service to be viable. The study found that in a region where people usually drive to outdoor destinations, travel by private vehicle must be discouraged, or simply not allowed, in order to sustain transit service. A new approach to parking that limits parking to officially designated parking areas, while prohibiting parking in undesignated areas, will present a range of opportunities and constraints that are discussed in this document.

This report provides an analysis of prospective changes to parking management within the I-90 Corridor of MBSNF. Understanding the costs and benefits of implementing a new parking program on MBSNF is essential for Forest decision-makers. Since, in theory, all vehicles that park at a MBSNF fee site have paid either a daily or seasonal recreation fee, reducing the number of vehicles that are allowed to park on the Forest would reduce recreation fee revenues. Also, there are a variety of infrastructure costs related to implementing a new parking program. Finally, in order for a new parking management program to gain traction, it will need to be enforced.

Benefits associated with parking management are tied directly to impacts associated with reduced maintenance of Forest facilities, improved visitor experience, increased ability to manage access to parking areas and trailheads, increased revenue from improvement in Northwest Forest Pass compliance, and opportunities associated with using transit to help manage access. Many of these costs and benefits can be quantified into dollars, but all expenses and prospective revenues are estimates and are intended to help illustrate the broad picture of a new parking management program.

Parking Management

When considering a new approach to parking within the I-90 corridor, it is important to first understand current and future parking practices. After conducting interviews with several key MBSNF staff groups, the Project Team was able to develop a list of assumptions to help inform the parking impact assessment. A summary of these discussions can be found in Appendix A at the end of this report.

Current Parking Assumptions

- 60% of all vehicles parking in parking areas in the I-90 corridor have the appropriate parking pass
- 50% of all vehicles with the appropriate parking pass use a season pass; 50% of all vehicles with the appropriate parking pass use a day pass
- Illegally parked cars are given a warning notice with information about how to submit parking payment; a small percentage of parking fees are recouped for vehicles that do not display the correct parking pass.

Future Parking Assumptions

- A new parking area for Denny Creek will be constructed and contain approximately sixty parking spaces (not including parking spaces for vans [5] and buses [3]). The surface will be paved, and parking spaces will be clearly marked.
- Decreasing parking will increase transit demand if viable alternatives are available.

A new approach to effectively managing parking within the I-90 corridor relies on parking area improvements as well as operations and maintenance. Parking area improvements must occur before the new parking management system is implemented, while operations and maintenance occurs once the new parking system is in place. Costs associated with improving a parking area are considered a one-time expense, whereas operations and maintenance costs occur annually.

Parking Area Improvements

To effectively regulate parking practices, the physical parking areas will need to be improved and enhanced to minimize confusion for visitors. This means clearly delineating all available parking spaces, enhancing parking area infrastructure, and incorporating signage for permitted and unpermitted parking locations.

Paving

Paving is one way to improve existing dirt and gravel parking surfaces and reduce regular maintenance costs. A variety of paving options offers different price points, installation costs, maintenance costs, and environmental impacts. For this study, asphalt is considered the preferred pavement based on existing paved roadway and plans for the new Denny Creek parking area (mix of compacted gravel and pervious asphalt). Negative connotations for paving usually pertain to increased stormwater runoff, which may be mitigated with porous asphalt, parking area landscaping and perimeter buffers. Environmental impacts may also be mitigated through parking management policies and reduced impacts to surrounding roadsides.

Configuration and Layout

A paved surface can be "striped", or painted, allowing parking spaces to be clearly defined and numbered. By defining official parking spaces, the Forest can ensure that parking areas

are laid out in a way that maximizes the number of spaces while ensuring adequate circulation and safety for vehicles and pedestrians.

In conjunction with paving and striping, concrete or wooden wheel-stops help to define parking spaces. Wheel-stops also may be used with dirt or gravel parking surfaces, but without painted lines, parking spaces may still be difficult to identify.

Natural barriers, such as boulders, have been used by MBSNF in the past to keep cars from parking in unwanted areas, reducing the need for signage. Boulders are less likely to be moved, and while they may be vandalized, they are less easily damaged than signs.

Signage

The Forest can use signage to serve many purposes, including explaining parking policies, displaying parking fees, identifying official parking areas, identifying areas where parking is not allowed, and providing information on alternative sites to visit. Signs are fairly easy to damage or destroy, and should they be employed, MBSNF will need to account for periodic replacement costs.

Cost of Improvements

Construction costs vary significantly for surface parking facilities. In addition to construction costs, most cost estimating tools include land costs, land clearing/preparation, planning, and permits associated with urban/suburban parking area development. Other considerations include paving materials, support infrastructure, and access facilities. Costs can be estimated in terms of square feet for paving or cost per parking space.

Paving costs are typically calculated by lane mile for large projects, or by square foot for small projects. Depending on site location, preparation, design, materials, and thickness, the cost for standard asphalt paving for parking areas can vary significantly.

Parking area construction costs may also be calculated per space. Estimating tools are typically aimed at developers of urban and suburban parking areas, which are different in many ways to a trailhead parking facility in a National Forest. For the purposes of this study, the estimated cost of paved parking area construction in the I-90 corridor is \$2,600 per parking space for areas that are already used as dirt or gravel parking areas.¹

Operations and Maintenance

Once parking areas have been improved, MBSNF should consider how it will operate a new parking program in addition to how the program and parking areas will be maintained.

Permitting

¹ Estimated parking cost is based on a parking area estimating tool developed by Todd Litman of the Victoria Transport Policy Institute. http://www.vtpi.org/tca/tca0504.pdf

MBSNF will likely continue to require the Northwest Forest Pass, which generates a significant amount of operating revenue for the Forest. If parking areas are closed or the number of vehicles parking on the Forest is reduced, revenue from the Northwest Forest Pass would decrease. Conversely, increased Northwest Forest Pass compliance at current visitation rates could have a significant impact on MBSNF revenue in the positive direction.

Enforcement

Enforcing a new parking program is essential if the program is to remain relevant over time. One solution may be to designate a parking officer that is responsible for monitoring parking area activities and identifying/warning/citing illegally parked vehicles. However, MBSNF law enforcement officers are usually are tasked with jobs of a higher priority. Another concern is that at least one King County judge has expressed unwillingness to uphold USFS parking violations unless the driver is present to receive the citation.

Improved enforcement may not require full-time human oversight, and there are alternatives that give an impression of strong enforcement without sacrificing labor hours. Strongly worded signage (such as "Illegally parked vehicles will be ticketed and/or towed") may help to improve Northwest Forest Pass compliance, even if it is difficult for the Forest to follow through.

Maintenance

Once improved, MBSNF will need to maintain the parking area and associated trailhead facilities. If parking areas are paved, near-term maintenance costs for the parking surface are reduced. Based on staff input, damage to signs and other regulatory installations is common, and it will be important for MBSNF to monitor this activity and budget for replacement.

Access Alternatives

Depending on how MBSNF chooses to change its approach to parking management in the I-90 corridor, alternative access such as transit will need to be considered. Timing and system details are dependent on both public demand and Forest access management goals, which are discussed thoroughly in the I-90 Alternative Transportation Feasibility Study.

New Parking Concepts: Task 4

The following two parking concepts were developed to help illustrate the costs and benefits of limiting parking in the Denny Creek area. Each focuses on three popular trailheads that offer a variety of activities: Denny Creek/Franklin Falls, Pratt Lake/Granite Mountain, and Annette Lake/Asahel Curtis Nature Trail.

Parking Concept 1

The first parking concept eliminates overflow parking at Denny Creek/Franklin Falls, Pratt Lake/Granite Mountain, and Annette Lake/Asahel Curtis Nature Trail parking areas. The number of parked vehicles will be capped by the number of official parking spaces at each trailhead. The new Denny Creek/Franklin Falls parking area will have a clear number of parking spaces when it is completed; the Pratt Lake/Granite Mountain and Annette Lake/Asahel Curtis Nature Trail parking areas will need to be improved. All parking areas will require additional signage to ensure visitors understand that overflow parking is not allowed.

Table 1: Estimated Improvement Costs: Parking Concept 1

Parking Area	Number of Parking Spaces	Construction	Signage	TOTAL
Denny Creek/Franklin Falls	60	N/A. Analysis assumes Phase 1 completed with existing funding.	\$5,000	\$5,000
Pratt Lake/Granite Mountain	55	\$143,000	\$5,000	\$148,000
Annette Lake/Asahel Curtis Nature Trail	41	\$107,000	\$5,000	\$111,000
	156	\$250,000	\$15,000	\$264,000

Parking Concept 2

The second parking concept eliminates parking altogether at the Pratt Lake/Granite Mountain and Annette Lake/Asahel Curtis Nature Trail parking areas, as well as eliminating parking overflow at the new Denny Creek/Franklin Falls parking area. Therefore, a total of only 60 parking spaces would be available in this area of the Forest. Improvement costs are minimal for Concept 2 for it could only be implemented in conjunction with alternative means of access, likely including a long-distance shuttle from the Seattle area and a circulator vehicle within the Forest, as discussed in the Alternative Transportation Feasibility Study.

Table 2: Estimated improvement costs: Parking Concept 2

Parking Area	Number of Parking Spaces	Configuration/ Layout/Striping/ Wheel-stops	Signage	TOTAL
Denny Creek/Franklin Falls	60	N/A. Analysis assumes Phase 1 completed with existing funding.	\$5,000	\$5,000
Pratt Lake/Granite Mountain	0	N/A	\$800	\$800
Annette Lake/Asahel Curtis Nature Trail	0	N/A	\$800	\$800
				\$6,600

Northwest Forest Pass Impacts and Compliance

Reducing the number of vehicles at any parking area will result in lost revenue from the Northwest Forest Pass. Parking Concept 1 will lose revenue associated with vehicles no longer being able to park in overflow areas, while Parking Concept 2 will lose revenue associated with closing the parking areas at Pratt Lake/Granite Mountain and Annette Lake/Asahel Curtis Nature Trail. Based on the number of parking spaces, occupancy percentages, and turnover rates identified in the Alternative Transportation Feasibility Study, as well as an estimated Northwest Forest Pass compliance rate of 60 percent (meaning 40 percent of all parked vehicles do not pay for a parking pass), the estimated loss in revenue for each parking concept is presented for comparison in Table 5. It is clear that MBSNF would experience a much greater loss in revenue for Parking Concept 2, where parking is eliminated at two of the parking areas.

A significant benefit of a new parking management program and improved parking areas is that it should be easier for the Forest to improve Northwest Forest Pass compliance. With new signage and increased enforcement, it is reasonable to think the MBSNF could raise compliance from the current estimated 60 percent to 90 percent or greater². For Parking Concept 1, the increase in revenue would be significant and could provide additional funding for operations and maintenance. For one year alone, focusing on just these three parking areas, the Forest could increase annual revenue by more than \$15,000.

A comparison of parking concepts reveals that Concept 1 is able to compensate for the loss associated with restrictions to overflow parking by increasing Northwest Forest Pass compliance from 60 percent to 80 percent. Concept 2, on the other hand, which eliminates parking altogether at two significant trailheads, would result in significant revenue loss

 $^{^2}$ Currently, Heather Meadows Parking Area in the Mount Baker District of MBSNF has a compliance rate of approximately 90 percent.

^{11 |} Volpe National Transportation Systems Center, April 2015

from Northwest Forest Pass. Furthermore, increased compliance rates for the Northwest Forest Pass would not be able to compensate for the losses, even at 90 percent compliance.

Table 3: Comparison of Northwest Forest Pass Revenue for Concept 1 and Concept 2 at 60, 80, and 90 percent compliance

	Existing Conditions	Concept 1	Concept 2
Parking Availability	Unlimited	156	60
Estimated Number of Vehicles for 12 Weeks (High Season)	26,424	22,272	11,880
	Approximate revenue for 12 weeks (High Season)		
Approximate income from Northwest Forest Pass at 60% Compliance	\$63,418	\$53,453	\$28,512
Approximate income from Northwest Forest Pass at 80% Compliance		\$71,270	\$38,016
Approximate income from Northwest Forest Pass at 90% Compliance		\$80,180	\$42,768

Recommendations: Task 5

Based on the analysis, it is the Project Team's recommendation that MBSNF consider moving forward with Parking Concept 1, which is to eliminate overflow parking at the Denny Creek/Franklin Falls, Pratt Lake/Granite Mountain, and Annette Lake/Asahel Curtis Nature Trail parking areas. This approach allows the Forest to take one step toward improving access management at some of the most highly visited (and parking constrained) areas in the I-90 corridor. Though capital expenses to improve parking areas are significant, improvements could be implemented incrementally in conjunction as funds become available, in conjunction with an effort to increase Northwest Forest Pass compliance.

Eliminate Overflow Parking

With the completion of the new Denny Creek/Franklin Falls parking area and the improvement of parking areas at Pratt Lake/Granite Mountain and Annette Lake/Asahel Curtis trailheads, MBSNF should limit parking to official trailhead parking areas where recreation fees are required.

Enforce Illegal Parking Penalties and Increase Northwest Forest Pass Compliance

Through regular monitoring, MBSNF should issue warnings and/or citations to all vehicles that are parked illegally. Improved signage and possible introduction of additional pay boxes/tubes may also be employed to ensure that legally parked vehicles purchase the Northwest Forest Pass. The Forest should establish a goal of 80% compliance for all vehicles parked in these areas.

Monitor Impacts and Register Feedback

As part of a new approach to parking management, MBSNF will want to ensure all stakeholders are able to register feedback as it pertains to the new parking program. The Forest will want to understand impacts, such as how a reduction of parking in the Denny Creek area may result in increased use at other destinations such as Snow Lake. The Forest should also monitor potential congestion resulting from visitors being turned away from parking areas. Finally, MBSNF should monitor Forest resources, such as trail wear-and-tear, backcountry impacts, roadside vegetation, and trailhead amenities. This will help to determine which areas may be capable of supporting additional visitation with alternative access.

Consider Alternative Means of Access with Transit

Based on impacts and visitor feedback after implementing changes to parking at three parking areas, the Forest should have a better understanding of how transit may be instituted to complement the new parking management program. This information will help guide the decision-making process for implementing any of the transit investment alternatives laid out in the I-90 Transit Feasibility Study.

Appendix A: Task 1-3 Interim Memo

October 2014

Background

In April 2014, the Mount Baker-Snoqualmie National Forest (MBSNF) completed an Alternative Transportation Feasibility study that partly focused on transit feasibility in the I-90 corridor between Seattle and Snoqualmie Pass. The study recommends that in order to implement transit service, MBSNF should adopt parking management policies that, in conjunction with other visitation management strategies, regulate access at certain destinations within the corridor. The Volpe Center is conducting this Parking Management Impact Assessment to evaluate the potential impacts of implementing changes to current MBSNF parking management practices. As an initial step in the study, the Volpe Center collected baseline information about current MBSNF parking management strategies and policies, the recreation fee program, and related revenues and expenditures. The Volpe Center interviewed Forest Service Regional andForest staff and reviewed existing Forest

Service guidance and documents. The following memo synthesizes the information collected.

MBSNF Current Parking Management Strategies

Parking is a major concern at many trailheads throughout the MBSNF, including sites along the I-90 corridor. In many areas, designated parking areas are often full, and visitors frequently park in undesignated areas along nearby access roads. This results in unsafe conditions for pedestrians, dangerous navigational conditions for emergency vehicles, degradation of roadside vegetation, and generally unpleasant conditions for a visitor seeking a pristine natural environment.

Aside from requiring all vehicles to display the Northwest Forest Pass, MBSNF does little to regulate parking in these areas. Some parking management strategies that the Forest has employed include:

- Post "no parking on this side of the road" signs in order to maintain access to an area. These signs often get removed by the public.
- Limited use of physical barriers, such as boulders, fencing and guard rails. When physical barriers are present visitors will typically park in roadway instead of on shoulder.

MBSNF's passive approach to parking management is driven by multiple factors. Most of the parking lots were developed many years ago and are vestiges of logging sites. These parking areas were not specifically designed to accommodate current usage levels. Another issue is that many parking areas are gravel lots where parking spaces are not well delineated, while some paved lots do not have wheel-stops or striping to indicate designated spots. In addition, the Forest has limited staff and resources to adequately regulate parking. Finally, the Forest does not have an overall approach to visitation management and wrestles with the balance of restricting use with the goal of providing public access. The Forest is reluctant to implement more active management policies, such as restricting parking or establishing trailhead quotas.

Current Parking Design Policies

When developing or improving a parking site, the engineering and recreation staff are supposed to work together to develop a design that meets the site's specific typography, resource and environmental conditions, and user needs. However, the Forest currently employs fewer landscape architects than in the past, so much of the facility design is left to the engineering group. The Forest has very limited data on trailhead usage or current parking usage so there is not a clear understanding of the demand for a site. As a result, the design of parking areas is largely driven by limits on funding, available space, accessibility requirements (regulated by the Architectural Barriers Act, 42 U.S.C. 4151 *et seq.*), and resource impacts rather than parking demand.

Recreation Fees

The Federal Lands Recreation Enhancement Act (REA), which was passed in 2004, gave the Forest Service the authority to collect recreation fees. Revenue from fees is used to supplement appropriations and other funding sources to repair, improve, operate, and maintain recreation sites and areas to quality standards and to enhance the delivery of recreation services to quality standards. A recreation site must meet a number of criteria in order for the Forest Service to charge a fee for its use. The criteria include a list of six amenities that the site must have:

- Designated developed parking
- Permanent toilet facility
- Permanent trash receptacle
- Interpretive sign, exhibit, or kiosk
- Picnic tables, and
- Security services

Concession-operated sites are not included in the REA authority.

Per Forest Guidance (Interim REA Implementation Guidelines, 2005), the REA sites are meant to be clearly delineated with tightly defined boundaries. As a result, vehicles that overflow the designated parking area and park on the access roads are not technically required to pay the day-use fee. However, some Forests in the region have made a portion of the access road that borders the REA site a defacto REA site in order to collect the fee. MBSNF clearly marks all REA sites; however, sites where the REA fee is not charged are not marked as non-REA sites (though the MBSNF does provide this information).

The Forest Service is prohibited from collecting parking or entrance fees. However, the REA fees are tied to parking as the fee collection system requires visitors to display a pass on their vehicle. The following passes are all valid at MBSNF REA sites:

- Annual Northwest Forest Pass: \$30 annually. Honored at all Forest Service operated recreation sites in Washington and Oregon where a day use fee is required.
- *National Forest Recreation Day Pass:* \$5 per day. Honored at all Forest Service operated recreation sites in Washington and Oregon where a day use fee is required.
- Interagency Annual Pass**: \$80 annually. Honored nationwide at all Forest Service, National Park Service, Bureau of Land Management, Bureau of Reclamation, and US Fish & Wildlife Service sites charging entrance or standard amenity fees.
- Interagency Senior Pass**: \$10, valid for lifetime. Honored nationwide at all Forest Service, National Park Service, Bureau of Land Management, Bureau of Reclamation, and US Fish & Wildlife Service sites charging entrance or standard amenity fees.

• Interagency Access Pass: Free for U.S. citizens that are blind or have a permanent disability. Honored nationwide at all Forest Service, National Park Service, Bureau of Land Management, Bureau of Reclamation, and US Fish & Wildlife Service sites charging entrance or standard amenity fees.

**MBSNF retains all revenue from Interagency passes purchased locally and a portion of those sold across the greater region.

In addition to the passes, MBSNF recently installed pay boxes/tubes at a number of its REA sites, enabling visitors to pay the REA fee onsite rather than purchasing a pass in advance.

Any changes to the fee structure must be approved by the Regional Fee Board. The Forest Service's Northwest Region does not currently have a Regional Fee Board, and is thus unable to change the cost or locations of its REA fee programs.

Recreation Fee Revenues and Expenditures

Since visitors are able to purchase and use visitor passes at a number of different locations, the MBSNF is not able to collect detailed information on the revenue collected for individual sites.

Table 4: MBSNF Recreation Fee Revenues (FY11-FY13)

Source: Fee Accomplishment Report 2011, 2012, and 2013

Source	FYII Revenue	FY12 Revenue	FY13 Revenue
Recreation Fees	\$880,709	\$911,110	\$901,879
Special Uses	\$36,663	\$38,823	\$47,429
Interagency Pass	\$100,433	\$133,757	\$98,543
Total	\$1,017,806	\$1,083,689	\$1,047,851

Forest Service units retain at least 95% of the recreation fees associated with its sites. The REA fee revenue is primarily intended to maintain the fee sites at a certain level of standards. Per FS REA guidance, the fee revenue may be used for the following:

- Repair, maintenance, and facility enhancement
- Visitor services
- Habitat restoration
- Law enforcement costs related to public use and recreation at fee sites.

- Direct operation expenses related to management and delivery of the recreation fee program
- Fee management agreements
- Administration, overhead, and indirect costs related to the operation of the recreation fee program
- Special use permit

At MBSNF recreation fee revenue is largely split between the trailhead and the trail itself.

Table 5: MBSNF Recreation Fee Expenditures (FY11-FY13)*Source: Fee Accomplishment Report 2011, 2012, and 2013

Source	FYII Expenditures	FY12 Expenditures	FYI3 Expenditures
Maintenance & Repair	\$671,933	\$633,279	\$785,055
Visitor Services	\$166,393	\$154,635	\$344,677
Cost of Collections	\$43,073	\$40,595	\$47,122
Law Enforcement	\$25,844	\$24,357	\$28,273
Habitat Restoration	\$0	\$0	\$0
Fee Agreements	\$0	\$0	\$0
Total	\$907,243	\$852,866	\$1,205,127

^{*}Expenditures may be funded with previous years' revenue.

Recreation Fee Compliance and Enforcement

MBSNF has two primary law enforcement tools to manage recreation fee compliance: a warning "Notice of Required Fee" and a violation notices. The "Notice of Required Fee" educates visitors about the fee requirement and includes a payment envelope that individuals can use to pay the fee after-the-fact. The fine for a nonpayment violation notice is \$100. In FY13, MBSNF issued 416 warning notices and 72 violations. Of the 115 Forest Protection Officers (FPOs) who have been trained and authorized to issue warning and violation notices, only an extremely small percentage are issuing tickets or warning. Of the 115 FPOs, only 15 were active, and, of those, four were most active issuing the tickets and warnings.

The low enforcement levels are driven by a number of factors. There is little incentive for FS staff to issue tickets; doing so adds a cost and burden to staff resources and the money generated goes to the treasury and not to the Forest itself. In addition, the local United States Attorney's Office has indicated that they do not like to deal with citations that involve the Northwest Forest Pass. The judges made it clear that these are administrative issues, fee collection issues, and they don't want to be seen as the debt collector for any

federal agency. In addition, the enforcement offices prefer to encourage compliance at the lowest level possible (i.e. issuing a warning notice) rather than punishing visitors for noncompliance. Yet, some Forest Service staff feel that the low enforcement/citation levels is doing the recreation fee program a disservice. If visitors see little consequence to not complying with the fee requirements then they are more likely to not purchase a pass. Limited levels of targeted enforcement (i.e. more active enforcement levels over three to four summer weekends) could help to show visitors that the Forest is serious about REA fee compliance.

Parking Compliance and Enforcement

Per Forest Service regulation (36 CFR §§ 261.12) "blocking, restricting, or otherwise interfering with the use of a road, trail, or gate" on National Forest System roads and trails is prohibited. While the Forest Service has the authority to enforce this regulation, it is not always practical to do so. From the law enforcement staff perspective, it is not appropriate to ticket and/or tow a vehicle that is parked illegally if the visitor could not reasonably know that they were parking illegally (i.e. there was clear signage, clear delineation of parking spots, clear travel lane markings on roadway, etc.). In addition, the law enforcement officers have limited availability to patrol for parking compliance. While the Forest Protection Officers could be utilized to enforce parking, any tickets written by these staff must be vetted through the law enforcement officers, who are the only staff who have access to vehicle registration information. As such, any increase in parking citations would place a large administrative burden on the law enforcement officers.