



Technical Memorandum #1

Date: January 24, 2025

Kittelson Project No: 30287

To: Project Management Team (PMT)

From: Matt Hughart, AICP – Kittelson & Associates
Eza Gaigalas – Kittelson & Associates
Shayna Rehberg, AICP – MIG
Meg Grzybowski - MIG

Subject: Boardman Community Profile and Trends

Introduction

The Community Profile and Trends memorandum is a high-level summary of the City of Boardman’s demographic, workforce/jobs, and travel/commuting profile. The profile and trends will help inform and update the goals and objectives for the development of a new Transportation System Plan (TSP), achieve statewide goals toward reducing transportation-related climate pollution, and incorporating a broader range of constituents in the overall planning process.

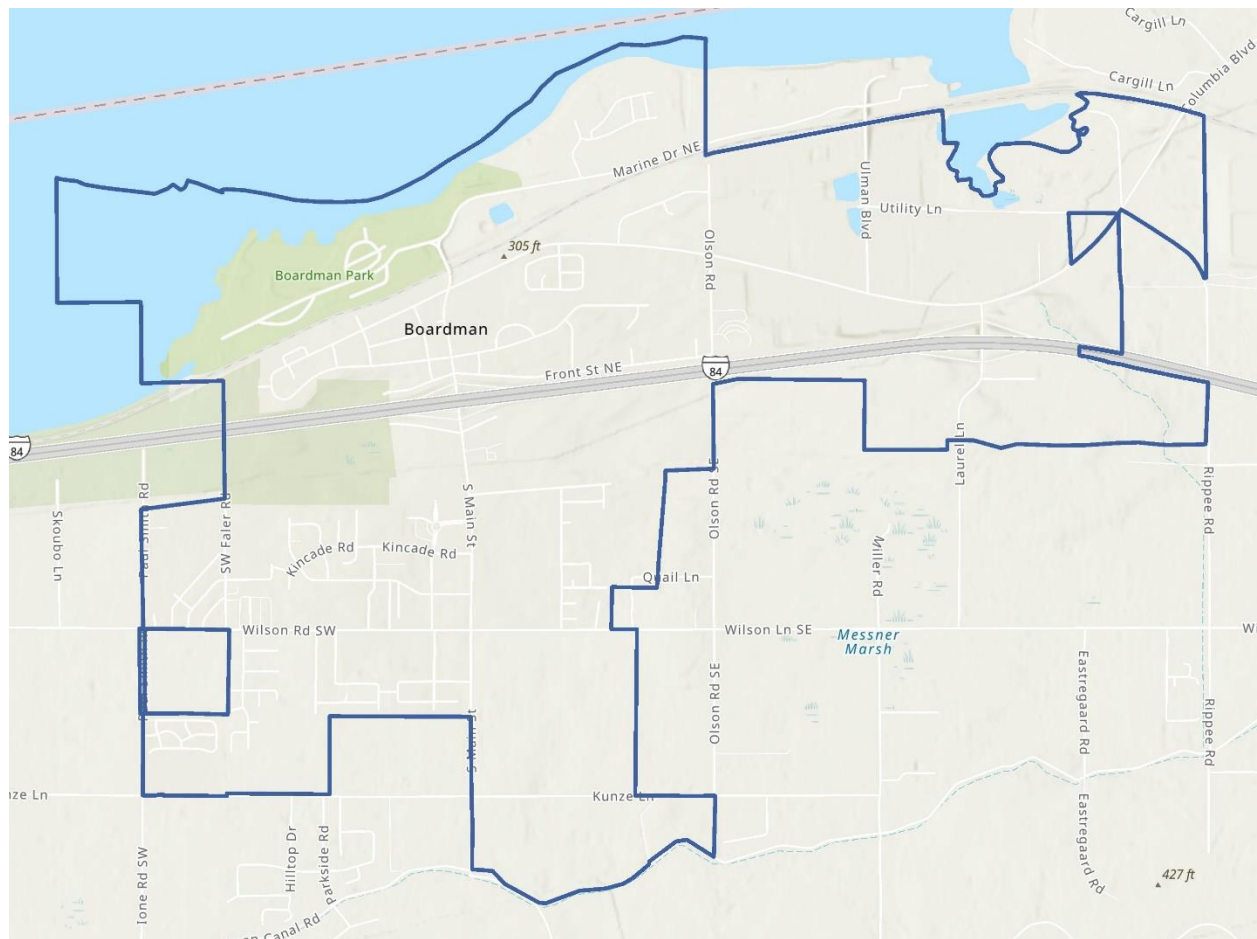
The community profile is divided into four sections:

1. Study Area
2. Residential Demographic Profile
3. Workforce/Jobs Profile
4. Travel/Commuting Profile

Study Area

The City of Boardman is located in Morrow County, Oregon. For the purposes of this assessment, the study area incorporates the City of Boardman city limits and Urban Growth Boundary (UGB) shown in **Figure 1**.

Figure 1. Project Study Area



Blue = Site project area and City of Boardman

Demographic Profile

Title VI and Underserved Communities

Title VI of the Civil Rights Act of 1964 (Section 601) prevents any person from discrimination on the bases of race, color, or national origin.¹ As it relates to Title VI and Environmental Justice, all programs and activities conducted or completed with the assistance of federal funding must ensure that they are not preventing participation of affected communities or conducting efforts through discriminatory practices based on race, color, or national origin that may lead to

¹ Civil Rights Act of 1964, HR 7152, 88th Cong., Public Law 88-352 (July 2, 1964).

environmental and human health impacts.² As the TSP update is funded in part through federal funds administered by the Oregon Department of Transportation (ODOT), it is necessary to identify specific communities and affected populations within Boardman. This section includes data from the 2020 Decennial Census, 2022 American Community Survey (ACS) 5-Year Estimates, and 2024 Portland State University’s Population Research Center Estimates to identify these populations.

Population Profile

According to American Community Survey (ACS) 5-year estimates (2022), the Boardman city limits is home to approximately 3,828 residents³, with the UGB hosting slightly more residents, at 4,160. The Portland State University Population Research Center (PRC) anticipates that the population within the Boardman UGB will continue to grow steadily, increasing by more than 1,200 residents by the year 2045 as shown in **Table 1**.

Table 1. Population Growth Forecast

Historical Population			Population Forecast			
	2010	2020	2030	2035	2040	2045
Morrow County	11,173	12,186	12,846	13,103	13,317	13,497
Percent Change		8.9%	5.4%	2.0%	1.6%	1.4%
Boardman UGB	3,546	4,160	4,828	5,046	5,246	5,429
Percent Change		17.8%	16.5%	4.5%	4.0%	3.5%
City of Boardman	3,149	3,529	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Percent Change		12.0%				

Source: PSU Population Research Center (PRC), 2024 for population forecast numbers; ACS 5-year estimates, 2010 and 2022 (Table DP05).

Age

Within its UGB, the City of Boardman has a younger population overall as compared to that of the broader Morrow County and the State of Oregon. The median age sits below 30 years, while the County and State are closer to 40 years as shown in **Table 2**. While the percentage of residents

² United States Environmental Protection Agency, *Title VI and Environmental Justice*, accessed September 25, 2024, <https://www.epa.gov/environmentaljustice/title-vi-and-environmental-justice>.

³ Note that the Portland State University Population Research Center confirmed that there was an undercount in the 2020 Census and that the accurate City of Boardman population as of April 2020 is 4,272. Verified as of December 30, 2024, this population figure indicates a greater historical growth rate than what is shown in Table 1 (42% between 2010 and 2020, as opposed to 12%). The analysis in this memorandum reflects figures that are consistent with data from 2022 ACS data and demographic break downs of the City’s 3,828 population.

under the age of 18 years is relatively similar across all geographies, the representation of residents over 65 years is significantly smaller in Boardman which results in its comparatively lower median age of 27.6 years.

Table 2. Age Demographics

	Population	Median Age (years)	Youth (< 18 years)		Seniors (> 65 years)	
			Total	Percent	Total	Percent
State of Oregon	4,237,256	39.9	867,076	20.8%	734,932	17.6%
Morrow County	12,186	36.9	3,159	27.6%	1,715	15.0%
Boardman UGB*	4,160	29.5	1,355	32.6%	347	8.4%
City of Boardman	3,828	27.6	1,189	33.7%	169	4.8%

Source: PSU Population Research Center (PRC) (2024)

*Source for City UGB is the US Census Decennial 2020

Racial and Ethnic Minority Groups

Census data was used to collect information on race and ethnicity. The US Census utilizes the 1997 Office of Management and Budget (OMB) definitions, referencing “White,” “Black or African American,” “American Indian or Alaska Native,” “Asian,” or Native Hawai’ian or Other Pacific Islander” though participants can self-report as more than one race or a race/ethnicity outside of these identifiers.⁴ The race and ethnicity groups represented in **Table 3** are as follows:

- Not Hispanic or Latino: American Indian or Alaska Native alone
- Not Hispanic or Latino: Asian alone
- Not Hispanic or Latino: Black or African American alone
- Hispanic or Latino (of any race)
- Not Hispanic or Latino: Native Hawai’ian or Other Pacific Islander
- Not Hispanic or Latino: Some Other Race
- Not Hispanic or Latino: Two or More Races
- Not Hispanic or Latino: White alone

⁴ U.S. Census Bureau, *About the Topic of Race*, accessed September 19, 2024, <http://doi.org/10.3886/ICPSR07552.v1><https://www.census.gov/topics/population/race/about.html>.

Table 3. Race and Ethnicity

	Diversity Index	American Indian or Alaska Native	Asian	Black	Hispanic/ Latino	Native Hawaiian or Other Pacific Islander	Some Other Race	Two or More	White
State of Oregon	56.1	42,042 (1.0%)	191,797 (4.5%)	78,658 (1.9%)	588,757 (13.9%)	18,197 (0.4%)	22,962 (0.5%)	258,685 (6.1%)	3,036,158 (71.7%)
Morrow County	76.9	82 (0.7%)	29 (0.2%)	37 (0.3%)	4,988 (40.9%)	5 (0.0%)	44 (0.4%)	401 (3.3%)	6,600 (54.2%)
Boardman UGB	80.6	20 (0.5%)	4 (0.0%)	17 (0.4%)	2,802 (67.4%)	1 (0.0%)	18 (0.4%)	89 (2.1%)	1,211 (29.1%)
City of Boardman	79.1	17 (0.4%)	4 (0.0%)	15 (0.4%)	2,813 (73.5%)	0 (0.0%)	17 (0.4%)	58 (1.5%)	904 (23.6%)

Source: US Census Decennial Census estimates (2020), Table P2

*Source for City UGB is the US Census Decennial 2020

Table 3 includes a Diversity Index, defined as the likelihood that when two persons are chosen at random from the same area they will belong to different race or ethnic groups. The number represents the percentage of possibility, with an index of 0 indicating no diversity and 100 indicating complete diversity.⁵ Compared to the State of Oregon and Morrow County, Boardman has a higher diversity index overall. Boardman also has a larger representation of people that identify as Hispanic or Latino. Though the larger Boardman UGB has a slightly higher diversity index compared to the city boundary, the city has a higher percentage of households in non-white racial groups compared to the UGB as well as the highest representation of Hispanic or Latino communities.

Limited English Proficiency (LEP)

When looking at the prominent language spoken within the household (for people 5 years and older), two-thirds of the population within Boardman spoke Spanish as the predominant language within the home, while only one-third spoke English as the primary language (**Table 4**).

⁵ ArcGIS Community Analyst, *Essential Vocabulary*, accessed September 19, 2024, <https://doc.arcgis.com/en/community-analyst/help/essential-vocabulary.htm>.

Table 4. Language Spoken at Home

	Population 5 Years and Over	English Only	Language Other than English	
			Spanish	Other Language
Morrow County	10,589	67%	32%	1%
City of Boardman	3,120	35%	63%	1%

Source: ACS 5-year estimates (2016-2020), Table S1601

Low Income and Poverty Levels

In 2022, the federally set poverty threshold for an individual was determined as annual earnings of \$13,590, with \$27,750 being the threshold for a four-person household.⁶ The U.S. Census Bureau translates this measure of need into a ratio, calculated by the dividing the family's income by their poverty threshold number. A ratio of 1.00 would imply that the family income matches the measure of need that the family has.⁷ Any number below 1.00 qualifies for varying levels of federal assistance programs.

The City of Boardman has a higher proportion of the population that falls below the 1.00 ratio of income to poverty, at approximately 21% (versus 17% and 12% in Morrow County and the State of Oregon respectively) (**Table 5**). While the unemployment rate in the City of Boardman is similar to that of the county (around 1%) and lower than the state (around 3%), residents are either not earning enough income to meet their means, or expenses are higher than they can meet.

⁶ Office of the Assistant Secretary for Planning and Evaluation (ASPE), *Prior HHS Poverty Guidelines and Federal Register References*, accessed September 19, 2024, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references>.

⁷ U.S. Census Bureau, *How the Census Bureau Measures Poverty*, June 15, 2023, <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>.

Table 5. Ratio of Income to Poverty

	State of Oregon		Morrow County		City of Boardman	
	Total	Percent	Total	Percent	Total	Percent
Population	4,149,034	-	12,095	-	3,829	-
Under 0.50	230,483	5.6%	586	4.8%	180	4.7%
0.50 – 0.99	263,675	6.3%	1,434	11.8%	619	16.1%
1.00 – 1.24	159,051	3.8%	953	7.9%	594	15.5%
1.25 – 1.49	171,293	4.1%	725	6.0%	226	6.0%
1.50 – 1.84	236,823	5.7%	1,061	8.8%	312	8.1%
1.85 – 1.99	104,576	2.5%	433	3.6%	188	4.9%
2.00 and Over	2,983,133	71.9%	6,903	57.1%	1,710	44.7%

Source: ACS 5-year estimates (2018-2022), Table C17002

Another way to demonstrate disparities in income is to look at what percentage of the population is living below certain poverty thresholds. As shown in **Table 6**, the City of Boardman had more than half of its population living below 200% poverty, which was greater than both the state and the county. This number is also nearly 4% higher than it was in 2020.⁸ Median household income in the City of Boardman is higher than that in the county but is less than in the state (**Table 7**).

Table 6. Population Below 200% Poverty Level

Poverty Level	State of Oregon		Morrow County		City of Boardman	
	Total	Percent	Total	Percent	Total	Percent
Populations	4,149,034	-	12,095	-	3,829	-
Below 200%	1,165,901	28.1%	5,192	42.9%	2,119	55.3%

Source: ACS 5-year estimates (2018-2022), Table S1701

⁸ ACS 2016-2020 5-year estimates, Table S1701

Table 7. Median Household Income

	Median Household Income
State of Oregon	\$65,667
Morrow County	\$56,572
City of Boardman	\$59,390

Source: ACS 5-year estimates (2016-2020), Table S1901

Households with Disabilities

Boardman has reportedly less households with one or more people with a disability compared to Morrow County (**Table 8**). Morrow County actually has the highest percentage at nearly 38%, compared to the State of Oregon, which is at 28%.

Table 8. Households with One or More People with a Disability

	Number of Households	With Disability	
		Total	Percent
Morrow County	4,201	1,581	37.6%
Boardman UGB	1,313	414	31.5%
City of Boardman	1,119	307	27.4%

Source: ACS 5-year estimates, 2018-2022

** Source: US Census 2020

Internet Access

The City of Boardman has nearly twice the percentage of households without internet access as the state of Oregon (**Table 9**). This has implications for accessing planning sessions and services and may mean that these communities will not have as many opportunities to participate in processes that shape the city.

Table 9. Households with Internet Subscription

	Number of Households	With Internet		Without Internet	
		Total	Percent	Total	Percent
State of Oregon	1,680,800	1,526,087	90.8%	154,713	9.2%
Morrow County	4,201	3,655	87.0%	546	13.0%
City of Boardman	1,119	920	82.2%	199	17.8%

Source: ACS 5-year estimates (2018-2022), Table S2801

Key Findings

Analysis of the population demographics revealed key findings as they relate to Title VI and Environmental Justice. They are summarized in **Table 10**.

Table 10. Summary of Population Demographics

Underserved Population Type	City of Boardman	Boardman UGB	Morrow County
65 Years and Over	5%	8%	15%
Non-Majority White	24%	29%	54%
Limited English Proficiency (LEP) Households	64%	N/A	33%
Below 200% Poverty	55%	N/A	43%
Disability	27%	32%	38%
Internet Access	18%	N/A	13%

Boardman consists of communities that are considered “underserved populations,” as defined by the Oregon Administrative Rule (OAR 660-012-0125). Notably for Boardman, the demographic populations that fall into this category pertain mainly to:

- Limited English Proficiency (LEP): Boardman has nearly double the county average for residents that speak a language other than English inside the household.
- Minoritized Majority Race: More than three-fourths of Boardman’s population is of a minority race or ethnicity (which is 30% more than the county population).
- Income to Poverty Ratio: The City of Boardman has a higher percentage of people living below the 1.00 income to poverty ratio; at nearly ¼ of the population.
- Internet Access: Compared to the county, the City of Boardman has 6% more households without internet access (that’s twice the percentage households in the state of Oregon).

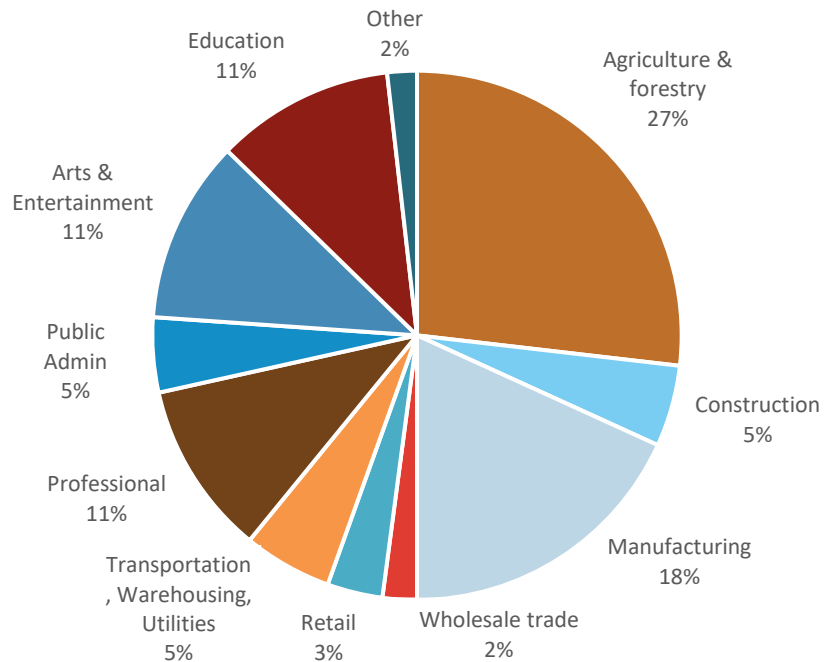
Workforce/Jobs Profile

Employment Industries of Boardman

There are 2,727 residents in Boardman who are 16 years and older and 1,803 of them are in the labor force (66%). The largest industry employers are in Agriculture, Forestry, Fishing, and Mining (27%), Manufacturing (18%), Education (11%), Arts & Entertainment (11%) and Professional Services (11%) (in Figure 2. Employment Industries in Boardman **Figure 2**). These five sectors alone account for 1,376 jobs (78%).⁹

The majority of workers are employed through private sector positions (86%), though some also work for the government (10%) or are self-employed (3%).

Figure 2. Employment Industries in Boardman



Employment Centers

In a 2021 regional travel assessment released by the Confederated Tribes of the Umatilla Indian Reservation's (CTUIR's) public transportation team, Morrow County, Umatilla County, and the Port of Morrow, major employment areas were analyzed to determine their importance to the area and employees' access to them through current infrastructure. There were many key employment centers identified as employment opportunities in Boardman that are made accessible by the Hermiston-Boardman Connector, in particular.¹⁰ These key employment centers include:

- Lamb-Weston West
- Lamb-Weston East
- Oregon Potato Company

⁹ ACS 5-year estimate, Table DP03, 2022

¹⁰ Kittleson & Associates, Inc., Hermiston-Boardman Connector – Port of Morrow Circular, 2021, p. 15.

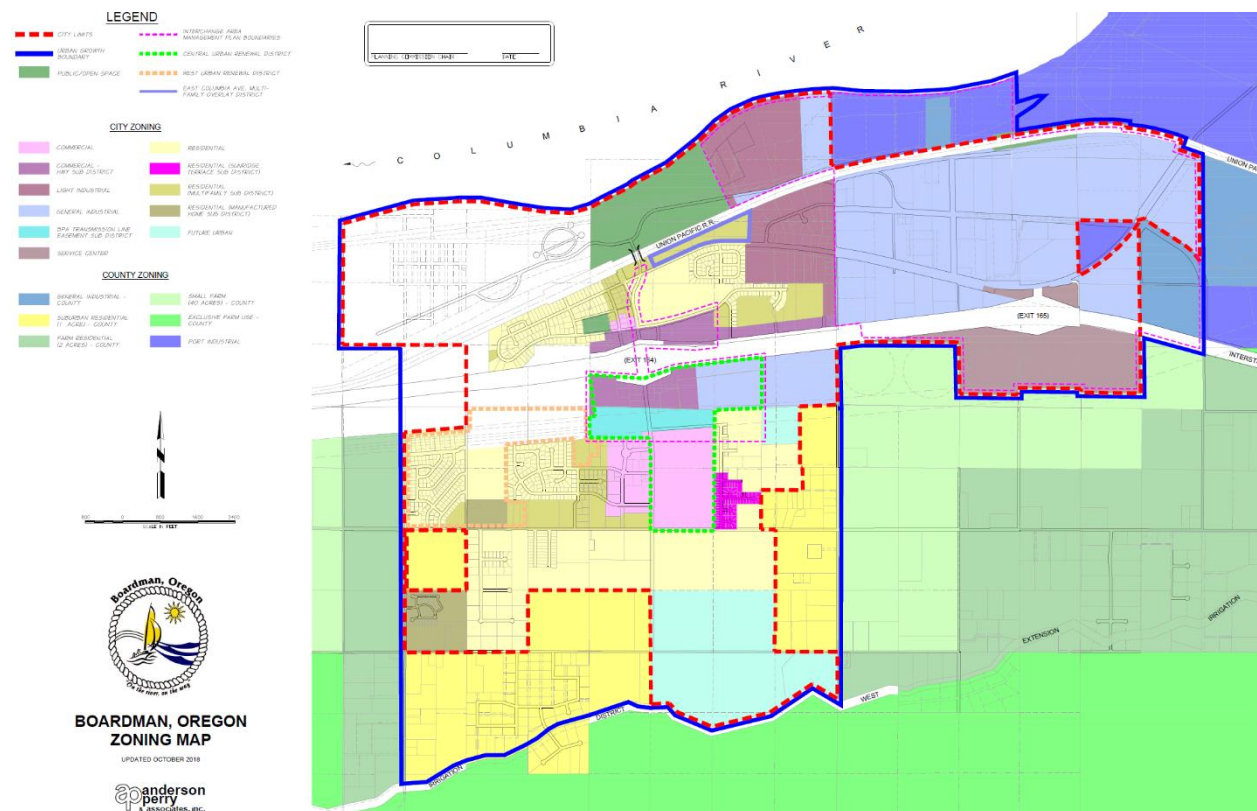
- Port of Morrow Warehouse Dry Storage
- Port of Morrow Warehousing
- Port of Morrow
- Boardman Foods
- Zeachem
- Pacific Ethanol Columbia, LLC
- Cascades Specialties Inc.
- Amazon
- Oregon Hay Company
- American Rock Company
- Cadman, Inc.
- Tillamook Cheese/Columbia River Processing
- Columbia River Health
- Central Business District
- Independent Transport, Inc.

Employment Land

Employment areas in Boardman are zoned as Commercial, Commercial Highway Sub-District, Commercial – Service Center, Light Industrial, General Industrial (City and County), and Port Industrial (County).

Commercially zoned areas, as well as some industrial land, are mainly located south of Interstate 84 and north of Wilson Ln SE. The majority of the industrial and port-specific zones about the Columbia River and north of Highway 84 and are largely associated with the Port of Morrow.

Figure 3. City of Boardman Zoning Map



Travel/Commuting Profile

In addition to the demographic and employment profiles, it is also important to look at the travel characteristics within, to, and from Boardman. The identification of travel patterns can be useful in the development of new transportation-based goals/objectives and prioritizing local and regional infrastructure projects. Sources used in this section include:

- Historical traffic counts
- US Census Bureau’s Longitudinal Employer-Household Dynamics (LEHD) program which provides job flow data that can be used to determine employment-based commuting profiles.
- Morrow County Coordinated Transportation Plan

Historical Traffic Counts

Over the last 15 years, there have been several transportation planning assessments that have involved the collection of traffic counts along key intersections in Boardman. These include the 2009 Boardman Main Street Interchange Area Management Plan and the 2023 Main Street Circulation Assessment. While these two assessments had different study areas, there were multiple common intersections along the Main Street corridor including the two I-84 ramp terminals, Boardman Avenue, and Front Street (north and south). **Exhibit 1** and **Exhibit 2** show the respective weekday PM peak hour traffic volumes from these two studies and **Table 10** summarizes comparable corridor segments. As shown in the Table, volumes along Main Street have increased upwards of 24%.

Table 10 – Traffic Count Comparison

Corridor Segment	Weekday PM Peak Hour Volumes		
	Year 2006	Year 2022	% Increase
Main Street (north of Boardman Avenue)	305	368	21%
Main Street (I-84 WB Ramp Terminal to Boardman Avenue)	635	774	22%
Main Street (I-84 EB Ramp Terminal to S Front Street)	645	803	24%
Main Street (South of S Front Street)	620	754	22%

Exhibit 1 – 2006 Boardman Main Street Weekday PM Peak Hour Traffic Volumes (Source: 2009 Boardman Main Street IAMP, DKS Associates)

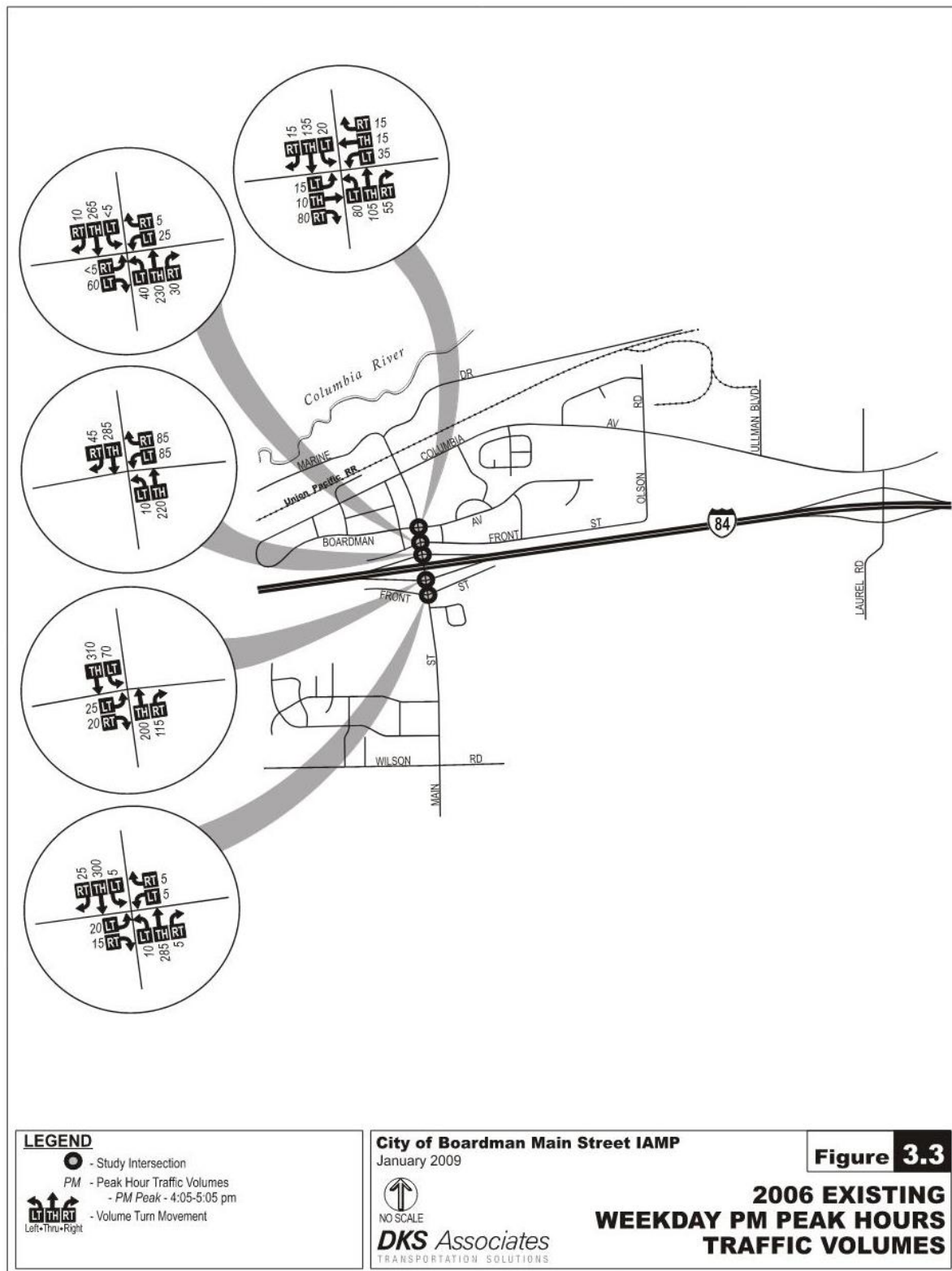
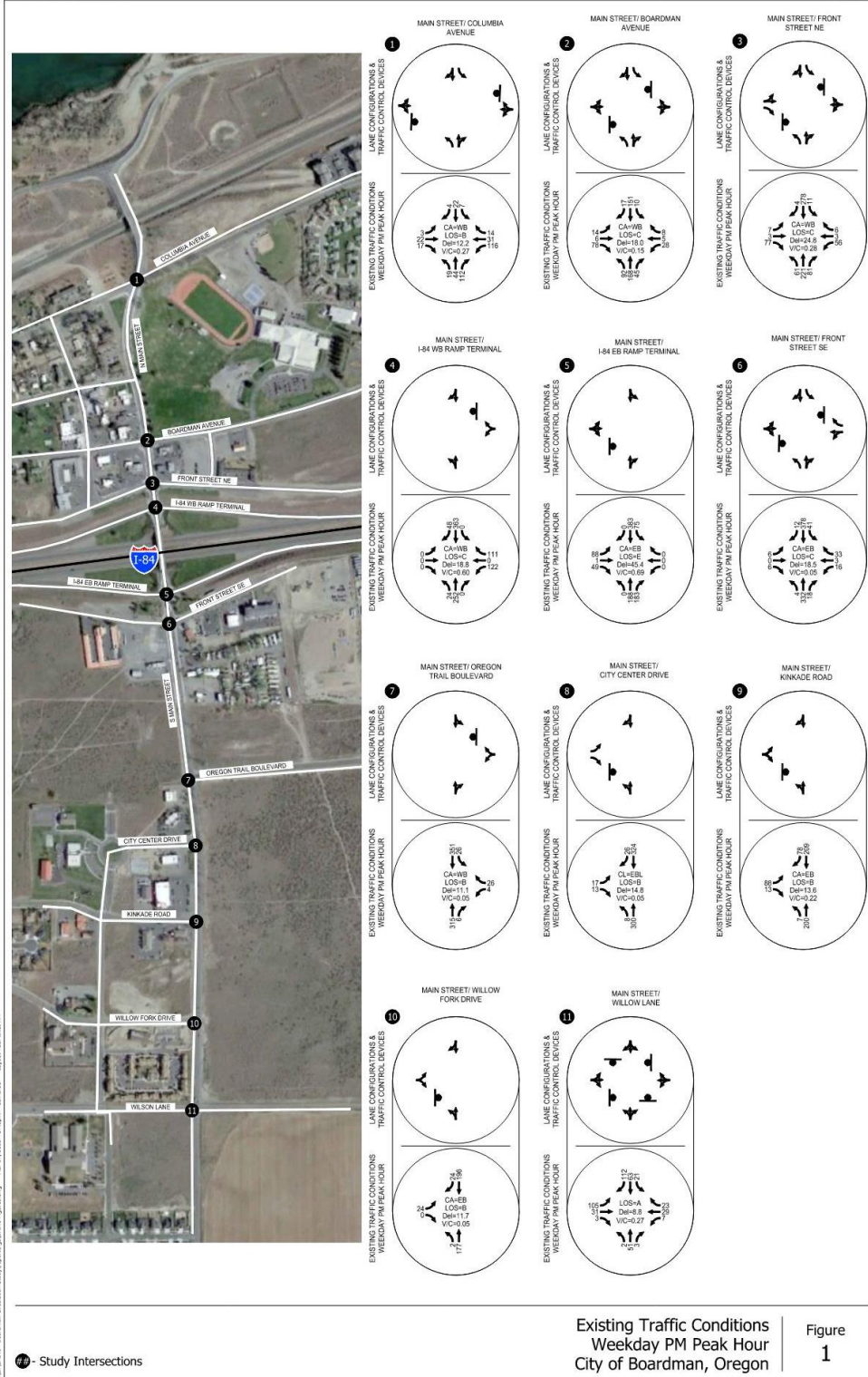


Exhibit 2 – 2022 Main Street Traffic Counts, Weekday PM Peak Hour (Source: 2023 Main Street Circulation Assessment, Kittelson & Associates)

Boardman Circulation Study

March 2023



Employment-Based Commuting Profile

This section provides an overview of the employment-based commuting profiles to/from Boardman based on data from the US Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program.

Where Boardman Residents Are Employed

Table 11 summarizes the locations where residents of Boardman have been employed on a percentage basis over the most recent five years of available data. As shown, the LEHD data indicates a general upward trend in the percentage of Boardman residents who are working in the City. In 2021, this percentage was approximately 32.8%, up from 20.7% in 2017. While this increase is likely due to several factors (a five-year population increase of approximately 20%, additional local employment opportunities, and a greater variety of local jobs), it does indicate that fewer Boardman residents are having to regionally commute outside of the city to their places of employment. Despite this general upward trend, 67% of Boardman residents are still commuting to regional destinations such as Hermiston, Irrigon, and Umatilla. This is significant as it indicates a continued need for regional transportation infrastructure.

Table 11 – Where Boardman Residents Are Employed

City of Employment	Percentage of Boardman Residents Employed in the Selected City				
	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021
Boardman	20.7%	23.5%	20.5%	29.0%	32.8%
Hermiston	9.3%	9.3%	9.2%	3.5%	5.1%
Portland	4.9%	4.7%	4.1%	4.9%	4.5%
Irrigon	3.7%	2.4%	2.2%	2.0%	1.9%
Umatilla	2.8%	3.5%	3.0%	2.7%	1.8%
Heppner	1.5%	2.0%	2.2%	1.5%	1.7%
Salem	1.0%	1.1%	1.8%	1.3%	1.6%
Pendleton	1.6%	1.2%	1.8%	2.0%	1.1%
Pasco/Richland	1.8%	2.3%	0.8%	0.8%	0.8%
All Other Locations	52.7%	50%	54.4%	52.3%	48.7%

Source: US Census Bureau. 2024. LEHD Origin-Destination Employment Statistics (2002-2021), Longitudinal Household Dynamics Program, accessed on 9/9/24 at <https://onthejob.ces.census.gov>.

Where Workers Live Who Are Employed in Boardman

Table 12 summarizes the home city of the workers that are employed at a job located within Boardman on a percentage basis over the most recent five years of available data. As shown, the LEHD data indicates another general upward trend in the percentage of Boardman jobs that are occupied by Boardman residents. In 2021, this percentage was approximately 20%, up from 15.7% in 2017. Despite this increasing trend, nearly 80% of the jobs located in Boardman are still held by non-Boardman residents indicating that there are more jobs available in the city than there are local workers. This can also be represented graphically in **Exhibit 3** which shows the Boardman Inflow/Outflow Job Counts in 2021.

Table 12 – Where Workers Live Who are Employed in Boardman (Year 2017 vs Year 2021)

City of Residence	Percentage of the Boardman Workforce Residing in the Selected City				
	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021
Boardman	15.7%	16.2%	14.3%	20.1%	20.6%
Hermiston	17.7%	16.1%	16.7%	16.1%	15.2%
Kennewick/Pasco/Richland	4.5%	7.3%	8.9%	5.3%	8.1%
Umatilla	6.3%	6.9%	6.5%	8.9%	7.0%
Irrigon	7.4%	8.0%	8.2%	5.0%	3.7%
Pendleton	1.7%	2.0%	2.6%	2.2%	3.0%
Stanfield	1.1%	1.2%	1.1%	1.2%	0.9%
All Other Locations	45.6%	42.3%	41.7%	41.2%	41.5%

Source: US Census Bureau. 2024. LEHD Origin-Destination Employment Statistics (2002-2021), Longitudinal Household Dynamics Program, accessed on 9/9/24 at <https://onthejob.ces.census.gov>.

Exhibit 3 – Boardman Inflow/Outflow Job Counts (2021)



Transit Supportive Demographic Profile

This section provides an overview of the transit supportive demographic characteristics of Boardman. This data is useful to illustrate a geographic area’s concentrations of population groups that face particular mobility challenges. **Table 13** provides a “snapshot” of these demographic characteristics.

Table 13 – Title IV and Underrepresented Populations

	Total Population (ACS)	Total Households (AS)	Below 100% Poverty	Below 200% Poverty	Households with Disability	Youth (Under 18)	Older Adults (65 and older)	Racial Ethnic Minority	Zero Vehicle Households	Low English Proficiency Households	Veterans
Boardman	3,828	1,119	20.8%	55.3%	27.4%	33.7%	4.8%	76.4%	2.5%	20.3%	4.2%

PSU Population Research Center (PRC), 2024 and ACS 5-year estimates, 2010 and 2022

References

1. United States Environmental Protection Agency. Title VI and Environmental Justice, n.d.
2. Portland State University Population Research Center. Oregon Population Forecast Program, 2022-2025.
3. American Community Survey 5-Year Estimates, Table DP05, 2010.
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