Mount Hood Multimodal Transportation Plan
APPENDIX A
Implementation Plan

Document: FINAL Implementation Plan Report

Date of Delivery: January 30, 2014

Description

This report summarizes the 14 projects from the greater MHMTP that have been identified for early implementation in the Implementation Plan, the rationale for selecting these projects, the critical path steps and tasks necessary for their implementation, the parties that will complete these tasks, and the ways that the plan can be used to help them accomplish this.

Status Update

The 14 projects identified for early implementation in the Implementation Plan were approved by the Project Leadership Group on December 19, 2013. The action plans for projects included in the Implementation Plan Report are intended to be used by the project champions to create a more detailed work scope for their top priority projects to be carried forward by their staff. As the MHMTP evolves, more projects from the overall 38 adopted in the MHMTP will be added to the Implementation Plan. In addition, new projects may be identified and added to the MHMTP and the Implementation Plan.

Mt. Hood Multimodal Transportation Plan

Implementation Plan Report

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Prepared for:

Oregon Department of Transportation

January 2014

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ATTACHMENT A: ALL MT. HOOD MULTIMODAL TRANSPORTATION PLAN ADOPTED PROJECTS (current as of February 2014)

ATTACHMENT B: WORKING DOCUMENT SHOWING IMPLEMENTATION PLAN GROUP A PROJECT CRITERIA IN A MATRIX (Project scoring may be updated over the course of the rolling plan.)

CHAPTER 1: COMPONENTS OF THE PLAN

INTRODUCTION

The Mt Hood Multimodal Transportation Plan (MHMTP) builds on many years of planning for the Mt. Hood Highway (US 26/OR 35) corridor, and is a direct outcome of the 2009 Omnibus Public Land Management Act. The Project Leadership Group (PLG), which is the decision-making body for the MHMTP made up of representatives from the Oregon Department of Transportation, U.S. Forest Service, Clackamas County, and Hood River County, created a Project Charge in March 2012 that defines the Mt Hood Multimodal Transportation Plan's goals and scope. As directed by the Project Charge, the MHMTP focuses on affordable and achievable solutions to improve safety and enhance travel options for travelers and residents along the Mt. Hood Highway in both Clackamas and Hood River Counties.

The MHMTP core values were created based on the project charge. The Project Management Team (PMT), comprised of staff members from each of the four jurisdictions, plus FHWA Western Federal Lands Highway Division, and consultant staff, screened projects for inclusion in the final MHMTP Project List against the core values. As defined by the Project Management Team (PMT), the core values are:

1. Improve highway safety for all users,
2. Expand travel options year round to reduce peak travel demand and enhance mobility and access to recreation and rural communities,
3. Projects are financially feasible and sustainable, and
4. Projects can be implemented in 15 years.

A unique aspect and organizing principle of the Mount Hood Multimodal Transportation Plan (MHMTP) is the Implementation Plan component. The Implementation Plan identifies the highest priority projects that the Project Partners agree to implement during the next six years. In addition, each “Implementation Plan project” has an action plan outlining the major tasks for implementation, the timeline for completing each task, and the project partners responsible for completing the tasks. Since the MHMTP is a rolling plan, more projects will move up in priority for implementation over the 15-year time frame of the plan. An action plan for each of those new Implementation Plan projects will be developed as they move up to implementation.

This report summarizes the 14 projects from the greater MHMTP that have been identified for early implementation in the Implementation Plan, the rationale for selecting these projects, the critical path steps and tasks necessary for their implementation, the parties that will complete these tasks, and the ways that the plan can be used to help them accomplish this.

MHMTP PUBLIC INVOLVEMENT PROCESS

The MHMTP project team conducted a public involvement process designed to 1) draw out the specific interests of each stakeholder group and 2) discover common interests, values and criteria that could lead to decisions on the types of projects that would be implemented on the mountain.

In addition to the three main stakeholder groups (PLG, PMT, and Technical Working Group (TWG), there was a broad range of stakeholder groups to engage to help inform the MHMTP and move it forward. In all, over 250 specific groups were contacted to gather input and request their assistance in promoting the MHMTP public process. In-person interviews were conducted with PLG and PMT members, transit providers, and Mt. Hood resort owners and managers to help the project team identify common values and goals held by the diversity of stakeholders. The MHMTP staff also developed a project website sponsored by ODOT.

Two surveys were conducted in 2013 to gauge levels of support for, and garner opinions on, which projects should be included in the MHMTP. The PMT members considered the results of the surveys and input from other stakeholder contact in determining the 38 projects that were ultimately included in the MHMTP final project list, and the 14 projects that were selected for the Implementation Plan component of the MHMTP. (Further information on the MHMTP public involvement process and survey results can be found in the MHMTP Final Report Appendices.)

IMPLEMENTATION PLAN PROJECTS AS A SUBSET OF MHMTP PROJECTS

Implementation Plan projects are a subset of the highest priority projects that are achievable in the near term. These projects either are implementable in the zero- to six-year time frame or are very effective projects that need to be started now in order to implement them within the 15-year overall planning time frame. In addition, Implementation Plan projects must have:

- A project champion who is willing and able to carry the project forward
- Funding sources that have been identified and are being pursued by the project champion

Thirty-eight total projects have been approved for inclusion in the MHMTP to be implemented within the plan's 15-year time frame. These projects were reviewed to determine the degree to which they promoted the project core values and their ease of implementation based on eight criteria (found on Page 4). Projects were then broken into three categories: Group A, Group B, and Group C. Projects are designated with an Identification Number based on project type. Project types include Safety and several types that fit under the travel options definition: Intelligent Transportation Systems (ITS), Pedestrian and Bicycle, Public Transit, Private Transit, Parking, and Organizations, Programs and Legislation.

Group A projects were the first priority for implementation. Ideally, these projects strongly met the project core values, had no major impediments to implementation, and had a short implementation time frame. They could also include projects that are hard to implement, but such projects would

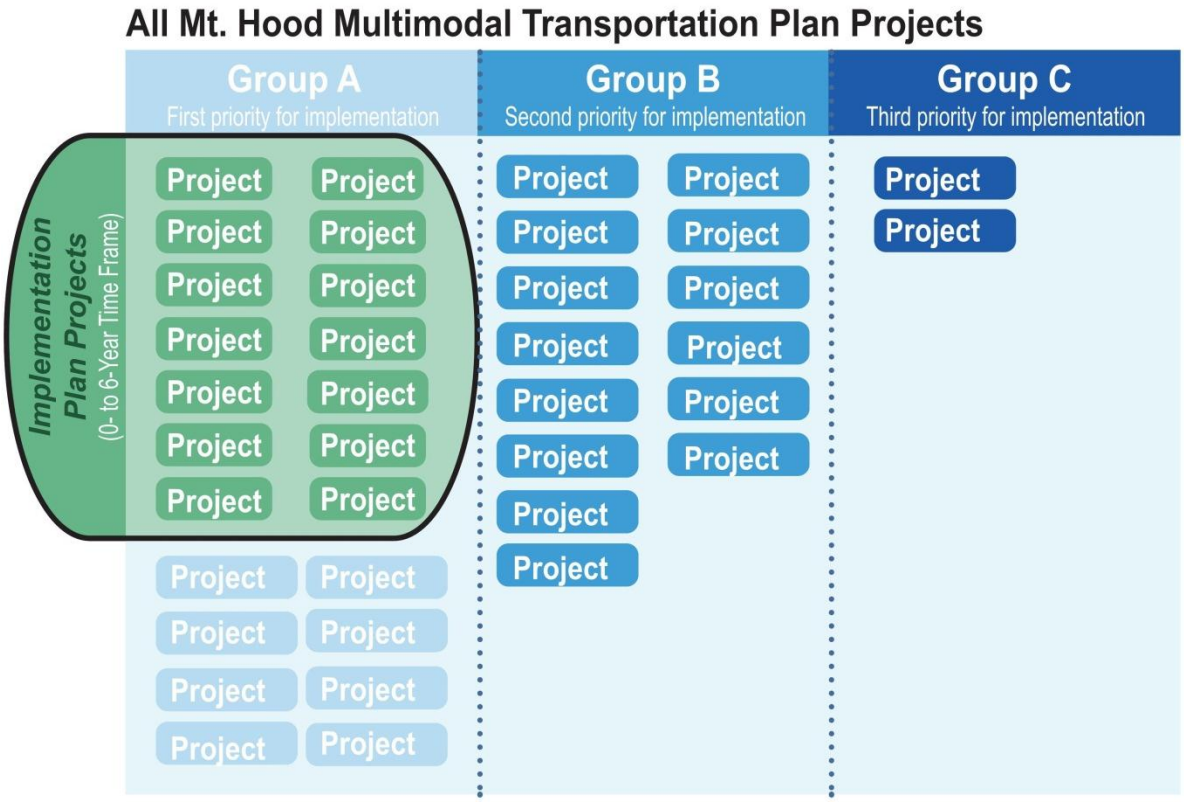
be likely to make substantial improvements in safety and/or travel options. They could also include projects that could be very easy to implement and that had only moderate effectiveness.

Group B projects were the second priority for implementation. They were likely have longer-term implementation (longer than 5 years and up to 15 years), and have important implementation considerations based on the eight criteria, such as high cost and needing other projects to be in place first. (The criteria are discussed in more depth below.)

Group C projects were the third priority for implementation. They had the longest timeline to implement within the 15-year time frame. Also, they might lack a project champion and have other major implementation issues.

Figure 1 shows the 14 projects that are included in the Implementation Plan, which is a subset of the highest priority (or Group A) projects. It also shows that the plan includes multiple project types (projects are given an identification, or name, that combines an abbreviation of their project type and a number).

Figure 1. Implementation Plan Projects Are a Subset of Group A Projects



Some Implementation Plan projects will see only a portion of their overall project description implemented in the short term due to lack of funding or other issues. The portions of the projects that will not be implemented are still included in the MHMTP as high priority, but those parts of the projects will be accomplished later, when conditions allow. (An example is project PB-5, which

includes an analysis of where there are deficient shoulders for bicycle and pedestrian use in the corridor and then includes selective shoulder widening. The portion of the project being implemented as part of the Implementation Plan is *only* the analysis of deficiencies and opportunities.)

IMPLEMENTATION PLAN CRITERIA

As mentioned above, each MHMTP project was prioritized based on the core values and the ease or difficulty of implementation. Implementation Plan projects had two additional criteria to meet for early implementation: a project champion willing and able to carry the project forward, and funding sources identified and being pursued by the project champion.

The implementation matrix found in Attachment B identifies the initial set of criteria for successful implementation of travel options and highway safety improvements. The matrix was developed with input from stakeholders, the project's Technical Working Group (TWG) and the Project Management Team (PMT). For each project, the matrix provides an assessment of the parameters necessary for its successful implementation, based on the criteria. The implementation matrix includes the major conditions that must be in place for successful implementation of travel options, based on the characteristics of each option.

The criteria are:

Funding Potential. This criterion identifies any potential funding sources (e.g., grants, ODOT Planning funds, tourism).

Permitting/Regulatory Compliance. This criterion identifies potential environmental documentation necessary, such as National Environmental Policy Act (NEPA) documentation or legal and legislative approvals.

Administrative/Organizational. This criterion identifies what organizational structure and coordination would be necessary (e.g., nonprofit, multiagency) or whether project organizational support is necessary.

Capital Cost. This criterion provides or gauges the capital costs necessary for the project.

Ongoing Costs (Operating Costs, Marketing, etc.). This criterion identifies day-to-day costs, such as office space, marketing, and maintenance.

Effective Time Frame. This criterion provides the estimated time frame in which a project could be implemented.

Dependent on Other Projects. This criterion identifies whether the project can be implemented as a stand-alone project or if it requires coordination with other projects.

Who. This criterion identifies who is ultimately responsible for implementation.

The matrix demonstrates the complexity of implementing each project and provides a basis for comparison. It was an early tool to understand the potential ease or difficulty of moving different solutions forward; some of the assumptions may have changed since the implementation matrix was created.

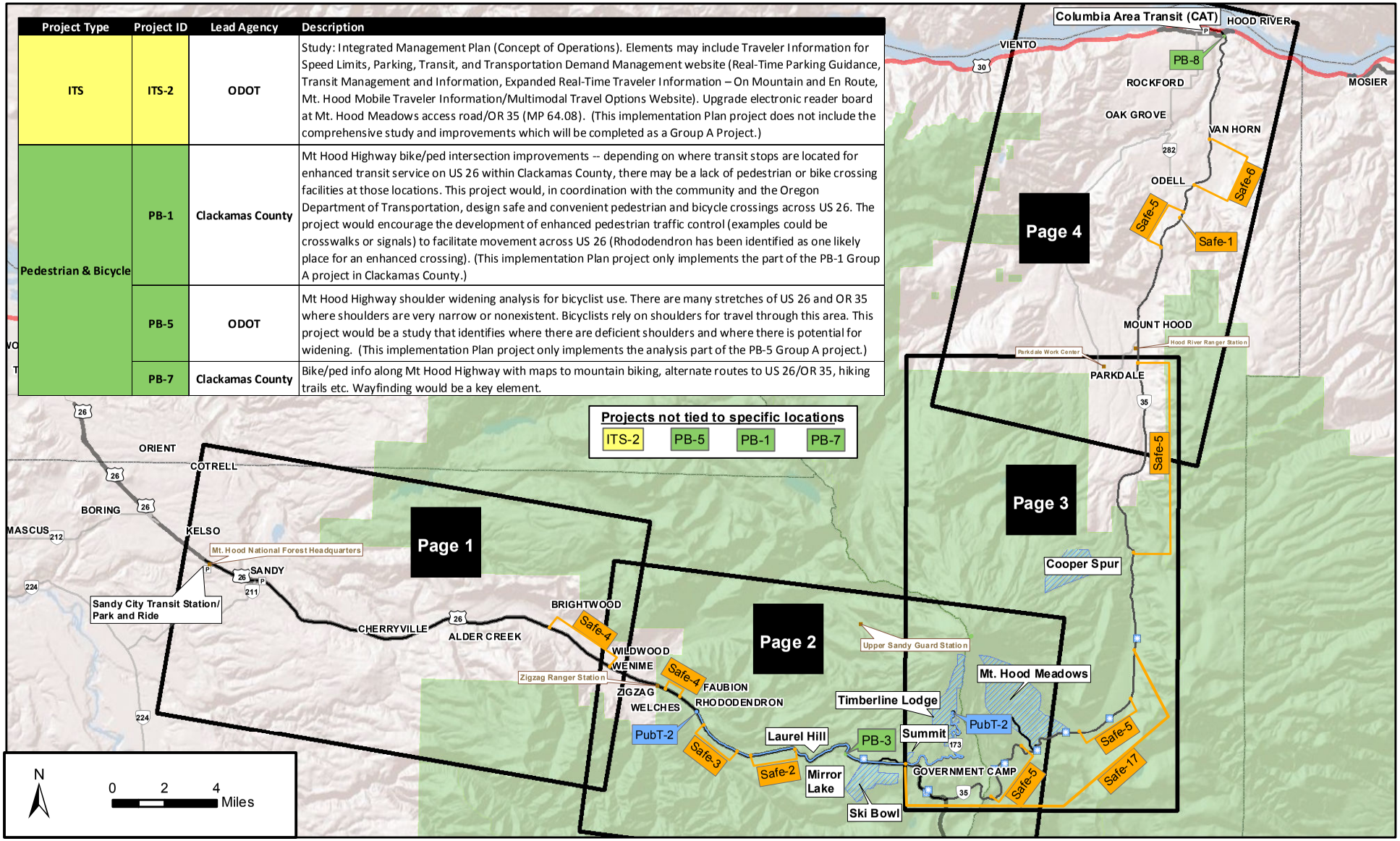
IMPLEMENTATION PLAN PROJECTS

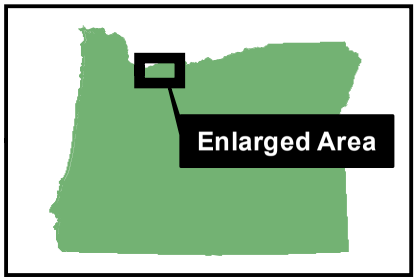
Fourteen of the total 38 MHMTP projects are included in the Implementation Plan. These projects are located throughout the corridor (see Figure 2 on the next 5 pages). As shown, the implementation plan projects include multiple modes as well as safety improvements that fall into the following categories:

- One public transit project
- One Intelligent Transportation Systems (ITS) project
- Five bicycle and pedestrian projects
- Seven safety and roadway projects

One of the seven safety and roadway projects in the Implementation plan (SAFE-1) was completed by ODOT during the course of developing the MHMTP. Therefore, it is already implemented and will not require an action plan.

Project Type	Project ID	Lead Agency	Description
ITS	ITS-2	ODOT	Study: Integrated Management Plan (Concept of Operations). Elements may include Traveler Information for Speed Limits, Parking, Transit, and Transportation Demand Management website (Real-Time Parking Guidance, Transit Management and Information, Expanded Real-Time Traveler Information – On Mountain and En Route, Mt. Hood Mobile Traveler Information/Multimodal Travel Options Website). Upgrade electronic reader board at Mt. Hood Meadows access road/OR 35 (MP 64.08). (This implementation Plan project does not include the comprehensive study and improvements which will be completed as a Group A Project.)
Pedestrian & Bicycle	PB-1	Clackamas County	Mt Hood Highway bike/ped intersection improvements -- depending on where transit stops are located for enhanced transit service on US 26 within Clackamas County, there may be a lack of pedestrian or bike crossing facilities at those locations. This project would, in coordination with the community and the Oregon Department of Transportation, design safe and convenient pedestrian and bicycle crossings across US 26. The project would encourage the development of enhanced pedestrian traffic control (examples could be crosswalks or signals) to facilitate movement across US 26 (Rhododendron has been identified as one likely place for an enhanced crossing). (This implementation Plan project only implements the part of the PB-1 Group A project in Clackamas County.)
	PB-5	ODOT	Mt Hood Highway shoulder widening analysis for bicyclist use. There are many stretches of US 26 and OR 35 where shoulders are very narrow or nonexistent. Bicyclists rely on shoulders for travel through this area. This project would be a study that identifies where there are deficient shoulders and where there is potential for widening. (This implementation Plan project only implements the analysis part of the PB-5 Group A project.)
	PB-7	Clackamas County	Bike/ped info along Mt Hood Highway with maps to mountain biking, alternate routes to US 26/OR 35, hiking trails etc. Wayfinding would be a key element.





Legend

- County Boundary
- Mt. Hood National Forest
- Ski Area
- Sno-Park
- Park & Ride

Implementation Plan Projects

Project Type

- ITS
- Pedestrian and Bicycle
- Public Transit
- Safety

Public Transit Project Segment

Project ID

- PubT-2

- Safety Project Segment

Mt. Hood Multimodal Transportation Plan

Implementation Plan Projects
Figure 2: Key Map

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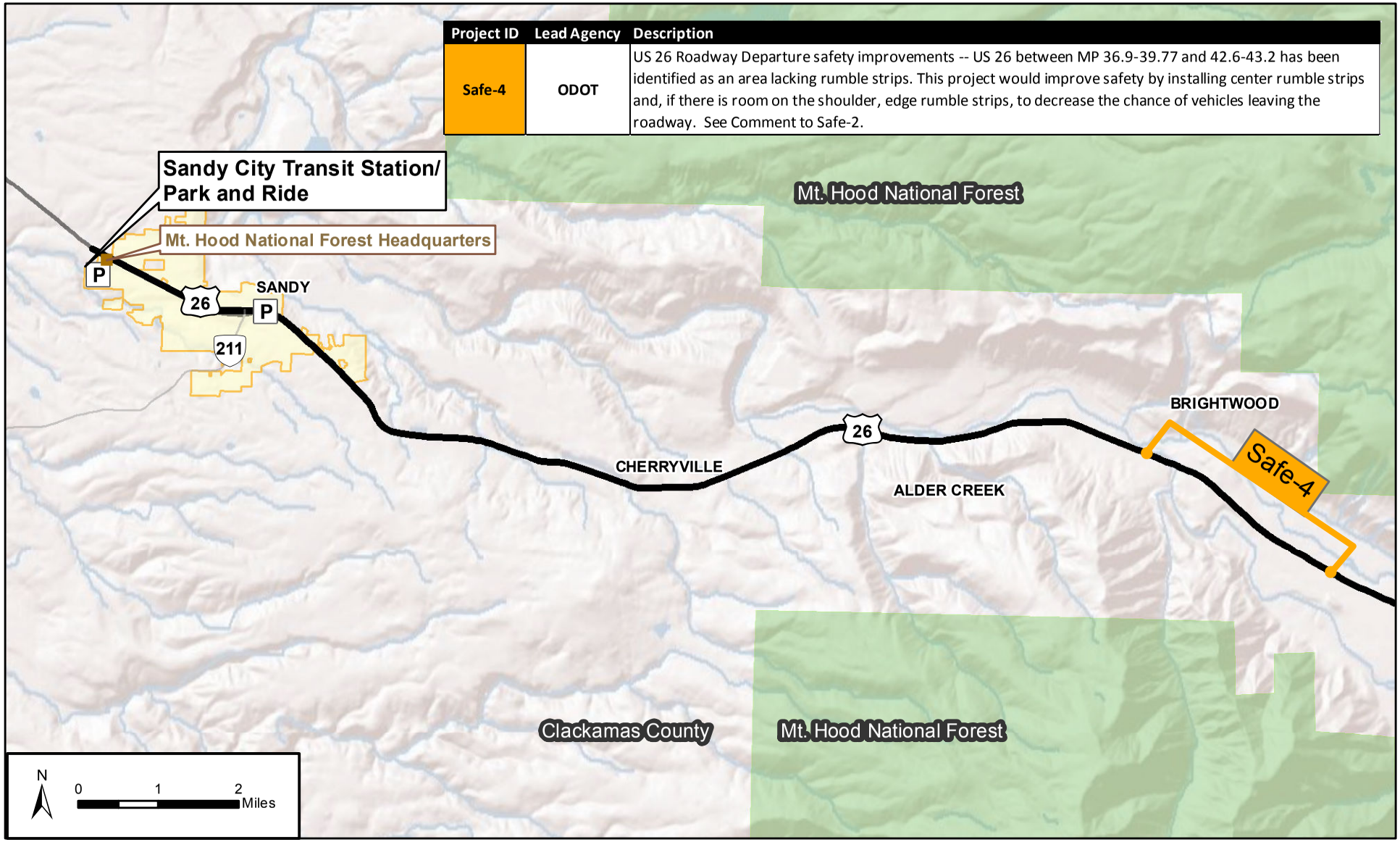
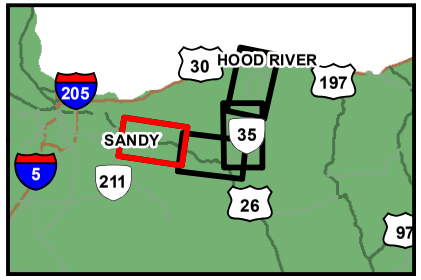
Project ID	Lead Agency	Description
Safe-4	ODOT	US 26 Roadway Departure safety improvements -- US 26 between MP 36.9-39.77 and 42.6-43.2 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway. See Comment to Safe-2.





Legend

- County Boundary
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- Sno-Park
- P Park & Ride

Implementation Plan Projects

Project Type

- ITS
- Pedestrian and Bicycle
- Public Transit
- Safety

Public Transit Project Segment

Project ID

- PubT-2

- Safety Project Segment

Mt. Hood Multimodal Transportation Plan

Implementation Plan Projects

Figure 2a: Map Page 1 of 4

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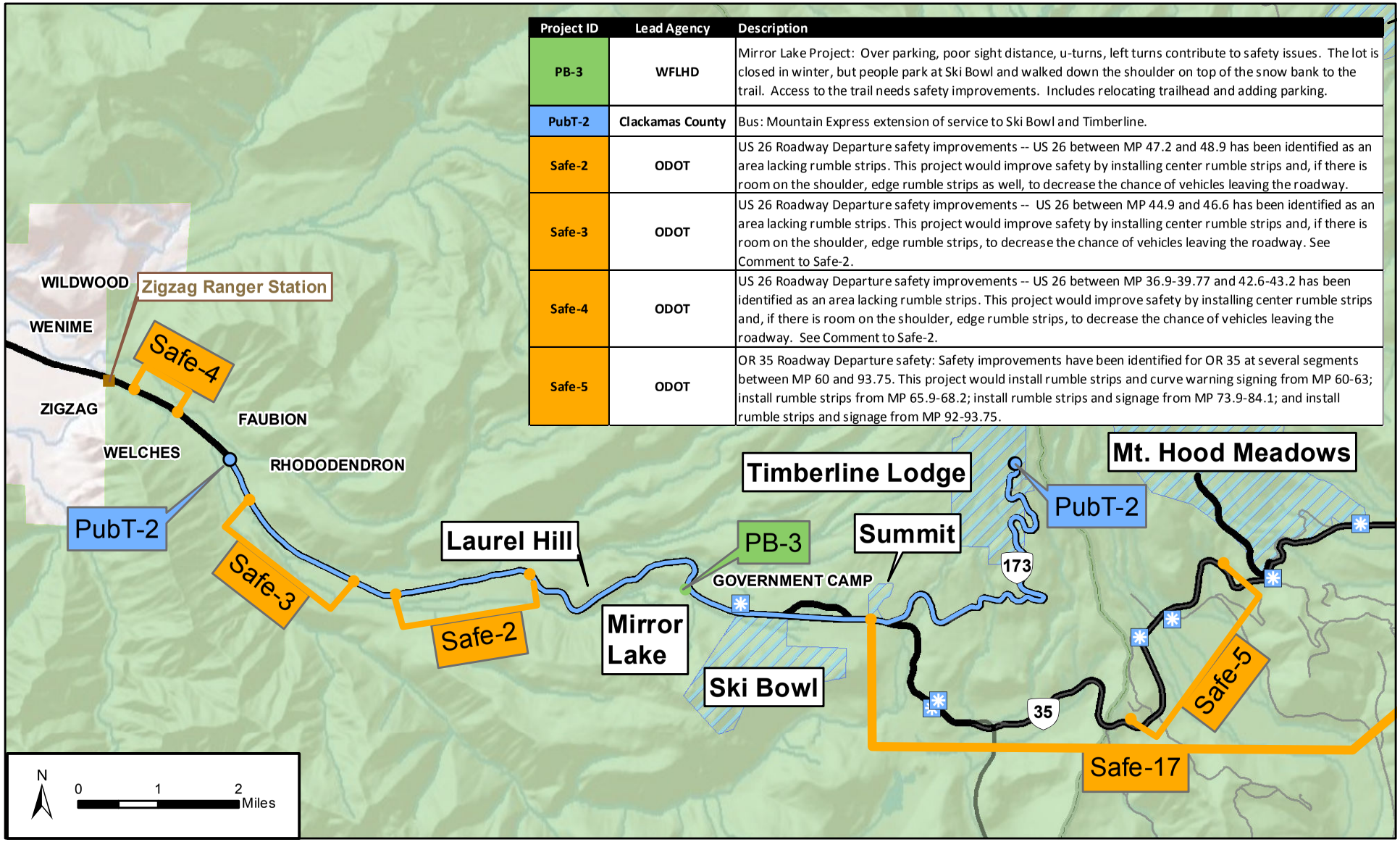
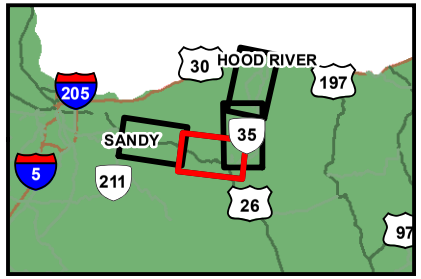
Project ID	Lead Agency	Description
PB-3	WFLHD	Mirror Lake Project: Over parking, poor sight distance, u-turns, left turns contribute to safety issues. The lot is closed in winter, but people park at Ski Bowl and walked down the shoulder on top of the snow bank to the trail. Access to the trail needs safety improvements. Includes relocating trailhead and adding parking.
PubT-2	Clackamas County	Bus: Mountain Express extension of service to Ski Bowl and Timberline.
Safe-2	ODOT	US 26 Roadway Departure safety improvements -- US 26 between MP 47.2 and 48.9 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips as well, to decrease the chance of vehicles leaving the roadway.
Safe-3	ODOT	US 26 Roadway Departure safety improvements -- US 26 between MP 44.9 and 46.6 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway. See Comment to Safe-2.
Safe-4	ODOT	US 26 Roadway Departure safety improvements -- US 26 between MP 36.9-39.77 and 42.6-43.2 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway. See Comment to Safe-2.
Safe-5	ODOT	OR 35 Roadway Departure safety: Safety improvements have been identified for OR 35 at several segments between MP 60 and 93.75. This project would install rumble strips and curve warning signing from MP 60-63; install rumble strips from MP 65.9-68.2; install rumble strips and signage from MP 73.9-84.1; and install rumble strips and signage from MP 92-93.75.





Legend

- County Boundary
- Mt. Hood National Forest
- Ski Area
- Sno-Park
- P Park & Ride

Implementation Plan Projects

Project Type

- ITS
- Pedestrian and Bicycle
- Public Transit
- Safety

Public Transit Project Segment

Project ID

- PubT-2

- Safety Project Segment

Mt. Hood Multimodal Transportation Plan

Implementation Plan Projects

Figure 2b: Map Page 2 of 4

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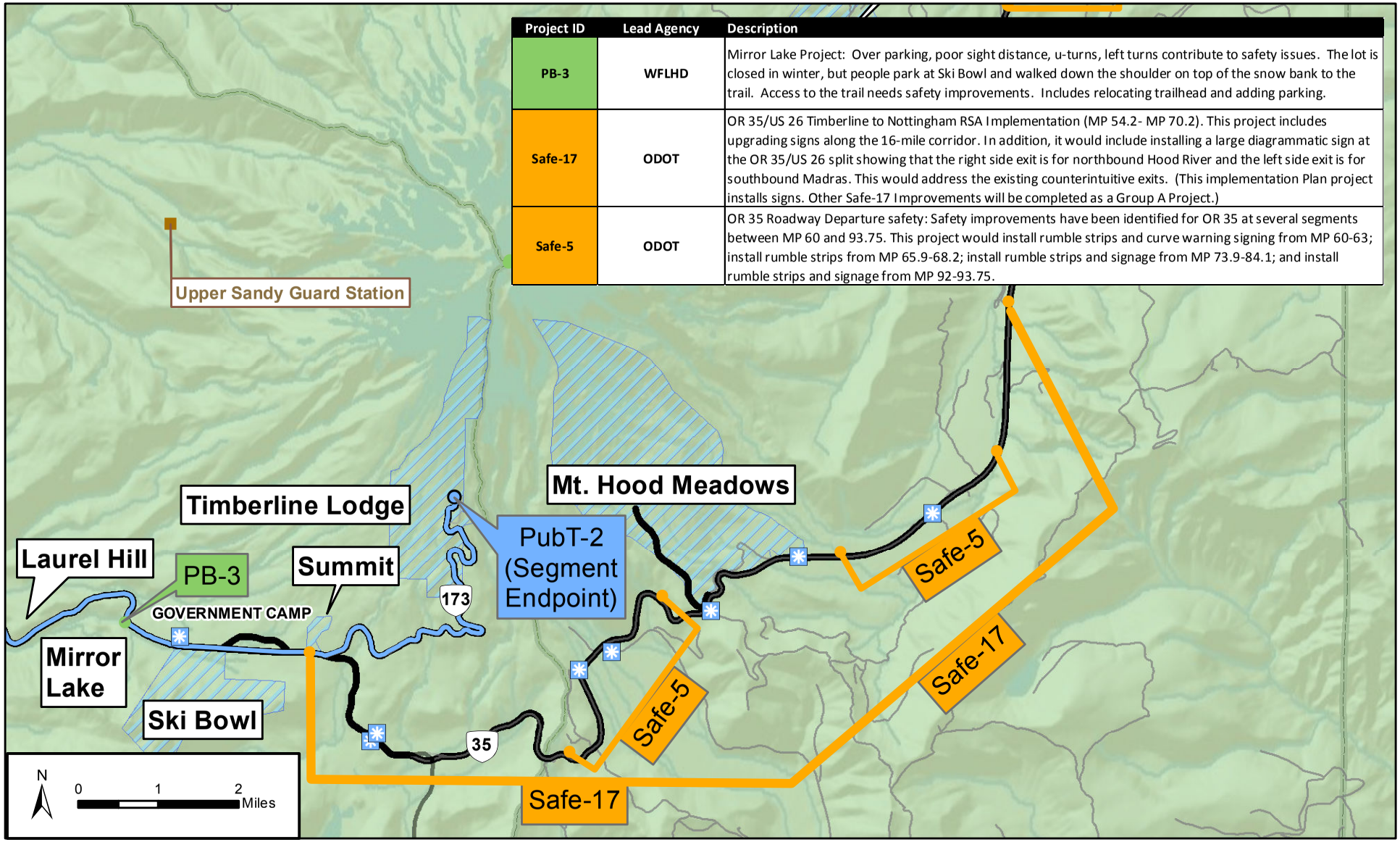
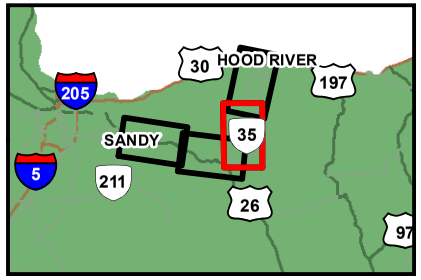
Project ID	Lead Agency	Description
PB-3	WFLHD	Mirror Lake Project: Over parking, poor sight distance, u-turns, left turns contribute to safety issues. The lot is closed in winter, but people park at Ski Bowl and walked down the shoulder on top of the snow bank to the trail. Access to the trail needs safety improvements. Includes relocating trailhead and adding parking.
Safe-17	ODOT	OR 35/US 26 Timberline to Nottingham RSA Implementation (MP 54.2- MP 70.2). This project includes upgrading signs along the 16-mile corridor. In addition, it would include installing a large diagrammatic sign at the OR 35/US 26 split showing that the right side exit is for northbound Hood River and the left side exit is for southbound Madras. This would address the existing counterintuitive exits. (This implementation Plan project installs signs. Other Safe-17 Improvements will be completed as a Group A Project.)
Safe-5	ODOT	OR 35 Roadway Departure safety: Safety improvements have been identified for OR 35 at several segments between MP 60 and 93.75. This project would install rumble strips and curve warning signing from MP 60-63; install rumble strips from MP 65.9-68.2; install rumble strips and signage from MP 73.9-84.1; and install rumble strips and signage from MP 92-93.75.





Legend

- County Boundary
- Mt. Hood National Forest
- Ski Area
- Sno-Park
- Park & Ride

Implementation Plan Projects

Project Type

- ITS
- Pedestrian and Bicycle
- Public Transit
- Safety

Public Transit Project Segment

Project ID

- PubT-2

- Safety Project Segment

Mt. Hood Multimodal Transportation Plan

Implementation Plan Projects

Figure 2c: Map Page 3 of 4

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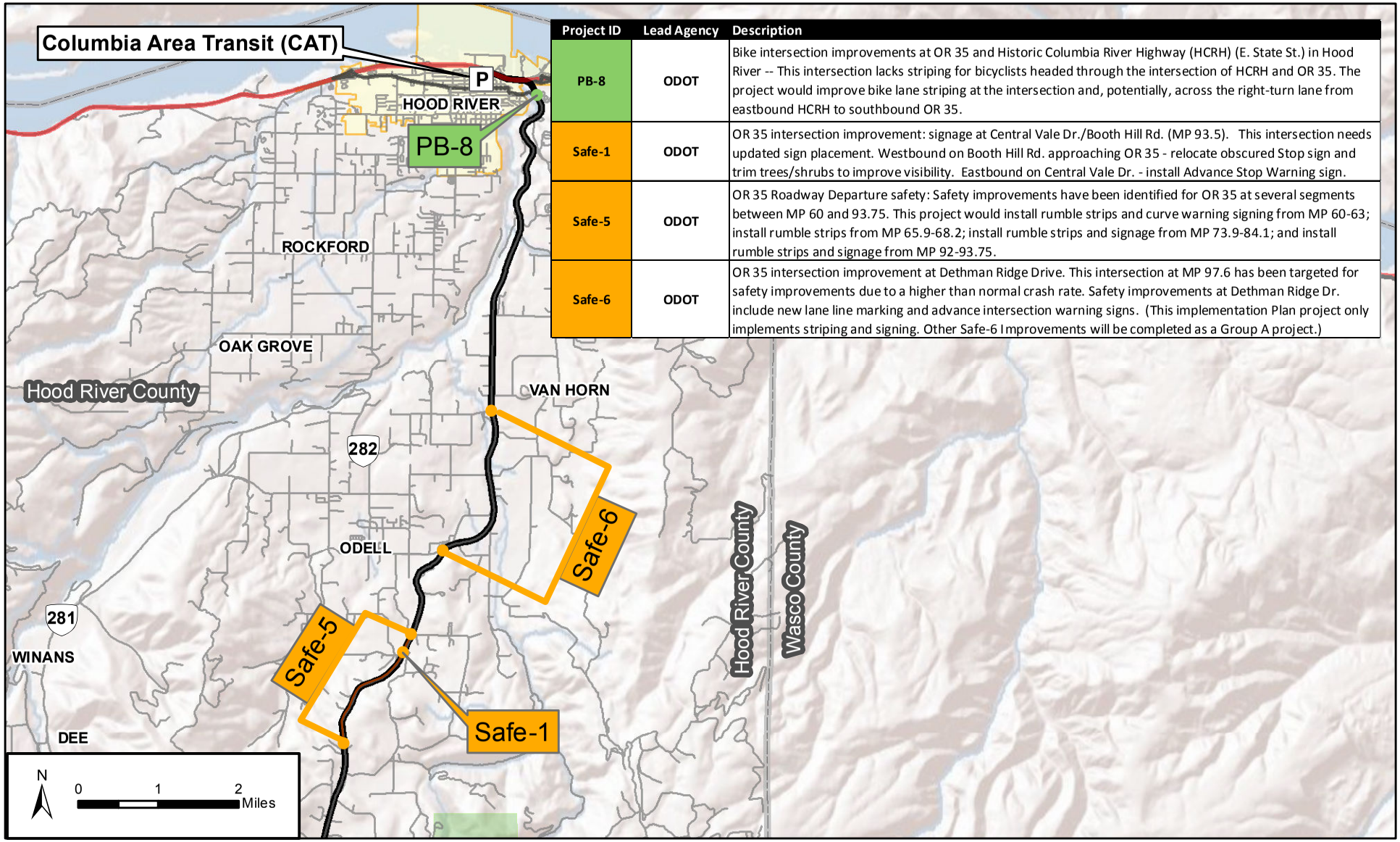
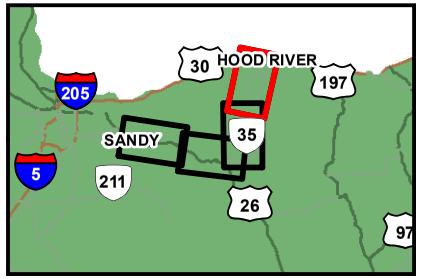


Project ID	Lead Agency	Description
PB-8	ODOT	Bike intersection improvements at OR 35 and Historic Columbia River Highway (HCRH) (E. State St.) in Hood River -- This intersection lacks striping for bicyclists headed through the intersection of HCRH and OR 35. The project would improve bike lane striping at the intersection and, potentially, across the right-turn lane from eastbound HCRH to southbound OR 35.
Safe-1	ODOT	OR 35 intersection improvement: signage at Central Vale Dr./Booth Hill Rd. (MP 93.5). This intersection needs updated sign placement. Westbound on Booth Hill Rd. approaching OR 35 - relocate obscured Stop sign and trim trees/shrubs to improve visibility. Eastbound on Central Vale Dr. - install Advance Stop Warning sign.
Safe-5	ODOT	OR 35 Roadway Departure safety: Safety improvements have been identified for OR 35 at several segments between MP 60 and 93.75. This project would install rumble strips and curve warning signing from MP 60-63; install rumble strips from MP 65.9-68.2; install rumble strips and signage from MP 73.9-84.1; and install rumble strips and signage from MP 92-93.75.
Safe-6	ODOT	OR 35 intersection improvement at Dethman Ridge Drive. This intersection at MP 97.6 has been targeted for safety improvements due to a higher than normal crash rate. Safety improvements at Dethman Ridge Dr. include new lane line marking and advance intersection warning signs. (This implementation Plan project only implements striping and signing. Other Safe-6 Improvements will be completed as a Group A project.)



Legend

- County Boundary
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- P Park & Ride

Implementation Plan Projects

Project Type

- ITS
- Pedestrian and Bicycle
- Public Transit
- Safety

Public Transit Project Segment

Project ID

- PubT-2

- Safety Project Segment

Mt. Hood Multimodal Transportation Plan

Implementation Plan Projects

Figure 2d: Map Page 4 of 4

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CHAPTER 2: PROJECT ACTION PLANS

Implementation Plan projects have an action plan that lists the critical path actions and the defined roles for implementation by the Project Partners. Actions will be included in at least four implementation categories: (1) planning, design, and construction (process and permitting needs); (2) funding (identified sources and steps to access sources); (3) administrative/organizational requirements (the existing organization to champion, and whether a new organization needs to be created or identified); and (4) the timeline to complete each step required.

The Oregon Department of Transportation (ODOT) will champion 10 of the projects; Clackamas County will champion three of the projects; and the Federal Highway Administration-Western Federal Lands Highway Division (FHWA-WFLHD) will champion one of the projects. Project numbers are identifiers only and do not indicate preferred priority.

PROJECT ACTION PLANS

The action plans are intended to provide a framework for the project champions to follow in order to move forward and develop more detailed scopes of work for accomplishing the project within the timeline identified in the action plan. In addition, the adoption of these action plans is a commitment by the Project Partners that they will champion these projects, and it moves them forward in the near term.

The action plans for the Implementation Plan projects, shown below, are organized by Project Partner champion, starting with ODOT (nine projects), then Clackamas County (three projects), and then FHWA-WFLHD (one project). A tenth ODOT project was included as an Implementation Plan project, but as mentioned earlier, ODOT completed SAFE-1 during this planning process. Consequently, there is no action plan developed for that project.

ODOT IMPLEMENTATION PLAN PROJECT ACTION PLANS

Project ID: ITS-2

Project Type: Intelligent Transportation Systems

Lead Agency: ODOT

Project Description: *Intelligent Transportation Systems along the US 26/OR 35 corridor* - This project would install a weather-based variable speed limit system along US 26 and OR 35. It would provide additional roadside cameras, expanded real-time traveler information, and an upgraded electronic information sign at the intersection of OR 35 and the Mt. Hood Meadows access road (Milepost [MP] 64.08). *(This implementation Plan project does not include the comprehensive study and improvements which will be completed as a Group A Project.)*

Required Actions for Implementation:

- ODOT will prepare the project plans for bid and construction in Years 1 and 2, and bid the project and oversee construction in Years 2 and 3.

- ODOT will commit ODOT Statewide Transportation Improvement Program (STIP) funds for the project in Years 1 through 3.
- ODOT will cover Preliminary Engineering costs in Years 1 and 2, permit costs in Years 1 through 3, construction costs in Years 2 and 3, and implementation costs in Years 1 through 3.

This implementation plan project does not include the comprehensive study and improvements, which will be completed as a Group A project.

Table 1. Action Plan for ITS-2: Intelligent Transportation Systems Along the US 26/OR 35 Corridor

ITS-2: Intelligent Transportation Systems Along the US 26/OR 35 Corridor			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	YR 1	YR 2	YR 3	YR 4	YR 5	Future	**Ongoing**
Planning/Design/ Construction	Scope project for cost, risks and resources (completed)	ODOT							
	Design team to prepare project plans for bid and construction	ODOT	X	X					
	Bid project and oversee construction	ODOT		X	X				
Funding	Funding: ODOT Statewide Transportation Improvement Program funds	ODOT	X	X	X				
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	Intergovernmental Agreement (IGA) with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X	X					
	Permits - US Forest Service, Hood River and Clackamas counties	ODOT	X	X	X				
	Construction	ODOT		X	X				
	Maintenance	ODOT							X
	Implementation Cost: $4.9 million	ODOT	X	X	X				

Project ID: PB-5
Project Type: Pedestrian and Bicycle
Lead Agency: ODOT
Project Description: *Mt Hood Highway shoulder widening analysis for bicyclist use.* There are many stretches of US 26 and OR 35 where shoulders are very narrow or nonexistent. Bicyclists rely on shoulders for travel through this area. This project would be a study that identifies where there are deficient shoulders and where there is potential for widening. *(This implementation Plan project only implements the analysis part of the PB-5 Group A project.)*

Required Actions for Implementation:

- ODOT will scope the project for costs, risks, and resources in Year 1, and hire a consultant or utilize internal resources to perform analysis in Years 1 and 2.
- ODOT will commit ODOT Planning Funds for the project in Years 1 and 2.
- ODOT will cover implementation costs in Years 1 and 2.

Table 2. Action Plan for SAFE-5: US 26 Roadway Departure Safety Improvements

SAFE-5: US 26 Roadway Departure Safety Improvements			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X						
	Bid project and oversee construction	ODOT	X	X					
Funding	Committed Funding: ODOT Safety Funds (Roadway Departure Initiative)	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X						
	Permits	N/A							
	Construction	ODOT	X	X					
	Maintenance	ODOT							X
	Implementation Cost: $40,000	ODOT	X	X					

Project ID: PB-8
Project Type: Pedestrian and Bicycle
Lead Agency: ODOT
Project Description: *Bike intersection improvements at OR 35 and Historic Columbia River Highway (HCRH) (E. State St.) in Hood River* -This intersection lacks striping for bicyclists headed through the intersection of HCRH and OR 35. The project would improve bike lane striping at the intersection and, potentially, across the right-turn lane from eastbound HCRH to southbound OR 35.

Required Actions for Implementation:

- ODOT will scope the project for costs, risks, and resources in Year 1, prepare project plans for bid and construction in Year 1, and bid the project and oversee construction in Year 2.
- ODOT will commit ODOT Region 1 Bike/Pedestrian funds for the project in Years 1 and 2.
- ODOT will cover Preliminary Engineering costs in Year 1, permit costs in Year 1, construction costs in Year 1, and ongoing maintenance costs and implementation costs in Years 1 through 2.

Table 3. Action Plan for PB-8: Bike Intersection Improvements at OR 35/Historic Columbia River Highway (US 30)

PB-8: Bike Intersection Improvements at OR 35/Historic Columbia River Highway (US 30)			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X						
	Bid project and oversee construction	ODOT		X					
Funding	Funding: ODOT Region 1 Bike/Ped Funds	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A	X						
Cost(s)	Preliminary engineering	ODOT	X						
	Permits - Hood River	ODOT	X						
	Construction	ODOT	X						
	Maintenance	ODOT							X
	Implementation Cost: $10,000	ODOT	X	X					

Figure 3. Intersection of OR 35 and the Historic Columbia River Highway (US 30)

Project ID: Safe-2
Project Type: Safety
Lead Agency: ODOT
Project Description: *US 26 Roadway Departure Safety Improvements* - US 26 between MP 47.2 and MP 48.9 lacks rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips as well, to decrease the chance of vehicles leaving the roadway. For cycling considerations, rumble strips should not be placed where the shoulder is substandard.

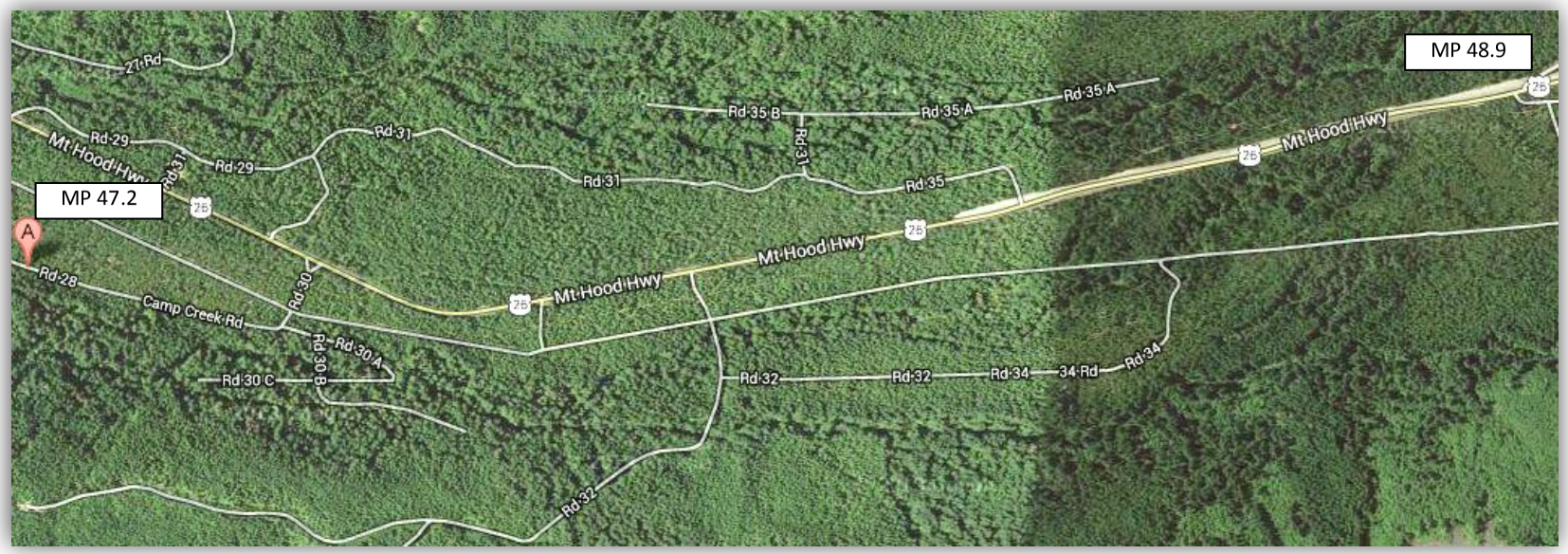
Required Actions for Implementation:

- ODOT will complete the planning, design, and construction phases of the project in Year 1.
- ODOT will commit ODOT Safety Funds for the project in Year 1 and Year 2.
- ODOT will cover Preliminary Engineering costs in Year 1, construction costs in Years 1 and 2, and ongoing maintenance costs starting in Year 2.

Table 4. Action Plan for SAFE-2: US 26 Roadway Departure Safety Improvements

SAFE-2: US 26 Roadway Departure Safety Improvements			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	Action/Improvement	Who?	YR 1	YR 2	YR 3	YR 4	YR 5	Future	Ongoing
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X						
	Bid project and oversee construction	ODOT	X						
Funding	Committed Funding: ODOT Safety Funds (Roadway Departure Initiative)	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X						X
	Permits	N/A							
	Construction	ODOT	X	X					
	Maintenance	ODOT		X	X	X	X		X
	Implementation Cost: $4,000	ODOT							

Figure 4. US 26 between MP 47 and MP 49



Project ID: Safe-3
Project Type: Safety
Lead Agency: ODOT
Project Description: *US 26 Roadway Departure Safety Improvements* - US 26 between MP 44.9 and MP 46.6 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips as well, to decrease the chance of vehicles leaving the roadway. For cycling considerations, rumble strips should not be placed where the shoulder is substandard.

Required Actions for Implementation:

- ODOT will complete the planning, design, and construction phases in Year 1.
- ODOT will commit ODOT Safety Funds for the project in Year 1 and Year 2.
- ODOT will cover Preliminary Engineering costs in Year 1, construction costs in Years 1 and 2, and implementation costs in Years 1 and 2.

Table 5. Action Plan for SAFE-3: US 26 Roadway Departure Safety Improvements

SAFE-3: US 26 Roadway Departure Safety Improvements			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	Action/Improvement	Who?	YR 1	YR 2	YR 3	YR 4	YR 5	Future	Ongoing
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X						
	Bid project and oversee construction	ODOT	X	X					
Funding	Committed Funding: ODOT Safety Funds (Roadway Departure Initiative)	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X						
	Permits	N/A							
	Construction	ODOT	X	X					
	Maintenance	ODOT							X
	Implementation Cost: $4,000	ODOT	X	X					

Project ID: Safe-4
Project Type: Safety
Lead Agency: ODOT
Project Description: *US 26 Roadway Departure Safety Improvements* - US 26 between MP 36.9 and MP 39.77 and between MP 42.6 and MP 43.2 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips as well, to decrease the chance of vehicles leaving the roadway. For cycling considerations, rumble strips should not be placed where the shoulder is substandard.

Required Actions for Implementation:

- ODOT will complete the planning, design, and construction phases in Year 1.
- ODOT will commit ODOT Safety Funds for the project in Year 1 and Year 2.
- ODOT will cover Preliminary Engineering costs in Year 1, construction costs in Years 1 and 2, and implementation costs in Years 1 and 2.

Table 6. Action Plan for SAFE-4: US 26 Roadway Departure Safety Improvements

SAFE-4: US 26 Roadway Departure Safety Improvements			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X						
	Bid project and oversee construction	ODOT	X						
Funding	Committed Funding: ODOT Safety Funds (Roadway Departure Initiative)	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X						
	Permits	N/A							
	Construction	ODOT	X	X					
	Maintenance	ODOT							X
	Implementation Cost: $8,000	ODOT	X	X					

Figure 5. US 26 between Brightwood Loop Rd and E. Multnomah Ave.

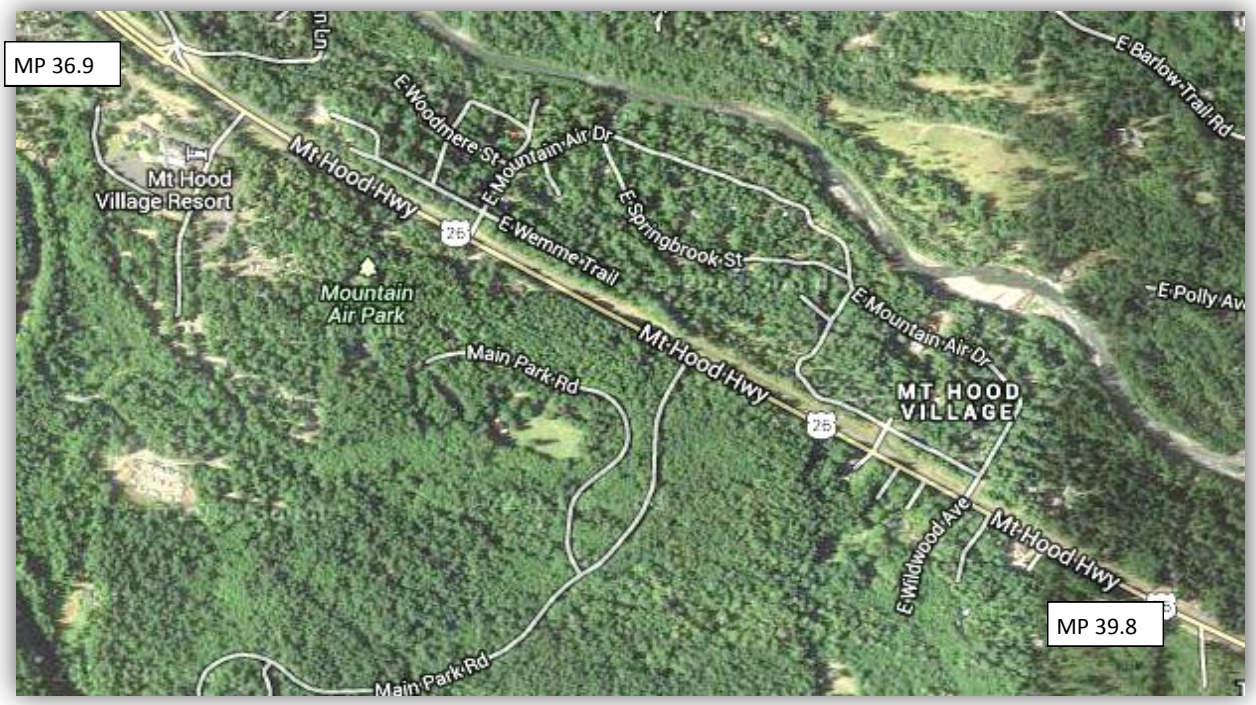
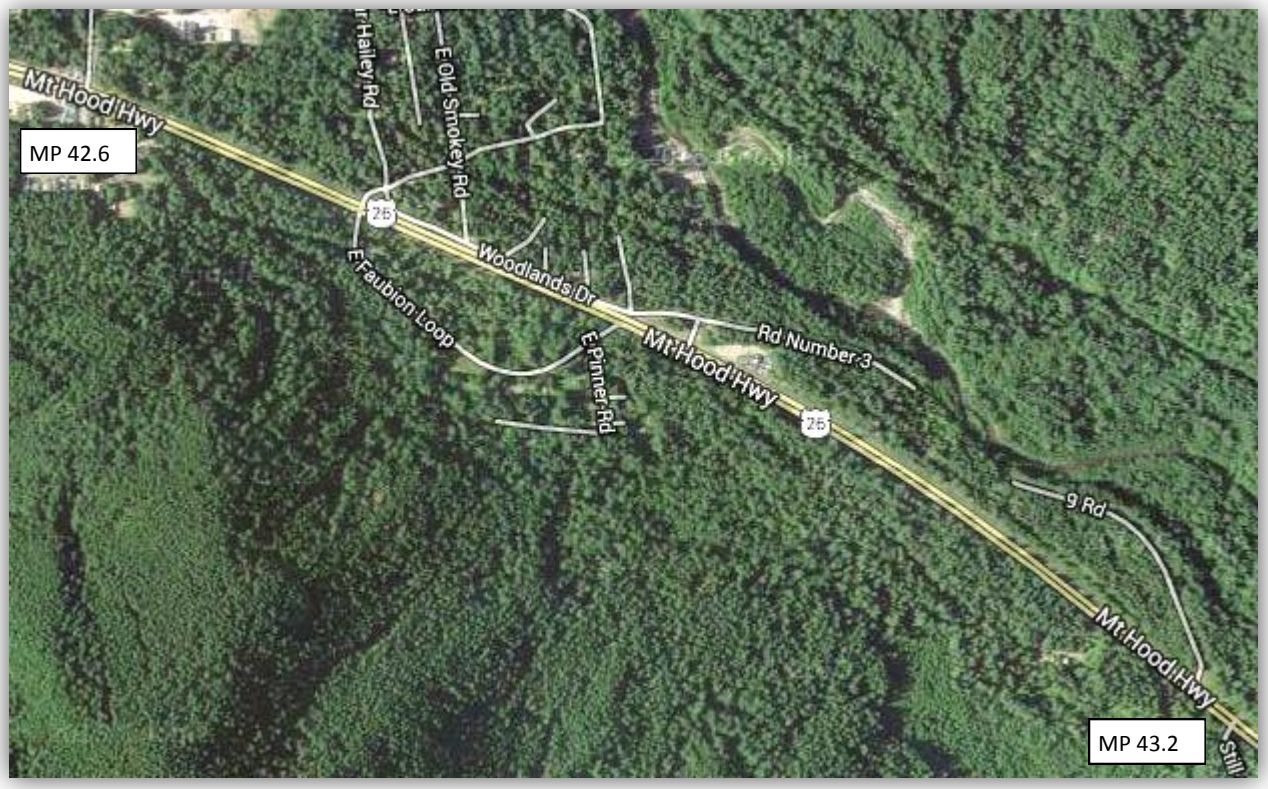


Figure 6. US 26 between ZigZag Ranger Station and Still Creek Rd.



Project ID: Safe-5
Project Type: Safety
Lead Agency: ODOT
Project Description: *US 26 Roadway Departure Safety Improvements* - Safety improvements have been identified for OR 35 along several highway segments between MP 60 and MP 93.75. This project would improve safety by installing center rumble strips and curve warning signs between MP 60 and MP 63; install rumble strips between MP 65.9 and MP 68.2; install rumble strips and signage between MP 73.9 and MP 84.1; and install rumble strips and signage between MP 92 and MP 93.75. For cycling considerations, rumble strips should not be placed where the shoulder is substandard.

Required Actions for Implementation:

- ODOT will complete the planning, design, and construction phases of the project in Year 1.
- ODOT will commit ODOT Safety Funds for the project in Year 1 and Year 2.
- ODOT will cover Preliminary Engineering costs in Year 1, construction costs in Years 1 and 2, and implementation costs in Years 1 and 2.

Table 7. Action Plan for SAFE-5: US 26 Roadway Departure Safety Improvements

SAFE-5: US 26 Roadway Departure Safety Improvements			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	Action/Improvement	Who?	YR 1	YR 2	YR 3	YR 4	YR 5	Future	Ongoing
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X						
	Bid project and oversee construction	ODOT	X	X					
Funding	Committed Funding: ODOT Safety Funds (Roadway Departure Initiative)	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X						
	Permits	N/A							
	Construction	ODOT	X	X					
	Maintenance	ODOT							X
	Implementation Cost: $40,000	ODOT	X	X					

Project ID: Safe-6
Project Type: Safety
Lead Agency: ODOT
Project Description: *OR 35 Intersection Improvement at Dethman Ridge Drive* - This intersection at MP 97.6 has been identified for safety improvements due to a higher than normal crash rate. Safety improvements at Dethman Ridge Drive include new lane line marking and advance intersection warning signs. *This implementation plan project implements only the striping and signing. Other Safe-6 improvements will be completed as a Group A project.*

Required Actions for Implementation:

- ODOT will complete the planning, design, and construction phases in Year 1.
- ODOT will commit ODOT Fix-it Safety Funds for the project in Year 1 and Year 2.
- ODOT will cover Preliminary Engineering costs in Year 1, construction costs in Years 1 and 2, and implementation costs in Years 1 and 2.

Table 8. Action Plan for SAFE-6: OR 35 Intersection Improvement at Dethman Ridge Drive

SAFE-6: OR 35 Intersection Improvement at Dethman Ridge Drive			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X						
	Bid project and oversee construction	ODOT	X	X					
Funding	Committed Funding: ODOT Fix-It Safety Funds	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X						
	Permits	N/A							
	Construction	ODOT	X	X					
	Maintenance	ODOT							X
	Implementation Cost: $10,000	ODOT	X	X					

Figure 7. OR 35 and Dethman Ridge Rd

Project ID: Safe-17
Project Type: Safety
Lead Agency: ODOT
Project Description: *OR 35/US 26 Timberline to Nottingham Road Safety Audit (RSA) Implementation Project* - This project includes upgrading signs along this 16-mile corridor of US 26/OR 35. In addition, this project includes installing a diagrammatic sign and sign bridge at the OR 35/US 26 split. This large sign would show that the right-side exit is for vehicles headed to Hood River, while the left-side exit is for motorists headed to Madras. This solution would address the counterintuitive exits that have caused confusion and safety concerns in the past. *This implementation plan project only installs signs. Other Safe-17 improvements will be completed as a Group A project.*

Required Actions for Implementation:

- ODOT will complete the planning phase of the project in Year 1, the design phase in Years 1 through 3, and the construction phase in Years 2 through 4.
- ODOT will commit ODOT Fix-it Safety Funds for the project in Year 1 and Year 2.
- ODOT will cover Preliminary Engineering costs in Years 1 through 3, construction costs in Years 2 through 4, and implementation costs in Years 1 through 4.

Table 9. Action Plan for SAFE-17: OR 35/US 26 Timberline to Nottingham Road Safety Audit Implementation Project (MP 54.2-70.2)

SAFE-17: OR 35/US 26 Timberline to Nottingham Road Safety Audit Implementation Project (MP 54.2-70.2)			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	Action/Improvement	Who?	YR 1	YR 2	YR 3	YR 4	YR 5	Future	Ongoing
Planning/Design/ Construction	Scope project for cost, risks and resources	ODOT	X						
	Design team to prepare project plans for bid and construction	ODOT	X	X	X				
	Bid project and oversee construction	ODOT		X	X	X			
Funding	Funding: ODOT Fix-It Safety Funds	ODOT	X	X					
	Contributive Funding (e.g. membership dues, sponsorship, transportation improvement district)	N/A							
Administrative/ Organizational	Memorandum of understanding with partners	N/A							
	IGA with partners	N/A							
	Other	N/A							
Cost(s)	Preliminary engineering	ODOT	X	X	X				
	Permits - US Forest Service Permit for Sign Bridge	N/A			X				
	Construction	ODOT		X	X	X			
	Maintenance	ODOT							X
	Implementation Cost: $250,000 (scoping to provide more accurate cost)	ODOT	X	X	X	X			

CLACKAMAS COUNTY IMPLEMENTATION PLAN PROJECT ACTION PLANS

Project ID: PB-1
Project Type: Pedestrian and Bicycle
Lead Agency: Clackamas County
Project Description: *Mt. Hood Highway bike/pedestrian intersection improvements* -- Depending on where transit stops are located for enhanced transit service on US 26 and OR 35, there may be a lack of pedestrian or bike crossing facilities at those locations. This project would, in coordination with the community and the Oregon Department of Transportation, design safe and convenient pedestrian and bicycle crossings across US 26. The project would encourage the development of enhanced pedestrian traffic control (example could be crosswalks or signals) to facilitate movement across US 26 (Rhododendron has been identified as one likely place for an enhanced crossing). *This implementation plan project implements only the part of the PB-1 Group A project in Clackamas County.*

Required Actions for Implementation:

- Clackamas County will identify potential funding source or sources for project planning, design, and construction in Year 1; scope the project for cost, risks, and resources in Years 1 and 2; and prepare project plans for bid and construction in Years 2 through 5.
- Clackamas County will apply for funding for the planning phase of the project in Year 1 and for the construction phase in Year 2.
- Clackamas County will work with multiple project partners (ODOT, Mt. Hood Express, Villages of Mt. Hood) to develop a detailed project scope in Year 1 and will execute an Intergovernmental Agreement (IGA) in Years 2 and 3.
- Responsibility for project costs (Preliminary Engineering, permits, construction, and maintenance) is to be determined.

Table 10. Action Plan for PB-1 Mt Hood Highway Bike/Ped Intersection Improvements

PB-1 Mt Hood Highway Bike/Ped Intersection Improvements			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction	Identify potential funding source for planning, design, and construction	Clackamas County	X						
	Scope project for cost, risks and resources	Clackamas County / ODOT	X	X					
	Design team to prepare project plans for bid and construction	Clackamas County / ODOT		X	X	X	X		
Funding	Apply for funding for planning	Clackamas County	X						
	Apply for funding for construction	Clackamas County		X					

PB-1 Mt Hood Highway Bike/Ped Intersection Improvements			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Administrative/ Organizational	Work with ODOT, Mt Hood Express, Villages of Mt. Hood to develop detailed scope of project	All Partners	X						
	IGA with partners	All Partners		X	X				
Cost(s)	Preliminary engineering	TBD			X				X
	Permits	TBD				X			
	Construction	TBD					X		
	Maintenance	TBD							X

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Project ID: PB-7
Project Type: Pedestrian and Bicycle
Lead Agency: Clackamas County
Project Description: *Bike/Pedestrian Information along Mt. Hood Highway* - This project provides maps and information on mountain biking, alternate routes to US 26/OR 35, hiking trails, and other bike/pedestrian-related information. Wayfinding would be a key element.

Required Actions for Implementation:

- Clackamas County will conduct discussions with the community on project needs, and select locations and implement "Share the Road" signs in Year 1.
- Clackamas County will identify and obtain funding for maps and wayfinding signage in Year 2.
- Clackamas County will work with Clackamas County Tourism, the Mt. Hood Chamber of Commerce, and the local community to develop maps in Years 2 and 3. Clackamas County will work with Clackamas County Tourism, and Villages at Mt. Hood to discuss wayfinding signage and identify funding in Years 1 through 3.
- Clackamas County will cover costs for "Share the Road" signs in Year 1, maps in Year 2, and wayfinding signage in Years 3 and 4.

Table 11. Action Plan for PB-7 Bike/Pedestrian Info along Mt Hood Highway

PB-7 Bike/Pedestrian Info along Mt Hood Highway			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction	Discuss needs with the Community	Clackamas County	X						
	Select locations and implement Share the Road signs	Clackamas County	X						
Funding	Identify and obtain funding for maps and wayfinding	Clackamas County		X					
Administrative/ Organizational	Work with DTD Transportation maintenance to identify and implement Share the Road signs on County roads	Clackamas County	X						
	Work with Tourism, Mt Hood Chamber and local community to develop maps	Clackamas County		X	X				
	Work with Tourism and Villages at Mt. Hood to discuss wayfinding and identify funding	Clackamas County	X	X	X				
Cost(s)	Share the Road	Clackamas County	X						

Project ID: Pub-T2
Project Type: Public Transportation
Lead Agency: Clackamas County
Project Description: *Mountain Express Extension* - This project involves the extension of Mountain Express service to the ski areas from Sandy. This project would pursue long-term funding to maintain the recent bus service extension from Sandy to the ski areas.

Required Actions for Implementation:

- Clackamas County will initiate discussions about long-term funding strategies in Year 1.
- Clackamas County will work with businesses and local property owners to identify potential funding partners in Year 1 and Year 2.
- Clackamas County will also work with Mt. Hood Transportation Alliance to explore the option of a Transportation Management Association (TMA) in Year 1 and Year 2.
- Ongoing coordination and discussion are needed in order to determine how the costs will be covered.

Table 12. Action Plan for Pub-T2: Mountain Express Extension

Pub-T2: Mountain Express Extension			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction*	Implement existing extension of service as funded through the Federal Lands Access Program	N/A	X	X	X	X			
Funding	Initiate discussion of long-term funding	Clackamas County	X						
Administrative/ Organizational	Work with businesses and local property owners to review and identify potential partnerships for long term funding	Clackamas County	X	X					
	Explore possibilities for future long term funding such as a Transit District and/or Transit Authority	Clackamas County	X	X					
	Work with Mt Hood Transportation Alliance to further explore a TMA	Clackamas County	X	X					
Cost(s)	Organization	TBD							X
	Operation and Maintenance	TBD							X
	Capital Costs	TBD							X

*Effort will be to maintain recent expansion of service focusing on a stable long-term funding strategy.

FHWA WFLHD IMPLEMENTATION PLAN PROJECT ACTION PLAN

Project ID: PB-3
Project Type: Pedestrian and Bicycle
Lead Agency: FHWA Western Federal Lands Highway Division (WFLHD)
Project Description: *Mirror Lake Project* - At Mirror Lake, over parking, poor sight distance, U-turns, and left turns contribute to safety issues. The lot is closed in winter, but people park at Ski Bowl and walk down the shoulder on top of the snowbank to the trail. The access to the trail needs safety improvements, including relocating the trailhead and adding parking.

Required Actions for Implementation:

- WFLHD will complete the planning phase of the project in Year 1 and Year 2, the design phase in Year 3, and the construction phase in Year 4.
- WFLHD will commit Access Program funding in Years 1 through 4. ODOT and Mt. Hood National Forest (MHNF) will contribute matching funds in Years 1 through 4.
- Interagency project agreement between ODOT and MHNF in Year 1.
- WFLHD, ODOT, and MHNF will pay for preliminary engineering in Years 1 through 3, implementation for Years 1 through 4, and construction in Year 4.
- ODOT and MHNF will pay for maintenance in Years 4 through 5 and other ongoing maintenance costs.

Table 13. Action Plan for PB-3: Mirror Lake Project

PB-3: Mirror Lake Project			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Planning/Design/ Construction	Scope project, preliminary engineering, and NEPA compliance	WFLHD	X	X					
	Design team to prepare project plans/final engineering and construction documents	WFLHD			X				
	Bid project and oversee construction	WFLHD				X			
Funding	Committed Funding: Federal Lands Access Program*	WFLHD	X	X	X	X			
	Contributive Funding- ODOT and Mt Hood National Forest matching funds	ODOT/Mt Hood National Forest	X	X	X	X			
Administrative/ Organizational	Match agreement with ODOT and Mt Hood National Forest	WFLHD	X						
	Project Agreement with ODOT/MHNF	WFLHD	X						
	Other	N/A							

PB-3: Mirror Lake Project			Time Frame						
			Short-Term (1-5 years)						
Implementation Category	**Action/Improvement**	**Who?**	**YR 1**	**YR 2**	**YR 3**	**YR 4**	**YR 5**	**Future**	**Ongoing**
Cost(s)	Preliminary engineering	WFLHD/ODOT/ MHNF	X	X	X				X
	Permits	N/A- covered in Preliminary Engineering							
	Construction	WFLHD/ODOT/ MHNF				X			
	Maintenance	ODOT/MHNF				X	X		X
	Implementation Cost: $2.6 million	WFLHD/ODOT/ MHNF	X	X	X	X			

*MAP 21 Reauthorization by Congress in Oct 2014 is necessary for the Federal Lands Access Program FLAP program to provide the already committed funds beyond Oct 2014 for project development and construction.

Figure 8. Mirror Lake trailhead access from US 26 between MP 51 and MP 52

CONCLUSION

The Implementation Plan is an important component of the overall MHMTP, because it provides a basic framework for the Project Partners to move forward with the implementation of the highest priority projects. The action plans for these projects are intended to be used by the project champions to create a more detailed work scope for their top priority projects to be carried forward by their staff. As the MHMTP evolves, more projects from the overall 38 adopted in the MHMTP will be added to the Implementation Plan. In addition, new projects may be identified and added to the MHMTP and the implementation plan. Action plans with critical path tasks and assigned project champions will be developed for these projects to create a framework for implementation and to document the important partner commitments.

ATTACHMENT A: ALL MT. HOOD MULTIMODAL TRANSPORTATION PLAN ADOPTED PROJECTS (current as of Febuary 2014)

(for best resolution, print on 11x17 paper)

Mount Hood Multimodal Transportation Plan Project List

CORE VALUES	1. Improve highway safety for all users, 2. Expand travel options year round to reduce peak travel demand and enhance mobility and access to recreation and rural communities, 3. Projects are financially feasible and sustainable, 4. Projects can be implemented in 15 years.

Mt. Hood Multimodal Transportation Plan

PROJECT ID/ PROJECT TYPE	PROJECT	EFFECTIVE TIME FRAME	LEAD AGENCY/ ENTITY	FINAL APPROVED PROJECT LIST
PB-1 (Pedestrian & Bicycle)	Mt Hood Highway bike/ped intersection improvements -- depending on where transit stops are located for enhanced transit service on US 26 within Clackamas County, there may be a lack of pedestrian or bike crossing facilities at those locations. This project would, in coordination with the community and the Oregon Department of Transportation, design safe and convenient pedestrian and bicycle crossings across US 26. The project would encourage the development of enhanced pedestrian traffic control (examples could be crosswalks or signals) to facilitate movement across US 26 (Rhododendron has been identified as one likely place for an enhanced crossing). *(This implementation Plan project only implements the part of the PB-1 Group A project in Clackamas County.)*	See Implementation Plan	-Clackamas County	**IMPLEMENTATION PLAN PROJECTS (SUBSET OF GROUP A)**
PB-3 (Pedestrian & Bicycle)	Mirror Lake Project: Over-parking, poor sight distance, U-turns, and left turns contribute to safety issues. The lot is closed in winter, but people park at Ski Bowl and walk down the shoulder on top of the snow bank to the trail. Access to the trail needs safety improvements. Includes relocating trailhead and adding parking.	See Implementation Plan	-WFLD using FLAP fund	
PB-5 (Pedestrian & Bicycle)	Mt Hood Highway shoulder widening analysis for bicyclist use. There are many stretches of US 26 and OR 35 where shoulders are very narrow or nonexistent. Bicyclists rely on shoulders for travel through this area. This project would be a study that identifies where there are deficient shoulders and where there is potential for widening. *(This implementation Plan project only implements the analysis part of the PB-5 Group A project.)*	See Implementation Plan	- ODOT	
PB-7 (Pedestrian & Bicycle)	Bike/ped info along Mt Hood Highway with maps to mountain biking, alternate routes to US 26/OR 35, hiking trails, etc. Wayfinding would be a key element.	See Implementation Plan	- Clackamas County	
PB-8 (Pedestrian & Bicycle)	Bike intersection improvements at OR 35 and Historic Columbia River Highway (HCRH) (E. State St.) in Hood River -- This intersection lacks striping for bicyclists headed through the intersection of HCRH and OR 35. The project would improve bike lane striping at the intersection and, potentially, across the right-turn lane from eastbound HCRH to southbound OR 35.	See Implementation Plan	- ODOT	
PubT-2 (Public Transit)	Bus: Mountain Express extension of service to the ski areas from Sandy. This project would pursue long-term funding for the enhanced service.	See Implementation Plan	- Clackamas County	
Safe-1 (Safety & Road Improvements)	OR 35 intersection improvement: signage at Central Vale Dr./Booth Hill Rd. (MP 93.5). This intersection needs updated sign placement. Westbound on Booth Hill Rd. approaching OR 35 - relocate obscured Stop sign and trim trees/shrubs to improve visibility. Eastbound on Central Vale Dr. - install Advance Stop Warning sign.	COMPLETED	- ODOT	

PROJECT ID/ PROJECT TYPE	PROJECT	EFFECTIVE TIME FRAME	LEAD AGENCY/ ENTITY	FINAL APPROVED PROJECT LIST
Safe-2 (Safety & Road Improvements)	US 26 roadway departure safety improvements -- US 26 between MP 47.2 and 48.9 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips as well, to decrease the chance of vehicles leaving the roadway.	See Implementation Plan	- ODOT	**IMPLEMENTATION PLAN PROJECTS (SUBSET OF GROUP A)**
Safe-3 (Safety & Road Improvements)	US 26 roadway departure safety improvements -- US 26 between MP 44.9 and 46.6 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway.	See Implementation Plan	- ODOT	
Safe-4 (Safety & Road Improvements)	US 26 Roadway Departure safety improvements -- US 26 between MP 36.9-39.77 and 42.6-43.2 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway. See Comment to Safe-2.	See Implementation Plan	- ODOT	
Safe-5 (Safety & Road Improvements)	OR 35 roadway departure safety: Safety improvements have been identified for OR 35 at several segments between MP 60 and 93.75. This project would install rumble strips and curve warning signage from MP 60 to MP 63; install rumble strips from MP 65.9 to MP 68.2; install rumble strips and signage from MP 73.9 to MP 84.1; and install rumble strips and signage from MP 92 to MP 93.75.	See Implementation Plan	- ODOT	
Safe-6 (Safety & Road Improvements)	OR 35 intersection improvement at Dethman Ridge Drive. This intersection at MP 97.6 has been targeted for safety improvements due to a higher than normal crash rate. Safety improvements at Dethman Ridge Dr. include new lane line marking and advance intersection warning signs. *(This implementation Plan project only implements striping and signing. Other Safe-6 Improvements will be completed as a Group A project.)*	See Implementation Plan	- ODOT	
Safe-17 (Safety & Road Improvements)	OR 35/US 26 Timberline to Nottingham RSA Implementation (MP 54.2-MP 70.2). This project includes upgrading signs along the 16-mile corridor. In addition, it would include installing a large diagrammatic sign at the OR 35/US 26 split showing that the right side exit is for northbound Hood River and the left side exit is for southbound Madras. This would address the existing counterintuitive exits. *(This implementation Plan project installs signs. Other Safe-17 Improvements will be completed as a Group A Project.)*	See Implementation Plan	- ODOT	
ITS-2 (Intelligent Transportation Systems)	Study: Integrated Management Plan (Concept of Operations). Elements may include Traveler Information for Speed Limits, Parking, Transit, and Transportation Demand Management website (Real-Time Parking Guidance, Transit Management and Information, Expanded Real-Time Traveler Information – On Mountain and En Route, Mt. Hood Mobile Traveler Information/Multimodal Travel Options Website). Upgrade electronic reader board at Mt. Hood Meadows access road/OR 35 (MP 64.08). *(This implementation Plan project does not include the comprehensive study and improvements which will be completed as a Group A Project.)*	See Implementation Plan	- ODOT	

PROJECT ID/ PROJECT TYPE	PROJECT	EFFECTIVE TIME FRAME	LEAD AGENCY/ ENTITY	FINAL APPROVED PROJECT LIST
Org-1 (Organizations, Programs & Legislation)	Transportation Management Association (TMA): organization to coordinate transit and Transportation Demand Management (TDM) programs.	SHORT TERM (0-3 years)	- Informal Work Group (Mt. Hood Transportation Alliance) - Mountain Express / CAT	PROJECT GROUP A
ITS-1 (Intelligent Transportation Systems)	Traveler Webpage Clearinghouse: links to weather and incidents, carpool websites, transit websites, parking.	SHORT TERM (0-3 years)	- Individual champion(s) - Business partners/members -Transportation Management Association - Community groups/advocates - Agency/jurisdiction partners	
ITS-2 (Intelligent Transportation Systems)	Study: Integrated Management Plan (Concept of Operations). Elements may include Traveler Information for Speed Limits, Parking, Transit, and Transportation Demand Management website (Real-Time Parking Guidance, Transit Management and Information, Expanded Real-Time Traveler Information – On Mountain and En Route, Mt. Hood Mobile Traveler Information/Multimodal Travel Options Website). Upgrade electronic reader board at Mt. Hood Meadows access road/OR 35 (MP 64.08).	SHORT TERM (0-3 years)	- Public-Private Partnership, ODOT, Clackamas County, Hood River County, Forest Service	
PubT-2 (Public Transit)	Bus: Mountain Express extension of service to the ski areas from Sandy. This project would pursue long-term funding for the enhanced service.	SHORT TERM (0-3 years)	- Mountain Express - Clackamas County - Ski Areas - Forest Service	
PubT-4 (Public Transit)	Expansion and development of park-and-rides: expand use of existing and add new park-and-rides (potential new park-n-rides in Welches, Laurel Hill, Parkdale). Ideally, adding information component.	SHORT TERM (0-3 years)	- Counties and transit agencies	
Park-2 (Parking)	Sno-Park Management/Enforcement - Teacup, Pocket Creek (Forest Service is owner; ODOT does maintenance).	SHORT TERM (0-3 years)	- Forest Service, Oregon State Police, ODOT, County Sheriffs	
Park-3 (Parking)	Parking education related to parking areas and safety.	SHORT TERM (0-3 years)	-TMA, ODOT, Forest Service, Counties, private	
PB-1 (Pedestrian & Bicycle)	Mt. Hood Highway bike/pedestrian intersection improvements -- depending on where transit stops are located for enhanced transit service on US 26 and OR 35, there may be a lack of pedestrian or bike crossing facilities at those locations. This project would, in coordination with the community and the Oregon Department of Transportation, design safe and convenient pedestrian and bicycle crossings across US 26. The project would encourage the development of enhanced pedestrian traffic control (example could be crosswalks or signals) to facilitate movement across US 26 (Rhododendron has been identified as one likely place for an enhanced crossing).	SHORT TERM (0-3 years)	- ODOT, Clackamas County, Hood River County, Mountain Express, CAT (depends on where the locations are)	
PB-3 (Pedestrian & Bicycle)	Mirror Lake Project: Over-parking, poor sight distance, U-turns, and left turns contribute to safety issues. The lot is closed in winter, but people park at Ski Bowl and walk down the shoulder on top of the snow bank to the trail. Access to the trail needs safety improvements. Includes relocating trailhead and adding parking.	MID TERM (3-7 years)	- Forest Service	

PROJECT ID/ PROJECT TYPE	PROJECT	EFFECTIVE TIME FRAME	LEAD AGENCY/ ENTITY	FINAL APPROVED PROJECT LIST
PB-5 (Pedestrian & Bicycle)	Mt. Hood Highway shoulder widening for bicyclist use -- There are many stretches of US 26 and OR 35 where shoulders are very narrow or nonexistent. Bicyclists rely on shoulders for travel through this area. This project would create a plan prioritizing shoulder widening locations along US 26 and OR 35. Shoulder widening would be targeted to areas based on need and cost.	SHORT TERM (0-3 years)	- ODOT	PROJECT GROUP A
PB-7 (Pedestrian & Bicycle)	Bike/pedestrian info along Mt. Hood Highway with maps to mountain biking, alternate routes to US 26/OR 35, hiking trails, etc. Wayfinding would be a key element.	MID TERM (3-7 years)	- Clackamas County	
PB-8 (Pedestrian & Bicycle)	Bike intersection improvements at OR 35 and Historic Columbia River Highway (HCRH) (E. State St.) in Hood River -- This intersection lacks striping for bicyclists headed east on HCRH to OR 35 north (or across the highway to the HCRH multi-use path). The project would add bike lane striping (green striping potentially) for bicyclists headed east from the bike lane on HCRH to the OR 35 crossing.	SHORT TERM (0-3 years)	- ODOT	
PB-9 (Pedestrian & Bicycle)	Bike intersection improvements at OR 35 and OR 282 intersection -- The bike shoulders on southbound OR 35 end through this intersection, so bicyclists have to merge into high-speed traffic at this location. In addition, bike lanes are not striped on OR 282 as it nears OR 35, so bicyclists have to enter the lane at the intersection. This project would stripe a bike lane on OR 282 approaching OR 35, and would look for ways to widen available space on OR 35 to allow for a bike lane on OR 35 south, to the west of the dedicated right-turn lane.	SHORT TERM (0-3 years)	- ODOT	
Safe-2 (Safety & Road Improvements)	US 26 roadway departure safety improvements -- US 26 between MPs 47.2 and 48.9 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips as well, to decrease the chance of vehicles leaving the roadway.	SHORT TERM (0-3 years)	- ODOT	
Safe-3 (Safety & Road Improvements)	US 26 Roadway Departure safety improvements -- US 26 between MP 44.9 and 46.6 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway.	SHORT TERM (0-3 years)	- ODOT	
Safe-4 (Safety & Road Improvements)	US 26 roadway departure safety improvements -- US 26 between MP 36.9-39.77 and 42.6-43.2 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway.	SHORT TERM (0-3 years)	- ODOT	
Safe-5 (Safety & Road Improvements)	OR 35 roadway departure safety: Safety improvements have been identified for OR 35 at several segments between MPs 60 and 93.75. This project would install rumble strips and curve warning signage from MP 60 to MP 63; install rumble strips from MP 65.9 to MP 68.2; install rumble strips and signage from MP 73.9 to MP 84.1; and install rumble strips and signage from MP 92 to MP 93.75.	SHORT TERM (0-3 years)	- ODOT	
Safe-6 (Safety & Road Improvements)	OR 35 intersection improvements: Two locations on OR 35 have been identified for safety improvements due to a higher than normal crash rate -- MP 95.2 (Davis Dr./OR 282) and MP 97.6 (Dethman Ridge Dr.). At Davis Drive, pavement markings and signing were recently installed. Further safety improvements may require realigning the intersection, which is very costly. Safety improvements at Dethman Ridge Dr. include new lane line marking and advance intersection warning signs.	MID TERM (3-7 years)	- ODOT	

PROJECT ID/ PROJECT TYPE	PROJECT	EFFECTIVE TIME FRAME	LEAD AGENCY/ ENTITY	FINAL APPROVED PROJECT LIST
Safe-10 (Safety & Road Improvements)	Government Camp Loop Road (W.)/US 26 intersection: Government Camp Loop Road West intersects US 26 at a skewed angle. Motorists must look back over their shoulder to safely merge onto US 26. This project would improve safety, operation and access to Government Camp Loop Road West by realigning the intersection with US 26. One possible solution would be to combine a project here with Ski Bowl West access, which is offset to Government Camp Loop Road West.	LONG TERM (7-10 years)	- ODOT	PROJECT GROUP A
Safe-11 (Safety & Road Improvements)	Government Camp Loop Road(E.)/US 26 intersection: This busy intersection's westbound US 26 right-turn lane is not visible for approaching motorists until they are traveling over the hill (vertical crest curve). In addition, the Government Camp Loop Road East intersection is very wide. This creates confusion with the entrance to the rest area, also in the intersection area. This project would improve safety, operations, and access to Government Camp Loop Road East from US 26 and reduce the traffic impacts of the existing rest area by extending the westbound US 26 right-turn lane over the vertical crest curve to provide more deceleration distance. In addition, the project should look at more clearly defining the Government Camp East Loop intersection. A more extensive project would realign the intersection further to the west, away from the rest area.	LONG TERM (7-10 years)	- ODOT	
Safe-17 (Safety & Road Improvements)	OR 35/US 26 Timberline to Nottingham Road Saftey Audit Implementation (MP 54.2-70.2). Project elements could include a sign for ramp connecting to OR 35 northbound to help drivers follow correct alignment; striping for sharp curves at MP 64-65; removal of dangerous trees; minor widening and paving to reduce elevations at MP 59-64; larger curve signs at Mt Hood Meadows; durable striping where it's not present; and general sign improvements. At the US 26/OR 35 split, a diagrammatic sign with graphic showing that the right side exit is for northbound Hood River and the left side exit is for southbound Madras would be installed. This would alleviate driver confusion for the existing counterintuitive exits.	SHORT TERM (0-3 years)	- ODOT	
Org-2 (Organizations, Programs & Legislation)	Explore legislation for Sno-Park permits to allow variation in fees. (Current legislation does not allow any variation in fees, which is a common practice by peers to encourage carpooling and transit use.)	SHORT TERM (0-3 years)	Champion to bring change to legislature. Legislators would need to get it approved.	PROJECT GROUP B
ITS-3 (Intelligent Transportation Systems)	Chain-up Area Education and Management: Recreation providers and local businesses can provide copies of Oregon State Police's Winter Driving Guide, ODOT's Winter Driving Guide, and additional signage.	SHORT TERM (0-3 years)	- ODOT, Oregon State Police, TMA	
ITS-4 (Intelligent Transportation Systems)	Increased Cell Phone Coverage: Provide service in existing coverage "dead zones."	SHORT TERM (0-3 years)	- Private entity	
PubT-1 (Public Transit)	Bus: Columbia Area Transit extension of service to the ski areas.	MID TERM (3-7 years)	- CAT - Hood River County - Could add potential partners (Mt Hood Meadows)	
PubT-3 (Public Transit)	Mass Transit: Transfer hub down the mountain; develop a portal staging concept supported by mass transit. Once charter bus service and shuttle service is in place, the Forest Service could work with its partners and other stakeholders, including all relevant transit agencies, to establish true mass transit service from Portland to Mt Hood National Forest (Sandy and/or Hood River as a portal served by mass transit).	SHORT TERM (0-3 years)	- Clackamas County - CAT (Columbia Area Transit)	
PriT-1 (Private Transit)	Bus Intra-Forest: Improve intra-forest transit service on Mt. Hood w/transit hub on mountain - During winter months, the parking/transit hub would be a focal point for an on-mountain shuttle transit system that serves each ski area.	MID TERM (3-7 years)	- Private entity	

PROJECT ID/ PROJECT TYPE	PROJECT	EFFECTIVE TIME FRAME	LEAD AGENCY/ ENTITY	FINAL APPROVED PROJECT LIST
PB-4 (Pedestrian & Bicycle)	Government Camp - Add new pedestrian bridge or crossing over US 26 by Ski Bowl and Mirror Lake.	MID TERM (3-7 years)	- Forest Service and ODOT	PROJECT GROUP B
PB-6 (Pedestrian & Bicycle)	Government Camp - Develop trailhead at Forest Service Compound (proposed or expanded parking).	SHORT TERM (0-3 years)	- Forest Service	
Safe-9 (Safety & Road Improvements)	US 26: Timberline Highway (MP 54.3) - The intersection of Timberline Highway and US 26 lacks clear definition. Motorists headed south on Timberline Highway often use the shoulder to make a right turn onto US 26. Because the intersection is not clearly marked and aligned, motorists mistakenly think the wide shoulder on US 26 is an add lane. This creates weaving and merge safety concerns. This project would improve the intersection by clearly defining this intersection, especially slowing the southbound right-turn movement. In addition, the Timberline Highway alignment with US 26 would be rebuilt.	MID TERM (3-7 years)	- ODOT	
Safe-12 (Safety & Road Improvements)	US 26: Ski Bowl West Access (MP 52.5) – This intersection has a skewed angle of less than 40 degrees; there is no westbound US 26 left-turn lane into Ski Bowl at this location; and sight distance is impaired. This project would reconfigure the intersection to provide improved intersection angles and intersection spacing.	LONG TERM (7-10 years)	- ODOT	
Safe-13 (Safety & Road Improvements)	US 26: Ski Bowl East Access (MP 52.85) – This intersection with US 26 has a very skewed angle and poor deceleration opportunities. The storage length for vehicles turning left off US 26 westbound is small. This project would reconfigure the intersection to provide improved intersection angles and intersection spacing.	LONG TERM (7-10 years)	- ODOT	
Safe-14 (Safety & Road Improvements)	Firwood Road/US 26 intersection - This intersection has been identified in the past for safety improvements for vehicles turning left from Firwood Road onto westbound US 26. The turn movement is on a curve with high speed vehicles traveling in both directions. Earlier this year (2013), ODOT made striping improvements to allow for a two-stage left turn onto US 26 West. In addition, access management changes were made to restrict some turning movements in the intersection area. If more improvements are needed following monitoring and evaluation of the recent round of improvements, they likely would involve re-routing traffic away from this intersection to a different access point to US 26.	LONG TERM (7-10 years)	- ODOT and Clackamas County	
Safe-15 (Safety & Road Improvements)	US 26: MP 26.0 – 42.0 Roadway Safety Audit study (exact study boundaries to be determined). This project would be similar to the two existing Road Safety Audits done on US 26 and OR 35, though for different highway segments. Safety along the corridor would be analyzed and specific safety improvements identified. This could be phased to include the US 26 Hot Spot Safety Study. This project would examine areas outside of the existing Road Safety Audits to determine whether cable barrier or other safety improvements would decrease crashes. Suggested locations for this Hot Spot Safety Study on US 26 focused on: MP 28-30, 32-35, and 45-47, (formerly Safe-7).	SHORT TERM (0-3 years)	- ODOT	

PROJECT ID/ PROJECT TYPE	PROJECT	EFFECTIVE TIME FRAME	LEAD AGENCY/ ENTITY	FINAL APPROVED PROJECT LIST
Safe-16 (Safety & Road Improvements)	OR 35: MP 93.0 – 102.0 Roadway Safety Audit Study (exact study boundaries to be determined). This project would be similar to the two existing Road Safety Audits done on US 26 and OR 35, though for different highway segments. Safety along the corridor would be analyzed and specific safety improvements identified, examining areas outside of the existing Road Safety Audits to determine whether cable barrier or other safety improvements would decrease crashes. This could include a Hot Spot Safety Study on OR 35 (MP 93-94, 95-96, 98-99, 101-102), (formerly listed as Safe-8).	SHORT TERM (0-3 years)	- ODOT	**PROJECT GROUP B**
PubT-3b (Public Transit)	Potential new project: Government Camp Intermodal Hub for automobiles and alternative transportation connections.	MID TERM (3-7 years)	- Clackamas County - TMA	**PROJECT GROUP C**
PriT-2 (Private Transit)	Aerial transportation link (ATL) project between Ski Bowl, Government Camp, and Timberline.	LONG TERM (7-10 years)	-Private entity	

Project Recommendation	Definition of Project Categories
Implementation Plan Projects	Subset of Group A Projects, highest priority for implementation in the MHMTP. Implementation Plan projects are achievable in the near term and are a subset of Group A (see below). Projects either are implementable in the 0- to 6-year time frame or are very effective projects that would need to be started now to implement within the 15-year overall planning time frame. These projects have a champion willing and able to carry the project forward. They also have funding identified or being pursued.
Project Group A	First priority for implementation in the MHMTP. Strong core values. Ideally, no major impediments to implementation and 0- to 5-year implementation time frame. Could also include a project that is hard to implement, but such a project would be likely to make substantial improvements in safety and/or travel options. Could also include projects that are very easy to implement, but are only moderately effective in meeting core values.
Project Group B	Second priority for implementation in the MHMTP. Strong or good core values. Likely have longer-term implementation (longer than 5 years and up to 15 years), with important implementation considerations based on the eight criteria, such as high cost and needing other projects to be in place first. If very strong core values, then project is difficult to implement. If moderate core values, then project is easy to implement. Most projects will have more than a 5-year implementation time frame and could be longer.
Project Group C	Third priority for implementation in the MHMTP. Moderate to low core values. Longest term to implement in the 15-year time frame. Also, could lack a project champion and have other major implementation issues. Projects may have significant merit, but may be not be key to improving safety and travel options in the corridor within the plan's time frame. (These projects may be better implemented through other planning efforts such as local Transportation System Plans.)

ATTACHMENT B: WORKING DOCUMENT SHOWING IMPLEMENTATION PLAN GROUP A PROJECT CRITERIA IN A MATRIX (Project scoring may be updated over the course of the rolling plan.)

(for best resolution, print on 11x17 paper)

Mount Hood Multimodal Transportation Plan

Implementation Matrix with Eight Criteria - Implemenation Projects and Group A Projects

Project ID	Lead Agency	Project Description	Implementation Requirements							
			Funding Potential	Permitting/ Regulatory Compliance	Administrative/ Organizational	Capital Cost	Ongoing (Operating Costs, Marketing, etc)	Effective Timeframe	Dependent Upon Other Projects	Who?
Clackamas County Lead - Implementation Plan Projects -3 Projects										
PB-1	Clackamas County for the sections in Clackamas County	Mt Hood Highway Bike/ped intersection improvements -- depending on where transit stops are located for enhanced transit service on US 26 within Clackamas County, there may be a lack of pedestrian or bike crossing facilities at those locations. This project would, in coordination with the community and the Oregon Department of Transportation, design safe and convenient pedestrian and bicycle crossings across US 26. The project would encourage the development of enhanced pedestrian traffic control (example could be crosswalks or pedestrian signals) to facilitate movement across US 26 (Rhododendron has been identified as one likely place for an enhanced crossing). ***PB-1 Implementation Plan includes only the Clackamas County portions of the PB-1 project included in Group A.***	○ - TGM Grant? State Bike/Ped Discretionary Funds. Enhance it/Fix it. Clackamas and Hood River Co. transit funds/grants. Private/ public partnerships.	◉ - Depends on location. In general, medium difficulty	◉ - MOU with partners. - Rhodo. agree to sidewalks	◉ - Depends on location - Pedestrian Traffic Control $150,000 to $300,000	○ - Minimal. Routine maintenance	⊖ -1-10 years	○ - Bike improvements not dependent. - Sidewalks along US 26 in Rhodo. $1-$3 million	- Clackamas County could work with ODOT on TGM funding? Maybe, Mountain Express, CAT (depends on where the locations are) - Need to do the transit planning first to determine the stop locations
PB-7	- Clackamas County Yes IP	Bike/ped info along Mt Hood Highway with maps to mountain biking, alternate routes to US 26/OR 35, hiking trails etc. Wayfinding would be a key element.	⊖ - Clackamas Co? Hood River? Forest Service?	⊖ - Sign permit. Easy. Needs to be outside of clear zone 30 feet from highway	○ - No new organization	○ - Low	○ - Low	⊖ - 3-7 years	○ - No	- Clackamas County
PubT-2	- Clackamas County yes IP	Bus: Mountain Express extension of service to the ski areas from Sandy. This project would pursue long-term funding for the enhanced service.	○ - Funded contingent upon award of Sarbanes Grant -Timberline/Ski Bowl providing $40K for operations (annual)	○ - No environmental or jurisdictional approvals needed (assumes no new stop amenities in right-of-way)	○ - Would operate within current organization	○ - New buses and equipment supplied via grant funding - Put in grant for operations	◉ - Significant increase in operating costs - Put in grant for operations	⊖ - Could be implemented w/in 1 year of funding - Long-term funding needed to maintain service to mountain	○ - No	- Clackamas County - Mountain Express - Ski Areas - National Forest Service

Mount Hood Multimodal Transportation Plan

Implementation Matrix with Eight Criteria - Implemenation Projects and Group A Projects

Project ID	Lead Agency	Project Description	Implementation Requirements							
			Funding Potential	Permitting/ Regulatory Compliance	Administrative/ Organizational	Capital Cost	Ongoing (Operating Costs, Marketing, etc)	Effective Timeframe	Dependent Upon Other Projects	Who?
ODOT Lead - Implementation Plan Projects -10 Projects										
PB-5	- ODOT	Mt Hood Highway shoulder widening analysis for bicyclist use. There are many stretches of US 26 and OR 35 where shoulders are very narrow or nonexistent. Bicyclists rely on shoulders for travel through this area. This project would be a study that identifies where there are deficient shoulders and have potential for widening. ***The implementation Plan includes only the analysis portion of PB-5 listed in Group A.***	⊖ - ODOT Planning Funds.	⊖ - None; this is a planning exercise	○ - ODOT	⊖ - $15,000	⊖ None	⦿ - 0-3 years	○ - No	- ODOT
PB-8	- ODOT	Bike intersection improvements at OR 35 and Historic Columbia River Highway (HCRH) (E. State St.) in Hood River -- This intersection lacks striping for bicyclists headed through the intersection of HCRH and OR 35. The project would improve bike lane striping at the intersection and, potentially, across the right-turn lane from eastbound HCRH to southbound OR 35.	⊖ ODOT Bike/Ped funding	○ - None	○ - None	○ - $5,000-$10,000	○ - Maintenance. Minimal	○ 0-3 years (Target: 2014)	○ - No	- ODOT
Safe-1	ODOT	OR 35 intersection improvement: signage at Central Vale Dr./Booth Hill Rd. (MP 93.5). This intersection needs updated sign placement. Westbound on Booth Hill Rd. approaching OR 35 - relocate obscured Stop sign and trim trees/shrubs to improve visibility. Eastbound on Central Vale Dr. - install Advance Stop Warning sign.	N/A Already Implemented	N/A Already Implemented	N/A Already Implemented	N/A Already Implemented	N/A Already Implemented	N/A Already Implemented	N/A Already Implemented	- ODOT
Safe-2	- ODOT	US 26 Roadway Departure safety improvements -- US 26 between MP 47.2 and 48.9 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips as well, to decrease the chance of vehicles leaving the roadway.	⊖ - ODOT Fix it.	○ - None	○ - ODOT	○ - $4,000	○ - Maintenance. Minimal	○ 0-3 years (Target: 2014)	○ - N/A	- ODOT

Mount Hood Multimodal Transportation Plan

Implementation Matrix with Eight Criteria - Implemenation Projects and Group A Projects

Project ID	Lead Agency	Project Description	Implementation Requirements							
			Funding Potential	Permitting/ Regulatory Compliance	Administrative/ Organizational	Capital Cost	Ongoing (Operating Costs, Marketing, etc)	Effective Timeframe	Dependent Upon Other Projects	Who?
Safe-3	- ODOT	US 26 Roadway Departure safety improvements -- US 26 between MP 44.9 and 46.6 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway. See Comment to Safe-2.	⊖ - ODOT Fix it.	○ - None	○ - ODOT	○ - $4,000	○ - Maintenance. Minimal	○ 0-3 years (Target: 2014)	○ - N/A	- ODOT
Safe-4	- ODOT	US 26 Roadway Departure safety improvements -- US 26 between MP 36.9-39.77 and 42.6-43.2 has been identified as an area lacking rumble strips. This project would improve safety by installing center rumble strips and, if there is room on the shoulder, edge rumble strips, to decrease the chance of vehicles leaving the roadway. See Comment to Safe-2.	⊖ - ODOT Fix it.	○ - None	○ - ODOT	○ - $4,000	○ - Maintenance. Minimal	○ 0-3 years (Target: 2014)	○ - N/A	- ODOT
Safe-5	- ODOT	OR 35 Roadway Departure safety: Safety improvements have been identified for OR 35 at several segments between MP 60 and 93.75. This project would install rumble strips and curve warning signing from MP 60-63; install rumble strips from MP 65.9-68.2; install rumble strips and signage from MP 73.9-84.1; and install rumble strips and signage from MP 92-93.75.	⊖ - ODOT Fix it.	○ - None	○ - ODOT	○ $40,000	○ - Maintenance. Minimal	○ 0-3 years (Target: 2014)	○ - N/A	- ODOT
Safe-6	- ODOT	OR 35 intersection improvement at Dethman Ridge Drive. This intersection at MP 97.6 has been targeted for safety improvements due to a higher than normal crash rate. Safety improvements at Dethman Ridge Dr. include new lane line marking and advance intersection warning signs. ***The Implementation Plan only implements striping and signing. Other Safe-6 improvements will completed as a Group A project.***	⊖ - ODOT Fix it.	○ - None	⊖ ODOT	○ $10,000	○ - Maintenance. Minimal	⊖ 0-3 years (Target: 2014)	○ - N/A	- ODOT

Mount Hood Multimodal Transportation Plan

Implementation Matrix with Eight Criteria - Implemenation Projects and Group A Projects

Project ID	Lead Agency	Project Description	Implementation Requirements							
			Funding Potential	Permitting/ Regulatory Compliance	Administrative/ Organizational	Capital Cost	Ongoing (Operating Costs, Marketing, etc)	Effective Timeframe	Dependent Upon Other Projects	Who?
Safe-17	- ODOT	OR 35/US 26 Timberline to Nottingham RSA Implementation (MP 54.2-70.2). This project includes upgrading signs along the 16-mile corridor. In addition, it would include installing a large diagrammatic sign at the OR 35/US 26 split showing that the right side exit is for northbound Hood River and the left side exit is for southbound Madras. This would address the existing counterintuitive exits. ***The Implementation Plan installs signs. Additional roadway improvements are included in Safe-17 in the Group A projects.***	⊖ - Fix it.	○ - None expected. However, there is the potential for NEPA process if new diagrammatic sign is not on ODOT right-of-way. This needs to be investigated through a detailed scoping process.	○ - ODOT	○ $200,000-$300,000 depending on sign structure design and regulatory clearance.	○ - Maintenance, minimal	○ - 0-3 years	○ - No	- ODOT
ITS-2	ODOT	ITS elements include variable speed limit signs, roadside camera installations, expanded real-time traveler Information and an upgraded electronic reader board at the Mt. Hood Meadows access road/OR 35 (MP 64.08) intersection. ***The Implementation Plan ITS-2 project does not include the comprehensive study and improvements included in the Group A project (see ITS-2 below).***	⊖ ODOT ITS funds	⊖ CatX	⊖ Not significant	⊖ $5 million	○ Ongoing maintenance of ITS system	⊖ 2-5 years	○ - No	None
Federal Highway Administration, Western Federal Lands Lead - Implementation Plan Projects -1 Project										
PB-3	WFLD -Yes IP	Mirror Lake Project: Over parking, poor sight distance, u-turns, left turns contribute to safety issues. The lot is closed in winter, but people park at Ski Bowl and walked down the shoulder on top of the snow bank to the trail. Access to the trail needs safety improvements. Includes relocating trailhead and adding parking.	⦿ - ODOT, CC Tourism - FS is pursuing a grant for this project	● - NEPA clearance may be high	⊖ - ODOT, Ski Bowl, FS	● - High	⦿ - Medium	⊖ - 2-10 years	● Trail Head relocation	- WFLD using FLAP funds will lead.

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OTHER PROJECTS										
Group A										
PB-1 Group A	ODOT/Hood River County?	Mt Hood Highway Bike/pedestrian intersection improvements -- depending on where transit stops are located for enhanced transit service on US 26 and OR 35, there may be a lack of pedestrian or bike crossing facilities at those locations. This project would, in coordination with the community and the Oregon Department of Transportation, design safe and convenient pedestrian and bicycle crossings across US 26. The project would encourage the development of enhanced pedestrian traffic control (examples could be crosswalks or pedestrian signals) to facilitate movement across US 26 (Rhododendron has been identified as one likely place for an enhanced crossing). ***Projects within Clackamas County will be completed as part of the implementation plan (see PB-1 above).***	○ - TGM Grant? State Bike/Ped Discretionary Funds. Enhance it/Fix it. Clackamas and Hood River Co. transit funds/grants. Private/ public partnerships.	◉ - Depends on location. In general, medium difficulty	◉ - MOU with partners. - Rhodo. agree to sidewalks	◉ - Depends on location - Pedestrian Traffic Control $150,000 to $300,000	○ - Minimal. Routine maintenance	⊖ -1-10 years	○ - Bike improvements not dependent. - Sidewalks along US 26 in Rhodo. $1-$3 million	- Clackamas County could work with ODOT on TGM funding? Maybe, Mountain Express, CAT (depends on where the locations are) - Need to do the transit planning first to determine the stop locations
PB-5 Group A	ODOT	Mt Hood Highway shoulder widening for bicyclist use -- There are many stretches of US 26 and OR 35 where shoulders are very narrow or nonexistent. Bicyclists rely on shoulders for travel through this area. This project would widen shoulders in areas on US 26 and OR 35 where there are no or substandard shoulders. Shoulder widening would be targeted to areas based on need. ***Portions of this project will be completed as part of the Implementation Plan (see PB-5 above).***	⊖ - ODOT Planning Funds.	⊖ - None; this is a planning exercise	○ - ODOT	⊖ - $15,000	⊖ None	◉ - 0-3 years	○ - No	- ODOT

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Safe-6 Group A		OR 35 intersection improvement: Two locations on OR 35 have been identified for safety improvements due to a higher than normal crash rate -- MP 95.2 (Davis Dr./OR 282) and MP 97.6 (Dethman Ridge Dr.). At Davis Drive, pavement markings and signing were recently installed. Further safety improvements may require realigning the intersection, which is very costly. Safety improvements at Dethman Ridge Dr. include new lane line marking and advance intersection warning signs. ***ODOT will complete portions of Safe-6 as part of the Implementation Plan.***	⊖ - ODOT Fix it.	○ - None	⊖ ODOT	○ $10,000	○ - Maintenance. Minimal	⊖ 0-3 years (Target: 2014)	○ - N/A	- ODOT
Safe-10 Group A	- ODOT	Govt. Camp Loop (W.)/US 26 intersection: Govt Camp Loop Road West intersects US 26 at a skewed angle. Motorists must look back over their shoulder to safely merge onto US 26. This project would Improve safety, operation and access to Government Camp Loop Road West by realigning the intersection with US 26. One possible solution would be to combine a project here with Ski Bowl West access, which is offset to Govt Camp Loop Road West.	● - STIP, Fix it, Enhance It, (WFLD?)	● - NEPA clearance high not part of existing EIS	⦿ - ODOT and Forest Service, Does EIS cover Timberline Highway than. MOUs	● - High $2-4 million	○ - Low	⦿ - 7-20 years	○ - Ski Bowl East	- ODOT

Mount Hood Multimodal Transportation Plan

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			Funding Potential	Permitting/ Regulatory Compliance	Administrative/ Organizational	Capital Cost	Ongoing (Operating Costs, Marketing, etc)	Effective Timeframe	Dependent Upon Other Projects	Who?
Safe-11 Group A	- ODOT	Govt. Camp Loop (E.)/US 26 intersection. This busy intersection's westbound US 26 right-turn lane is not visible for approaching motorists until they are traveling over the hill (vertical crest curve). In addition, the Govt. Camp Loop Road East interesection is very wide. This creates confusion with the entrance to the rest area also in the intersection area. This project would improve safety, operations and access to Government Camp Loop Road East from US 26 and reduce the traffic impacts of the existing rest area by extending the westbound US 26 right-turn lane over the vertical crest curve to provide more deceleration distance. In addition, the project should look at more clearly defining the Govt Camp East Loop intersection. A more extensive project would realign the intersection further to the west away from the rest area.	● - STIP, Fix it, Enhance It, (WFLD?)	● - NEPA clearance high not part of existing EIS	⦿ - ODOT and Forest Service, Does EIS cover Timberline Highway than. MOUs	- $3-7 million	○ - Low	⦿ - 7-20 years	Ski Bowl East, Govy West	- ODOT
Safe-17 Group A	ODOT	OR 35/US 26 Timberline to Nottingham RSA Implementation (MP 54.2-70.2). Project elements could include sign for ramp connecting to OR 35 NB to help drivers follow correct alignment; striping for sharp curves at MP 64-65; removing danger trees, minor widening and paving to reduce elevations MP 59-64; larger curve signs at Mt Hood Meadows; durable striping where it's not present; general sign improvements. At the US 26/OR 35 split, a diagrammatic sign w/graphic showing that the right side exit is for northbound Hood River and the left side exit is for southbound Madras would be installed. This would alleviate driver confusion for the existing counterintuitive exits. ***ODOT will complete portions of Safe-17 as part of the Implementation Plan.***	⊖ - Fix it.	○ - None expected. However, there is the potential for NEPA process if new diagrammatic sign is not on ODOT right-of-way. This needs to be investigated through a detailed scoping process.	○ - ODOT	○ $200,000-$300,000 depending on sign structure design and regulatory clearance.	○ - Maintenance, minimal	○ - 0-3 years	○ - No	- ODOT

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Project ID	Lead Agency	Project Description	Implementation Requirements							
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Park-2 Group A	WHO? Forest Service?	Sno-Park Management/Enforcement - Teacup, Pocket Creek (Forest Service is owner; ODOT does maintenance).	◉ -Tickets, citations - Grants	○ - No issues. Could increase fines. Issues if changing who is able to issue citations.	⊖ - Hard if requires changes to who issues citiations	○ - no direct capital cost identified	◉ -high, but could generate money	○ -0-3 years	◉ -identification of funds	- FS, Oregon State Police, County Sheriffs (ODOT will not lead)
ITS-1 Group A	WHO? ***TMA Lead?***	Traveler Webpage Clearinghouse: links to weather and incidents, carpool sites, transit sites, and parking.	◉ - CMAC funds - Grants - Membership dues/fees - Fundraising - Individual contributions - County Tourism development grants	○ - Legal paperwork	⊖ - Non-profit structure (e.g. 501c(6), 501c(3) - Establish Bylaws, Officers, Board of Directors - Define mission - Requires champions	⊖ - Office supplies (e.g. computer, desk)	● - Day-to-Day Staff duties - Office space - Marketing materials	⊖ - TMA should be active and implementing programs within 1-2 years	○ Dependent on a TMA if it is really comprehensive	- TMA - Individual Champion(s), - Business Partners/Members, Community groups/advocates, Agency/jurisdiction partners
ITS-2 Group A	ODOT	Study: Integrated Management Plan (Concept of Operations). Elements may include Traveler Information for Speed Limits, Parking, Transit, and Transportation Demand Management website (Real-Time Parking Guidance, Transit Management and Information, Expanded Real-Time Traveler Information – On Mountain and En-Route, Mt. Hood Mobile Traveler Information/Multimodal Travel Options Website). Upgrade electronic reader board Mt. Hood Meadows access road/OR 35 (MP 64.08). ***ODOT will complete part of ITS-2 as part of its implementation plan.***	⊖ ODOT ITS funds	⊖ CatX	⊖ Not significant	⊖ $5 million	○ Ongoing maintenance of ITS system	⊖ 2-5 years	○ - No	None

KEY FOR PROJECT IMPLEMENTATION MATRIX
'Implementation Requirements' Key

○	No Additional Effort Required
⊖	Low Level of Effort Required
◉	Medium Level of Effort Required
●	High Level of Effort Required