3.12 TRANSPORTATION

3.12.1 Introduction

The following section describes existing traffic on US 12, parking, roads, and pedestrian access in the White Pass Study Area. Scoping for this project identified parking as a significant issue for both crowding and safety concerns. Projected visitor use numbers are approximations based on expected changes at White Pass if the expansion were to occur. The rationale for these use figures is presented in more detail in Section 3.11 – Recreation and Appendix D – Social, Economic and Recreation Assumptions.

3.12.2 Affected Environment

Traffic service is usually measured in terms of Level of Service (LOS) (Transportation Resource Board 2000). LOS measures the quality of traffic service, and may be determined for each roadway segment based on average delays, congestion speed, volume to capacity ratio, or vehicle density by functional class. The various LOS ratings for roadway segments are defined as follows (Transportation Resource Board 2000):

- LOS A describes primarily free-flow operation at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification.
- **LOS B** represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification.
- LOS C represents stable operations; however, ability to maneuver and change lanes in mid-block locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both, may contribute to lower average travel speeds of about 50 percent of the average free-flow speed for the arterial classification.
- LOS D borders on a range in which small increases in flow may cause substantial increases in delay, and hence decreases in arterial speed. Average travel speeds are about 40 percent of free-flow speeds. LOS D is often used as a limiting criterion for design purposes.
- LOS E is characterized by significant delays and average travel speeds of one-third of the freeflow speed or less. LOS E is sometimes accepted as a limiting design criterion when restricted conditions make it impractical to consider a higher LOS.
- LOS F characterizes arterial flow at extremely low speeds, below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations with high delays and extensive queuing. LOS F is never used as a design standard. It represents a condition that is intolerable to most motorists.

3.12.2.1 US 12

Access to White Pass Ski Area (approximate milepost 151) is provided on US 12. The White Pass Study Area is bisected by US 12 and includes several additional mountain service roads, which are closed to the public.

Construction of US 12 was completed in 1951. US 12 is a major transportation corridor for commerce, winter sports, and tourists, as well as recreational activities in the GPNF and OWNF. This two-lane paved highway is the southern-most highway crossing the Cascades in Washington. It consists of two lanes, a 24-foot running surface (total for both lanes), with shoulders varying from a minimum of 4 feet up to 38 feet on either side along the segment passing through the ski area.

Current traffic data for US 12 has been collected by WSDOT at milepost 185.25, which is approximately 34 miles east of White Pass, just west of the SR 410 intersection. The most current survey available is the 2005 Peak Hour Report which includes Average Daily Traffic (ADT) and the top 200 Peak Hour Volumes (WSDOT 2005). This report found the ADT to be 2,247 vehicles. The peak one-hour volume was recorded at 1,348 or 59.99 percent of ADT. Of the top 200 Peak Hourly Volumes measured at White Pass, nearly all of these occurred between July and November, with only 19 occurring during the operation of White Pass. During peak traffic 29.9 percent of vehicles were recorded traveling east while 70.1 percent were headed west (WSDOT 2005). The number of trucks using US 12 in the vicinity of White Pass has also been measured at milepost 185.25. WSDOT reports that 18 percent of all vehicles traveling on this part of US 12 are single, double, or triple trailer trucks (WSDOT 2005b).

In the section of US 12 in the vicinity of White Pass, between mileposts 135 and 177, WSDOT has estimated Average Daily traffic as 0-1,999 vehicles per day (WSDOT 2005a). Actual counts and estimates of Daily Traffic Volumes for 2002, 2003, 2004, and 2005 are shown in Illustration 3.12 FEIS1. Traffic operates at LOS B along US 12 in the vicinity of White Pass (USDI and NPS 2002).

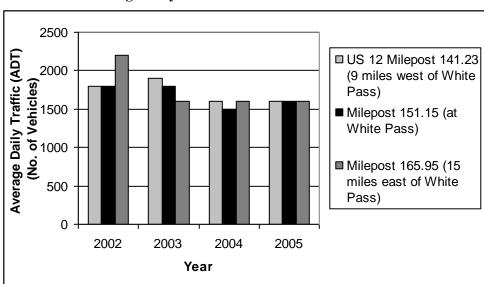


Illustration 3.12 FEIS1: Average Daily Traffic Volumes Near White Pass

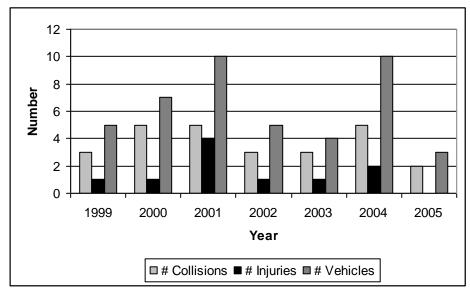
Note: ADT volumes for 2003, 2004, and 2005 at milepost 151.15, and 2003 ADT volumes at mileposts 141.23 and 165.95 are based on actual WSDOT traffic and vehicle counts. All others are estimated by WSDOT.

Source: WSDOT 2005a

The *U.S. Highway 12 Corridor Charette* (USDI and NPS 2002) reports that no segment of US 12 between Interstate 5 and Naches is designated as a High Accident Corridor, nor have any specific locations along the highway been designated as a "High Accident Location" (USDI and NPS 2002). The 12.55-mile segment from SR 123 (near the Mount Rainier National Park boundary) east to the Yakima County line exhibits an accident rate that is higher than the average accident rates for either Lewis or Yakima Counties. The accident rate along this segment of US 12 is 2.3 accidents per million vehicle miles traveled as compared to 1.36 accidents per million vehicle miles traveled in Lewis County and 1.49 accidents per million vehicle miles traveled in Yakima County. The segment ranks fourth highest among the 15 segments identified between Interstate 5 and Naches. The remainder of the corridor is at or below average accident rates.

The speed limit for the section of US 12 through the White Pass Ski Area is 35 mph. Accidents on this stretch of highway have been insignificant due to the reduced speed limit, good sight distance, and snow management. Although half of the guest parking at White Pass occurs along US 12, with guests walking along the highway to the ski area entrance, accidents have involved only vehicles (those parked as well as those entering and leaving the highway) rather than pedestrians and vehicles. Since 1999, 26 collisions involving 44 vehicles, resulting in ten injuries (no fatalities), have occurred during the operation of the ski area in the 4-mile stretch of US 12 in the immediate vicinity of White Pass (WSDOT 2006). Illustration 3.12 FEIS2 summarizes the number of collisions, injuries and vehicles involved in accidents within 2 miles of the White Pass Ski Area for each year since 1999.

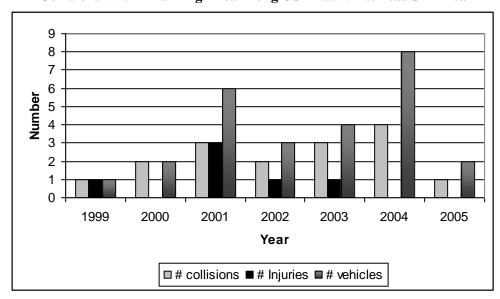
Illustration 3.12 FEIS2: Collisions Within Two Miles of White Pass Ski Area



Source: WSDOT 2006

Since 1999, 16 collisions involving 26 cars and resulting in six injuries have occurred during the operation of the ski area in the vicinity of guest parking along US 12 (WSDOT 2006). Illustration 3.12 FEIS3 summarizes the number of collisions, injuries and vehicles involved in collisions within the parking area along US 12 (around mileposts 150.25 to 152.25) for each year since 1999.

Illustration 3.12 FEIS3: Collisions Within Parking Area Along US 12 at White Pass Ski Area



Source: WSDOT 2006

The US 12 Corridor Charette (USDI and NPS 2002) indicates that the background growth in traffic would result in an increase in ADT from the existing 2,247 to 2,609 by 2017. In addition, the LOS is projected to reduce from LOS B to LOS C during this timeframe (USDI and NPS 2002). These background projections assume that some form of expansion will take place at White Pass (USDI and NPS 2002).

3.12.2.2 Parking

Parking at White Pass Ski Area occurs in six parking lots, as well as along the shoulders of US 12. Parking capacity at White Pass is a combination of 1,100 passenger vehicles and 9 buses. Based on 2.3 guests per vehicle and 40 guests per bus, a total of approximately 2,890 visitors can park at White Pass. The 1,100 passenger vehicle parking incorporates approximately 550 vehicles in the six existing lots, while parking for the remaining 550 vehicles is achieved along US 12 (McCarthy, pers. comm.). These parking lots include the overnight lot, which accounts for 130 vehicles, the main lot with 225 vehicles, the condominium lot with 70 vehicles, the Kracker Barrel lot with 75 vehicles, and the employee lot with 50 vehicles.

3.12.2.3 Roads

Table 3.12-1 presents the existing road length and road density within the White Pass Study Area. The majority of road length, 4.2 miles, is located in the Upper Tieton watershed, on the eastern portion of the SUP area. The remaining 2.6 miles of roads are located in the Upper Clear Fork Cowlitz watershed, on the western side of the SUP area. The road densities in the White Pass Study Area total 2.7 miles/mile², with a density of 6.0 miles/mile² in the Upper Tieton and 1.5 miles/mile² in the Upper Clear Fork Cowlitz watershed.

Table 3.12-1: Existing Road Characteristics at White Pass

Parameter	Upper Clear Fork Cowlitz	Upper Tieton	Total
Paved (miles)	0.2	0.3	0.5
Unpaved (miles)	2.3	3.9	6.2
Total Road Length (miles)	2.6	4.2	6.7
Road Density (mi/mi ²)	1.5	6.0	2.7

3.12.2.4 Pedestrian Access

Skiers parking along US 12 must negotiate a walk of up to ¼-mile along the highway, usually wearing or carrying ski gear and/or with children, in order to access the ticket booth and other facilities. Similarly, those that park in the lots on the north side of US 12 must cross the highway to access the ticket booth, lodge or lifts. This situation results in potentially conflicting uses of US 12. As described above, no fatalities have been recorded since 1999 and no pedestrian accidents have been reported (WSDOT 2006).

However, the presence of pedestrians along US 12 in the vicinity of White Pass creates the potential for pedestrian-related accidents.

<u>3.12.3</u> <u>Environmental Consequences</u>

3.12.3.1 *Alternative* 1

US 12

Under Alternative 1, no new development at White Pass would take place. Traffic would continue to follow patterns similar to historic trends. Growth in visitation at White Pass would increase at a rate of approximately 1 percent per year, which would be lower than, and in response to, the projected 2.6 percent average annual population growth rate in the White Pass Study Area (refer to Section 3.10 – Social and Economic Factors and Section 3.11 – Recreation). WSDOT projects an increase in ADT along US 12 from the existing 2,247 to 2,609 by the year 2017. The current LOS B would be reduced to LOS C by 2017 (USDI and NPS 2002). As a result, traffic associated with the operation of White Pass is expected to fall within the projected increase in ADT on US 12. As under the existing condition, the majority of peak hourly volumes would occur during the non-skiing season. With increased traffic volumes and increased visitation at White Pass, it is expected that it would become increasingly difficult for White Pass guests to cross US 12 during busy periods of traffic and/or visitation. Additionally, the number of injuries and vehicles involved in collisions within the parking area along US 12 (around mileposts 150.25 to 152.25) would potentially continue to occur at a rate similar to the existing rates (refer to Illustrations 3.12 FEIS2 and 3.12 FEIS3).

Parking

No new parking lots would be constructed. Parking capacity would remain unchanged from the existing condition, with a capacity of approximately 1,100 cars. With a CCC of 2,670 and the ability to park 2,890 visitors, the existing parking would be sufficient to cover all but peak visitation in the short-term. **However, with increasing visitation, over the long-term, it is anticipated that the parking lots at White Pass would become increasingly parked out.** Refer to Table 3.12 FEIS1 for a comparison of parking by alternative.

Table 3.12 FEIS1: Summary of Parking at White Pass by Alternative

	Altern	ative 1 ^a	Alternative 2		Modified Alternative 4		Alternative 6		Alternative 9		
CCC	2,6	570	4,250		3,800		3,640		3,280		
# Lots	(6		6		7		7		7	
Additional Parking (acres)	N/A		N/A 7		2.5		2.5				
Cars in Additonal Parking (cars) ^b	N	/A	N/A		946		340		340		
Parking Capacity	Vehicle	Guests	Vehicle	Guests	Vehicle	Guests	Vehicle	Guests	Vehicle	Guests	
Car in Lots ^c	550	1,265	550	1,265	1,496	3,440	890	2,047	890	2,047	
Busses in Lots ^d	9	360	9	360	9	360	9	360	9	360	
Cars on US 12	550	1265	1141	2625	0	0	536	1,233	380	873	
Total	1,109	2,890	1,700	4,250	1,505	3,800	1435	3,640	1,279	3,280	

^a The Alternative 1 summary is based on measured existing conditions provided by White Pass Ski Company (refer Section 3.12.2.2). Whereas, all other alternatives are prepared with reference to the relevant CCC.

Roads

No new road construction would take place under Alternative 1. Road mileage and road densities would remain as described in Table 3.12-1.

Pedestrian Access

With no new parking at White Pass, pedestrian access would be as described for the existing condition, with the majority of skiers having to walk along and/or across US 12 to access the ski area. Given the projected increase in traffic on US 12, this would increase the risk of a vehicle/pedestrian accident as compared to the existing condition.

3.12.3.2 Alternative 2

US 12

Under Alternative 2, visitation at White Pass is projected to increase by 40,000 in the first year after the expansion, followed by an annual growth rate of 1 percent (refer to Section 3.10 – Social and Economic Factors and Section 3.11 – Recreation). The CCC would increase from 2,670 to 4,250 guests. As with Alternative 1, the current LOS B would be reduced to LOS C by 2017 (USDI and NPS 2002) including consideration of the increases in traffic volume resulting from the proposed expansion.

^b Assumes that a 2.5-acre parking lot accommodates approximately 340 cars, which equates to approximately 136 cars per acre.

^c Car capacity is based on 2.3 guests per car. Additionally, parking along US 12 would not have a maximum but the limiting factor is how far guests are willing to walk to get to the White Pass Ski Area, assumed to be less than ½-mile.

^dBus capacity is based on 40 guests per bus.

In contrast to the additional trails and lifts proposed by this alternative, which would result in increases to the CCC, Alternative 2 does not expand parking capacity. As a result, the parking supply would limit resort visitation and could potentially result in increased vehicle/pedestrian conflicts on US 12. Outside the projected increases as described in Alternative 1, Alternative 2 is not projected to result in increased peak hour volumes or ADT along US 12. Additionally, the number of injuries and vehicles involved in collisions within the parking area along US 12 (around mileposts 150.25 to 152.25) would occur at a rate higher than the current condition due to the possible increase in vehicle traffic of up to 591 cars along US 12 (refer to Illustrations 3.12 FEIS2 and 3.12 FEIS3). Similarly, on peak days at White Pass, the increase in CCC at White Pass could potentially provide for 1,360 more people (591 cars), which would be added to the morning peak inbound hour and the afternoon/evening peak outbound hour. This increase in vehicle traffic would result in a proportional increase in the number of peak hours that occur during the ski season, as compared to the existing 19 out of 200 peak hours (refer to Section 3.12.2.1 – US 12). However, the parking limitation, described above, would limit peak day vehicle traffic and may affect visitation due to a lack of available parking.

Operation of an in-resort shuttle along US 12 would reduce the potential for conflicts between pedestrians and vehicles along US 12. However, the potential exists for conflicts between highway traveler vehicles and the in-resort shuttle operating along and across US 12, resulting in minor delays for through travelers. These delays would be consistent with the projected LOS C along US 12 at White Pass (USDI and NPS 2002). Approval from WSDOT and the Washington State Patrol would be required to implement the shuttle program.

Parking

As described above, Alternative 2 would not include additional parking at White Pass. Parking capacity would remain as described under Alternative 1. White Pass would initiate an in-resort shuttle service to the more distant parking areas (i.e., greater than 1,200 feet from the ski area and along US 12) to eliminate the need for additional parking lot construction. The shuttles would consist of two 35-passenger, open air trailers (similar to the shuttle system operated by Crystal Mountain).

With the existing ability to park 2,890 guests, based on parking 550 vehicles (1,265 guests) along US 12, 9 buses (360 guests) and 550 cars (1,265 guests) at the existing parking lots at White Pass, and a CCC of 4,250, parking would continue to be limited, particularly during peak days, when ski area capacity would exceed parking space by 591 cars (1,360 people). During these periods, White Pass visitors may choose to park further east/west along US 12, as described above. **Because no additional parking would be provided under Alternative 2, the occurrence of parked-out conditions would occur more often, particularly as daily visitation approaches the parking capacity of 2,890 visitors. White Pass visitors would likely park outside of the existing parking areas, or further east/west along US 12, which could further exacerbate the pedestrian conflict (and hence safety) on the highway during peak visitation periods. The use of pedestrian shuttles, described below, would mitigate the conflicts to**

some degree, while creating a new road hazard for US 12 motorists by placing a passenger shuttle along the already congested roadway.

Roads

No new road construction would take place under Alternative 2. As shown in Table 3.12-2, the road mileage and density would remain unchanged.

Table 3.12-2:
Road Characteristics at White Pass under the Action Alternatives

Road Parameter	Alternative 2	Modified Alternative 4	Alternative 6	Alternative 9
Upper Clear Fork Cowlitz Waters	shed			
Paved (miles)	0.2	0.2	0.2	0.2
Unpaved (miles)	2.3	2.3	2.65	2.3
Total Road Length (miles)	2.6	2.6	2.85	2.6
Road Density (mi/mi ²)	1.5	1.5	1.7	1.5
Upper Tieton Watershed				
Paved (miles)	0.3	0.3	0.3	0.3
Unpaved (miles)	3.9	3.9	3.9	3.9
Total Road Length (miles)	4.2	4.2	4.2	4.2
Road Density (mi/mi ²)	6.0	6.0	6.0	6.0

Note: Road characteristics under Alternative 1 are included in Table 3.12-1.

Pedestrian Access

Under Alternative 2, pedestrian access would be improved with the implementation of the shuttle system. White Pass visitors who park in the distant lots or along US 12 would be provided with the opportunity to ride the shuttle to access the ski area. For visitors carrying gear and/or guarding children, the shuttle system would reduce the need to walk along or across the highway.

It is expected that some White Pass visitors would be unwilling to wait for shuttles to arrive at pick-up sites. These individuals would continue to walk on the highway, and would represent less than 5 percent of the skiers in the remote parking areas, as is the case at Crystal Mountain (Steel, personal communication). For those guests who would choose to walk along the highway, the potential for conflicts with US 12 motorists would increase.

3.12.3.3 Modified Alternative 4

US 12

Under Modified Alternative 4, the LOS is expected to drop to C, and visitation is projected to increase as described for Alternative 2. The CCC would increase from 2,670 to 3,800 guests. As a result, impacts to traffic volumes and LOS would be similar to but less than Alternative 2, with a peak day increase of 396

new cars under Modified Alternative 4 as compared to 591 under Alternative 2 (both of which are included in the background LOS and ADT projection – refer to Section 3.12.2.1). However an additional parking lot would be constructed under Modified Alternative 4, which would alter the vehicle/pedestrian conflict when compared to Alternative 2, as detailed below.

Parking

A 7-acre parking lot would be constructed in the northeast corner of the existing SUP area, adjacent to the existing drainfield. This lot would accommodate approximately 946 cars, or approximately 2,176 guests, thereby eliminating the need to park along US 12. Parking along US 12 would not be permitted unless the parking lots are efficiently filled to capacity. A Pedestrian Management Plan (refer to Section 2.3.4.8) would be prepared prior to construction of the new parking lot. This plan would address the process for ensuring that no parking occurs on US 12 when capacity is available in parking lots, including the use of signage and parking attendants.

With the existing ability to park 1,625 guests in lots, the additional parking area would allow off-highway parking for approximately 3,800 guests in total. With a CCC under Modified Alternative 4 of 3,800, parking would accommodate peak capacity visitation at White Pass (refer to Table 3.12 FEIS1). As a result, Modified Alternative 4 would decrease the occurrence of parked-out conditions during peak visitation periods. By providing no parking along US 12, Modified Alternative 4 would also minimize the number of accidents associated with the parking along US 12, as compared to Alternatives 1 or 2.

Roads

Under Modified Alternative 4, no new road construction would take place. Road characteristics at White Pass would remain unchanged from the existing condition (refer to Table 3.12-2).

Pedestrian Access

Under Modified Alternative 4, the combined parking areas (existing and proposed) would accommodate all visitors on capacity days. As a result, guests who park in the new 7-acre parking lot would have improved access to the new ticket booth and the base area. In addition, with sufficient parking at White Pass, Modified Alternative 4 would allow all users to park near the base area, thereby eliminating cars along US 12. Overall, Modified Alternative 4 would substantially lower the risk of vehicle/pedestrian accidents when compared to the other alternatives, because no cars would be parked along US 12.

3.12.3.4 Alternative 6

US 12

Under Alternative 6, visitation at White Pass is projected to increase by approximately 14,000 the first year after the expansion, followed by an approximately 1 percent annual growth rate (refer to Section 3.10

– Social and Economic Factors and Section 3.11 – Recreation). The CCC would increase from 2,670 to 3,640. Impacts on LOS and traffic volumes would be less than Alternative 2 or Modified Alternative 4, with 326 new peak day cars.

Parking

A 2.5-acre parking lot would be constructed in the northeast corner of the existing SUP area, (refer to Figure 2-6). This lot would accommodate approximately 340 cars, or approximately 782 guests. With the existing ability to park 2,890 guests, the increased parking area would allow for approximately 3,672 guests in total. With a CCC of 3,640 (refer to Table 3.12 FEIS1), parking would accommodate capacity visitation at White Pass. Alternative 6 would not eliminate parking along US 12, as in Modified Alternative 4, but by providing a new parking lot, Alternative 6 addresses the potential for pedestrian/vehicle conflicts along US 12 better than Alternative 2 by providing additional off-highway parking. Alternative 6 would decrease the occurrence of parked-out conditions, as compared to Alternatives 1 or 2.

Roads

While the other Action Alternatives include the development of no roads in the White Pass Study Area, under Alternative 6, a new permanent road, approximately 0.25-mile in length, would be constructed from the existing Quail trail to the base of the *Basin* chairlift within the White Pass IRA. ⁴⁹ This road would serve as the egress trail from the *Basin* pod. Road development is included in Alternative 6 to evaluate the effects of road use for construction and operations, as opposed to over-the-ground (or snow) access with no roads (refer to Section 3.2 – Geology and Soils and Section 3.3 – Watershed Resources).

By creating an additional 0.25 mile of road, Alternative 6 would increase the mileage and density of roads in the Upper Clear Fork Cowlitz watershed. As shown in Table 3.12-2, the road density in the Upper Clear Fork Cowlitz portion of the White Pass Study Area would increase from 1.5 miles/mile² to 1.7 miles/mile². In an effort not to increase the mileage of roads in the Upper Clear Fork Cowlitz Tier 2 Key Watershed, obliteration of 0.6 mile of Road 1284.016 (an existing native surface road located

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⁴⁸ Based on parking 550 vehicles (1,265 guests) along US 12, 9 buses (360 guests) and 550 vehicles (1,265 guests) at the existing parking lots at White Pass.

⁴⁹ This new permanent road would be constructed in the White Pass Inventoried Roadless Area, which is also in a Tier 2 Key Watershed (refer to Section 3.14 – Inventoried Roadless Areas). The Northwest Forest Plan (USDA and USDI 1994) Standards and Guidelines specifically prohibit this activity. Construction of the road would require a site-specific modification of the Standards and Guidelines, which would require a coordinated review by the Regional Interagency Executive Committee and Regional Ecosystem Office. If this road were to be selected in the ROD for this FEIS, the Decision could not be rendered until the Regional Interagency Executive Committee concurs that such a modification to the Standards and Guidelines is consistent with the objective of the Standards and Guidelines. Such coordination has not taken place as of the publication of this FEIS. In addition, a decision for road construction within an IRA is reserved to the Chief of the Forest Service, unless he should choose to grant an exception otherwise (FSM 1920, i.d. 1920-2004-1, section 1925.03).

approximately 1 mile northwest of White Pass) would occur under Alternative 6. As a result, the mileage of roads in the Upper Clear Fork Cowlitz watershed would decrease by 0.35 mile.

Pedestrian Access

Under Alternative 6, the total number of pedestrians, with moderate increases in visitation projected (refer to Table 3.11-4), would be comparable to the existing condition, due to the presence of the new parking lot. However, compared to the existing condition, on peak days, proportionately more of the new guests would be able to park off the highway. Skiers parked on US 12 and those in the new parking lot would be able to access the new ticket booth, reducing the potential for pedestrian and vehicle conflicts, as well as the amount of time and distance walking along US 12.

3.12.3.5 *Alternative* 9

US 12

Under Alternative 9, visitation at White Pass is projected to increase by approximately 6,000 the first year after construction of the in-fill facilities, followed by a 1 percent annual growth rate, which is lowest among the Action Alternatives (refer to Section 3.10 – Social and Economic Factors and Section 3.11 – Recreation). The CCC would increase from 2,670 to 3,280. Impacts on LOS and traffic volumes would be less than the other Action Alternatives due to the comparatively lower increase in visitation and capacity, resulting in approximately 170 additional cars on US 12 during a peak day.

Parking

Parking under Alternative 9 would be similar to Alternative 6, although the CCC would be less than the parking capacity. With the existing ability to park 2,890 guests, the additional parking area would allow for approximately 3,672 guests in total. With a CCC of 3,280 (refer to Table 3.12 FEIS1), parking would accommodate capacity visitation at White Pass. Alternative 9 would address pedestrian/vehicle conflicts in a manner that is similar to Alternative 6.

Roads

No new road construction would take place under Alternative 9. Road mileage and density would remain unchanged from the existing condition (refer to Table 3.12-2).

Pedestrian Access

With additional parking lots at White Pass, Alternative 9 would allow more users to park in the base area, thereby reducing the number of cars along US 12, as compared to Alternative 1. As a result of the new parking lot construction, guests who park along US 12 and those in the new parking lot would have improved access to the new ticket booth. Overall, this Alternative would lower the potential for vehicle/pedestrian conflicts as compared to Alternatives 1 or 2.

3.12.4 Cumulative Effects

A cumulative effects analysis was performed for each watershed within the White Pass Study Area for transportation, which is the US 12 corridor from Naches to Packwood. Past, present and reasonably foreseeable projects occurring within each watershed area are included in the analysis. Within the discussions below, cumulative impacts to transportation are considered for short-term and long-term impacts. The cumulative effects on transportation include an increase in the scenic quality of the US 12 corridor (a scenic byway), an increased volume of vehicles utilizing US 12, and a reduction of LOS from B to C.

A list of past, present and reasonably foreseeable projects occurring within the Upper Clear Fork Cowlitz River watershed (refer to Table 3.12-3) and the Upper Tieton River watershed (refer to Table 3.12-4) that affect transportation are presented below. For a description of project actions, refer to Tables 3.0-FEIS1 and 3.0-FEIS2 in Section 3.0.

Table 3.12-3: Cumulative Effects of Past, Present, and Reasonably Foreseeable Project in the Upper Clear Fork Cowlitz River Watershed on Transportation

in the Opper Clear Fork Cowntz Kiver watershed on Transportation			
Project Number	Project Name	Cumulative Effects	
UCFC-3a	Palisades Scenic Viewpoint Project	The 2-acre Palisades Scenic Viewpoint was reconstructed in 2005, resulting in an increase in the scenic quality of US 12, a scenic byway. The effects of this project overlap spatially and temporally with the White Pass expansion. Combined with the White Pass expansion and the other projects listed in this table, this project will add to the long-term increase in scenic quality of US 12, a scenic byway.	
UCFC-3b	Palisades Scenic Viewpoint Project Vegetation Mgmt	Approximately 1 acre of trees will be treated to improve the view from the Palisades Scenic Viewpoint, and will result in an increase in the scenic quality along US 12. The effects of this project overlap spatially and temporally with the White Pass expansion. Combined with the White Pass expansion and the other projects listed in this table, this project will add to the cumulative increase in long-term scenic quality of US 12, a scenic byway.	
UCFC-4	Mt Rainier/Goat Rocks Scenic Viewpoint	Approximately 0.75 acre of trees will be treated to highlight views of Mt. Rainier, resulting in an increase in the scenic quality along US 12. The effects of this project overlap spatially and temporally with the White Pass expansion. Combined with the White Pass expansion and the other projects listed in this table, this project will add to the cumulative increase in the long-term scenic quality of US 12, a scenic byway.	
UCFC-12	Rockfall Mitigation (between mileposts 143 and 149)	Removal of debris and slope stabilization on a rockfall slope resulted in an increase in the scenic character of the US 12 corridor. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the cumulative increase in the long-term scenic quality of US 12, a scenic byway.	

Table 3.12-3: Cumulative Effects of Past, Present, and Reasonably Foreseeable Project in the Upper Clear Fork Cowlitz River Watershed on Transportation

Project Number	Project Name	Cumulative Effects
UCFC-13	Highway 12 Paving Project (between Mile Posts 140.3 to 151.2)	Resurfacing on US 12 in 2004 resulted in an increase in the scenic character of the US 12 corridor by providing a new road surface along the scenic byway. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the cumulative increase in the ability of US 12 to provide a travel experience expected of a scenic byway.
UCFC-14	Unstable Slope Repair Projects (between mileposts 145.61 and 145.77)	Unstable slope repair on US 12 will result in an increase in the scenic character of the US 12 corridor. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the cumulative increase in the ability of US 12 to provide a travel experience expected of a scenic byway.
UCFC-15	Unstable Slope Repair Projects (between mileposts 141.8 and 144.4)	Unstable slope repair on US 12 will result in an increase in the scenic character of the US 12 corridor. Implementation of this project will overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the increase in the ability of US 12 to provide a travel experience expected of a scenic byway.
UCFC-16	Highway 12 Hazard Tree Removal	Hazard tree removal along the US 12 corridor will result in an increase in the scenic character of the US 12 corridor. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will maintain the cumulative increase in the ability of US 12 to provide a travel experience expected of a scenic byway.

Table 3.12-4: Cumulative Effects of Past, Present, and Reasonably Foreseeable Projects in the Upper Tieton River Watershed on Transportation

Project Number	Project Name	Cumulative Effects
UT-11	Clear Creek Overlook Reconstruction	The 1-acre Clear Creek Scenic Overlook will result in an increase in the scenic quality along US 12. The effects of the project will overlap spatially with the White Pass Study Area for transportation (US 12 corridor from Packwood to Naches). Temporally, the effects of the Clear Creek Overlook construction overlap with the White Pass expansion. Combined with the White Pass expansion and the other projects listed in this table, this project will add to the cumulative increase in the long-term scenic quality of US 12, a scenic byway.

Table 3.12-4: Cumulative Effects of Past, Present, and Reasonably Foreseeable Projects in the Upper Tieton River Watershed on Transportation

Project Number	Project Name	Cumulative Effects
UT-19	Highway 12 Hazard Tree Removal	Hazard tree removal along the US 12 corridor will result in a maintenance of the scenic character of the US 12 corridor. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will cumulatively increase the ability of US 12 to provide a travel experience expected of a scenic byway.
UT-26	Highway 12 Rock Stabilization (at Mile Post 155)	Removal of debris and slope stabilization on a rocky side slope will result in an increase in the scenic character of the US 12 corridor. The effects of implementation of this project will overlap spatially with the White Pass Study Area for transportation (US 12). Temporally, the project overlaps with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the cumulative increase in the ability of US 12 to provide a travel experience expected of a scenic byway.
UT-27	Highway 12 Rock Stabilization (at Mile Post 155)	Emergency repair of US 12 due to road washout in 2002 resulted in an increase in the scenic character of the US 12 corridor. The effects of this project will overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the cumulative increase in the ability of US 12 to provide a travel experience expected of a scenic byway.
UT-33	Highway 12 Paving project (between Mile Posts 151.2 and 159)	Resurfacing on US 12 in 2004 resulted in an increase in the scenic character of the US 12 corridor by providing a new road surface along the scenic byway. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the increase in the scenic quality of US 12.
UT-34	Unstable Slope Repair Projects (between Mile Posts 156.32 and 156.56)	Unstable slope repair on US 12 resulted in an increase in the scenic character of the US 12 corridor. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the cumulative increase in the ability of US 12 to provide a travel experience expected of a scenic byway.
UT-35	Unstable Slope Repair Projects (between Mile Posts 161.93 and 165.02)	Unstable slope repair on US 12 will result in an increase in the scenic character of the US 12 corridor. The effects of this project overlap spatially and temporally with the White Pass expansion. Coupled with the White Pass expansion and other projects listed in this table, this project will add to the cumulative increase in the ability of US 12 to provide a travel experience expected of a scenic byway.

The long-term, cumulative effect of the projects listed in the tables above, combined with the White Pass expansion, is an increase in the scenic quality of US 12, a scenic byway, due to the improvement of views and maintenance of visual quality along the corridor.

As described in Section 3.10 - Social and Economic Factors, ongoing economic development strategies along the US 12 corridor include:

Lewis County/Packwood

- Overall Economic Development Plan for Cowlitz and Lewis Counties (CWCOG &LCEDC, 1997)
- Lewis County Industrial Needs Analysis (E.D. Hovee & Company, 1997)
- Packwood Community Action Plan (E.D. Hovee & Company, 1999)
- Northwest Economic Adjustment Initiative Assessment Packwood, Lewis County, Washington (NWAIA, 2000)
- Lewis County Profile (Washington State Employment Security, 2001)
- Draft USDA Forest Service Packwood Work Center Utilization Analysis (Dean Runyan Associates, 2004)

Yakima County/Naches

- Naches, Washington 1993 Community Development Plan (Pacificorp, 1993)
- Town of Naches Land Use Element (Town of Naches, 1995)
- Plan 2015 A Blueprint for Yakima County Progress. Chapter IV Economic Development Element (Yakima County, 1997)

US 12 Corridor

- US 12 Corridor Charette (USDI-NPS 2002)
- White Pass Scenic Byway Corridor Management Plan (Lewis County, Gifford Pinchot National Forest and Okanogan-Wenatchee National Forests - draft, unpublished manuscript on file)

The most comprehensive of the published strategies is the US 12 Corridor Charette (USDI-NPS 2002). This document is the third in a series of studies that focus on the corridors leading to Mount Rainier. The document identifies the importance of gateway communities, such as Packwood and Naches, in the pursuit of shared regional goals.

While none of the strategies outlined in the US 12 Corridor Charette are known to be in a formal proposal, several relevant planning efforts are identified. These include the White Pass Scenic Byway Corridor Management Plan (draft, unpublished), which evaluates byway resources, provides design guidelines for visitor services, and proposes site enhancements along US 12. This plan, currently in draft form, focuses on improving the highway corridor as a destination for recreational travelers, and finding ways for tourism to contribute more to local economies. Directly relating to the transportation effects of White Pass, the US 12 Corridor Charette (USDI-NPS 2002) also identifies an opportunity for Packwood hotels to jointly sponsor a shuttle service to White Pass, as well as the potential for the development of a public parking area in Naches that could serve as a recreational staging area, providing shuttles to and from White Pass during the winter. While these planning efforts could impact transportation issues within the White Pass Study Area, these initiatives have not been identified as reasonably foreseeable for inclusion in Tables 3.0-FEIS1 and 3.0-FEIS2 as of publication of this FEIS.

The ADT and LOS projections through 2017, as described under Alternative 1, both include and provide opportunities for the strategic development of transportation and economic development projects along the US 12 corridor, including the expansion of White Pass. Therefore, the White Pass expansion has been incorporated in the long-term planning and projections for the US 12 corridor. As a result, the White Pass expansion would not result in additional cumulative impacts on traffic along US 12, other than those accounted for in background highway use projections. In conjunction with population growth and other increased uses along US 12, the White Pass expansion would cumulatively contribute to increased volumes and a reduction in LOS from B to C.

In summary, cumulative effects to transportation from the White Pass expansion, coupled with the effects of past, present and reasonably foreseeable projects listed in Tables 3.12-3 and 3.12-4, include an increase in traffic volumes along US 12, and a LOS reduction from B to C. However, the scenic quality of US 12 as a scenic byway will improve due to frequent improvements and maintenance.