TABLE OF CONTENTS

1 INTRODUCTION ................................................................................................................. 1
2 RESOURCE STUDY AREA ................................................................................................. 1
3 REGULATORY FRAMEWORK ........................................................................................... 4
  3.1 State Guidance ........................................................................................................... 4
4 STUDY METHODOLOGY ................................................................................................. 4
  4.1 Literature Review ........................................................................................................ 4
5 BASELINE CHARACTERIZATION ..................................................................................... 6
  5.1 General Economic Conditions .................................................................................... 6
  5.2 General Social Conditions ......................................................................................... 7
    5.2.1 History and Background ...................................................................................... 7
    5.2.2 Social Activities .................................................................................................. 8
    5.2.3 General Social Demographics .......................................................................... 8
  5.3 Population Trends and Demographic Characteristics .................................................. 8
    5.3.1 General Population Information .......................................................................... 8
    5.3.2 Race and Ethnicity .............................................................................................. 11
    5.3.3 Migrant and Seasonal Farmworkers ................................................................... 11
    5.3.4 Income and Poverty ............................................................................................ 12
  5.4 Existing Socioeconomic Environment of Malheur County ........................................ 13
    5.4.1 Household Income in Malheur County ................................................................ 16
    5.4.2 Malheur County Employment ............................................................................. 18
    5.4.3 Malheur County Tax Base .................................................................................. 19
  5.5 Malheur County Public Services ................................................................................ 20
    5.5.1 Water, Sewer, and Solid Waste ........................................................................... 20
    5.5.2 Fire Protection ...................................................................................................... 21
    5.5.3 Law Enforcement and the Criminal Justice System ......................................... 21
    5.5.4 Schools and Education ....................................................................................... 22
6 BIBLIOGRAPHY ................................................................................................................ 23
7 CONTACTS ....................................................................................................................... 27
8 LIST OF PREPARERS ......................................................................................................... 27

LIST OF TABLES

Table 1: Demographic Characteristics of Oregon, Malheur County, and Study Area Communities ................................................................. 10
Table 2: Migrant and Seasonal Farmworker Estimates for Malheur County .................... 11
Table 3: Median and Mean Household Incomes for Malheur County ................................ 12
Table 4: Basic Housing Characteristics and Home Prices ................................................. 13
Table 5: Housing Specifications ....................................................................................... 14
Table 6: Total Personal Income in the Study Area, 2007 to 2016 .................................... 17
Table 7: Median Earnings by Industry for the Past 12 Months for Malheur County and the Cities of Ontario, Nyssa, Vale, Adrian, and Jordan Valley ........ 17
Table 8: Employment by Sector in Malheur County .................................................. 19
Table 9: Malheur County 2015/2016 Revenues and Expenditures .......................... 20
Table 10: 2016-2017 School Enrollment ..................................................................... 22

LIST OF FIGURES

Figure 1: Location Map .......................................................................................... 2
Figure 2: Permit Area Map .................................................................................. 3
Figure 3: Socioeconomics Study Area .................................................................... 5
Figure 4: Population Trends for Malheur County, Oregon, 1900 to 1910 ............. 9
Figure 5: New Foreclosure Filings by Type ............................................................. 16
## LIST OF ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>BEA</td>
<td>Bureau of Economic Analysis</td>
</tr>
<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
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<td>DHS</td>
<td>Department of Human Services</td>
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<td>Education Service District</td>
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<td>HDR Engineering, Inc.</td>
</tr>
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<td>MCSO</td>
<td>Malheur County Sheriff’s Office</td>
</tr>
<tr>
<td>MSFWs</td>
<td>migrant and seasonal farmworkers</td>
</tr>
<tr>
<td>OAR</td>
<td>Oregon Administrative Rules</td>
</tr>
<tr>
<td>ODE</td>
<td>Oregon Department of Education</td>
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<tr>
<td>OED</td>
<td>Oregon Employment Department</td>
</tr>
<tr>
<td>OSP</td>
<td>Oregon State Police</td>
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<td>Project</td>
<td>Grassy Mountain Mine Project</td>
</tr>
<tr>
<td>SNAP</td>
<td>supplemental nutrition assistance program</td>
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<td>Study Area</td>
<td>Socioeconomics Study Area</td>
</tr>
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<td>U.S.</td>
<td>United States</td>
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<tr>
<td>US 20</td>
<td>United States Highway 20</td>
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<td>Zillow</td>
<td>Zillow, Inc.</td>
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INTRODUCTION

The purpose of the socioeconomic baseline study is to characterize existing socioeconomic conditions at the Grassy Mountain Mine Project (Project) in Malheur County, Oregon. The baseline study will be used to support future mine permitting. The baseline study will enable the Project’s potential direct and indirect effects on the County’s population to be measured, taking key socioeconomic aspects into account. This baseline report will be used to support a National Environmental Policy Act evaluation for future mine site activities and will be included in the Consolidated Permit Application submitted to the Oregon Department of Geology and Mineral Industries.

The format of this report follows the format of the July 2015 Socioeconomic Baseline Study prepared for the Project by HDR Engineering, Inc. (HDR) (HDR 2015). Most of the background information is the same as the July 2015 HDR report, while updated information has been added where necessary. The updated information includes: 1) expansion/description of the permit area; 2) updates of socioeconomic data with different or more recent available data; and 3) Contacts and Preparers.

RESOURCE STUDY AREA

The Project is located in Malheur County, Oregon, approximately 22 miles south-southwest of Vale (Figure 1), and consists of two areas: the Mine and Process Area and the Access Road Area (Permit Area) (Figure 2). The Mine and Process Area is located on three patented lode mining claims and unpatented lode mining claims that cover an estimated 886 acres. These patented and unpatented lode mining claims are part of a larger land position that includes 419 unpatented lode mining claims and nine mill site claims on lands administered by the Bureau of Land Management (BLM) (Figure 2). All proposed mining would occur on the patented claims, with some mine facilities on unpatented claims. The Mine and Process Area is in all or portions of Sections 5 through 8, Township 22 South, Range 44 East (T22S, R44E) (Willamette Meridian).

The Access Road Area is located on public land administered by the BLM, and private land controlled by others (Figure 2). A portion of the Access Road Area is a Malheur County Road named Twin Springs Road. The Access Road Area extends north from the Mine and Process Area to Russell Road, a paved Malheur County Road. The Access Road Area is in portions of Section 5, T22S, R44E, Sections 3, 10, 11, 14, 15, 21 through 23, 28, 29, and 32, T21S, R44E, Sections 1, 12 through 14, 23, 26, 27, and 34, T20S, R44E, Sections 6 and 7, T20S, R45E, and Sections 22, 23, 26, 35, and 36, T19S, R44E (Willamette Meridian). The width of the Access Road Area is 300 feet (150 feet on either side of the access road centerline) to accommodate possible minor widening or re-routing, and a potential powerline adjacent to the access road. There are several areas shown that are significantly wider than 300 feet on the Permit Area Map (Figure 2), which are areas where the final alignment has not yet been determined. The final engineering of the road will be consistent throughout, and within the Permit Area. The Access Road Area also includes a buffer on either side of the proposed road width for the collection of environmental baseline data. The road corridor will be 40 feet wide, which includes a 24-foot wide road travel width (12 feet on either side of the road centerline), four-foot wide shoulders on each side of the road, minimum...
CALICO RESOURCES USA CORP.
GRASSY MOUNTAIN MINE PROJECT
Location Map

Projection: UTM Zone 11 North, NAD83, meters

Explanation
- Permit Area
- Existing Road
one-foot wide ditches on each side of the road, and appropriate cut and fill. The Access Road Area totals approximately 876 acres.

The study area is defined as the geographical area in which the potential direct and indirect socioeconomic effects of the Project are realized. The purpose of documenting the socioeconomic setting of the study area is to provide an understanding of the social and economic forces that have shaped the area and to provide a frame of reference necessary to estimate the social and economic effects of the Project. Figure 3 shows the Socioeconomics Study Area (Study Area). The Study Area for socioeconomic conditions is Malheur County, which includes the cities of Vale, Nyssa, Ontario, Adrian, Jordan Valley, and other unincorporated communities.

Malheur County is Oregon’s second largest county in area but is largely undeveloped. The County is in the southeastern corner of the State of Oregon and is crossed by two major rivers, the Snake River and the Malheur River. Ninety-four percent of the County is undeveloped rangeland, most of which is federally-owned and administered by the BLM. Developed areas along the Snake and Malheur Rivers support agricultural production areas and agriculture-focused communities.

3 REGULATORY FRAMEWORK

3.1 State Guidance

Oregon Administrative Rules (OAR) Section 632 Division 37 describes the process for consolidated permitting of mining operations. The State of Oregon would have to authorize the Project consistent with the consolidated process. Division 37 requires an applicant to describe the baseline socioeconomic conditions (OAR 632-037-0055[1][o]) and requires an independent socioeconomic impact analysis (OAR 632-037-0090):

- Concurrent with the development of an environmental evaluation, the Department [of Geology and Mineral Industries] shall direct staff or hire a third-party contractor to prepare a socioeconomic impact analysis. The analysis shall include but not be limited to an identification of the major and reasonably foreseeable socioeconomic impacts on individuals and communities located in the vicinity of the proposed mine resulting from mine construction and operation. Such identification shall include the short and long-term impacts on population, economics, infrastructure and fiscal structure. The Department shall make the analysis available to the public upon request.

- Upon completion of the socioeconomic impact analysis, the Department shall distribute a copy of the analysis to each local government within the vicinity of the proposed mine and affected agencies.

4 STUDY METHODOLOGY

4.1 Literature Review

The majority of the baseline characterization in this report has been taken from the July 2015 HDR report. Additional or updated information has been added where necessary. References used for this report are included in Section 6, Bibliography.
Figure 3. Projection: UTM Zone 11 North, NAD83, meters

Explanation:
- Mine Permit Area
- Socioeconomics Study Area (Malheur County)

GRASSY MOUNTAIN MINE PROJECT

Socioeconomics Study Area

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri (Korea), Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community
5 BASELINE CHARACTERIZATION

5.1 General Economic Conditions

The primary industries in Malheur County are agriculture, livestock, food processing, fruit and vegetable farming, tourism, and recreation. Malheur County’s largest employer is Ore-Ida. This facility is a potato-based frozen foods distributor located in Ontario, employing approximately 1,000 workers. Oregon Snake River Correctional Institution, the largest facility in the Oregon Department of Corrections, employs 900 people, and is the County’s second largest employer. Idaho residents hold a substantial share of the jobs in Malheur County. Due to this commuting pattern, the federal government recognizes Idaho's Payette County plus Oregon's Malheur County as a single labor market known as the Ontario Micropolitan Statistical Area.

The northeastern corner of Malheur County, also known as Western Treasure Valley, is primarily used for farming, which makes up a large portion of the economy in the County. Oregon’s no tax policy for retail merchandise serves the County well. The County has a fairly large level of employment in the retail sector, with Ontario serving as a retail center for many surrounding communities. Tourism is also a major factor that holds a considerable amount of weight in the regional economy, with Cow Hollow Park, Lake Owyhee State Park, Leslie Gulch, and Malheur National Forest being the main attractions.

In 2010, the United States (U.S.) Census Bureau reported a population of 31,312. Population estimates for 2016 were 30,551, a decrease of approximately 761 (U.S. Census Bureau 2016a). Between 1990 and 2010, Malheur County’s population, real personal income, and employment decreased, then increased by 2010. This pattern is similar to the State of Oregon and other counties in the region (U.S. Bureau of Economic Analysis [BEA] 2016a, 2017).

When the Owyhee Reservoir was built in 1939, it created a consistent and abundant water source for irrigation. This allowed local farmers to expand operations into the entire Western Treasure Valley, an extremely fertile farming area. Row crop farming has grown and continues to contribute to a strong economy in Malheur County. The amount of Mexican American migrant workers has grown considerably, as the agricultural industry has increased over the years, and make up a majority of the farm labor force.

Agriculture remains important to Malheur County, but agriculture’s relative share of the economy has fallen over time as farming and ranching have suffered from the volatility in the price of their respective goods. In recent decades, agricultural employment declined steeply even as farm and ranch personal income increased. Regionally, agriculture accounted for approximately 12 percent of the total earnings by industry in 2015 (BEA 2016b), representing approximately 11 percent of the total employment (BEA 2016c). Those industries that have seen a relatively steady increase since 2001 in employment figures and earnings include wholesale trade and accommodation and food services. All other industries have seen stagnation or decline (BEA 2016b, 2016c).
5.2 **General Social Conditions**

5.2.1 **History and Background**

Malheur County is largely rural, with the population concentrated in the northern part of the County. The larger cities in Malheur County are proximate to more urbanized areas in Idaho, including the cities of Nampa and Boise. While residents of northern Malheur County have a rural lifestyle, they are near goods and services in western Idaho.

Malheur County's social life reflects its rural nature. A good portion of the population is, in some way, involved with agriculture, while others are employed by shops and large processing plants and other industries involved with agriculture. Historically, many of the immigrants to Malheur arrived precisely due to the large amounts of available rangeland.

The County seat, Vale, is located where U.S. Highway 20 (US 20) and US 26 intersect. These two highways are principal access routes for this part of eastern Oregon and for nearby western Idaho. Ontario (2016 population 11,089; U.S. Census Bureau 2016a) is the largest city in the County and is the most eastern city of any size in the state, sitting on the Idaho border and inside the Mountain time zone.

Historically, Malheur County was first settled by miners and stockmen in the early 1860s. Discovery of gold in 1863 spurred interest in the area, which also resulted in the establishment of settlements and stock ranches and the influx of immigrants to the region. In the 1890s, Basque settlers came to the region, engaging mostly in sheep ranching. The County’s population has increased steadily since its settlement, with brief periods of decline and rebound since the mid-1980s (Oregon Secretary of State 2017).

Nyssa is the location of the first farm labor camp set up for Japanese Americans during World War II. There was a need for laborers to work the beet fields in Malheur County due to the depletion of labor from the armed services draft. Local officials appealed to have a few hundred of the recently detained Japanese Americans in Portland sent to Nyssa from the detention center in Portland, to work the fields. Malheur County continues to be home to a significant Japanese American community (Densho Encyclopedia 2017).

During the last four decades, Malheur County’s population, employment, and real personal income have fluctuated. In 2016, the population of Malheur County was estimated at 30,551 (U.S. Census Bureau 2016a). Malheur County has a low-density population, with a density of approximately 3.1 people per square mile. Current population projections indicate that two of Malheur County's incorporated cities have fewer than two hundred persons: Adrian at 154 people and Jordan Valley at 153 people (U.S. Census Bureau 2016a).

Malheur County residents are proud of the County’s relationship to the Oregon Trail, rock hounding, and ranching way of life. The City of Vale was the first stop in the state for travelers using the Oregon Trail to go west. Locals refer to the City of Nyssa as the thunderegg capital of the world.
5.2.2 Social Activities

The Malheur County Fair and Rodeo began in 1909 as the Ontario Corn Festival and has become one of the premier county fairs in the Pacific Northwest. The fair has an annual gate count of approximately 20,000 people. The fair showcases a diverse array of the region’s accomplishments, including, agricultural, cultural, and homemaking products (Malheur County Fair Grounds 2017).

Aside from the County fair, social and public events are limited to what is offered in each specific community. The City of Ontario, as it is the most populated community in the County, is the site for many major events including the America’s Global Village Festival, the Japanese-American Obon Festival, the Winter Wonderland Parade, the October Faire, the Ontario Aire Faire, and the Basque Dinner & Dance (Ontario Area Chamber of Commerce 2017).

5.2.3 General Social Demographics

Malheur County has a slightly higher percentage of people 18 years of age and younger than the State as a whole, but its proportion of residents age 65 and older is about the same as the State. Females make up a smaller proportion of the population than the State as a whole. The County is not very racially diverse; 86 percent of residents are white. Median household incomes are substantially lower in Malheur County than in the State as a whole, and median values of owner-occupied homes are lower in Malheur County than the State. Approximately 38 percent of residents have a high school diploma and approximately 34 percent have completed some college. The rates of residents having a high school diploma are higher than the State as a whole, but the rates of residents having completed some college are lower than the State as a whole. The rate of college graduates is lower than the State as a whole (U.S. Census Bureau 2016b).

Most residents speak English at home. Approximately 24 percent of the County’s residents primarily speak a foreign language, with Spanish the most prevalent. Approximately 32 percent of County residents identify themselves as being of Hispanic or Latino ethnicity (regardless of race). This rate is higher than the State, which reports a Hispanic or Latino proportion as approximately 12 percent of the total population.

5.3 Population Trends and Demographic Characteristics

5.3.1 General Population Information

Malheur County is one of the state’s largest counties, by area, but is sparsely populated. The County’s population centers consist mostly of its incorporated cities (Ontario, Vale, Nyssa, Adrian, and Jordan Valley). Several unincorporated communities are also located within the County.

Malheur County’s population has grown slowly and includes periods of net population gain and loss. Table 1 shows the County’s population changes between 1900 and 2010.
The population of Malheur County steadily increased from 1900 through 1930, then saw a large increase of approximately 75 percent by 1940. Between 1950 and 1960, there was a small decrease, then the population began to increase again in 1970. Between 1980 and 1990, the population saw another small decrease of approximately three percent. The 2000 decennial census showed a rebound with the population increasing by approximately 21 percent. The 2010 decennial census reported a County population of 31,312, which is an overall decrease of approximately 0.7 percent from the 2000 census estimate. Between April 1, 2010, which is the baseline date for the 2010 census, and July 1, 2016, 873 people left Malheur County. The 2016 U.S. Census Bureau population estimate shows a decline in population to 30,439, which is approximately a three percent decrease from the 2010 decennial census estimate (U.S. Census Bureau 1996, 2016a, 2017).

Table 1 summarizes the current, basic population demographics for Oregon, Malheur County, and the cities of Ontario, Nyssa, Vale, Adrian, and Jordan Valley.

The population trend of the County, showing a 2.5 percent decrease in population overall since 2010, is dissimilar to the State, which had a 2.8 percent increase since 2010 (U.S. Census Bureau 2016a). Demographics of Malheur County differ from the State with respect to gender (a higher percent of males than females live in the County than in the State), and age (a higher population of residents less than 18 years of age live in the County than in the State and the County’s median age is slightly lower). The cities of Ontario, Nyssa, and Vale have a lower median age than the County and State which results in higher proportions of people who are under age 18. Adrian and Jordan Valley have a considerably higher median age than the County and State. Ontario, Nyssa, Vale, and Adrian are similar to the State in that they all have a higher proportion of females than males. Jordan Valley is similar to the State in that they both have a higher proportion of males than females. Adrian and Jordan Valley have lower proportions of residents under the age of 18, and Jordan Valley has the highest proportion of residents aged 65 and older (U.S. Census Bureau 2016a).
<table>
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<tr>
<th>Demographic</th>
<th>Oregon Estimate</th>
<th>Oregon %</th>
<th>Malheur County Estimate</th>
<th>Malheur County %</th>
<th>Ontario Estimate</th>
<th>Ontario %</th>
<th>Nyssa Estimate</th>
<th>Nyssa %</th>
<th>Vale Estimate</th>
<th>Vale %</th>
<th>Adrian Estimate</th>
<th>Adrian %</th>
<th>Jordan Valley Estimate</th>
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<td>30,551</td>
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<td>American Indian and Alaska Native</td>
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<td>0.6</td>
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<td>26</td>
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<tr>
<td>Asian</td>
<td>156,695</td>
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<td>501</td>
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<td>246</td>
<td>2</td>
<td>14</td>
<td>0.4</td>
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<td>9</td>
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<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
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<td>12</td>
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<td>3</td>
<td>0.03</td>
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<tr>
<td>Some other race alone</td>
<td>132,667</td>
<td>3</td>
<td>2,025</td>
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<td>222</td>
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<td>89</td>
<td>5</td>
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<td>Two or more races</td>
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<td>1,225</td>
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<td>588</td>
<td>5</td>
<td>101</td>
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<td>28</td>
<td>2</td>
<td>1</td>
<td>0.6</td>
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<tr>
<td>Hispanic or Latino (of any race)</td>
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<td>9,987</td>
<td>33</td>
<td>4,427</td>
<td>40</td>
<td>2,016</td>
<td>63</td>
<td>496</td>
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<td>1,201</td>
<td>11</td>
<td>519</td>
<td>16</td>
<td>226</td>
<td>12</td>
<td>24</td>
<td>16</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau 2016a, 2016d
5.3.2 Race and Ethnicity

As Table 1 shows, most residents of Malheur County and the cities of Ontario, Nyssa, Vale, Adrian, and Jordan Valley are white. The racial minority in Ontario, Nyssa, Vale, and Adrian that comprises the largest proportion of non-white people is some other race. The U.S. Census Bureau considers people who identify as Hispanic or Latino to be ethnic minorities, not racial minorities. However, when Hispanic or Latino people have to choose a race for a census, they often choose some other race or two or more races. The proportions of residents that identify as some other race or two or more races are higher in the County and in the City of Ontario than the State as a whole. The proportion of people who identify as some other race in Vale is approximately two percent greater than the State. Jordan Valley is the only community in the Study Area that does not have any person identify as a race other than white. Only one person in Adrian identifies as two or more races. The City of Nyssa has the largest percentage of people who identify as Hispanic or Latino (U.S. Census Bureau 2016a).

Approximately 11 percent of County and Ontario residents, 16 percent of Nyssa and Adrian residents, 12 percent of Vale residents, and two percent of Jordan Valley residents are foreign born. Of these, approximately 86 percent of foreign born people in the County come from Mexico or Central America (the countries of Costa Rica, El Salvador, Honduras, and Nicaragua). The corresponding rate for the State of Oregon is approximately 43 percent (U.S. Census Bureau 2016d). English is the primary language spoken at home in Malheur County with approximately 76 percent of the population speaking English. Spanish is the primary language that is spoken after English, with approximately 22 percent of the County residents being Spanish speakers. Of that 22 percent, approximately ten percent do not speak English well. The remaining 1.5 percent of the population speaks a language other than English or Spanish (U.S. Census Bureau 2016e).

5.3.3 Migrant and Seasonal Farmworkers

Information about the numbers of migrant and seasonal farmworkers (MSFWs) in Malheur County is available in the Oregon Update Migrant and Seasonal Farmworker Enumeration Profiles Study (Larson Assistance Services 2013). The report includes estimates for total MSFWs, migrant workers, seasonal workers, and non-farmworkers in migrant and seasonal worker households. Table 2 summarizes the Malheur County estimates for MSFWs. More recent information is not available.

Table 2: Migrant and Seasonal Farmworker Estimates for Malheur County

<table>
<thead>
<tr>
<th>Total MSFW</th>
<th>Migrant Workers</th>
<th>Seasonal Workers</th>
<th>Non-Farmworkers in Migrant Worker Households</th>
<th>Non-Farmworkers in Seasonal Worker Households</th>
<th>Total MSFW and non-MSFW</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,981</td>
<td>2,003</td>
<td>3,977</td>
<td>1,511</td>
<td>3,000</td>
<td>10,492</td>
</tr>
</tbody>
</table>

Source: Larson Assistance Services 2013

Using the U.S. Census Bureau’s County population estimate for 2013 (30,898), approximately 19 percent of County residents were MSFWs and approximately 15 percent were non-farmworkers.
who lived in the same households as MSFWs. The total population of MSFWs and non-MSFWs comprised approximately 34 percent of the County’s population.

The 2012 Census of Agriculture (U.S. Department of Agriculture 2012) reported a total migrant farmworker count of 771 workers on 39 farms in Malheur County. The Census of Agriculture defines a migrant worker as someone whose employment requires travel that prevents the worker from returning to his or her permanent place of residence the same day. The Census of Agriculture also reports unpaid farmworkers who are agricultural workers not on the payroll who performed activities or work on a farm or ranch. The 2012 Census of Agriculture estimates that the County had 1,226 unpaid workers. Some of these unpaid workers could be MSFWs who are day laborers and paid by a third party.

5.3.4 Income and Poverty

Table 3 summarizes the annual mean and median incomes for the State of Oregon, Malheur County, and the cities in the Study Area.

Table 3: Median and Mean Household Incomes for Malheur County

<table>
<thead>
<tr>
<th>Geography</th>
<th>Median Income</th>
<th>Difference from State</th>
<th>Mean Income</th>
<th>Difference from State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>51,243</td>
<td>-</td>
<td>69,040</td>
<td>-</td>
</tr>
<tr>
<td>Malheur County</td>
<td>35,418</td>
<td>-15,825</td>
<td>48,070</td>
<td>-20,970</td>
</tr>
<tr>
<td>Ontario</td>
<td>40,518</td>
<td>-23,483</td>
<td>44,075</td>
<td>-28,645</td>
</tr>
<tr>
<td>Nyssa</td>
<td>37,760</td>
<td>-20,513</td>
<td>47,029</td>
<td>-22,411</td>
</tr>
<tr>
<td>Vale</td>
<td>34,950</td>
<td>-16,193</td>
<td>42,930</td>
<td>-26,310</td>
</tr>
<tr>
<td>Adrian</td>
<td>40,586</td>
<td>-1,737</td>
<td>47,949</td>
<td>21,991</td>
</tr>
<tr>
<td>Jordan Valley</td>
<td>33,333</td>
<td>-7,910</td>
<td>47,949</td>
<td>-21,991</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau 2016f

All the cities in the Study Area and Malheur County have lower median and mean incomes when compared to the State. Ontario and Vale have the biggest negative differences from the State for median and mean incomes. Nyssa has the lowest difference in median income from the State, while Adrian has the lowest difference in mean income. Personal income for the Ontario, Oregon-Idaho Micropolitan Statistical Area increased by approximately five percent from 2014 to 2015, continuing a trend that started in 2009, after dropping by almost five percent (BEA 2016d).

In 2015, Malheur County had the highest poverty rate in Oregon, at 24.9 percent. The counties surrounding Malheur all have poverty levels greater than the statewide rate of 15.2 percent (Harney – 16.3; Grant – 16.4; Baker – 15.3) (U.S. Census Bureau 2016f). The Oregon Department of Human Services (DHS) reports that Malheur County has two poverty hotspots in Ontario and one in Vale. Among the three hotspots, Ontario East had the highest poverty rate, the fourth lowest high school completion rate, and the fifth highest percentage of households headed by single mothers. The Ontario Southwest area had the fifth highest rate of child welfare involvement among all Oregon hotspots (DHS 2017a).

The DHS reported approximately 8,356 individuals per month received supplemental nutrition assistance program (SNAP) benefits in 2017 (January through October), in Malheur County. Out
of the 8,356 individuals, DHS reported approximately 863 individuals were over age 60, and approximately 1,142 monthly recipients were under age 5 (DHS 2017b).

5.4 Existing Socioeconomic Environment of Malheur County

Table 4 summarizes the basic housing characteristics of Malheur County.

Table 4: Basic Housing Characteristics and Home Prices

<table>
<thead>
<tr>
<th>Metric</th>
<th>Number</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Units1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11,629</td>
<td>--</td>
</tr>
<tr>
<td>Occupied Housing Units</td>
<td>10,286</td>
<td>88.5</td>
</tr>
<tr>
<td>Owner-Occupied</td>
<td>6,145</td>
<td>59.7 (of occupied)</td>
</tr>
<tr>
<td>Renter-Occupied</td>
<td>4,141</td>
<td>40.3 (of occupied)</td>
</tr>
<tr>
<td>Vacant Housing Units</td>
<td>1,343</td>
<td>11.5</td>
</tr>
<tr>
<td>Homeowner Vacancy Rate2</td>
<td>2.5</td>
<td>--</td>
</tr>
<tr>
<td>Rental Vacancy Rate3</td>
<td>4.3</td>
<td>--</td>
</tr>
<tr>
<td>Average Household Size</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Owner-Occupied</td>
<td>2.68</td>
<td>--</td>
</tr>
<tr>
<td>Renter-Occupied</td>
<td>2.53</td>
<td>--</td>
</tr>
<tr>
<td>Location of Housing Units5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ontario</td>
<td>4,744</td>
<td>40.8 (of County total)</td>
</tr>
<tr>
<td>Nyssa</td>
<td>1,112</td>
<td>9.6 (of County total)</td>
</tr>
<tr>
<td>Vale</td>
<td>730</td>
<td>6.3 (of County total)</td>
</tr>
<tr>
<td>Adrian</td>
<td>77</td>
<td>0.7 (of County total)</td>
</tr>
<tr>
<td>Jordan Valley</td>
<td>135</td>
<td>1.2 (of County total)</td>
</tr>
<tr>
<td>Homes for Sale4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>94</td>
<td>--</td>
</tr>
<tr>
<td>Ontario</td>
<td>59</td>
<td>62.8</td>
</tr>
<tr>
<td>Vale</td>
<td>17</td>
<td>18.1</td>
</tr>
<tr>
<td>Nyssa</td>
<td>14</td>
<td>14.9</td>
</tr>
<tr>
<td>Adrian</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Jordan Valley</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Home Price Range4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to $82,999</td>
<td>13</td>
<td>13.8</td>
</tr>
<tr>
<td>$83,000 to $109,999</td>
<td>16</td>
<td>17.0</td>
</tr>
<tr>
<td>$110,000 to $149,999</td>
<td>15</td>
<td>16.0</td>
</tr>
<tr>
<td>$150,000 to $189,999</td>
<td>13</td>
<td>13.8</td>
</tr>
<tr>
<td>$190,000 to $289,999</td>
<td>14</td>
<td>14.9</td>
</tr>
<tr>
<td>$290,000 to $549,999</td>
<td>13</td>
<td>13.8</td>
</tr>
<tr>
<td>$550,000 and up</td>
<td>10</td>
<td>11.7</td>
</tr>
</tbody>
</table>

1Source: U.S. Census Bureau 2016g
2The proportion of the homeowner inventory that is vacant and for sale.
3The proportion of the rental inventory that is vacant and for rent.
4landwatch.com 2017

The County has 11,629 housing units, with 88.5 percent occupied and 11.5 percent vacant. These rates are similar to those for the State as a whole. Of the occupied households in the County, 59.7 percent are owner-occupied, and 40.3 percent are renter-occupied. Owner-occupied homes have a slightly higher average household size than renter-occupied units. Approximately 40 percent of all housing units are in Ontario (U.S. Census Bureau 2016g).
In the fall of 2017, there were approximately 94 homes for sale in Malheur County, with Ontario having the most with 59 homes, followed by Vale with 17, Nyssa with 14, and one each for Adrian and Jordan Valley. The remaining two homes were in other small towns in the Study Area. The cost of homes ranges from less than $82,999 to $71,999 to $550,000 and up. The home price range with the largest percentage (17 percent) is $110,000 to $149,999, and the home price range with the smallest percentage (11.7 percent) is $550,000 and up (landwatch.com 2017). The current property tax rate (December 2016) is $10.72, which is the rate per $1,000 of real market value for residential homes and land (Sperling’s Best Places 2017).

Table 5 summarizes housing specifics for the County.

**Table 5: Housing specifics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Number</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Units</td>
<td>11,629</td>
<td></td>
</tr>
<tr>
<td><em>Year Structure Built</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built 2014 or later</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Built 2010 to 2013</td>
<td>65</td>
<td>0.6</td>
</tr>
<tr>
<td>Built 2000 to 2009</td>
<td>855</td>
<td>7.4</td>
</tr>
<tr>
<td>Built 1990 to 1999</td>
<td>1,503</td>
<td>12.9</td>
</tr>
<tr>
<td>Built 1980 to 1989</td>
<td>1,453</td>
<td>12.5</td>
</tr>
<tr>
<td>Built 1970 to 1979</td>
<td>2,694</td>
<td>23.2</td>
</tr>
<tr>
<td>Built 1960 to 1969</td>
<td>1,089</td>
<td>9.4</td>
</tr>
<tr>
<td>Built 1950 to 1959</td>
<td>1,192</td>
<td>10.2</td>
</tr>
<tr>
<td>Built 1940 to 1949</td>
<td>1,353</td>
<td>11.6</td>
</tr>
<tr>
<td>Built 1939 or earlier</td>
<td>1,425</td>
<td>12.2</td>
</tr>
<tr>
<td><em>Year Householder Moved into Unit</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moved in 2015 or later</td>
<td>199</td>
<td>1.9 (of occupied)</td>
</tr>
<tr>
<td>Moved in 2010 to 2014</td>
<td>3,032</td>
<td>29.5 (of occupied)</td>
</tr>
<tr>
<td>Moved in 2000 to 2009</td>
<td>3,774</td>
<td>36.7 (of occupied)</td>
</tr>
<tr>
<td>Moved in 1990 to 1999</td>
<td>1,470</td>
<td>14.3 (of occupied)</td>
</tr>
<tr>
<td>Moved in 1980 to 1989</td>
<td>861</td>
<td>8.4 (of occupied)</td>
</tr>
<tr>
<td>Moved in 1979 and earlier</td>
<td>950</td>
<td>9.2 (of occupied)</td>
</tr>
<tr>
<td><em>Home Value, Owner-Occupied Units (6,145 units)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $50,000</td>
<td>815</td>
<td>13.3</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>1,387</td>
<td>22.6</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>1,366</td>
<td>22.2</td>
</tr>
<tr>
<td>$150,000 to $199,999</td>
<td>1,017</td>
<td>16.5</td>
</tr>
<tr>
<td>$200,000 to $299,999</td>
<td>858</td>
<td>14.0</td>
</tr>
<tr>
<td>$300,000 to $499,999</td>
<td>471</td>
<td>7.7</td>
</tr>
<tr>
<td>$500,000 to $999,999</td>
<td>190</td>
<td>3.1</td>
</tr>
<tr>
<td>$1,000,000 or more</td>
<td>41</td>
<td>0.7</td>
</tr>
<tr>
<td><em>Gross Rent, Occupied Units Paying Rent (3,638 units)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $500</td>
<td>1,148</td>
<td>31.6</td>
</tr>
<tr>
<td>$500 to $999</td>
<td>2,298</td>
<td>63.2</td>
</tr>
<tr>
<td>$1,000 to $1,499</td>
<td>118</td>
<td>3.2</td>
</tr>
<tr>
<td>$1,500 to $1,999</td>
<td>33</td>
<td>0.9</td>
</tr>
<tr>
<td>$2,000 to $2,499</td>
<td>41</td>
<td>1.1</td>
</tr>
<tr>
<td>$2,500 to $2,999</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$3,000 or more</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Type of Housing Unit</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-unit, detached</td>
<td>7,353</td>
<td>63.2</td>
</tr>
<tr>
<td>1-unit, attached</td>
<td>208</td>
<td>1.8</td>
</tr>
</tbody>
</table>
The peak period for new home building was the period of 1970 through 1979, which was when approximately 23 percent of all homes in the County were constructed. Statewide construction also peaked during this time. Construction in the County and the State has declined overall since then, and the last housing units to be built occurred between 2010 and 2013 (U.S. Census Bureau 2016g). These construction data indicate a rapid decline in the housing market and confidence levels people may have in the foreseeable future of the housing market in Malheur County.

Single family housing units are the most common type of housing in the County, comprising approximately 65 percent of the total. Multifamily housing units make up approximately 17 percent and mobile homes comprise approximately 18 percent of the total units in the County.

The Housing Authority of Malheur County oversees affordable housing assistance in Malheur and Harney Counties. The housing authority provides assistance through Section 8 Housing Choice Voucher, Family Self-Sufficiency, Housing Choice Voucher Homeownership, and Low-Rent Public Housing programs. There are 17 low-income housing apartment complexes which contain 406 affordable apartments in Malheur County. There are 129 project-based Section 8 subsidized apartments in Malheur County. There are 395 other low-income apartments that don’t have rental assistance but are still considered to be affordable housing for low-income families (Affordable Housing Online 2017).

At the end of the first quarter of 2017, approximately 12.7 percent of Malheur County homes had negative equity (the rate for Oregon was 5.4 percent) and 5.5 percent of homeowners were delinquent on mortgage (the rate for Oregon was 3.4 percent) (Zillow, Inc. [Zillow] 2017a). The foreclosure rate of Malheur County (1:6,416) is lower than that for the State (1:3,135) (RealtyTrac 2017). Figure 5 shows recent foreclosure trends.

The median age of Malheur County real estate is 41 years, which is only four years older than the national median age of 37 (Sperling’s Best Places 2017). Over half of the householders in the County and statewide have been in the same home since the 2000 through 2009 period. When compared to the state, Malheur County has a higher proportion of long-time householders in the same home (since 1980 or earlier) (U.S. Census Bureau 2016g). The median home sale price peaked in February 2009 at $174,100 (Zillow 2017b). Most owner-occupied homes in the County are valued between $50,000 and $99,999, with the median home value being $127,000. These values are significantly lower than the same metrics for the state as a whole. The statewide median value is over $100,000 more at $237,300 (U.S. Census Bureau 2016h).
The median rent for Malheur County ($604) is lower than the state median ($907). Most renters (approximately 63 percent) in the County pay between $500 and $999 per month. Statewide, most renters (about 51 percent) also pay between $500 and $999 per month. When compared to statewide renters, a larger proportion of Malheur County renters pay less than $500 per month (approximately 32 percent for County renters compared to approximately nine percent of statewide renters) (U.S. Census Bureau 2016g).

In general, Malheur County residents spend less of their annual monthly income on housing when compared to Oregon as a whole. For Malheur County households that earn between $35,000 and $49,000 annually (the range within which the median and mean incomes fall):

- Approximately 56 percent of all occupied housing units in Malheur County spend less than 20 percent of their income on housing where the statewide rate is approximately 28 percent;

- Approximately 19 percent spend between 20 and 29 percent of their income on housing where the statewide rate is approximately 15 percent; and

- Approximately 23 percent spend 30 percent or more of their income on housing where the statewide rate is approximately 18 percent (U.S. Census Bureau 2016g).

### 5.4.1 Household Income in Malheur County

Total personal income in the Study Area has been steadily increasing over the last ten years (Table 6), with the exception of three drops in income in 2009, 2013, and 2016.
### Table 6: Total Personal Income in the Study Area, 2007 to 2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>684,158</td>
<td>724,071</td>
<td>704,449</td>
<td>738,193</td>
<td>800,726</td>
<td>799,477</td>
<td>857,783</td>
<td>910,900</td>
<td>904,459</td>
<td></td>
</tr>
</tbody>
</table>

Source: BEA 2016a

Table 7 displays the median earnings by industry for 2016 in the Study Area.

### Table 7: Median Earnings by Industry for the Past 12 Months for Malheur County and the Cities of Ontario, Nyssa, Vale, Adrian, and Jordan Valley

<table>
<thead>
<tr>
<th>Industry</th>
<th>Malheur County</th>
<th>Ontario</th>
<th>Nyssa</th>
<th>Vale</th>
<th>Adrian</th>
<th>Jordan Valley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting</td>
<td>22,423</td>
<td>22,567</td>
<td>20,966</td>
<td>17,344</td>
<td>18,333 *</td>
<td></td>
</tr>
<tr>
<td>Mining, quarrying, and oil and gas extraction</td>
<td>29,698 *</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Construction</td>
<td>31,010</td>
<td>31,111</td>
<td>30,500</td>
<td>2,500-</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>31,140</td>
<td>33,301</td>
<td>40,921</td>
<td>21,964</td>
<td>24,688 *</td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>16,938</td>
<td>13,731</td>
<td>27,981</td>
<td>19,643</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>16,161</td>
<td>12,781</td>
<td>15,700</td>
<td>25,000</td>
<td>35,417</td>
<td>21,250</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>26,750</td>
<td>37,639</td>
<td>16,750</td>
<td>36,875</td>
<td>36,875 *</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>31,838</td>
<td>24,881</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Information</td>
<td>35,977</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>33,100</td>
<td>32,670</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Real estate and rental and leasing</td>
<td>17,014</td>
<td>14,688</td>
<td>12,083</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Professional, scientific, and technical services</td>
<td>45,461</td>
<td>53,297</td>
<td>46,250</td>
<td>47,500</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Administrative and support and waste management services</td>
<td>26,071</td>
<td>25,417</td>
<td>21,429</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Educational services</td>
<td>25,956</td>
<td>14,306</td>
<td>17,083</td>
<td>18,654</td>
<td>38,750 *</td>
<td></td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>23,750</td>
<td>20,923</td>
<td>30,602</td>
<td>19,773</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>25,085</td>
<td>20,250</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>
### Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Malheur County</th>
<th>Ontario</th>
<th>Nyssa</th>
<th>Vale</th>
<th>Adrian</th>
<th>Jordan Valley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and food services</td>
<td>15,070</td>
<td>16,548</td>
<td>4,420</td>
<td>4,821</td>
<td>19,000</td>
<td>*</td>
</tr>
<tr>
<td>Other services, except public administration</td>
<td>10,625</td>
<td>2,500-</td>
<td>11,087</td>
<td>30,833</td>
<td>24,688</td>
<td>*</td>
</tr>
<tr>
<td>Public administration</td>
<td>44,886</td>
<td>47,778</td>
<td>50,662</td>
<td>57,798</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau 2016i

*Indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.

A “-” following a median estimate means the median falls in the lowest interval of an open-ended distribution.

#### 5.4.2 Malheur County Employment

For 2016, the U.S. Census Bureau estimated that the total civilian labor force (people aged 16 years and older and able to work) in Malheur County was approximately 11,936 people. Of these people, most of the unemployed individuals were age 16 to 19 years; approximately 28 percent of this population was estimated to be unemployed. People aged 20 to 24 years had the second highest unemployment rate, with approximately 18 percent of them being unemployed. For people living in poverty, the unemployment rate was approximately 31 percent in 2016. For disabled persons, approximately 21 percent were unemployed in 2016 (U.S. Census Bureau 2016j).

Malheur County October 2017 labor market information from the Oregon Employment Department (OED) shows that over-the-year employment increasing for manufacturing, professional/business services, retail trade, and mining/logging/construction services. The trends show reductions in private education/health services and local government (OED 2017a). In 2016, the average annual wage was $33,851, which is the lowest of the three southeastern Oregon counties (Grant, Harney, and Malheur) (OED 2017b).

Unemployment has been steadily declining for the last five years in Malheur County (OED 2017c). At the end of 2016, Malheur County's seasonally adjusted unemployment rate was 5.6 percent (OED 2017c). Without seasonal adjustment, the County’s 2016 unemployment rate was also 5.6 percent, which is higher than the statewide non-seasonally adjusted rate of 4.9 percent. In general, unemployment rates have been holding steady or dropping statewide and in the County since 2009. None of Oregon’s counties have had an increase in unemployment since 2014 (OED 2017c). Compared to 2015, the rate of unemployment in Malheur County dropped 0.8 percentage point. The state reported that 12,080 people were on a payroll in September 2017, which is an increase of 230 people since September 2016 (OED 2017c). Table 8 summarizes the 2015 employment by sector for Malheur County. The table includes Oregon for comparative purposes.
### Table 8: Employment by Sector in Malheur County

<table>
<thead>
<tr>
<th>Employment Sector</th>
<th>Oregon</th>
<th>Malheur County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing and hunting</td>
<td>38,549</td>
<td>3.6</td>
</tr>
<tr>
<td>Mining, quarrying, and oil and gas extraction</td>
<td>1,195</td>
<td>0.1</td>
</tr>
<tr>
<td>Construction</td>
<td>63,919</td>
<td>6.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>165,428</td>
<td>15.5</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>41,448</td>
<td>4.0</td>
</tr>
<tr>
<td>Retail trade</td>
<td>123,086</td>
<td>11.6</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>42,363</td>
<td>4.0</td>
</tr>
<tr>
<td>Utilities</td>
<td>12,866</td>
<td>1.2</td>
</tr>
<tr>
<td>Information</td>
<td>22,125</td>
<td>2.1</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>54,237</td>
<td>5.1</td>
</tr>
<tr>
<td>Real estate and rental and leasing</td>
<td>23,468</td>
<td>2.2</td>
</tr>
<tr>
<td>Professional, scientific, and technical services</td>
<td>79,202</td>
<td>7.4</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td>879</td>
<td>0.1</td>
</tr>
<tr>
<td>Administrative and support and waste management services</td>
<td>40,618</td>
<td>3.8</td>
</tr>
<tr>
<td>Educational services</td>
<td>76,936</td>
<td>7.2</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>157,902</td>
<td>14.8</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>17,051</td>
<td>1.6</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>55,763</td>
<td>5.2</td>
</tr>
<tr>
<td>Other services (except public administration)</td>
<td>46,891</td>
<td>4.4</td>
</tr>
<tr>
<td>Public administration (government)</td>
<td>67,103</td>
<td>6.3</td>
</tr>
</tbody>
</table>

D = not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

Source: U.S. Census Bureau 2016k

As shown in Table 8, the County’s largest private sector employment subsector by proportion of jobs is agriculture, forestry, fishing and hunting. Manufacturing jobs also make up a large portion of County employment at approximately 13.5 percent of the total. According to the data in Table 7, people in agriculture, forestry, fishing and hunting earned approximately $22,423 annually. People working in professional, scientific, and technical services are the highest paid workers in the County with median annual earnings of $45,461 in 2015 (U.S. Census Bureau 2016i).

#### 5.4.3 Malheur County Tax Base

Malheur County provides support for several types of services through its general fund, road fund, and other governmental funds. Table 9 summarizes the County’s 2015/2016 total governmental revenues and expenditures.
### Table 9: Malheur County 2015/2016 Revenues and Expenditures

<table>
<thead>
<tr>
<th>Revenues and Expenditures</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Taxes</td>
<td>$5,184,262</td>
</tr>
<tr>
<td>Intergovernmental</td>
<td>$10,358,482</td>
</tr>
<tr>
<td>Grants</td>
<td>$1,455,983</td>
</tr>
<tr>
<td>Charges for Services</td>
<td>$3,280,863</td>
</tr>
<tr>
<td>Investment Earnings (losses)</td>
<td>$25,402</td>
</tr>
<tr>
<td>Other Income</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$20,304,992</strong></td>
</tr>
<tr>
<td>Expenditures</td>
<td></td>
</tr>
<tr>
<td>General Government</td>
<td>$2,138,782</td>
</tr>
<tr>
<td>Social Services</td>
<td>$4,440,733</td>
</tr>
<tr>
<td>Public Safety and Justice</td>
<td>$8,971,148</td>
</tr>
<tr>
<td>Community Services</td>
<td>$1,275,252</td>
</tr>
<tr>
<td>Library Services</td>
<td>$22,327</td>
</tr>
<tr>
<td>Roads and Bridges</td>
<td>$2,329,187</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>$224,484</td>
</tr>
<tr>
<td>Debt Service (Principal and Interest)</td>
<td>$112,103</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$19,514,016</strong></td>
</tr>
</tbody>
</table>

Source: Malheur County 2016

### 5.5 Malheur County Public Services

This section summarizes the availability and quantity of public services as part of the “affected environment” current conditions in the Study Area. Projections for the life of the mine costs will be developed as part of the “environmental consequences” analysis section of the environmental evaluation required under 632-037-0085, Division 37, Consolidated Permitting of Mining Operations.

#### 5.5.1 Water, Sewer, and Solid Waste

The County does not provide water and sewer services.

For unincorporated areas of the County, the Environmental Health Department issues on-site septic system permits, runs the Licensed Facility Program and Drinking Water Program, and oversees the County Solid Waste Program.

Malheur County holds permits from the Oregon Department of Environmental Quality for the operation of one small landfill (Lytle Boulevard Landfill), approximately ten miles south of Vale. A private contractor conducts the daily operation (Malheur County 2017). It is a very small landfill and is only permitted to accept 20 tons per day. The landfill is usually close to that number on a yearly basis, averaging about 19 tons per day. The estimated lifespan of the landfill is about 50 years. A large part of solid waste from the County is disposed of in Idaho at Clay Peak Landfill in Payette County.

Ontario Sanitary Service, Inc., a family-owned company, provides residential and commercial garbage collection and recycling services to the City of Ontario, as well as rural Malheur County areas. The Ontario Sanitary Service Transfer Station provides for the transfer of refuse from Ontario to the Clay Peak Landfill in Idaho.
The City of Ontario provides domestic water, wastewater, and storm drain services to its residents. The City of Nyssa provides domestic water and wastewater services to its residents. The City of Vale provides domestic water, wastewater, and garbage collection services to its residents.

5.5.2 Fire Protection

Fire protection in Malheur County consists of the following districts, departments, and agencies:

- Ontario Fire & Rescue;
- Nyssa Fire Department;
- Vale Fire & Ambulance;
- Adrian Rural Fire Protection District;
- Jordan Valley Volunteer Fire Department; and
- BLM.

The BLM has been integrated with the US Forest Service since 1995 for fire and aviation management in the Pacific Northwest and is managed cooperatively between the two agencies and in close collaboration with the Pacific Northwest Wildfire Coordinating Group. This group includes the five federal wildland fire agencies, two state forestry agencies, and two state fire marshal associations. The interagency jurisdiction covers both Oregon and Washington and includes ten BLM districts, 19 National Forests, and the Columbia Gorge National Scenic Area (BLM 2017).

For the Vale District, which is the BLM district within which the proposed Project is located, the BLM provides fire protection using 17 engines and a tactical tender which are located at seven guard stations throughout the district, including a station in Vale. The district also hosts an exclusive use air attack plane and helicopter with a helitack crew of nine people from June to October.

5.5.3 Law Enforcement and the Criminal Justice System

The Malheur County Sheriff’s Office (MCSO) is the primary provider of law enforcement services to residents of Malheur County. The Ontario Police Department and Nyssa Police Department also provide law enforcement services to residents in those jurisdictions. The Oregon State Police (OSP) is a multi-disciplined organization that enforces traffic laws on state roadways, investigates and solves crime, conducts post-mortem examinations and forensic analysis, and provides background checks and law enforcement data. The OSP also regulates gaming, the handling of hazardous materials and fire codes, and educates the public on fire safety and enforce fish, wildlife, and natural resource laws (OSP 2016).

The MCSO includes the following divisions: 9-1-1 Dispatch; Civil; Criminal; Emergency Management; Jail; Parole and Probation; and Search & Rescue. The Criminal Division is comprised of the Patrol, Marine, Sheriff’s Emergency Response Team, and Investigations units. The Patrol unit includes the North District and South District, and contracts with the City of Vale to provide law enforcement services in the Vale District. The Marine unit patrols approximately 57 square miles of waterways in Malheur County (MCSO 2017).
5.5.4 Schools and Education

5.5.4.1 Elementary and Secondary Education

The Malheur Education Service District (ESD) provides a supporting infrastructure to the local school districts. The Malheur ESD supports ten local school districts containing 27 schools. These include eight high schools, three middle schools, nine elementary schools, and seven schools that service kindergarten through eighth grade (Malheur ESD 2017).

Table 10 shows the enrollment numbers in each district broken down by school, as reported by the Oregon Department of Education (ODE).

Table 10: 2016-2017 School Enrollment

<table>
<thead>
<tr>
<th>School</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrian School District No. 61</td>
<td>285</td>
</tr>
<tr>
<td>Adrian High School</td>
<td>85</td>
</tr>
<tr>
<td>Adrian K-8</td>
<td>200</td>
</tr>
<tr>
<td>Annex School District No. 29</td>
<td>88</td>
</tr>
<tr>
<td>Arock School District No. 81</td>
<td>15</td>
</tr>
<tr>
<td>Four Rivers Community School</td>
<td>280</td>
</tr>
<tr>
<td>Harper School District No. 66</td>
<td>99</td>
</tr>
<tr>
<td>Huntington School District No. 16J</td>
<td>77</td>
</tr>
<tr>
<td>Jordan Valley School District No. 3</td>
<td>71</td>
</tr>
<tr>
<td>Jordan Valley High School</td>
<td>46</td>
</tr>
<tr>
<td>Jordan Valley Elementary School</td>
<td>21</td>
</tr>
<tr>
<td>Rockville Elementary School</td>
<td>4</td>
</tr>
<tr>
<td>Juntura School District No. 12</td>
<td>2</td>
</tr>
<tr>
<td>Nyssa School District No. 26</td>
<td>1,162</td>
</tr>
<tr>
<td>Nyssa High School</td>
<td>326</td>
</tr>
<tr>
<td>Nyssa Middle School</td>
<td>260</td>
</tr>
<tr>
<td>Nyssa Elementary School</td>
<td>549</td>
</tr>
<tr>
<td>Nyssa SD 26</td>
<td>27</td>
</tr>
<tr>
<td>Ontario School District No. 8C</td>
<td>2,432</td>
</tr>
<tr>
<td>Ontario High School</td>
<td>671</td>
</tr>
<tr>
<td>Ontario Middle School</td>
<td>347</td>
</tr>
<tr>
<td>Aiken Elementary School</td>
<td>305</td>
</tr>
<tr>
<td>Alameda Elementary School</td>
<td>403</td>
</tr>
<tr>
<td>Cairo Elementary School</td>
<td>149</td>
</tr>
<tr>
<td>May Roberts Elementary School</td>
<td>375</td>
</tr>
<tr>
<td>Pioneer Elementary School</td>
<td>137</td>
</tr>
<tr>
<td>Ontario SC 8C</td>
<td>45</td>
</tr>
<tr>
<td>Vale School District No. 84</td>
<td>948</td>
</tr>
<tr>
<td>Vale High School</td>
<td>280</td>
</tr>
<tr>
<td>Vale Middle School</td>
<td>129</td>
</tr>
<tr>
<td>Vale Elementary School</td>
<td>435</td>
</tr>
<tr>
<td>Willowcreek Elementary School</td>
<td>89</td>
</tr>
<tr>
<td>Vale SD 84</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: ODE 2017
6 BIBLIOGRAPHY


7 CONTACTS

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