

# **Socioeconomic Technical Report**

## **For the US 26: Wildwood-Wemme Project Environmental Assessment**

**April 21, 2006**

**Oregon Department of Transportation**

Prepared by: Andrew Johnson, ODOT  
Katie Carroz, URS

## Table of Contents

EXECUTIVE SUMMARY .....	1
Existing Conditions.....	1
Impacts.....	1
Cumulative Impacts .....	3
Mitigation.....	3
INTRODUCTION .....	5
COORDINATION AND INVOLVEMENT .....	6
ANALYSIS METHODS .....	7
AFFECTED ENVIRONMENT .....	8
Economy .....	8
Social Conditions.....	11
Public Services and Community Facilities .....	12
Recreation .....	14
US 26 and Transportation-Related Social Conditions .....	14
Social Groups.....	14
ENVIRONMENTAL CONSEQUENCES .....	16
Direct and Indirect Impacts.....	16
Cumulative Impacts .....	19
Mitigation.....	20
REFERENCES .....	21

### List of Tables

Table 1 Labor Force and Unemployment .....	8
Table 2 Revenue by Source and Expenditure by Function.....	10
Table 3 Population Trends .....	12
Table 4 Projects for Cumulative Impact Analysis .....	19

### List of Figures

Figure 1 Vicinity Map.....	9
----------------------------	---

## **EXECUTIVE SUMMARY**

### **Existing Conditions**

The US 26: Wildwood-Wemme project involves a 1.33-mile section of rural, two-lane highway between the Portland-Vancouver metropolitan area and recreational areas near Mt. Hood in northwest Oregon. Five businesses and 23 homes exist within 200 feet of this section of US 26, and are separated from US 26 and each other by vegetation.

Homes near the proposed project are primarily single family. Almost 80 percent of vacant homes are identified as seasonal, recreational, or occasional use homes. Census 2000 data indicate that over 50 residents live within approximately 200 feet of the proposed project, and that the Mt. Hood Village Census Designated Place (CDP), within which the project is located, does not contain a disproportionate number of minority, low-income, elderly, or institutionalized residents when compared to Clackamas County as a whole.

Businesses within approximately 200 feet of the proposed project include Mt. Hood Village (restaurant and lodging), the Whistle Stop Tavern and Tattoo Parlor, and the Mountain Air Motel. The Hoodland Church and portions of the Bureau of Land Management (BLM) Wildwood Recreation Area are also located within 200 feet of the proposed project. Mt. Hood Village operates a small restaurant and a temporary lodging facility. These businesses are spread out along this section of US 26. No established business district exists within the project area. Public transportation is not available along this section of US 26.

### **Impacts**

#### ***No Build Alternative***

Social and economic impacts would not occur with the No Build Alternative. Usual maintenance activities would continue on US 26, and related jobs and spending would continue to benefit the economy. Less than adequate safety conditions along this section of US 26 would persist. The high number of accidents in the project area could perpetuate the elevated demand for emergency services, and would continue to intermittently impede access by local residents, freight carriers, and tourists traveling this route. The No Build Alternative could slow future development in the long run due to less than adequate safety conditions. The No Build Alternative would not result in disproportionate impacts upon minority, low-income, elderly, or institutionalized populations, nor would this alternative result in changes to regional or local travel patterns, or access closures or consolidations. Construction impacts, noise, and changes to the visual environment would not occur.

#### ***Widen to the North Alternative***

##### ***Economic Impacts***

No business displacements or relocations would occur. No business access closures would occur, although some access consolidation would be necessary. No right-of-way acquisition would be necessary. The proposed project would improve safety conditions and mobility along the section of US 26 between Wildwood and Wemme, and would therefore contribute to a higher quality of life. A

higher quality of life could result in increases in property values, the potential for new development, and attraction of new business and residents in the long run. New development or additional population that is indirectly attributable to the proposed project could result in indirect economic impacts in the long run, such as additional jobs, income, spending, retail sales, and property tax revenue. Improved safety would, in general, support a stronger local and regional economy and consistent tourism flow. The area would remain accessible from the Portland-Vancouver metropolitan area and Mt. Hood. Although operations at highway-related businesses in the project area would generally remain similar to existing conditions because US 26 traffic volumes would not change, patronage of these businesses could increase slightly because left turns off of US 26 would be easier to make. The project would not result in a change to established businesses districts because no formal business district exists along this section of US 26.

### *Social Impacts*

No residential displacements or relocations would occur. No residential access closures would occur, although some access consolidation would be necessary. The improvement in quality of life associated with the proposed project could indirectly result in the attraction of new business and residents in the long run.

Community cohesion would not change as a result of the project because (1) the US 26 alignment would be similar to existing conditions, (2) the layout and boundaries of the community would not change, and (3) no displacements would occur. The proposed project would result in an increased feeling of safety in the neighborhood because the number of times vehicles would need to slow or stop behind turning vehicles would decrease. The proposed project would not adversely affect the character and livability of the neighborhood. No specific social group would be benefited or harmed disproportionately, although full-time residents would experience more of the safety benefits compared to seasonal residents, due to their full-time status.

Public services providers would experience minor benefits attributable to the project, such as easier left turns, and a reduction in calls for service over time because traffic accidents would decrease. In the long run, demand for public services and community facilities could increase if development occurs faster than under the No Build Alternative. Travel patterns would not change under the Widen to the North Alternative. Although transportation choices offered in the area would not change, shoulders would be safer for bicyclists.

The proposed project would not result in environmental justice issues. The project area population is not disproportionately minority, low-income, elderly, or institutionalized when compared to Clackamas County. Visual impacts attributable to the proposed project would be moderate due to the removal of approximately 100 large trees on the north side of the highway. Noise and air impacts would be negligible because traffic volumes would remain the same, and construction impacts would be temporary. Safety and mobility improvements resulting from the Widen to the North Alternative would benefit local residents and businesses, as well as regional users of US 26. Public involvement activities undertaken as part of this project and contributing to meeting requirements of environmental justice regulations are discussed in the Public Involvement Report.

### ***Widen to the North Alternative Construction Impacts***

Construction would occur in summer 2008, with portions of the work performed in 2007. The proposed project would cost \$5.64 million to build, and would result in temporary direct economic benefits in the region and local area, such as jobs, income, and spending related to construction. Indirect economic benefits would occur due to increases in household spending and supplier spending, and would lag behind the construction period by several months. Residents and businesses could experience disruptions associated with construction, including noise and dust, detours, and congestion. These impacts would be short-term and temporary. Prior notice of temporary detours and possible congestion would be given to residents and businesses. No business or residence would be without access at any time during construction.

The daily presence of construction workers would result in increased demand for goods and services at local commercial establishments, leading to minor increased sales for local businesses. Levels of service at public service providers would be adequate to serve the temporary daily influx of construction workers. The proposed project would not likely result in the permanent movement of workers and their families to the project area.

### **Cumulative Impacts**

Projects that could occur near the site of the proposed project include highway improvement projects, the reopening of a BLM quarry, a new recreational trail, and new rural development projects. Cumulative impacts of the proposed project together with these other projects would include temporary disruptions associated with construction; such as noise, detours, and congestion; and long-term increases in jobs, income, population, traffic, and demand for services. Only the US 26 preservation (paving) projects would likely occur concurrent with the proposed project. Construction impacts would be moderate during this time period, and the presence of construction workers at the sites during the day could stress the area slightly and temporarily. Mitigation measures for construction would reduce proposed project impacts to a negligible level and would also therefore reduce cumulative impacts.

Permanent cumulative socioeconomic impacts could include increased traffic volumes and population; safety improvements; and increases in jobs, income, and spending. Long-term increases in population and related increases in demand for services would likely be consistent with current trends, and improved safety conditions on US 26 would accompany higher traffic volumes.

### **Mitigation**

Socioeconomic impacts as defined under NEPA arise due to physical occurrences, such as business patronage, disruption due to traffic detours, and access changes. Therefore, mitigation measures for traffic would not only mitigate traffic impacts, but also socioeconomic and environmental justice impacts. Similarly, mitigation measures for noise, visual, and other physical impacts would also mitigate socioeconomic and environmental justice impacts. In addition to mitigation measures listed for traffic, noise, and visual impacts, the following mitigation measures would lessen socioeconomic and environmental justice impacts.

### *Construction*

- Prior notice of construction activity, detours, and possible congestion will be given to residents and businesses.
- Signage will clearly indicate detours.
- Hours of construction will be limited to daytime and evening.
- Access consolidations will be coordinated with property owners.
- ODOT will work with service providers to design and implement procedures so that access to the project area by emergency and law enforcement vehicles is never blocked.

### *Operation*

No mitigation measures would be required for operation.

## INTRODUCTION

The purpose of the proposed project is to improve safety on US 26 between the communities of Wildwood and Wemme in Clackamas County. The need exists to provide for safe left turns between US 26 and residences, small businesses, a church, and a Bureau of Land Management recreation area by widening the median, which is currently four feet wide. ODOT is the lead state agency, and FHWA is the lead federal agency for this project.

A petition containing 600 signatures was submitted to the ODOT District 2C Manager in 1999, requesting that ODOT address safety and access issues along this section of US 26. Thirteen accidents, one of which was fatal, were reported between January 2000 and December 2004 in this segment of US 26.

This Technical Report supports the Environmental Assessment and analyzes two alternatives: the No Build Alternative and the Widen to the North Alternative. The Widen to the North Alternative would widen US 26 to the north to accommodate four 12-foot travel lanes, a 14-foot median for continuous left-turns, and 8-foot shoulders/bikeways. Two additional feet would be added to the shoulder where a guardrail is required. The proposed project maintains the location of the edge of pavement on the south side of US 26, and could be implemented within ODOT right-of-way on the north side. The total paved cross-section of the highway would be 78-80 feet wide, depending on the presence of guardrail on the north side. The proposed project would involve consolidating certain accesses on the south side of US 26.

## **COORDINATION AND INVOLVEMENT**

This technical report has been completed in coordination with Andrew Johnson of the Oregon Department of Transportation, Region 1 Transportation and Growth Management Division, and local residents and business owners, through public meetings. See the Public Involvement Report for more detailed information about the public outreach activities associated with this project.

## ANALYSIS METHODS

This socioeconomic analysis meets requirements of the FHWA Technical Advisory T6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents, and the National Cooperative Highway Research Program Guidebook for Assessing Social and Economic Effects of Transportation Projects (Report 456). As required, this report presents information about the existing economic and social environment surrounding the proposed project, and assesses socioeconomic impacts attributable to the proposed project. Geographic areas for which data are presented vary according to the type of impact and the data available. Alternatives analyzed include the No Build Alternative and the Widen to the North Alternative.

Socioeconomic impacts are discussed at a level of detail appropriate for the magnitude, extent, likelihood, and duration of potential impacts. Types of economic impacts addressed include business displacements, jobs, income, expenditures, changes in development patterns, tax revenues, retail sales, changes in economic vitality of highway-related businesses, and changes to established business districts. Types of social impacts addressed include changes in neighborhoods and community cohesion; transportation-related social impacts, such as changes in travel patterns, safety, and accessibility; impacts on public services and community facilities; and impacts on specific social groups. Environmental justice impacts are also discussed.

Environmental justice refers to Federal policies the purpose of which is to identify, address, and avoid high, adverse, and disproportionate environmental impacts on minority and low-income populations. Executive Order (EO) 12898 (February 11, 1994)<sup>1</sup> forms the basis for environmental justice policies. It requires Federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations, including interrelated social and economic effects. The federal lead agency status of FHWA requires that this report comply with FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.<sup>2</sup> This report uses Census 2000 data to characterize the project area in terms of percentage minority and low-income,. The report determines whether the percentages minority and low-income for the Mt. Hood Village Census Designated Place (CDP) are higher than those for Clackamas County as a whole. Mt Hood Village CDP is a geographic area smaller than the census tracts and larger than individual census block groups and blocks in this area. The environmental justice analysis finds whether the project would have disproportionate adverse impacts on minority and low-income populations.

Cumulative impacts would result from the incremental impacts of the proposed project when added to impacts of other past, present, and reasonably foreseeable future projects. This report discusses cumulative impacts of the proposed project together with impacts of past, present, and foreseeable future actions that would have socioeconomic impacts near the proposed project site.

Sources for the data presented in this report include the U.S. Census Bureau, the Population Research Center at Portland State University, Clackamas County, and the Oregon Department of Employment.

---

<sup>1</sup><http://www.fs.fed.us/land/envjust.html>

<sup>2</sup> [http://www.fhwa.dot.gov/legsregs/directives/orders/6640\\_23.htm](http://www.fhwa.dot.gov/legsregs/directives/orders/6640_23.htm)

## AFFECTED ENVIRONMENT

The proposed project is located in northeast Clackamas County, which is located in northwest Oregon, southeast of the Portland-Vancouver metropolitan area (Figure 1, Vicinity Map). Approximately seven-eighths of the 1,879 square miles contained within Clackamas County is considered rural. The County encompasses Mt. Hood, the Mt. Hood National Forest, and the Bull Run Watershed (which supplies the City of Portland), and includes 17 cities and extensive lands in rural residential and agricultural use. Freight moves through Clackamas County via Interstate 5, Interstate 205, Highway 225, and Interstate 84, as well as US 26. The intersection of US 26 with the Mt. Hood Highway, which leads to Timberline Lodge on Mt. Hood, is approximately 10 miles east of the eastern terminus of the proposed project. The closest incorporated city is the City of Sandy, located approximately 15 miles to the west of the western terminus of the proposed project.

### Economy

#### *Local Businesses*

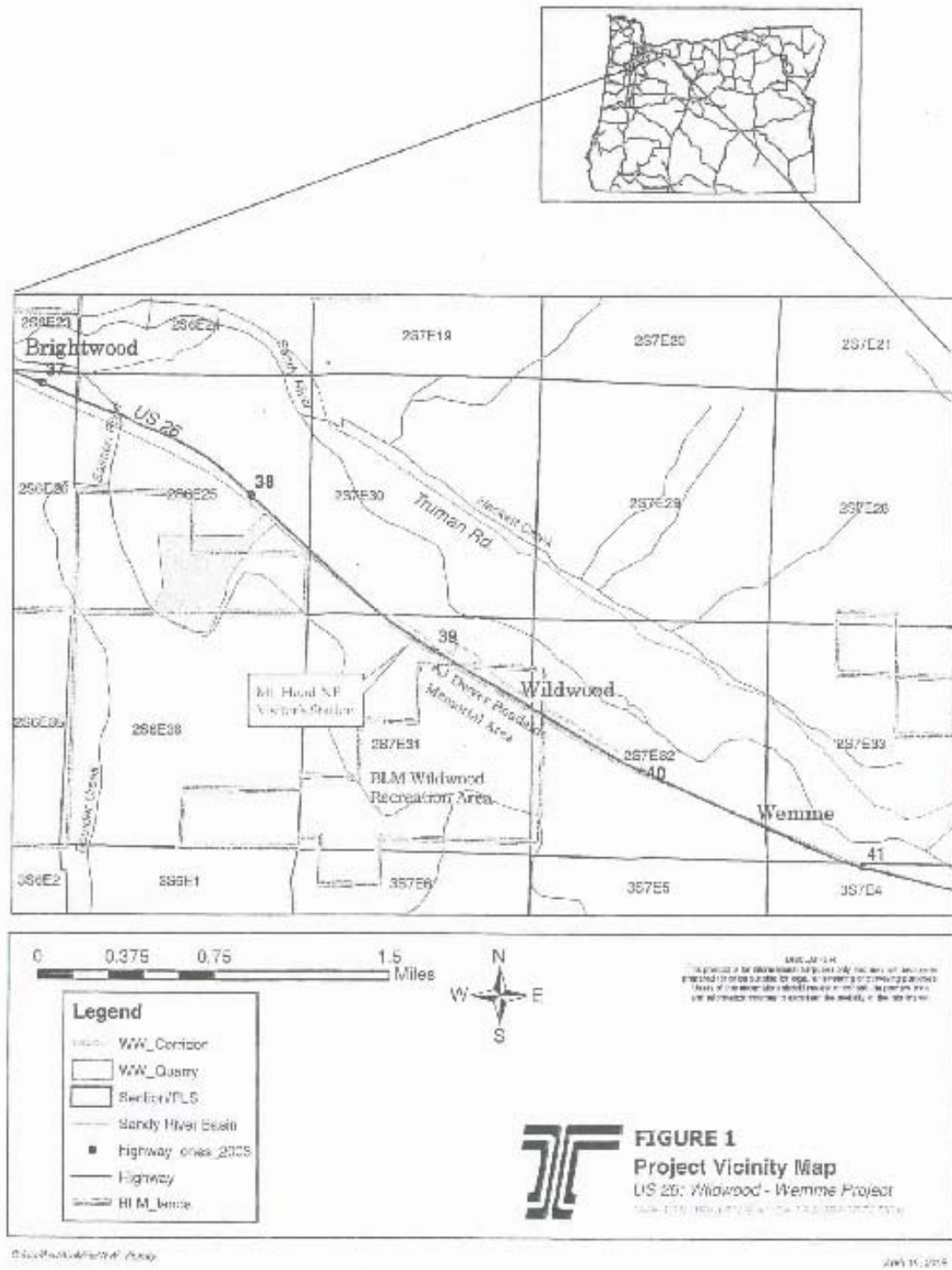
Vegetation partially or fully separates homes and businesses from the 1.33-mile length of the proposed project. Businesses within approximately 200 feet of the proposed project include businesses within Mt. Hood Village, the Whistle Stop Tavern, the Tattoo Parlor, and the Mountain Air Motel. The Hoodland Church and portions of the BLM Wildwood Recreation Area are also within 200 feet of the proposed project. Mt. Hood Village operates retail establishments and a temporary lodging facility. No established business district exists within the project area.

#### *Regional Labor Force and Unemployment*

The Clackamas County labor force of 189,545 represented one-tenth of the Oregon labor force in August 2004. Labor force growth was relatively fast in the early 1990s, slower in the late 1990s, and consistently low during the period 2000-2004 in both the County and the State. The 2004 County unemployment rate of 6.8 percent was slightly lower than Oregon unemployment that year, although unemployment rates in both regions have continued to rise after dipping in the mid-1990s. The County has consistently exhibited a lower unemployment rate than the State (Table 1), which is one measure of slightly better economic health.

<b>Table 1</b>		
<b>Labor Force and Unemployment</b>		
	<b>Clackamas County</b>	<b>State of Oregon</b>
Civilian Labor Force 2004	189,545	1,856,237
AARG 1990-1995	2.6%	2.0%
AARG 1995-2000	0.9%	1.7%
AARG 2000-2004	0.2%	0.6%
Annual Unemployment Rate 2004	6.8	7.4
Annual Unemployment Rate 2000	4.1	5.2
Annual Unemployment Rate 1995	3.2	4.9
Annual Unemployment Rate 1990	3.4	5.4
Notes: AARG = Annual average rate of growth Source: OED 2005a.		

Figure 1: Vicinity Map



## **Regional Industry**

Although agriculture is a relatively large part of the Clackamas County economy (Clackamas County 2005b), most employment in the County in 2004 was in trade, transportation, and utilities (23 percent); manufacturing (13 percent); and government (12 percent). Industries in Clackamas County with a comparative advantage in 2004, meaning industries whose employment represented a greater share of County employment compared to the same share measure for the State, included agriculture, forestry, fishing, and hunting; construction; trade, transportation, and utilities; and financial activities. In 2004, the employment share in Clackamas County in trade, transportation, and utilities was three percentage points higher than the same share for the State, and the employment share in Clackamas County in government was four percent points lower than the same share for the State (OED 2005b).

## **Income**

The per capita income of an area characterizes relative wealth. Census 2000 reports that the Mt. Hood Village CDP<sup>3</sup> had a per capita income in 1999 of \$24,604, which was higher than the State of Oregon per capita income (\$20,940), and lower than the Clackamas County per capita income (\$25,974) (Census 2005a).

## **Fiscal Conditions**

Revenue and expenditure for the Clackamas County 2004-2005 Fiscal Year were budgeted at \$712.4 million. Interfund transfers and the balance carried over each represent approximately one-quarter of annual revenue. Property taxes, fee and fines, and state revenues each represent 11 to 12 percent of revenues (Table 2). Primary expenditures in Clackamas County are categorized into transportation and development (36 percent), general government (17 percent), human services (12 percent), public safety (11 percent) and wastewater treatment and sanitation (9 percent) (Table 2).

<b>Table 2</b>					
<b>Revenue by Source and Expenditure by Function</b>					
Revenue Source	Revenue Amount	Revenue Share	Expenditure Function	Expenditure Amount	Expenditure Share
Interfund Transfer	172,254,558	0.2418	Transport. and Devel.	257,711,904	0.3618
Fund Balance	170,654,339	0.2396	General Government	121,481,532	0.1705
Property Taxes	88,849,565	0.1247	Human Services	88,860,110	0.1247
Fees & Fines	78,210,554	0.1098	Public Safety	76,638,569	0.1076
State Revenue	76,712,862	0.1077	Wastewtr. Treatmt and San.	65,854,085	0.0924
Other Revenue	57,519,307	0.0807	Internal Services	44,375,495	0.0623
Federal Revenue	38,630,305	0.0542	Debt Service	52,510,645	0.0737
Local Revenue	18,365,580	0.0258	Trust & Agency	4,937,423	0.0069
Licenses	11,172,693	0.0157	-	-	-
Total	712,369,763	1	Total	712,369,763	1

Source: CCFD 2005.

<sup>3</sup> The Mt. Hood Village CDP is used for per capita income comparisons because boundaries for this CDP match the project area more closely than the census tracts in which the proposed project is located. The census tracts within which the project is located extend north and south substantial distances. This CDP will also be used later in this report for types of information for which census tract data would typically be used.

The assessed value of property<sup>4</sup> in Clackamas County for the 2004-2005 Fiscal Year was \$27.6 billion. Applying the average property tax rate that year in the County of \$15.12 per \$1,000 in assessed value gives the approximate amount of certified property taxes (\$406.5 million), of which 97 percent was collected (ODOR 2005). Neither the State of Oregon nor its cities and counties impose a sales tax.

## **Social Conditions**

### ***Local Population and Housing***

The Mt. Hood Village CDP had 3,306 residents in 2000, representing one percent of Clackamas County population. Within approximately 200 feet of the proposed project, ten homes are located north of US 26 within the 1.33-mile long project area, and thirteen homes are located south of US 26 within the project area. Fourteen streets intersect with US 26 on the south and five streets intersect with US 26 on the north. The western terminus of the proposed project is located 35 miles east of the County Seat of Oregon City, and 15 miles east of the City of Sandy.

The Mt. Hood Village CDP had 1,912 housing units in 2000, 85 percent of which were single family homes. In comparison, 67 percent and 63 percent of Clackamas County housing units and State of Oregon housing units were single family homes that year. Ten percent of housing units in the CDP were mobile homes, which is similar to the share of mobile homes in Oregon as a whole (Census 2005b).

Most homes in the Mt. Hood Village CDP were built in the 1990s (31 percent), followed by the 1970s (21 percent) and the 1930s (18 percent). Of occupied housing units (which represent a relatively low 69 percent of total units), a relatively high 80 percent are owner-occupied. Of the 31 percent of housing units that were vacant, 78 percent are classified as seasonal, recreational, or occasional use. Eighty-three percent of homes in the Mt. Hood Village CDP were valued between \$100,000 and \$299,999 in 2000, and the median value of owner-occupied housing units that year was \$173,200. This median value of owner-occupied housing units was higher than the same measure for Oregon, and lower than the same measure for Clackamas County (Census 2005b).

### ***Community Cohesion***

The proposed project is located in a rural community characterized by low-density, single-family homes, and a few businesses. As reflected by the high percentage of owner-occupied and seasonal homes, many of the homes are vacation homes or second homes. Many are winter-lodge type homes (Johnson 2005).

No formal neighborhood boundaries, community focal point, or gathering place exist, although homes are centered around US 26, which is the only transportation route in and out of this community. This community is a transition area between the suburban and satellite communities of the Portland-Vancouver metropolitan area and recreational areas near Mt. Hood (Johnson 2005). Most full-time residents of the project area travel to Sandy for services (Johnson 2005). Full-time residents likely form a cohesive community despite the lack of physical neighborhood boundaries due to the relatively small number of full-time residents in comparison to seasonal residents, the

---

<sup>4</sup> This figure is the net assessed value of property, which includes non-profit housing value and state fish and wildlife value, and excludes urban renewal excess value.

shared values that accompany rural lifestyles, the need to travel to Sandy for everyday services, and the proximity to Mt. Hood.

**Regional Population**

Approximately one-tenth of Oregon residents live in Clackamas County. Over half of the 363,276 County residents live in unincorporated areas. The City of Lake Oswego is the largest city in the County with approximately 36,000 residents, followed by the cities of Oregon City, West Linn, Milwaukie, Wilsonville, Canby, and Gladstone, which are each home to between 12,000 and 29,000 residents. The cities of Happy Valley, Sandy, Molalla, and Estacada have between 2,000 and 7,000 residents each, while the cities of Johnson City and Barlow have between 100 and 700 residents each. The City of Damascus was incorporated in 2004, and now contains a portion of the 12,851 residents that lived in the Damascus/Boring area in 2000. The City of Eagle Creek has less than 4,000 residents (Clackamas County 2005b). Portions of the cities of Rivergrove and Tualatin are also located in Clackamas County. The City of Sandy is the city closest to the proposed project area, and is also the only city located in the eastern half of the county.

The Clackamas County population has grown faster than population in Oregon as whole. The County exhibited population growth of 1.4 percent annually in the 1980s compared to 0.8 percent for the State, 2.0 percent annually in the 1990s compared to 1.9 percent for the State, and 1.8 percent annually during the period 2000-2004 compared to 1.2 percent for the State. Since 2000, trends have shifted from a growing incorporated area population to a growing unincorporated area population. During the period 2000 to 2004, population in the unincorporated areas grew 5.7 percent annually, compared to a 1.8 percent annual reduction in population in the incorporated areas.

<b>Population</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2004</b>	<b>AARG, 1980-1990</b>	<b>AARG, 1990-2000</b>	<b>AARG, 2000-2004</b>
Oregon State	2,633,156	2,842,321	3,421,399	3,594,586	0.8%	1.9%	1.2%
Clackamas Co.	241,919	278,850	338,391	363,276	1.4%	2.0%	1.8%
Incorporated	81,832	120,311	186,771	173,850	3.9%	4.5%	-1.8%
Unincorp.	160,087	158,539	151,620	189,426	-0.1%	-0.4%	5.7%

Sources: Census 2005g; Clackamas County 2005b; PSU 2005.

**Public Services and Community Facilities**

**Fire Protection**

The Hoodland Rural Fire Protection District No. 74 (HRFPD) provides fire protection service to the immediate area surrounding the proposed project. Beyond the HRFPD service area, the Oregon Department of Forestry Fire Protection District (ODF) provides fire protection service. The United States Department of Agriculture Forest Service has jurisdiction and responsibility for fire protection beyond these two service areas.

The HRFPD employs eight staff members and utilizes approximately 40 volunteers to provide fire suppression and prevention and emergency medical services from three stations. Seven of the eight staff are fire staff and certified emergency medical technicians. Heading east from Sandy, the Brightwood Station No. 252 is operated by volunteers and houses a squad vehicle, an engine and a

water tender. The Main Station No. 251 is staffed by paid firefighters from 6:30 a.m. to 6:30 p.m. (otherwise operated by volunteers) and houses a rescue vehicle, two engines, a water tender, and a brush vehicle. Government Camp Station No. 253 is operated by residents who live in the station and volunteers from the surrounding area. Government Camp Station No. 253 houses an engine and a water tender (HRFPD 2005).

The ODF protects 15.8 million acres of private and public forestland from fire, including 3.5 million acres of "wildland-urban interface," which are forest lands with residences and other structures within the reach of wildfire in that area. The residences in the project area are within this "wildland-urban interface." As of July 29, 2005, the ODF has listed three jurisdictions or communities in Clackamas County as high-risk for fire: Clackamas County as whole, the HRFPD, and the Sandy Rural Fire Protection District No. 72 (ODF 2005).

### ***Law Enforcement***

Two agencies respond to law enforcement issues in the project area: the Clackamas County Sheriff's Office (CSO) and the Patrol Division of the Oregon State Police. The CSO provides law enforcement along US 26, and has three divisions: Corrections, Patrol and Support Services. The CSO office is located in the City of Oregon City (CCSO 2005).

The Patrol Division of the Oregon State Police employs 329 uniformed members whose duty is to protect persons and property on state and interstate highways, including US 26. This Division provides services, such as transportation safety, the investigation of crimes, assisting disabled motorists, and supplying general information and assistance (OSP 2005).

### ***Schools***

The Oregon Trail School District (OTSD) provides educational services to families living near the proposed project. The OTSD service area of approximately 425 square miles includes the communities of Boring, Sandy and the Villages of Mt. Hood. This district operates six elementary schools, three middle schools, and one high school, with total enrollment of 4,200 students. The project area is within the Welches Attendance Area. Schools closest to the proposed project are Welches Elementary School and Welches Middle School, both located approximately one mile east of the project area, and Sandy High School, located approximately 15 miles west of the project area (OTSD 2005). School bus routes use US 26.

The two higher education institutions closest to the proposed project are the Southeast Center of Portland Community College (30 miles northwest) and Mt. Hood Community College (30 miles west) (CD 2005).

### ***Hospitals***

The closest hospital to the project site is Legacy Mt. Hood Medical Center in Gresham, Oregon, approximately 25 miles west of the project site (CD 2005). Providence Hood River Memorial Hospital is located in Hood River, Oregon, and Kaiser Sunnyside Medical Center is located in Clackamas, Oregon (CD 2005).

## **Recreation**

The project section is along US 26 between the Portland-Vancouver metropolitan area and the Mt. Hood ski areas. This route along US 26 is very heavily used during both the winter and summer recreation periods. The main ski areas located at Mt. Hood are Timberline Lodge, Mt. Hood Meadows, and Ski Bowl. In the project area, US 26 carries an average of 12,100 vehicles daily, with trucks accounting for approximately 10% of the traffic. The Bureau of Land Management operates the Wildwood Recreation Site, the entrance to which is on the proposed project section of US 26. The Wildwood Recreation Site is a day-use recreational site along the Salmon Wild and Scenic River that encompasses 560 acres of woodland. Recreational activities available at this site include group picnic facilities, ball fields, a play area, and hiking and walking trails. The Cascade Streamwatch Interpretive Trail, the Wildwood Wetland Boardwalk Trail, and the Salmon Huckleberry Wilderness are accessible from this recreation site (SUNY 2005).

## **US 26 and Transportation-Related Social Conditions**

### ***Safety and Mobility***

US 26 routes traffic through the project area, to and from Mt. Hood and the Portland-Vancouver Metropolitan area. Other roads and streets in the project area are residential. Safety along this section for vehicles turning left off of US 26 needs improvement, which is currently a detriment to the quality of life of commuters, residents, tourists traveling through the area, and freight carriers. Inadequate safety conditions on main roads can result in higher transportation costs, which can hurt local economic development and viability. A center turn lane along this section was originally planned, but not constructed due to concerns about the large, old trees located along US 26. Sections of US 26 to the immediate west and east of the project section have medians of adequate width such that vehicles have enough room to safely wait to turn left. US 26 sections on either end of the project section experience lower accidents rates when compared to the project section.

Local residents have asked ODOT to improve safety in this area. A petition containing 600 signatures was submitted to the ODOT District 2C Manager in 1999 requesting that ODOT address safety and access issues along this section of US 26. Fourteen accidents, of which two were fatal, were reported in this section of US 26 between January 1997 and December 2002. The Wildwood – Wemme Traffic Technical Report further documents accidents for the five-year period from 2000 through 2004, and reports 13 accidents, one included a fatality, 6 additional ones involved personal injury and 6 involved property damage.

### ***Transportation Options***

No identified sidewalks exist along this section of US 26, although alternative pedestrian pathways follow US 26. The existing 6- to 8-foot wide shoulder along US 26 in this section is a designated bicycle lane, and is used primarily by long-distance bicyclists, as opposed to local bicyclists. The Mountain Express Public Transit Service provides bus service along US 26 between Sandy and Rhododendron five times per weekday (ME 2006).

## **Social Groups**

### ***Full-Time vs. Seasonal Residents***

Full-time residents of the project area experience more of the adverse effects of unsafe conditions on this section of US 26 compared to seasonal residents.

### ***Minority and Low-Income Populations***

In 2000, 10.2 percent of the Mt. Hood Village CDP population identified themselves as minority. The same percentage for Clackamas County that year was 10.9 percent. The Oregon population as a whole was 16.5 percent minority that year (Census 2005c).

Approximately 6.4 percent of the population living in Mt. Hood Village CDP in 1999 was living below the poverty level. The same measure was 6.6 percent for Clackamas County, and 11.6 percent for the State of Oregon (Census 2005c).

### ***Age***

Mt. Hood Village CDP is similar to Clackamas County and the State of Oregon in terms of distribution of population by age, except that slightly more residents age 50-69 exist in the CDP compared to Clackamas County and the State of Oregon (Census 2005e).

### ***Special Populations***

One-half of one percent of the Mt. Hood Village CDP population was institutionalized in 2000, and represented 15 people in training programs for juvenile delinquents. The same measure for Clackamas County was 0.6 percent, while the same measure for the State of Oregon was 1.1 percent (Census 2005f). Few if any transit-dependent populations likely live in the project area due to the lack of public transit services on this section of US 26.

## **ENVIRONMENTAL CONSEQUENCES**

This section describes potential direct, indirect, and cumulative impacts of the No Build Alternative and the Widen to the North Alternative. Direct impacts would result from the permanent safety improvement associated with the project, and from construction activities. Indirect impacts can occur as a result of direct project impacts in places other than the immediate project area, or later in time compared to direct impacts. The cumulative impact analysis involves the review of proposed project impacts together with impacts of past, present, or reasonably foreseeable future actions that, collectively, could create trends that result in impacts to the project area.

### **Direct and Indirect Impacts**

#### *No Build Alternative*

Direct and indirect socioeconomic impacts would not occur under the No Build Alternative. Usual maintenance activities would continue on US 26, and related jobs and spending would continue to benefit the regional economy and the local economy on a more minor level.

The No Build Alternative would not result in an increase in the local quality of life related to safety, because the less-than-adequate safety conditions along this section of US 26 would persist. The No Build Alternative could perpetuate the increased demand for emergency services (e.g., police, ambulance service, hospitals) due to the high number of accidents in the project area. The high number of traffic accidents would continue to intermittently impede access by local residents, freight carriers, and tourists traveling this route. The No Build Alternative could slow future development in the long run due to the less-than-adequate safety conditions on this section of US 26.

The No Build Alternative would not result in disproportionate impacts upon minority, low-income, elderly, or institutionalized populations, nor would this alternative result in changes to regional or local travel patterns or access. Construction impacts would not occur.

#### *Widen to the North Alternative*

##### *Economic Impacts*

No businesses would be permanently displaced, nor would any business access be closed. No business relocation impacts would occur, nor would any right-of-way acquisition be required, such that any change in size or type of use of private property would be necessary. The assessed value of private property would not change as a result of this project because no property would change over from private property to public property and thus be removed from the tax rolls.

Traffic and associated shopping patterns would not change as a result of the proposed project. Certain redundant property accesses would be consolidated as a part of the proposed project. This consolidation would be coordinated with property owners and would result in simpler and safer access points.

The proposed project would improve safety conditions in this area, reduce the number of traffic accidents, and contribute to a higher quality of life. A higher quality of life is one of many factors that could increase property values in the local area and the potential for new development, as well

as attract new business and residents. Although no new development would directly result from the proposed project, improved safety on US 26 would not hinder new development or the influx of additional population into the project area in the long run, results that would represent indirect impacts of the proposed project. New development or additional population attributable to the proposed project could result in economic impacts indirectly attributable to the project, such as additional jobs, income, spending, retail sales, and property tax revenue in the long run.

A safer transportation route in this area with fewer accidents would support a stronger local and regional economy and consistent tourism flow through the area. The area would remain accessible from the Portland-Vancouver metropolitan area and the Mt. Hood area. Although operations at highway-related businesses in the project area would generally remain similar to existing conditions because US 26 traffic volumes would not change, patronage of these businesses could increase slightly because left turns off of US 26 would be easier to make. The project would not result in a change to established businesses districts.

Levels of employment, income, and spending associated with operation and maintenance of US 26 would not change in the long run, with the exception that some cost savings could occur due to fewer accidents along this section of highway.

### *Social Impacts*

No residences or businesses would be permanently displaced, nor would any access be closed. No housing or business relocation impacts would occur, nor would any right-of-way acquisition be required such that any change in size or type of use of private property would be necessary.

No impacts to community cohesion would occur because (1) the US 26 alignment would be similar to existing conditions, (2) the layout and boundaries of the community would not change, and (3) no displacements would occur. No neighborhood would be split, nor would any portion of a community or specific social group be split or isolated. The project would not affect community focal points or gathering places, nor would the demographics of the community change. Residents' distances from local public service providers would not change.

Regional and local travel patterns and volumes would not change under the Widen to the North Alternative. Certain redundant property accesses would be consolidated as a part of the proposed project. The access consolidation would be coordinated with property owners and would result in simpler and safer access points. Transportation choices offered in the area would not change, with the exception that shoulders for bicyclists would be safer. No recreational trails would be affected.

Public services providers would experience minor benefits attributable to the project. Emergency service providers could experience a decrease in calls for service because traffic accidents would decrease with the Widen to the North Alternative, and all public services providers and community facilities would benefit from the increased safety levels, easier left turns, and associated greater accessibility. Service response times would not change. In the long run, demand for public services and community facilities could increase if development occurs faster than under the No Build Alternative. The church and entrance to the Wildwood Recreation Area located within project area boundaries would experience negligible adverse impacts.

The Widen to the North Alternative would improve safety and mobility along US 26, reduce the number of accidents between Wildwood and Wemme, and increase the quality of life in the local community. The proposed project would improve safety for motorists turning left onto and off of US 26 between Wildwood and Wemme.

The proposed project would result in an increased feeling of safety in the neighborhood because the number of times vehicles would need to slow or stop behind turning vehicles would decrease. Vehicles slowing or stopping behind turning vehicles can lead to crashes. The project would not adversely affect the character and livability of the neighborhood. No specific social group would benefit, or be harmed disproportionately as a result of the proposed project. Due to their full-time status, full-time residents would experience more of the safety benefits resulting from the proposed project compared to seasonal residents.

Approximately 100 large, relatively old trees that now border the north side of US 26 would be removed as part of the proposed project. The beneficial social impacts due to the safety improvements this project offers would counteract possible negative social impacts attributable to changes in the visual environment due to tree removal. Visual simulations have been prepared to illustrate the changes to the visual environment. Overall the change to the visual environment will be moderate because although large trees will be removed along the north side of the highway, the primary dominant view of mature trees along both the north and south sides of this segment of US 26 will remain.

#### *Environmental Justice*

In general, the project area population is not disproportionately minority or low-income when compared to Clackamas County.

Types of adverse impacts that could potentially contribute to environmental justice impacts include noise, visual impacts, air quality impacts and construction impacts. Temporary noise, visual and air impacts attributable to construction of the proposed project would be few and those that do occur would be negligible – and construction impacts would be temporary. Safety and mobility improvements resulting from the Widen to the North Alternative would benefit all residents and businesses. Impacts from the proposed project would not disproportionately adversely affect minority or low-income populations.

#### *Construction Impacts*

The proposed project would cost \$5.64 million to build. This spending would result in temporary direct economic benefits, such as additional jobs in the construction industry, income earned by construction workers, and spending for project materials and supplies. Indirect economic benefits would occur due to increases in household spending and supplier spending, and would lag behind the construction period by several months. Geographically, these benefits would occur in the areas from which materials and labor are purchased. The economic benefits associated with construction, including direct and indirect jobs, income and spending, would be temporary and would last approximately as long as the construction period.

The majority of the proposed project would be built in summer 2008, with portions of the work performed in 2007. During construction, residents and businesses could experience disruptions,

including increased noise and dust, detours, and congestion associated with construction. These impacts would be short-term and temporary. Prior notice of temporary detours and possible congestion would be given to residents and businesses. No business or residence would be without an access at any time during construction.

The daily presence of construction workers at the project site could result in increased demand for goods and services at local commercial establishments, such as gas stations, food stores and restaurants. Nearby lodging places could experience a temporary increase in demand for service to the extent that construction workers originate from locations outside of daily commuting distance. These increases in demand could lead to increased sales at local businesses.

The agencies that currently provide public services near the project site would likely be adequate to serve the temporary daily influx of construction workers. The proposed project has a construction period that is relatively short and would therefore not likely result in the permanent movement of workers and their families to the project area, a related increase in demand for housing, or related increases in demand for public services, including school services.

### Cumulative Impacts

Table 4 lists past, present, and reasonably foreseeable future actions near the proposed project, and their associated socioeconomic impacts.

<b>Table 4 Projects for Cumulative Impact Analysis</b>	
<b>Project Description and Location</b>	<b>Potential Socioeconomic Impacts</b>
BLM Brightwood Quarry reopening and reclamation (west of the proposed project between US 26 and the Salmon River)	Temporary disruptions related to construction (noise, detours, congestion); jobs and income related to mining operations; traffic related to construction and operations.
US 26 preservation (paving) projects (immediately west and east of the proposed project)	Temporary disruptions related to construction (noise, detours, congestion); safety improvements.
Multipor Overcrossing safety improvement project (at US 26 and the east end of Government Camp Loop)	Temporary disruptions related to construction (noise, detours); safety improvements.
The potential development of a new trail as part of the Barlow Trail Association concept (BLM Wildwood Recreation Area)	Negligible temporary disruptions related to construction (noise); recreational benefit.
Limited development in Villages of Mt. Hood (Brightwood, Welches, Wemme, Zig Zag and Rhododendron)	Temporary disruptions related to construction (noise, detours, congestion); jobs, income, and traffic related to new commercial development.
Infill residential development (platted area between US 26 and the Sandy River, between Wildwood and Wemme)	Temporary disruptions related to construction (noise, detours, congestion); traffic and demand for services related to additional residents.
Development of two resorts and expansion of ski areas (in and around Government Camp)	Temporary disruptions related to construction (noise, detours, congestion); jobs, income, and traffic related to new commercial development; traffic and demand for services related to additional day and temporary visitors.

Although all of these projects would have construction impacts, only the US 26 preservation (paving) projects would likely occur concurrent with the proposed project. Construction impacts would be moderate during this time period, and the presence of construction workers at the sites during the day could stress the area slightly and temporarily. Mitigation measures for construction

would reduce proposed project impacts to a negligible level and would also therefore reduce cumulative impacts.

Permanent cumulative socioeconomic impacts could include increased traffic volumes and population; safety improvements; and increases in jobs, income, and spending. Long-term increases in population and related increases in demand for services would likely be consistent with current trends, and improved safety conditions on US 26 would accompany higher traffic volumes.

## **Mitigation**

Socioeconomic impacts as defined under NEPA arise due to physical occurrences, such as business patronage, disruption due to traffic detours, and access changes. Therefore, mitigation measures for traffic would not only mitigate traffic impacts but also socioeconomic and environmental justice impacts. Similarly, mitigation measures for noise, visual and other physical impacts would also mitigate socioeconomic and environmental justice impacts. In addition to mitigation measures listed for noise and visual impacts, the following mitigation measures would lessen socioeconomic and environmental justice impacts.

### *Construction*

- Prior notice of construction activity, detours, and possible congestion will be given to residents and businesses.
- Signage will clearly indicate detours.
- Hours of construction will be limited to daytime and evening.
- Access consolidations will be coordinated with property owners.
- ODOT will work with service providers to design and implement procedures so that access to the project area by emergency and law enforcement vehicles is never blocked.
- Consolidation of access points will be coordinated with property owners.

### *Operation*

No mitigation measures would be required for operation.

## REFERENCES

- Census. 2005a. U.S. Census, Census 2000. Summary File 4, Table QT-P33. Income in 1999 by Selected Household, Family, and Individual Characteristics: 2000. [www.census.gov](http://www.census.gov).
- Census. 2005b. U.S. Census, Census 2000. Summary File 3, Table QT-H4: Physical Housing Characteristics. Summary File 3, Table DP-4: Profile of Selected Housing Characteristics. Summary File 1, Table H3: Occupancy Status and Table H5: Vacancy Status. [www.census.gov](http://www.census.gov).
- Census 2005c. Census 2000. Summary File 1, Table QT-P4. Summary File 3, Table P87. [www.census.gov](http://www.census.gov)
- Census 2005d. Census 2000. Summary File 1, Table P-17. Average Household Size. [www.census.gov](http://www.census.gov)
- Census 2005e. Census 2000. Summary File 1, Table P12: Sex by Age. [www.census.gov](http://www.census.gov)
- Census 2005f. Census 2000. Summary File 1, Table PCT16: Group Quarters Population by Group Quarters Type. [www.census.gov](http://www.census.gov)
- Census 2005g. Census 2000. Population Statistics. [www.census.gov](http://www.census.gov), [http://www.census.gov/c2k00/s41/c5/chart\\_popl.html](http://www.census.gov/c2k00/s41/c5/chart_popl.html)
- City Data Mt. Hood (CD). 2005. Website. <http://www.city-data.com/city/Mount-Hood-Village-Oregon.html>
- Clackamas County. 2005a. County website. <http://www.co.clackamas.or.us/about/cityrev.htm>
- Clackamas County. 2005b. County website. <http://www.co.clackamas.or.us/about/overview.htm>.
- Clackamas County Finance Department (CCFD). 2005. Website. October 10, 2005. <http://www.co.clackamas.or.us/finance/finance/main.htm>
- Clackamas County Sheriff's Office (CCSO). 2005. Website. <http://www.co.clackamas.or.us/sheriff/divisions/main.htm>
- Hoodland Rural Fire Protection District No. 74 (HRFPD). 2005. Website. <http://www.hoodlandfire.com/xoops/modules/xoopsfaq/>
- Johnson, Andrew. 2005. Personal communication between Andrew Johnson, Oregon Department of Transportation, and Katie Carroz, URS Corporation. September 28, 2005.
- Mountain Express Sandy-Rhododendron Public Transit Service (ME). 2005. Website. [http://www.ci.sandy.or.us/cs/transit/mountain\\_express.htm](http://www.ci.sandy.or.us/cs/transit/mountain_express.htm)
- Oregon Department of Forestry Fire Protection District (ODF). 2005. Website. <http://www.oregon.gov/ODF/FIRE/fire.shtml>

Oregon Department of Revenue (ODOR). 2005. Property Tax Statistics.  
[http://egov.oregon.gov/DOR/STATS/docs/303-448-05/PTD\\_stats.htm](http://egov.oregon.gov/DOR/STATS/docs/303-448-05/PTD_stats.htm)  
<http://egov.oregon.gov/DOR/STATS/303-405-05-toc.shtml>

Oregon Employment Department (OED). 2005a. Oregon Labor Market Information System (OLMIS), Labor Force Data.  
<http://www.qualityinfo.org/olmisj/labforce?&year=2000&year=1995&year=1990&year=1980&month=00&stat=laborforce&msort=asc&ysort=asc&periodtype=01>

Oregon Employment Department (OED). 2005b. Oregon Labor Market Information System (OLMIS), Covered Employment and Wages. <http://olmis.emp.state.or.us/olmisj/CEP>

Oregon State Police Patrol Division (OSP). 2005. Website. (source: [http://egov.oregon.gov/OSP/PATROL/about\\_us.shtml](http://egov.oregon.gov/OSP/PATROL/about_us.shtml))

Oregon Trail School District (OTSD). 2005. Website. (source: <http://www.oregontrailschools.com/Default.aspx?indx=1&pageid=4>).

Portland State University Population Research Center (PSU). 2005. 2004 Population Report. [https://stage.www.pdx.edu/media/p/r/prc\\_2004\\_Population\\_Report.pdf](https://stage.www.pdx.edu/media/p/r/prc_2004_Population_Report.pdf)

State University of New York at Buffalo. 2005. BLM Wildwood Recreation Site information. <http://ublib.buffalo.edu/libraries/e-resources/ebooks/records/eff6702.html>