

# ARCH BRIDGE AND BOLTON TOWN CENTER

## EXISTING CONDITIONS REPORT

APRIL 2 2014



**LMN**  
ECONORTHWEST  
WALKER MACY  
NELSON NYGAARD  
STUDIO CASCADE

# ARCH BRIDGE AND BOLTON TOWN CENTER

## EXISTING CONDITIONS REPORT

### TABLE OF CONTENTS

EXECUTIVE SUMMARY

MARKET CONDITIONS..... A-1

TRANSPORTATION CONDITIONS AND OPPORTUNITIES... B-1

URBAN DESIGN AND DEVELOPMENT POTENTIAL..... C-1

TRAILS AND OPEN SPACE..... D-1



# EXECUTIVE SUMMARY

The consultant team examined the study area from a number of different perspectives, including economics, urban design, development pattern, transportation, and recreation. All of these subjects are addressed in the subsequent sections of this report.

The following represents highlights of this analysis:

## DEMOGRAPHICS AND MARKET ECONOMICS

1. West Linn has a long-standing stature in the metropolitan area as being a good community to raise a family with the availability of a high performing school district.
2. As with many other communities, West Linn is beginning to experience an aging of its population, with an increasingly larger portion being over 65.
3. There are relatively few choices of housing for people in this category if they wish to live in other than single-family detached homes. Typically, many people as they age desire to stay in their community to enjoy their social connections but “downsize” into more efficient housing. The absence of different housing choices may cause some older people to leave.
4. West Linn also has an under-representation of people in the age category of 20-34. This is likely due both to the lack of places of employment as well as to a lack of different housing choices. There is a demand for rental housing, especially at affordable price points, that is not being met.
5. Creating a town center, with a mix of uses and different housing choices, could help meet the demands by both older people as well as younger people for different choices in the marketplace.
6. There is also a notable absence of a hotel that can serve the community – both people visiting relatives and those conducting business in the area. This use could be accommodated within a town center.
7. There is a demand for additional restaurants and personal service businesses. While these could occur in many different places, a town center is certainly an appropriate and likely location.

## TRANSPORTATION:

1. The study area accommodates a significant amount of traffic in a generally efficient manner. There are no pressing needs for safety enhancements.
2. The primary opportunities for improvements in the area involve the allocation of existing facilities and right-of-way to other purposes in addition to moving vehicles.
3. The Highway 43 Concept Plan suggested a number of improvements to Willamette Drive. Although these did not extend very deep into the study area, similar improvements such as bicycle lanes, a median to control left turns and enhance the character, upgraded sidewalks and crosswalks are potentially applicable to the town center.
4. There are redundant access ramps associated with I-205. One could be eliminated with a reconfiguration of roadways, intersections and lights. This could make the area safer for walking and biking, open up areas for other purposes, and enhance the experience of people arriving into West Linn from both the Arch Bridge and I-205.
5. The Broadway bridge crossing over I-205 duplicates the function performed by the West “A” Street bridge. There is a possibility that the Broadway corridor could be re-purposed to accommodate other uses such bicycle and walking routes.



# URBAN DESIGN AND DEVELOPMENT POTENTIAL

1. The portion of the Primary Study Area north of I-205 has relatively limited sites for redevelopment. This is a mature area that is surrounded by stable, single-family housing and includes the shopping center that was recently renovated and expanded.
2. There are a few locations where sensitive infill development could occur, such as along Burns Street. Should the U.S. Post Service reconfigure its operations, the parcel occupied by the post office could be available for redevelopment, perhaps with the postal service function retained. The two automobile service stations that flank Willamette Drive near I-205 could also be future development sites.
3. The greatest potential for development exists in the southern portion of the Primary Study Area, closest to the Arch Bridge and the West Linn Paper Company. Previously the location of the original town center, this could become a place that can accommodate new housing, employment, retail, services, and restaurants. A hotel and conference center could also be located there.
4. The current non-residential zoning for the area includes both General Commercial (GC) and Office Business center (OBC) – both districts that are found elsewhere in the community. Many cities attempting to create a mixed use town center adopt a special form of zoning that recognizes the unique function of a town center. A town center district often includes different standards for intensity and design.
5. The Bolton Neighborhood Plan, adopted in 2006, offers a number of ideas for the town center that continue to be valid.
6. The construction of I-205 split the area apart and created a confusing combination of ramps, twisting streets, odd intersections, and unused land. Over time, a town center could help mend the divide.
7. Willamette Drive is not currently a street that reflects the quality of the city, its unique natural setting, and established neighborhoods. Enhancements indicated in the Highway 43 Concept Plan suggest a number of features that add to the idea of a town center.
8. The history of the West Linn Paper Mill, the power plant, the locks, the Falls, and the unique land forms of the area are not currently commemorated in a manner that could attract visitors. There are numerous opportunities to denote and interpret these cultural resources. This could play off of the impending redevelopment of the mill property in Oregon City.

## OPEN SPACE / TRAILS

1. The Primary Study Area is anchored by several parks – Hammerle Park, Burnside Park and Maddox Woods on the north and West Bridge Park on the south. These are all unique open spaces that infuse a potential town center with splendid places for people to spend time and enjoy the natural surroundings.
2. The recently-adopted West Linn Trails Master Plan provides a vision for a riverfront trail that would connect the town center with Willamette Park. This trail could make use of current parks, streets and added right-of-way to complete a multimodal recreational route.
3. As the trail is developed, local connections can enhance its relationship to the town center.
4. The trail presents opportunities to interpret the rich history of the area, as well as to provide an esplanade with spectacular views of the water, the falls, and the opposite side of the river.
5. The McLean House is a valuable community asset that could be enhanced by sensitive additions of parking and usable spaces for events.



DATE: March 31, 2014

ECO Project #: 21631

TO: Mark Hinshaw, LMN Architects

FROM: Anne Fifield and Lorelei Juntunen, ECONorthwest

SUBJECT: ARCH BRIDGE/BOLTON TOWN CENTER-MARKET CONDITIONS ASSESSMENT-DRAFT

---

ECONorthwest is part of a multi-disciplinary team led by LMN Architects to create a redevelopment plan for the area in West Linn to the west of the Arch Bridge. This memorandum provides an initial assessment of demographic and market trends that affect redevelopment of the study area.

This market assessment does not provide any specific recommendations regarding uses for the study area. Instead, it provides an understanding of key demographic and market trends, to identify viable uses for redevelopment in the study area. Later phases of the planning process will refine this understanding, and describe potential uses on specific sites.

The remainder of this memorandum is organized into the following parts:

- Key findings and implications
- Description of the study area
- Overview of demographics and economic conditions
- Development market

## 1. Key Findings and Implications

West Linn is a southern suburb in the Portland metropolitan area. The Portland region has a relatively strong economy—its total employment is growing. The strength of the regional economy benefits the study area. The population of the region is expected to grow at a steady pace, and the study area will be in a position to capture some of the demand for housing that the new households will generate.

West Linn is attractive to affluent households with children. The community has a high portion of children and its housing stock is dominated by detached single-family units. West Linn is part of a school district that enjoys a good reputation, and the area is likely to continue to be attractive to such households.

West Linn, however, is experiencing the same demographic trends as the nation: its population is aging and in the coming decades, a larger portion of its population will be over 65. A portion of these households will choose to downsize from large, detached single-family houses to higher-density homes that require less maintenance. At this time, West Linn offers few housing choices for these households. If an aging household would like to remain in West Linn, the primary housing choice is the single-family detached home. A household that would like a smaller choice is likely to leave the community. Providing housing choices for an aging



population could give existing residents a wider choice of housing options to enable them to age in their community.

Although most of the households in West Linn have relatively high incomes, a portion of the community has lower incomes. Our research found evidence of strong demand for low-cost rental housing. The school district's reputation will attract families with children to the area; smaller, less costly family-oriented housing could provide housing choices for those families.

The broad employment trends show that West Linn residents are highly employable, but they tend to not work in West Linn, and employment opportunity in Clackamas County is diminishing relative to employment opportunity elsewhere in the region. This indicates that West Linn functions as a 'bedroom community'. Creating a town center in the study area may be a tool to create employment opportunities in the study area, redeveloping the area to encourage businesses to locate in West Linn, and potentially providing opportunities for co-working space. There is likely demand for a small amount of office space that offers flexible space to small sole proprietors.

The study area shows a reasonably strong retail market, with low vacancy rates. There are potential retail opportunities for full-service restaurants and personal care services. The opportunity for new retail space is limited, however. The area is not likely to be a large retail center.

West Linn has no hotel at this time. The primary demand for a hotel in a suburban community stems from individuals visiting residents of West Linn. It is likely that the community could generate adequate demand for a hotel. Combining a hotel with event space for large parties such as weddings, could generate additional demand.

The study area has relatively high-value properties west of Interstate 205, making it unlikely that the area will redevelop in the near term. The land between the Interstate and the western bank of the Willamette River, however, has a number of relatively low-value properties. Existing development on many parcels is relatively low value, making it more likely that the area could redevelop.

These key findings suggest that a mix of uses could be supported in the study area, particularly in the area near the Willamette River. A mix of owner and renter-occupied housing, some office space and retail space, along with a hotel, could create a town center on the eastern edge on West Linn.



## 2. Description of study area

West Linn connects directly to Portland via State Highway 43 and the rest of the metropolitan area via Interstate 205. The primary study area includes the intersection of these two highways, extending southeast on Highway 43 to the Arch Bridge on the eastern edge of West Linn. The study area extends to the north and south of the western end of the Arch Bridge to include property along the banks of the Willamette River.

The primary study area includes the eastern entrance to West Linn, facing Oregon City. Decades ago, West Linn acted as an outlying community of Oregon City and West Linn's residents traveled to Oregon City for many goods, services, and employment. As the City of Portland grew, West Linn became an outlying community of Portland.

Evidence of West Linn's connection to Oregon City lies on the eastern end of the primary study area. The older buildings along Highway 43 are remnants of the small city center that once existed. The construction of Interstate 205 eliminated much of that city center and created a divide between that city center and the rest of the community.

### 2.1 Land use and values

Figure 1 shows the existing land uses in the primary study area, as identified by the Clackamas County Assessment and Taxation Office. The map shows that the area is primarily a mix of single-family residential and commercial uses, with industrial activity on the western bank of the Willamette River. Many of the uses shown as 'commercial' are public uses, including schools, the City library, and a police station. The site of the Bolton Primary School is classified as open space/park, because the school and the associated park are on a single parcel.

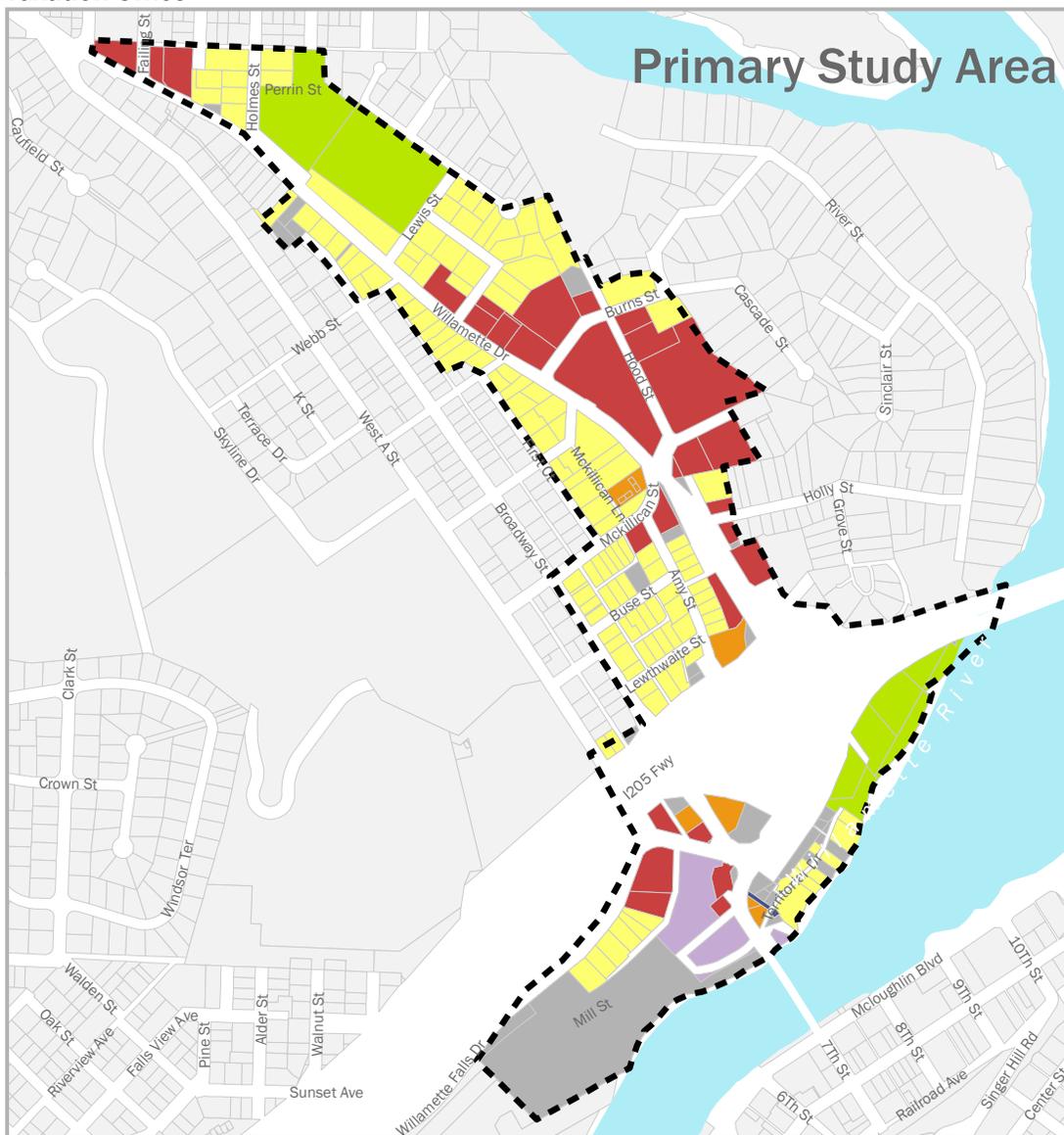
The commercial uses are centered at the intersection of Willamette Drive (i.e., Highway 43) and Burns Street. This area includes the City's public library and the West Linn Central Village shopping center. The parking lot next to the City's library appears as 'vacant', because it is an independent parcel with no structure on it. The parking lots associated with the West Linn Central Village are part of the larger parcels that include structures.

The eastern edge of the study area, east of Interstate 205, there is a wide mix of uses, including a the West Linn Paper Mill, apartment complexes, multi-story commercial structures, single-story gas stations, single-family residential, and open space along the Willamette River. A large portion of space is right-of-way for Interstate 205. The Clackamas County Assessment and Taxation Office shows the parcels that are part of the West Linn Paper Company's operations as vacant, because those parcels are used for truck access and surface parking by the paper mill. According to the Clackamas County Assessment and Taxation Office, there are no structures with value on those parcels, and are therefore identified as vacant.

Just north of the paper mill lie several properties that were originally built as single-family homes, but are now used for commercial purposes. The Clackamas County Assessment and Taxation Office has identified their uses to be a mix of residential and commercial.



**Figure 1. Existing Land Uses, Identified by the Clackamas County Assessment and Taxation Office**



**Land Use, Clackamas County Assessors Office**

- Single-family residential
- Multifamily residential
- Commercial
- Industrial
- Open space / park
- Vacant
- Utility

0      500      1,000 feet  
 1 inch = 667 feet

Source: RLIS parcel data, February 2014. Land use categories are derived from Oregon Department of Revenue property classification land use codes. Several parcels were reclassified based on local knowledge.

**ECONorthwest**  
 ECONOMICS • FINANCE • PLANNING

Source: ECONorthwest, using RLIS parcel data.

In order to assess the relative value of existing development, ECONorthwest calculated the ratio of the value of improvements on a single tax parcel (i.e., the structures on the parcel) to the value of the land of the tax parcel. The data are based on the estimated value of each parcel, as

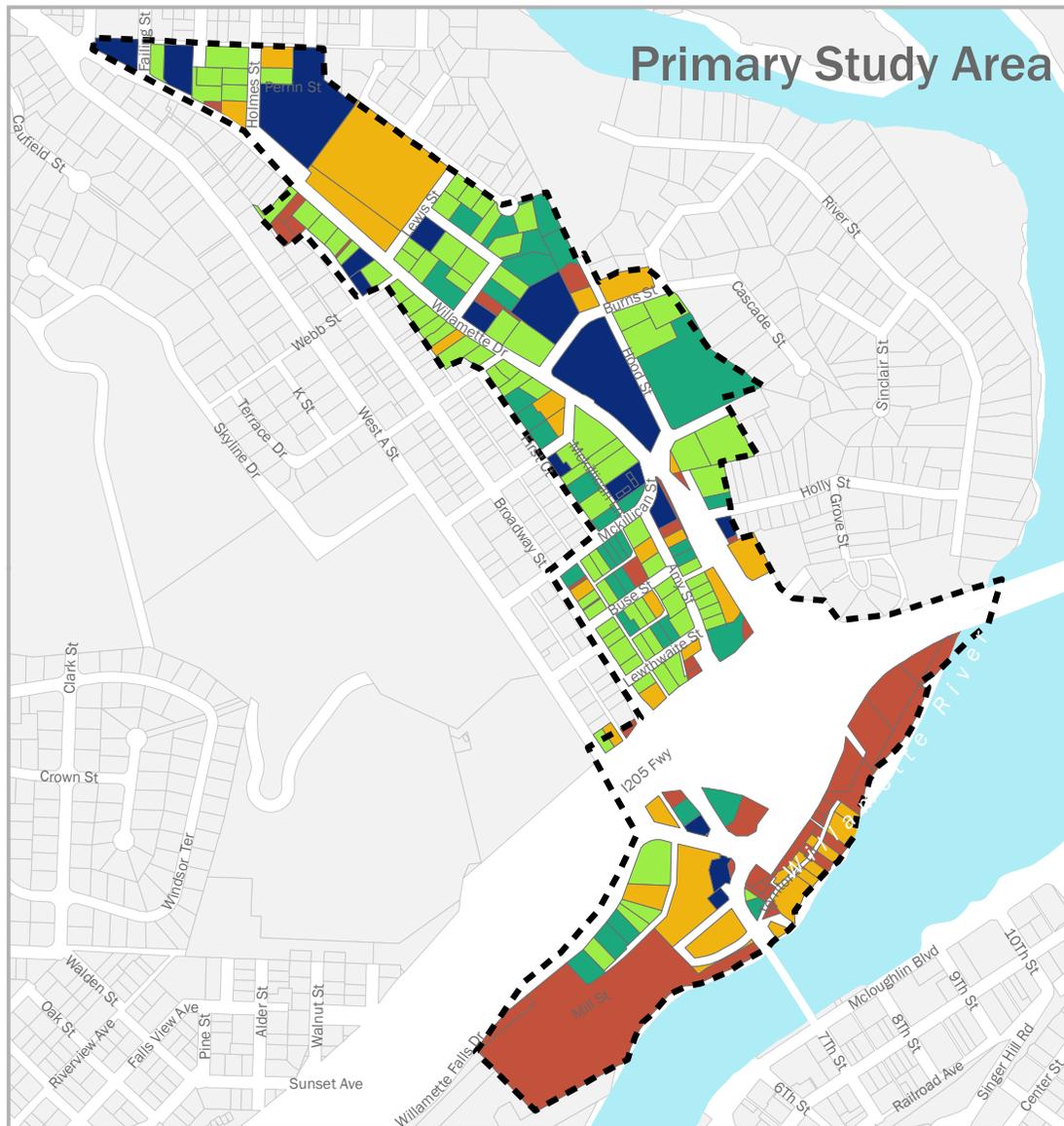


determined by the Clackamas County's Assessors Office, and provide a reasonable estimate of the values of individual parcels. In general, the higher the ratio, the more valuable the existing structure is and the less likely that parcel would redevelop in the near term. However, individual site characteristics and uses are also important in determining redevelopment potential. Lower value structures that are in productive employment uses, for example, are not likely to see large-scale redevelopment in the near term.

Figure 2 shows the ratio of the value of the improvement to the value of land. The data show that most of the parcels in the primary study area have a ratio greater than 1.0. The residential parcels tend to have a ratio between 1.0 and 1.99. A few parcels west of Interstate 205 have a ratio less than 1.0, but they tend to be scattered throughout the study area. The area east of Interstate 205 shows a concentration of parcels that have relatively low improvement-to-land ratios.



**Figure 2. Improvement-to-Land Value Ratio, Identified by the Clackamas County Assessment and Taxation Office**



**Improvement to Land Value Ratios**

- 0.00
- 0.01 - 0.99
- 1.00 - 1.99
- 2.00 - 2.99
- 3.00 and greater

0      500      1,000 feet  
 1 inch = 667 feet

**ECONorthwest**  
 ECONOMICS • FINANCE • PLANNING

Source: RLIS parcel data, February 2014.

Source: ECONorthwest, using RLIS parcel data.



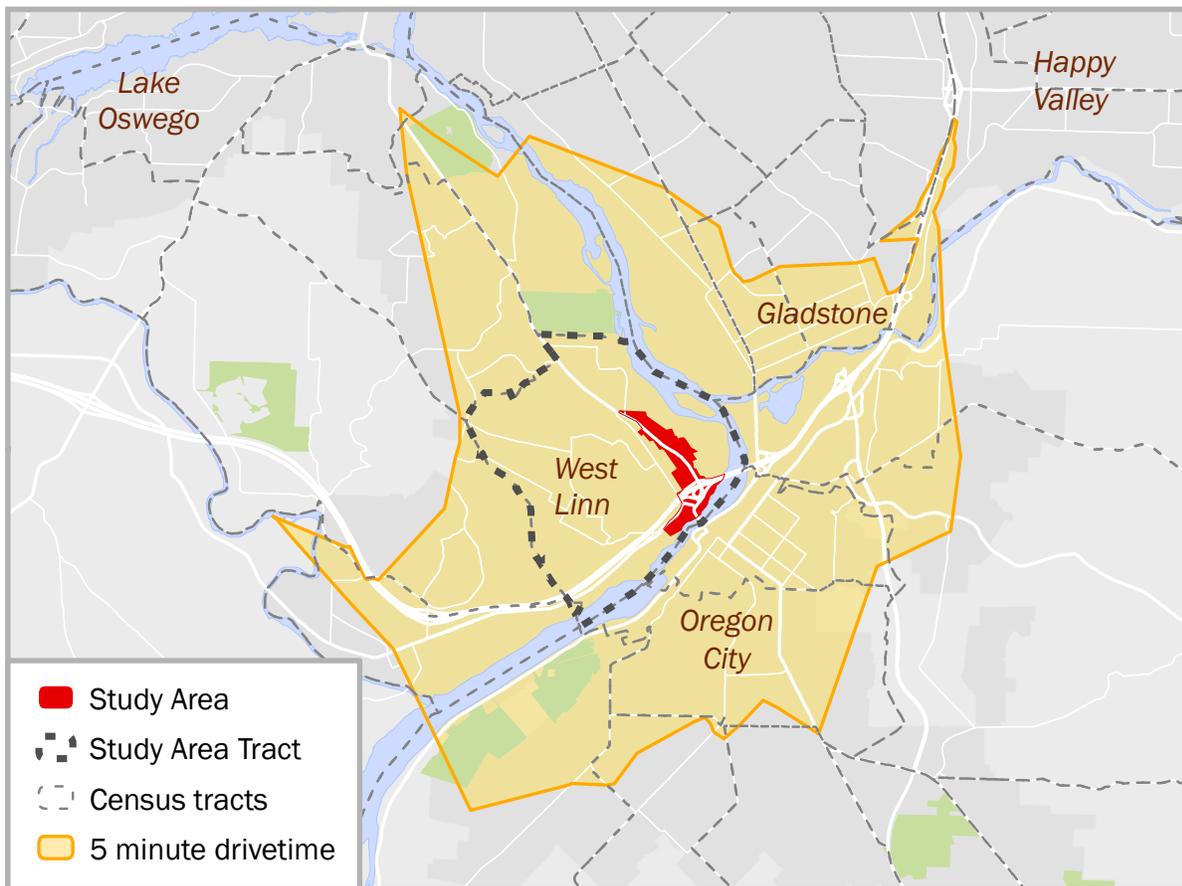
## 2.2 Research boundaries

In this analysis, we describe the primary study area and compare it to other, larger geographies. We describe the primary study area, West Linn, an area that covers a five-minute drive time around the study area, Clackamas County, and the Portland metropolitan area.

To describe the primary study area, we relied on data from a variety of sources, but one of the key sources was the US Census, at the Census tract level. The boundary of the Census tract did not align with the boundary of the study area, but it provided the narrowest description of the study area.

Figure 3 shows the geographies we defined for this analysis. The dashed lines show the boundaries of Census tracts. The red area at the center represents the primary study area. The Census tract used to describe the primary study is the defined by the heavier dashed line encircling the primary study area. The yellow area surrounding it represents a five-minute drive time from the primary study area. To describe that geography, ECONorthwest used the Census tracts that have a majority of their area within the five-minute drive time boundary.

**Figure 3. Primary Study Area and Five-Minute Drive Area**



Source: ECONorthwest, using US Census data.



### 3. Overview of Demographics and Economic Conditions

This section provides an overview of major demographic trends for the primary study area and comparison geographies. These trends affect demand for different uses in the study area.

#### 3.1 Population Trends

Table 1 summarizes the total population and the number of households within the primary census tract, West Linn, a five-minute drive area, Clackamas County, and the Portland Metropolitan Statistical Area (MSA). The primary tract comprises about 31% of the total population of West Linn. West Linn makes up about 7% of Clackamas County. The five areas have an average of between 2.5 and 2.7 people per household. The study area has a slightly larger average household size, suggesting that the area is popular for households with children.

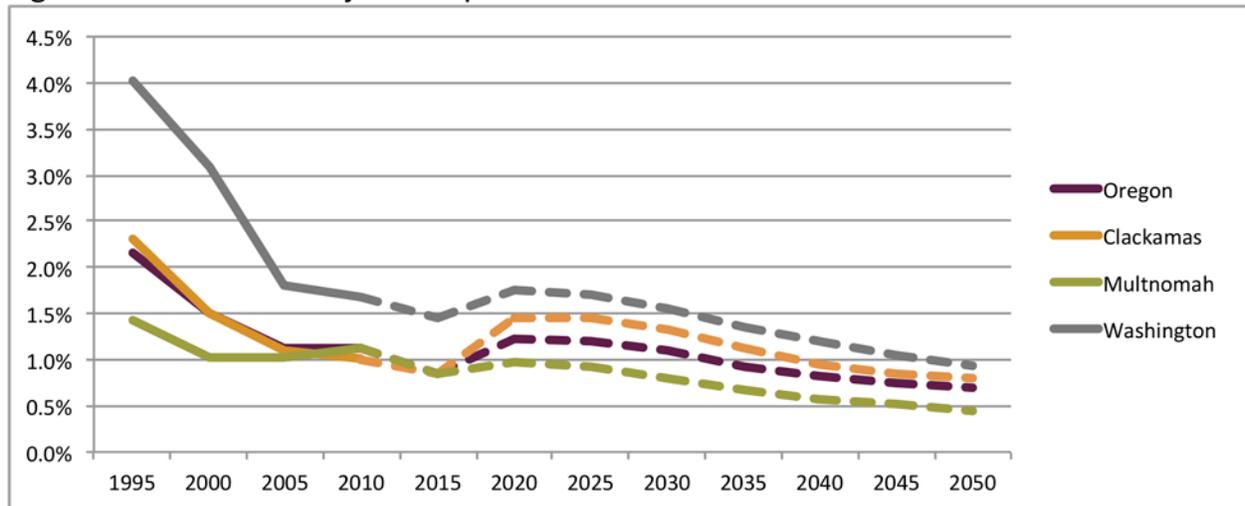
**Table 1. Total Population and Number of Households**

	Study Area	West Linn	5-Minute Drive	Clackamas County	Portland MSA
Total Population	7,814	25,109	41,893	375,992	2,226,009
Total Number of Households	2,889	9,523	16,693	145,790	867,794
Average Number per Household	2.7	2.6	2.5	2.6	2.6

Source: U.S. Census Bureau. 2010 Decennial Census. Tables SF1 QTH1 and SF1 DP1.

Figure 4 shows the historical and projected population growth rates for Oregon, Clackamas County, Multnomah County, and Washington County from 1995 to 2050. Historical and projected growth in Clackamas County is less than growth in Washington County, but greater than growth in Oregon and Multnomah County. Growth in all four geographies is expected to increase until 2020, and then slow to less than 1% by 2050. Clackamas County is expected to grow at almost 1.5% annually through 2025, about 6,000 individuals per year.

**Figure 4. Historical and Projected Population Annual Growth Rates**



Source: Oregon Office of Economic Analysis. 2013. Long-term Oregon State's County Population Forecast.

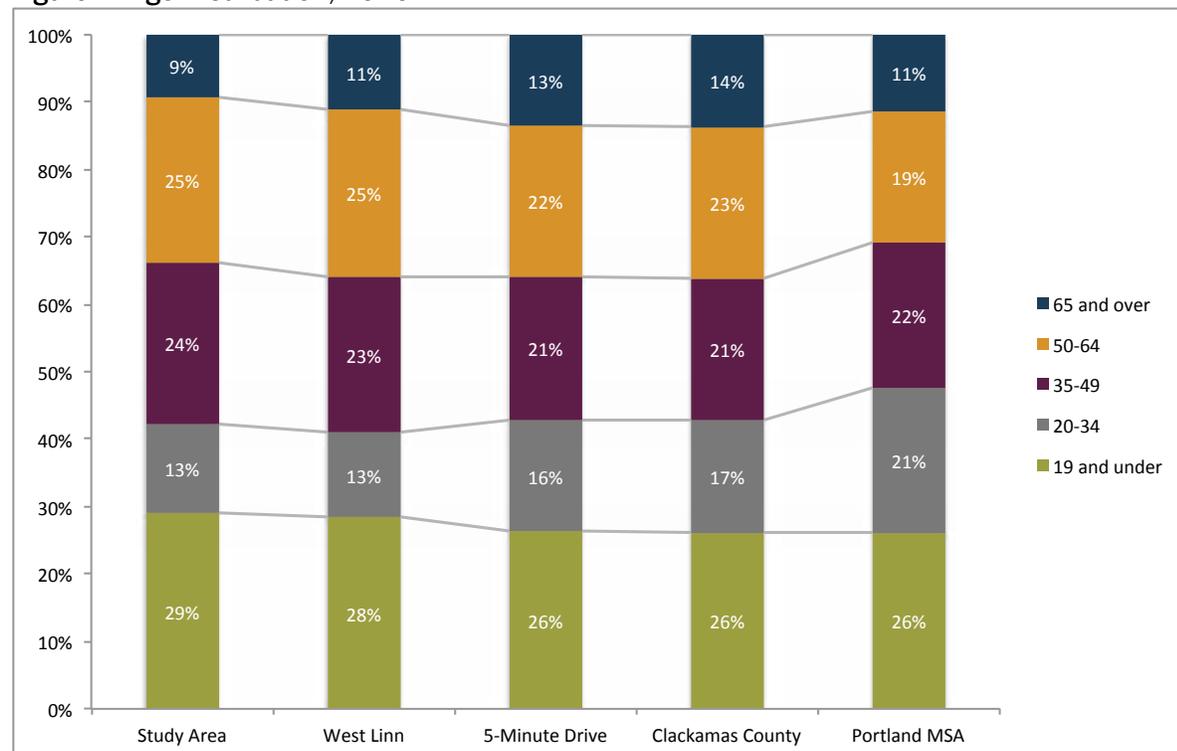


The projected growth rates indicate that the region expects steady growth, but not extraordinary growth. The study area will be in a position to capture some of the demand for housing that the new households will generate.

### 3.2 Age Distribution

Figure 5 shows the age distribution in the study area, West Linn, the five-minute drive area, Clackamas County, and the Portland MSA. The distribution of the study area and West Linn contain a smaller percentage of 20 to 34 year olds, a larger percentage of people under 19 years of age, and a larger percentage of people between 50 and 64 than the other three geographies

**Figure 5. Age Distribution, 2010**



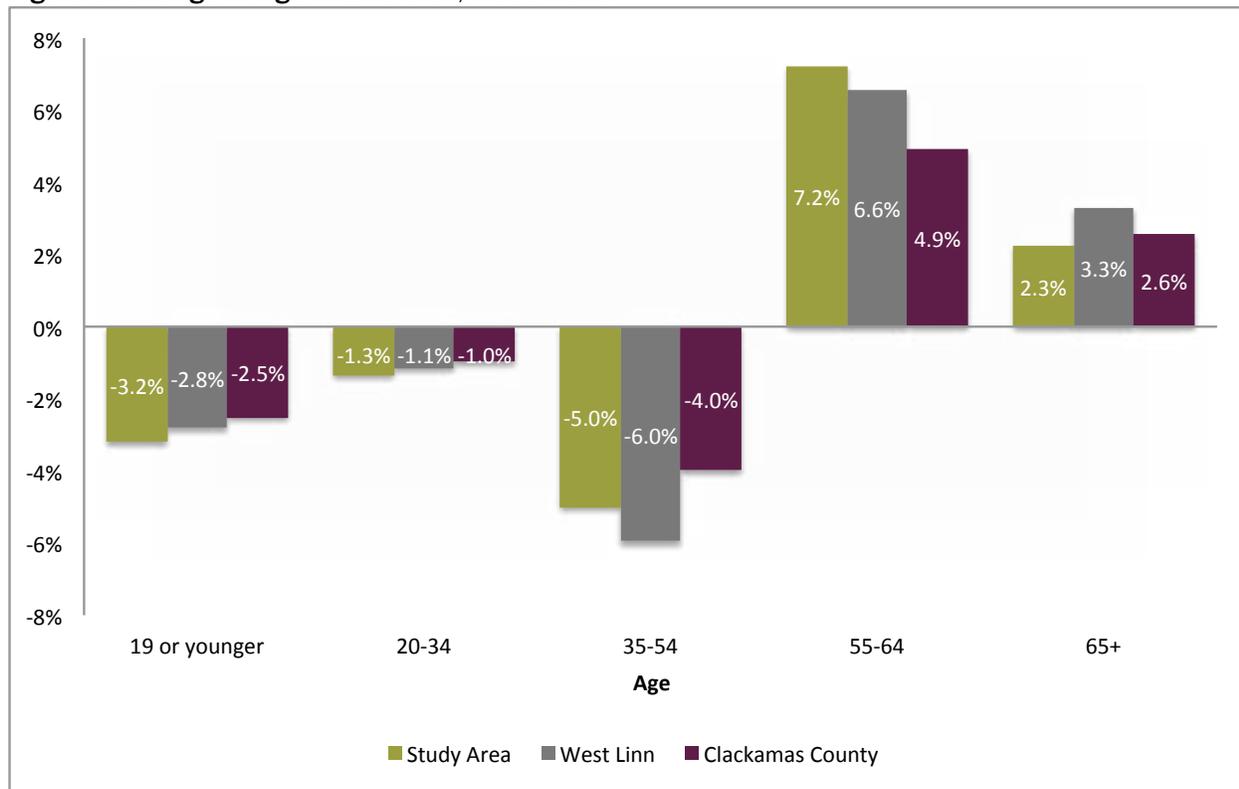
Source: U.S. Census Bureau. 2010 Decennial Census. Table DP1.

These data indicate that the study area and West Linn offer amenities that are more appealing to families with children. Individuals between the ages of 20 and 34 are more likely to choose to live in an urban center.

Figure 6 shows the change in age distribution in the study area, West Linn, and Clackamas County between 2000 and 2010. All three areas show similar trends. The study area experienced a 7.2% growth in the 50-to-64 year old age group, higher than the other areas. It also experience a 5% decrease in 35 to 49 year olds. In this time period, the population of West Linn grew by about 2,800. The actual number of children changed very little in the study area, declining by fewer than 30. The number of children grew by 190 in West Linn.



**Figure 6. Change in Age Distribution, 2000-2010**



Source: U.S. Census Bureau. 2000 and 2010 Decennial Census. Table DP1.

The primary study area and West Linn are experiencing the same demographic trends as the nation: its population is aging and in the coming decades, a larger portion of its population will be over 65. Providing housing choices for an aging population could give existing residents a wider choice of housing options to enable them to age in place.

### 3.3 Race and Ethnicity

Table 2 shows the race and ethnicity composition of the study area, West Linn, the five-minute drive area, Clackamas County, and the Portland MSA. The study area, the five-minute drive area, and West Linn exhibit similar trends, with 88% of people identifying themselves as white, 5%, and other races each comprising less than 5% of the population. Clackamas County is similar with a slightly lower percentage of people identifying as white (84%) and a slightly larger percentage identifying as Hispanic or Latino (8%). The Portland MSA contains the most diversity with about 76% of people identifying as white, 11% identifying as Hispanic or Latino, 6% identifying as Asian and the remainder individually making up less than 5% of the population.



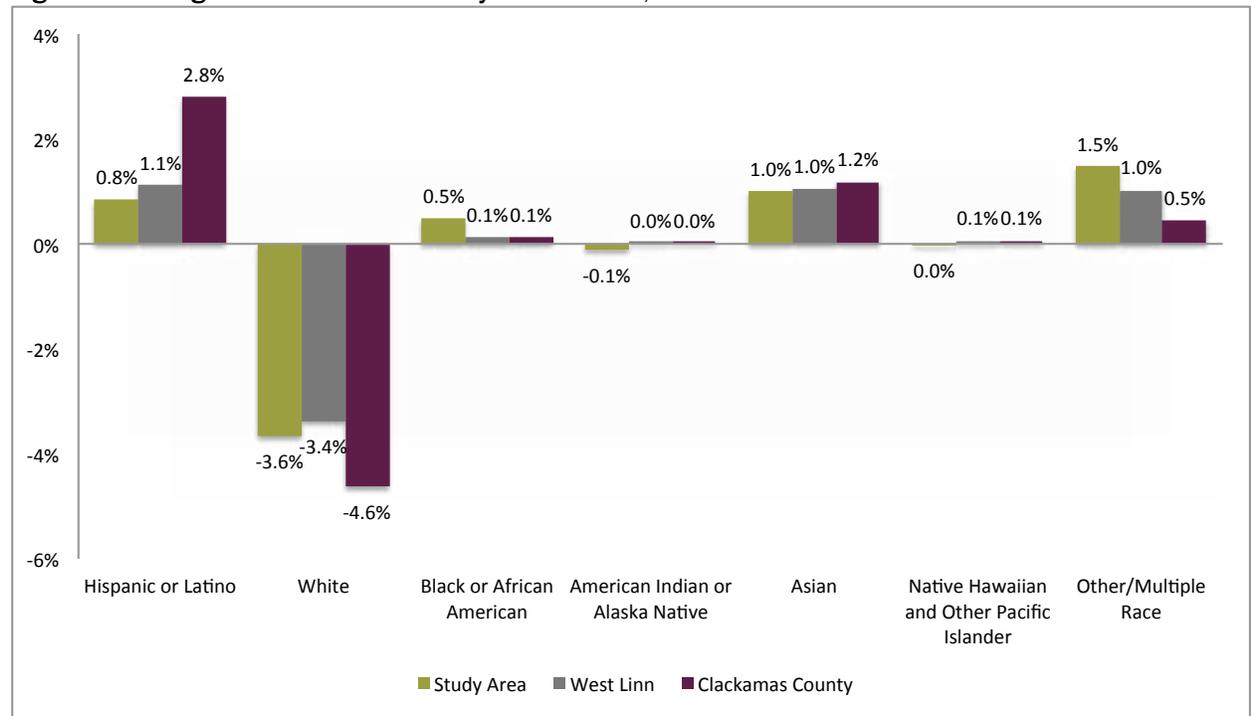
**Table 2. Race and Ethnicity, 2010**

	Study Area	West Linn	5-Mintue Drive	Clackamas County	Portland MSA
Hispanic or Latino	4%	4%	6%	8%	11%
White	88%	88%	88%	84%	76%
Black or African American	1%	1%	1%	1%	3%
American Indian or Alaska Native	0%	0%	1%	1%	1%
Asian	4%	4%	2%	4%	6%
Native Hawaiian and Other Pacific Islander	0%	0%	0%	0%	0%
Some other Race	3%	3%	3%	3%	3%

Source: U.S. Census Bureau. 2010 Decennial Census. Table SF1 DP1.

Figure 7 shows the change in race and ethnicity between 2000 and 2010 in the study area, West Linn, and Clackamas County. All three geographies experienced a decrease in those reporting white as their race and in increase in those reporting Hispanic or Latino, Asian, black or African-American, or other/multiple race.

**Figure 7. Change in Race and Ethnicity Distribution, 2000-2010**



Source: U.S. Census Bureau. 2010 Decennial Census. Table DP1. 2000 Decennial Census, Table P004.

The racial and ethnic composition of West Linn and the study area is similar to the regional composition. The analysis does not suggest any particular findings specific to this site’s redevelopment potential.

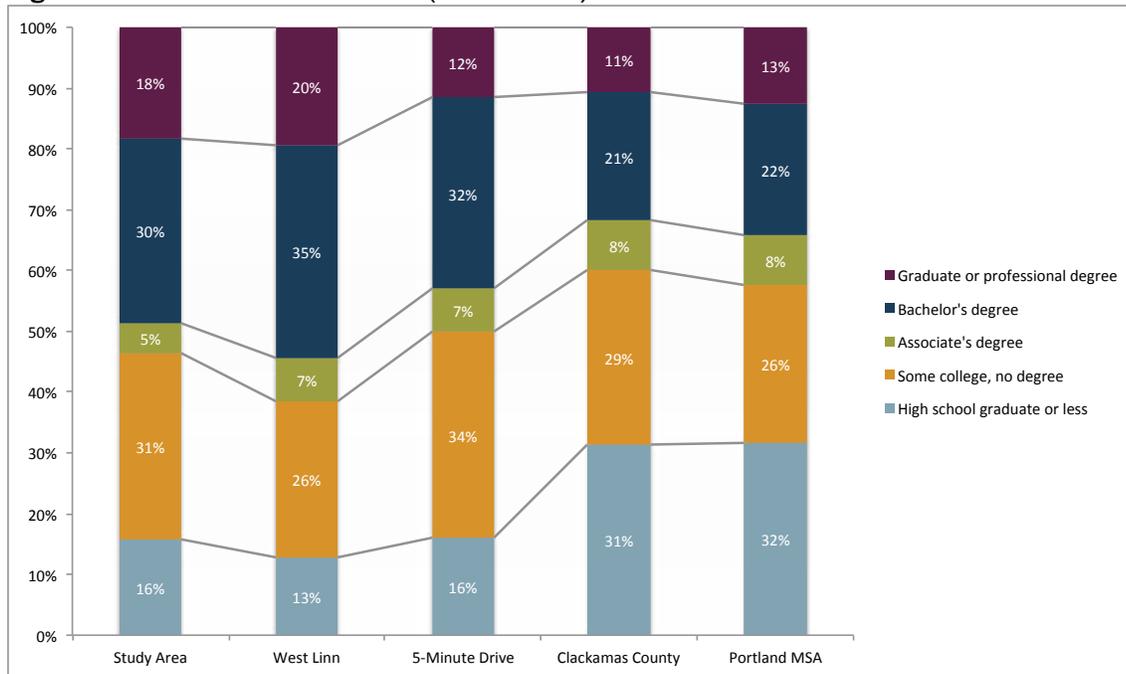
### 3.4 Educational attainment

Figure 8 shows educational attainment in the study area, West Linn, the five-minute drive area, Clackamas County, and the Portland MSA. More than half of those in the study area, the five-minute drive area, and West Linn have an associates degree or higher, much higher than



Clackamas County and the Portland MSA. Only 16 % of the study area population has a high school degree or less.

**Figure 8. Educational Attainment (2008-2012)**



Source: U.S. Census Bureau. 2008-2012 American Community Survey 5-year Estimates. Table S1501.

Education levels are strongly correlated with income. This data suggests that income levels in the study area will be high over demand, supporting higher-end retail and residential facilities. The high education levels may also show potential for entrepreneurial activity.

### 3.5 Income

Table 3 shows the labor force characteristics of the study area, West Linn, the five-minute area, Clackamas County, and the Portland MSA. The study area and West Linn have the highest median household income at nearly \$90,000 and \$87,000 respectively. Per capita income is also greatest in these communities. The Portland MSA has the lowest median household income at about \$58,000 and the lowest per capita income at about \$30,000.

**Table 3. Income characteristics**

	Study Area	West Linn	5-Minute Drive	Clackamas County	Portland MSA
Median Household Income	\$ 89,850	\$ 86,611	\$ 66,052	\$ 63,951	\$ 57,896
Per Capita Income	\$ 37,270	\$ 41,319	\$ 34,229	\$ 32,249	\$ 29,946

Source: U.S. Census Bureau. 2008-2012 American Community Survey 5-year Estimates. Table DP03.

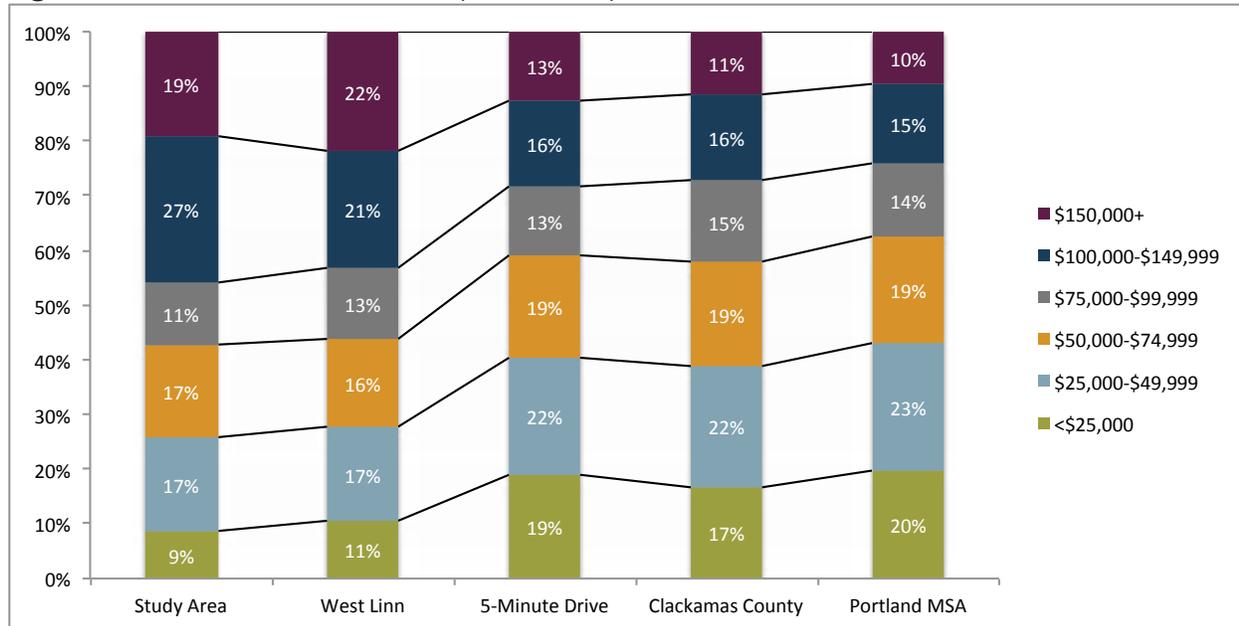


The data show that the study area has a higher median household income than West Linn, but a lower per capita income. This indicates that more families live in and near the study area, with more individuals per household.

Figure 9 shows the annual household income of the study area, West Linn, the five-minute drive area, Clackamas County, and the Portland MSA. The study area and West Linn have a significantly larger portion of households with \$100,000 or more than the five-minute area, Clackamas County, and the Portland MSA. The five-minute area, Clackamas County, and the Portland MSA have a larger portion of households earning less than \$50,000 than the study area and West Linn. This suggests that, while incomes very nearby are higher than average, the market depth for products that target the upper incomes is limited.

It is important to note, that although the study area and West Linn have very high average incomes, there are households with very low incomes, less than \$25,000 per year. There are few housing choices in the area for lower income households at this time.

**Figure 9. Annual household income (2008-2012)**



Source: U.S. Census Bureau. 2008-2012 American Community Survey 5-year Estimates. Table DP03.

The study area and West Linn are attractive to high-income households. This creates an opportunity to provide housing that appeals to that demographic. However, the area does have a small portion of lower-income households, and could provide housing to support a range of incomes. Further, while the number of people in high-income brackets is proportionally high in West Linn, the total number of higher-income earners in proximity to the site is small. Products that target upper income earners would need to attract residents from other parts of the region, rather than from other parts of the City of West Linn.



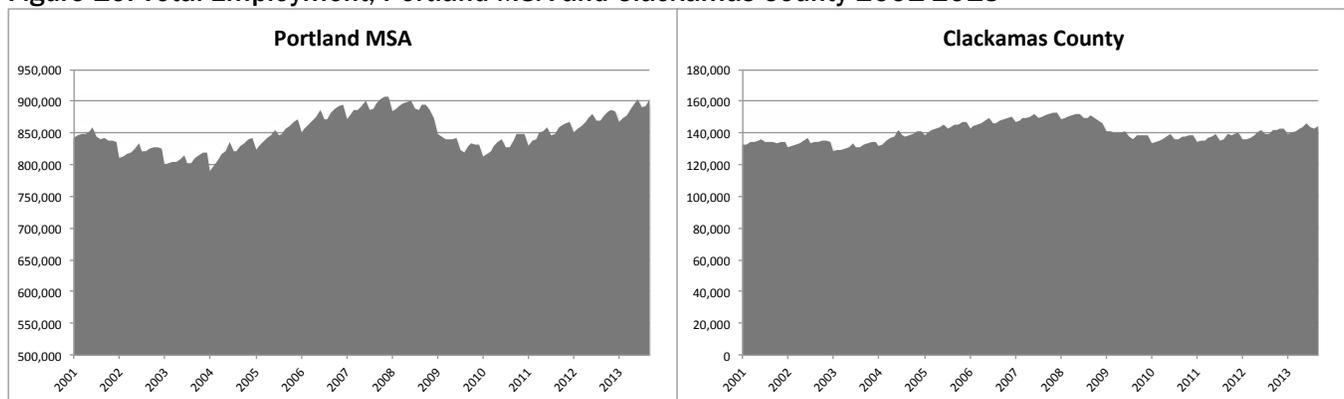
### 3.6 Employment Trends

This section describes broad economic trends and their implications for redevelopment potential in the study area.

Figure 10 shows total employment in the Portland MSA and Clackamas County from 2001 to 2013. The data show that the entire region and Clackamas County lost jobs during the server recession that began in 2008. By 2013, the region had recovered the jobs that were lost in 2008 and 2009. There area roughly 900,000 jobs in the Portland MSA. Clackamas County, however, has not yet recovered the jobs lost in 2008 and 2009. It had about 150,000 jobs in early 2008, and by the end of had about 140,000.

New jobs in the Portland have concentrated in Washington County. Total employment in 2013 in Washington County exceed its total employment in early 2008. Employment growth in Clackamas County has lagged other parts of the region.

**Figure 10. Total Employment, Portland MSA and Clackamas County 2001-2013**



Source: Oregon Employment Department, Covered Employment.

Note: The scale for the two charts varies.

Although total employment in Clackamas County lags behind the region, this slower growth trend has not affected the labor force in West Linn. Figure 11 shows the labor force characteristics of the study area, West Linn, the five-minute drive area, Clackamas County, and the Portland MSA. The study area has the highest labor force participation rate than the other geographies at 71%, but also has the highest unemployment rate at 11%. The unemployment rate is similar across the other geographies, except for West Linn, which has a rate of only 7.2%.

**Figure 11. Labor Force Characteristics**

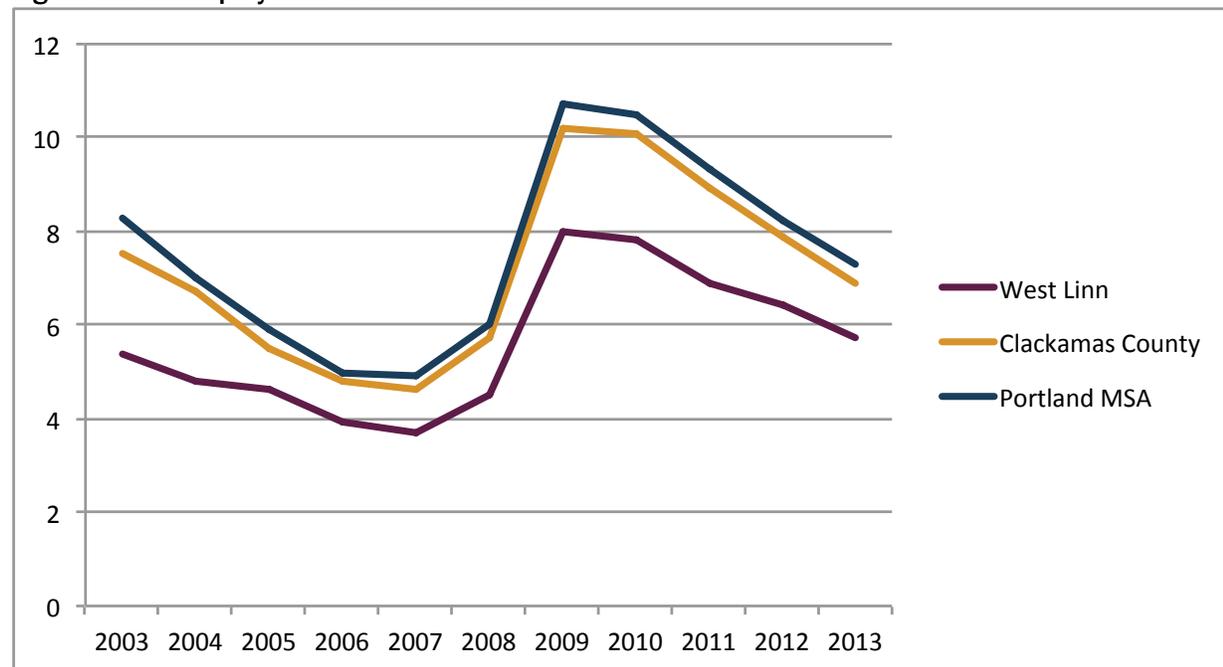
	Study Area	West Linn	5-Minute Drive	Clackamas County	Portland MSA
% Over 16 in Labor Force	71%	68%	66%	66%	68%
% Over 16 not in the Labor Force	29%	32%	34%	34%	32%
% In Labor Force Employed	89%	93%	90%	90%	90%
% In Labor Force not Employed	11%	7%	10%	10%	10%

Source: U.S. Census Bureau. 2008-2012 American Community Survey 5-year Estimates. Table DP03.



Figure 12 shows the unemployment rate for West Linn, Clackamas County, and the Portland MSA from 2003 to 2013. West Linn’s unemployment rate was consistently lower than Clackamas County and the Portland MSA over the 10-year period. However, all three followed the same trend, declining until 2007, rising sharply between 2007 and 2009, and then declining slowly between 2009 and 2013.

**Figure 12. Unemployment Rate 2003-2013**



Source: U.S. Bureau of Labor Statistics. 2013. Local Area Unemployment Statistics.

The data show that West Linn workers are more likely to be employed than workers in the rest of the region. The community’s high education levels make its labor force more employable. Individuals with higher levels of education are more likely to be employed.

In 2011, only 7.5% of employed West Linn residents were employed in West Linn.<sup>1</sup> This is a lower portion than in neighboring communities: 13.2% of Lake Oswego; 14.2 % in Oregon City, and 8.5% in Milwaukie.

The broad employment trends show that West Linn residents are highly employable, but they tend to not work in West Linn, and employment opportunity in Clackamas County is diminishing relative to employment opportunity elsewhere in the region. This indicates that West Linn functions as a ‘bedroom community’. There may be an opportunity to create employment opportunity in the study area, redeveloping the area to encourage businesses to locate in West Linn.

<sup>1</sup> U.S. Census Bureau. 2013. LODES Data. Longitudinal-Employer Household Dynamics Program. <http://onthemap.ces.census.gov/>



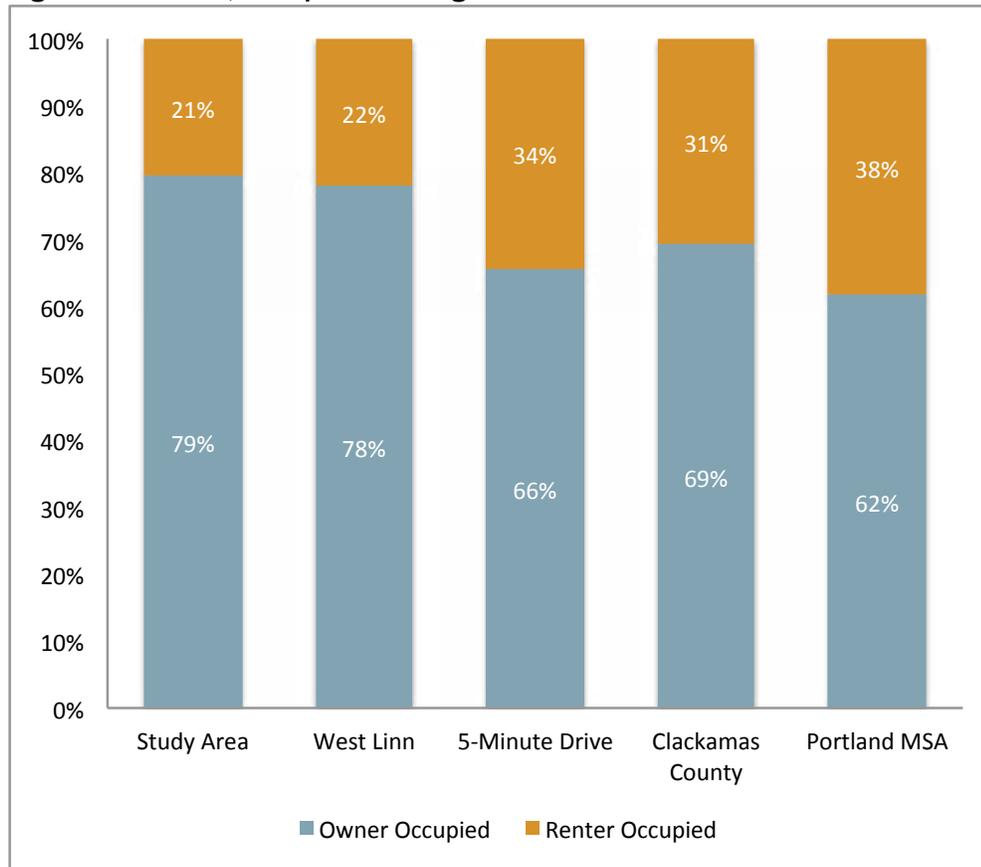
## 4. Development Market

In this section, we describe the existing conditions for residential and commercial uses in and near the study area. The analysis provides insight into existing supply and potential demand for different land uses and redevelopment opportunities.

### 4.1 Residential Uses

This section describes general trends in the housing market. Figure 13 shows that the study area and West Linn have a higher portion of owner-occupied homes than the County and the MSA. Almost 80% of households in West Linn own their homes, compared to 62% in the Portland MSA. For reference, nationwide, about 65 percent of households own their homes.

**Figure 13. Tenure, Occupied Housing Units**



Source: U.S. Census Bureau. 2008-2012 American Community Survey 5-year Estimates. Table DP04.

Figure 14 shows the median home sale prices of homes in Lake Oswego, Oregon City, and West Linn between 1997 and 2013. All three geographies follow similar trends, however Lake Oswego and West Linn consistently have higher home prices than Oregon City. Lake Oswego has had the highest home sale prices since 2002, with 2013 sale prices nearly \$70,000 higher than West Linn and more than \$180,000 higher than Oregon City.



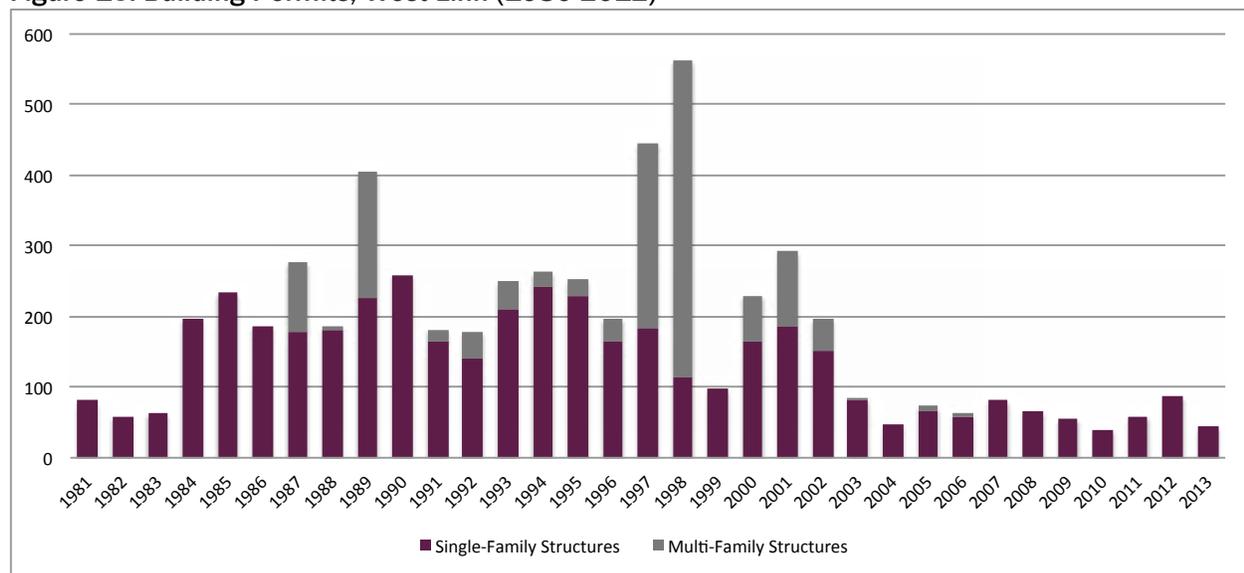
**Figure 14. Median Home Sale Prices (1997-2013)**



Source: Zillow.com

Figure 15 shows building permits for single-family structures and multi-family structures in West Linn between 1981 and 2013. Permits for single-family housing peaked in the early 1990s. Permits for multi-family housing peaked in 1997 and 1998. Since 2003, about 60 units have been per year, on average. The City has issued only eleven permits for multi-family units of any kind over the last ten years.

**Figure 15. Building Permits, West Linn (1980-2012)**

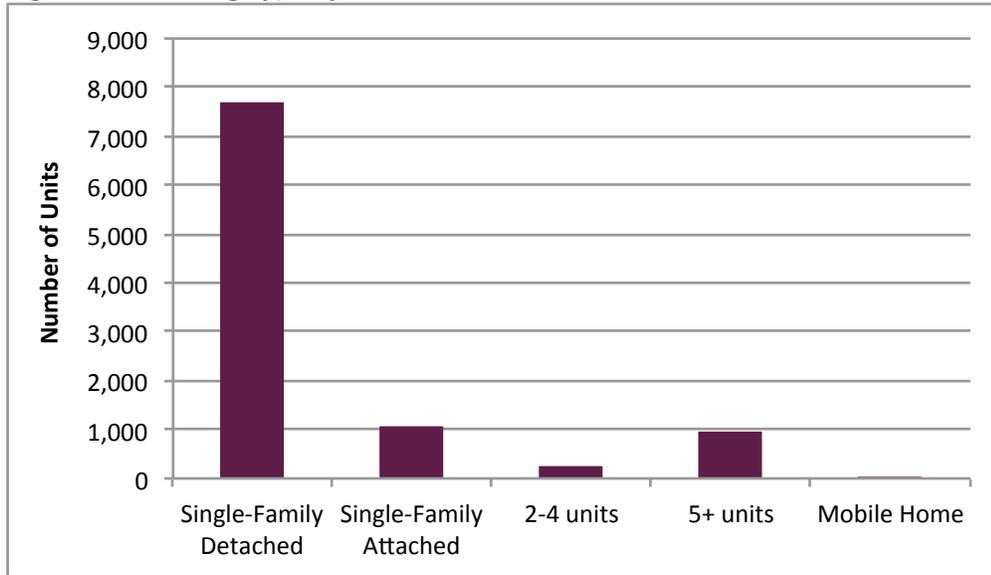


Source: City of West Linn Building Department (<http://westlinnoregon.gov/building/latest-housing-counts>).



Figure 16 shows the mix of housing types in West Linn. The data show that a large majority, 77%, of housing units are single-family detached houses. A small portion, 11%, lives in attached single-family units, such as townhomes. The remainder (11%) lives in multi-family units, ranging from duplexes to apartment complexes with more than 20 units.

**Figure 16. Housing Type by Number of Units in Structure, West Linn**



Source: U.S. Census Bureau. 2008-2012 American Community Survey 5-year Estimates. Table DP04.

The data show that the majority of the housing stock in West Linn is single-family detached units. The existing multi-family complexes, however, enjoy strong rents and low vacancy rates. Table 4 shows the rents and vacancy rates for three apartment complexes in West Linn. Two complexes, Cascade Summit and Summerlinn, are relatively new and offer high-level amenities. One of the complexes that ECONorthwest was able to reach, the Amy Street Apartments, is in the study area. The apartment manager reported that the units are very easy to fill and units are rarely vacant for long. The rents at the Amy Street Apartments are much lower than at the larger, newer complexes.



**Table 4. Apartment Rents and Vacancy Rates, West Linn**

Complex	Unit	Number of			\$/SF	Vacancy Rate
		Units	Rent	SF		
<b>Cascade Summit</b> 22100 Horizon Dr West Linn, Oregon	1 Bedroom	62	\$1,000	795	\$1.26	1.6%
	2 Bedroom	182	\$1,200	1045	\$1.15	1.1%
	3 Bedroom	50	\$1,500	1289	\$1.16	6.0%
	<i>Total/Average</i>	<i>294</i>			<i>\$1.17</i>	<i>2.0%</i>
<b>Summerlinn</b> 400 Springtree Lane West Linn, Oregon	1 Bedroom	35	\$1,100	765	\$1.44	14.3%
	2 Bedroom	70	\$1,350	1239	\$1.09	2.9%
	3 Bedroom	21	\$1,800	1515	\$1.19	9.5%
	<i>Total/Average</i>	<i>126</i>			<i>\$1.18</i>	<i>7.1%</i>
<b>Amy Street Apartments</b> 5250 Amy Street West Linn, Oregon	Studio	1	\$650	350	\$1.86	0.0%
	1 Bedroom	1	\$725	550	\$1.32	0.0%
	2 Bedroom	7	\$895	850	\$1.05	0.0%
	3 Bedroom	1	\$850	1000	\$0.85	0.0%
	<i>Total/Average</i>	<i>10</i>			<i>\$1.05</i>	<i>0.0%</i>

Source: ECONorthwest.

The housing market data show that the great majority of housing units in West Linn are high-cost, single-family detached units. This aligns with the demographic structure of the community, which showed the community appeals to affluent households with children. Staff at the City of West Linn and members of this project’s Advisory Committee noted that the community has long supported its K-12 schools and the school system enjoys a good reputation. The State of Oregon has rated the schools in West Linn as ‘outstanding’.

A small portion of the community’s households rent their homes. The existing rented housing has low vacancy rates and high rents, indicating potential demand for additional rental housing. Very few multi-family units have been built in West Linn over the last ten years, and it is likely that there is pent-up demand for additional units.

A small portion of West Linn is low income. There are few housing choices for lower-income households, and new housing in the study area could provide new workforce housing. Given the good reputation of the school district, it is likely that many families would like to locate in the area, but cannot find housing within their price range.

The lack of higher-density ownership housing in West Linn creates an opportunity. The demographic analysis showed that the portion of West Linn residents over the age of 65 is growing. At this time, those individuals have few choices to allow them to remain in West Linn as they age. Higher-density units, with low maintenance requirements, are likely to appeal to a portion of this demographic.

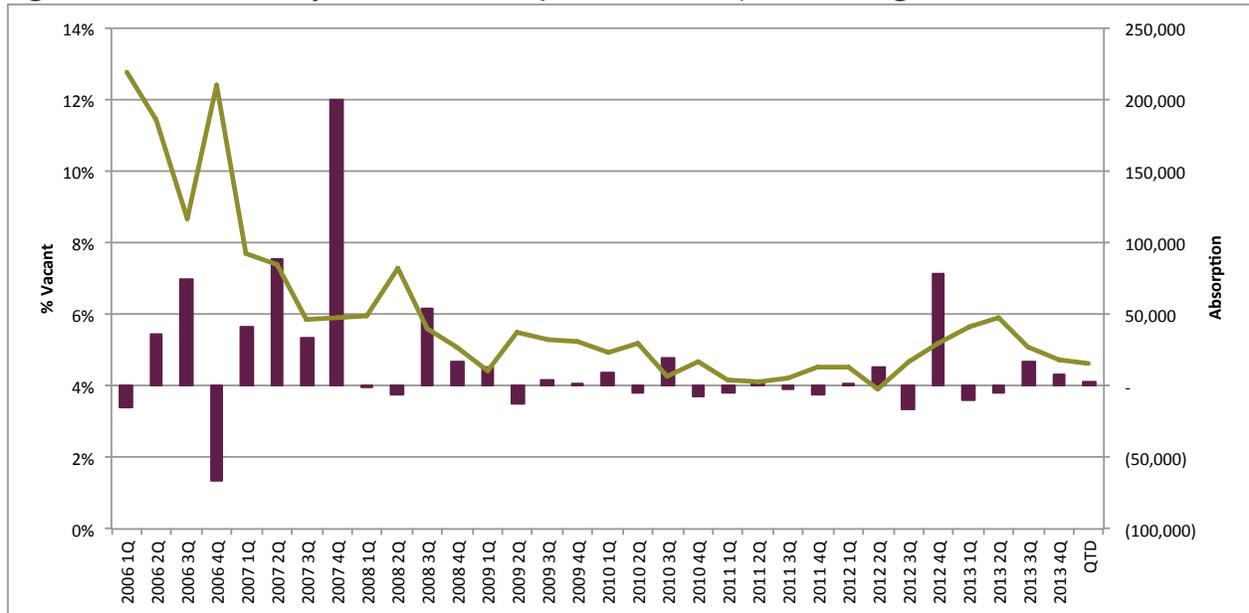
## 4.2 Retail Uses

Figure 17 shows vacancy and absorption for retail space in the West Linn/Lake Oswego region; Figure 18 shows average rents in the region. Vacancies in the market have been low, even



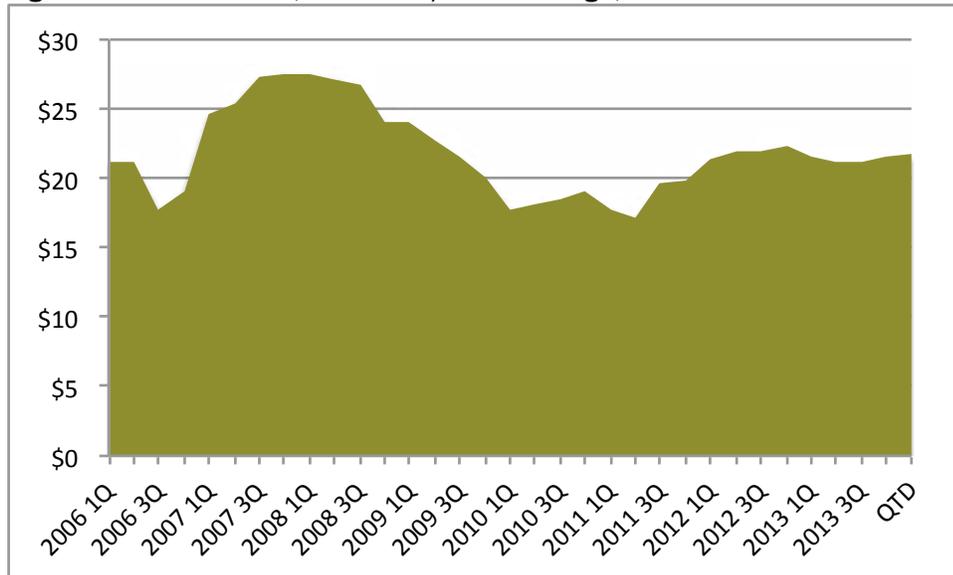
throughout the most difficult parts of the recession. Recently, the vacancy rate has held below 5%. Rents have risen somewhat since 2010, up to \$21 per square foot (NNN).

**Figure 17. Retail Vacancy Rates and Absorption, West Linn/Lake Oswego, 2006-2014**



Source: Costar.

**Figure 18. Retail Rents, West Linn/Lake Oswego, 2006-2014**



Source: Costar. Reported rents are triple net, noted as NNN, which excludes the cost of taxes, insurance, and janitorial services.

ECONorthwest also analyzed retail-space trends in the study area. Figure 19 and Figure 20 show trends for retail space in the study area along Highway 43. The smaller area shows more volatility in its vacancy rate—a single space can affect the area’s overall vacancy rate. Overall, the study area shows a reasonably strong retail market. Its vacancy rate is less than 8% and rents have held steady at about \$24 per square foot.

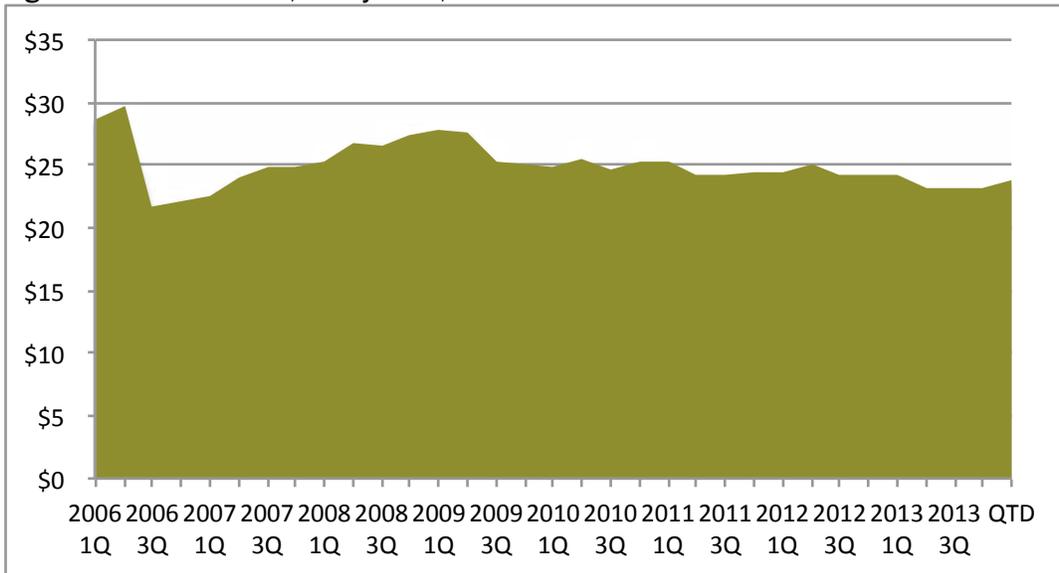


**Figure 19. Retail Vacancy Rates and Absorption, Study Area, 2006-2014**



Source: Costar.

**Figure 20. Retail Rents, Study Area, 2006-2014**



Source: Costar. Reported rents are triple net, noted as NNN, which excludes the cost of taxes, insurance, and janitorial services.

ECONorthwest conducted a retail “gap analysis” for West Linn. A gap analysis estimates the demand for categories of retail goods and services, based on household demographics. It then estimates the existing supply of retail goods, based on the retailers in the same geographic area. The demand minus supply is the gap.

It is important to recognize that a gap in any retail category does not, in and of itself, indicate that the gap would be filled in any given area. The potential to fill a retail gap requires further investigation. One must determine if there are viable sites within an area, if there is adequate potential sales volume to support various retail types, construction and local rental costs, and



an understanding of the ease of customer access to products in gap categories just outside the targeted area. The gap analysis is only one measure to provide insight into market potential.

Table 5 shows the difference between demand and supply for West Linn. If the gap is positive, it indicates that the households in the geographic area are purchasing retail goods and services outside that geographic area. If it is negative, it indicates that households from other areas are coming to the geographic area to purchase goods and services. The data show that households in West Linn purchase a large portion of goods and services outside the community.

**Table 5. Retail Gap Analysis, West Linn**

<b>Retail Category and NAICS code</b>	<b>Total Demand</b>	<b>Total Supply</b>	<b>Gap</b>
Motor Vehicle and Parts Dealers	\$107,338,633	\$6,179,928	101,158,705
Furniture and Home Furnishings Stores	\$12,642,112	\$1,317,551	11,324,561
Electronics and Appliance Stores	\$10,891,609	\$14,948,795	(4,057,186)
Building Material, Garden Equip Stores	\$60,185,026	\$8,620,211	51,564,815
Supermarkets, Grocery (exc. convenience) Stores	\$39,139,399	\$41,520,943	(2,381,544)
Convenience Stores	\$2,564,990	\$937,487	1,627,503
Beer, Wine and Liquor Stores	\$17,401,741	\$1,546,908	15,854,833
Health and Personal Care Stores	\$26,536,895	\$4,083,077	22,453,818
Clothing and Clothing Accessories Stores	\$27,497,170	\$6,281,025	21,216,145
Sporting Goods, Hobby, Musical Inst Stores	\$11,611,955	\$2,104,463	9,507,492
Book, Periodical and Music Stores	\$1,796,261	\$95,448	1,700,813
Miscellaneous Store Retailers	\$14,292,316	\$10,106,423	4,185,893
Full-Service Restaurants	\$24,105,026	\$13,778,683	10,326,343
Limited-Service Eating Places	\$21,105,358	\$63,689,717	(42,584,359)
Special Foodservices	\$5,689,455	\$0	5,689,455
Drinking Places -Alcoholic Beverages	\$2,219,759	\$0	2,219,759
Gasoline Stations	\$46,977,162	\$28,755,332	18,221,830
<b>Total Retail Sales Incl Eating and Drinking Places</b>	<b>\$542,334,089</b>	<b>\$209,898,721</b>	<b>332,435,368</b>

Source: ECONorthwest, with data from Nielsen Claritas.

It is important to understand broad retail trends that affect retail space in West Linn. Households purchase more and more goods over the Internet, creating challenges for ‘bricks-and-mortar retailers’. There are certain goods and services that require a physical presence and will be able to grow as households continue to shift purchases to the Internet:

- Services, such as hair salons, masseuses, medical offices, and computer repair shops;
- Food services, including full-service and limited-service restaurants;
- Drive-by convenience, including coffee kiosks and dry cleaners;
- Fresh goods, such as baked pastries and flowers; and
- Recreational activities, such as gyms and recreational facilities for children.

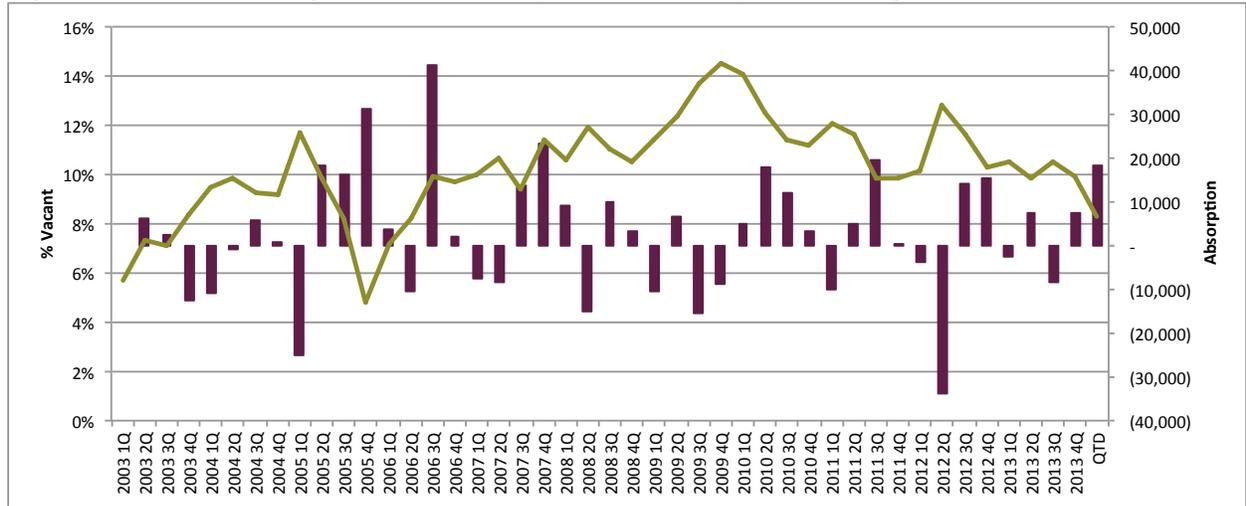
Combining these broad trends with the gap analysis, ECONorthwest believes there are potential retail opportunities for full-service restaurants and personal care stores.



### 4.3 Office Uses

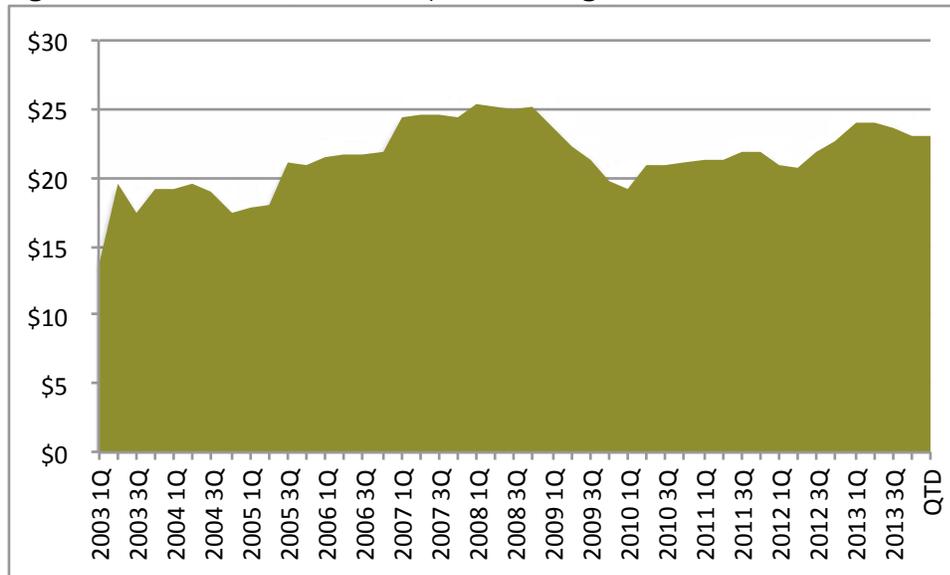
Figure 21 shows vacancy and absorption for office space in the West Linn/Lake Oswego region; Figure 22 shows average rents in the region. Vacancies in the market have been 10% and 14%, until a recent decline to 8%. The vacancy rate is evidence of a relatively weak office space market, negatively affected by weak demand during the recession. Rents, however, have climbed to about \$24 per square foot, after a steep decline in the early part of the recent severe recession.

**Figure 21. Office Vacancy Rates and Absorption, West Linn/Lake Oswego, 2003-2014**



Source: Costar.

**Figure 22. Office Rents, West Linn/Lake Oswego, 2003-2014**



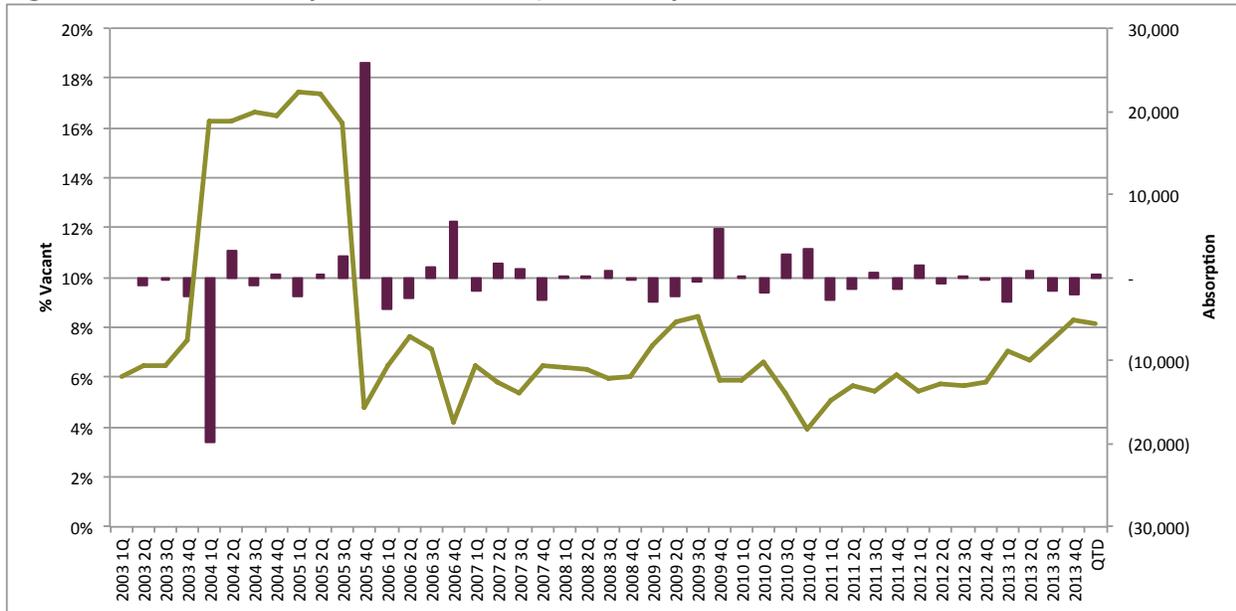
Source: Costar. Reported rents are triple net, noted as NNN, which excludes the cost of taxes, insurance, and janitorial services.

ECONorthwest also analyzed office-space trends in the study area. Figure 23 and Figure 24 show trends for office space in the study area along Highway 43. The smaller area shows a low



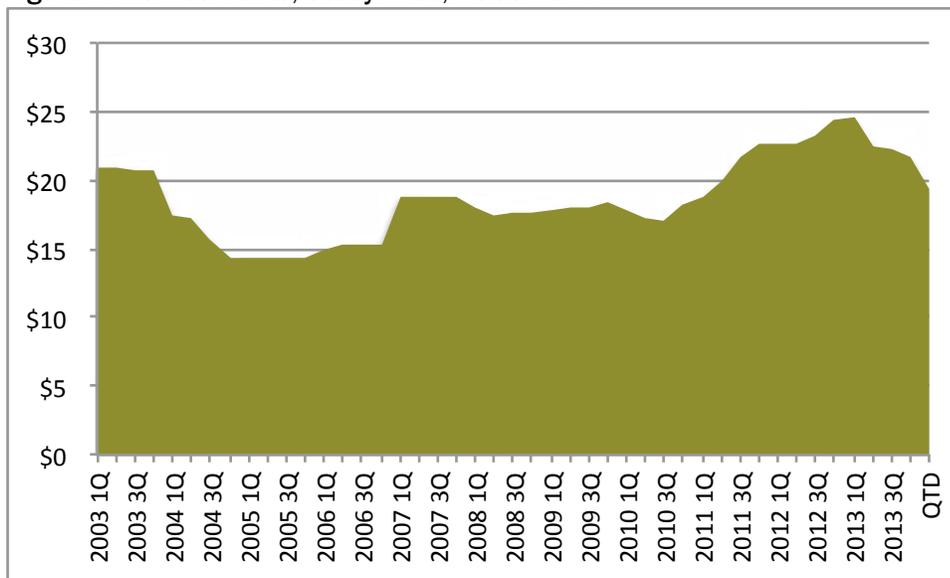
vacancy rate, hovering around 6% since 2005. This smaller geography has roughly 230,000 square feet of office space. For context, the KOIN tower in downtown Portland has about 300,000 square feet of office space. Overall, the study area shows a healthy office market, but given the small size there is little demand for new office space.

**Figure 23. Office Vacancy Rates and Absorption, Study Area, 2003-2014**



Source: Costar.

**Figure 24. Office Rents, Study Area, 2003-2014**



Source: Costar. Reported rents are triple net, noted as NNN, which excludes the cost of taxes, insurance, and janitorial services.

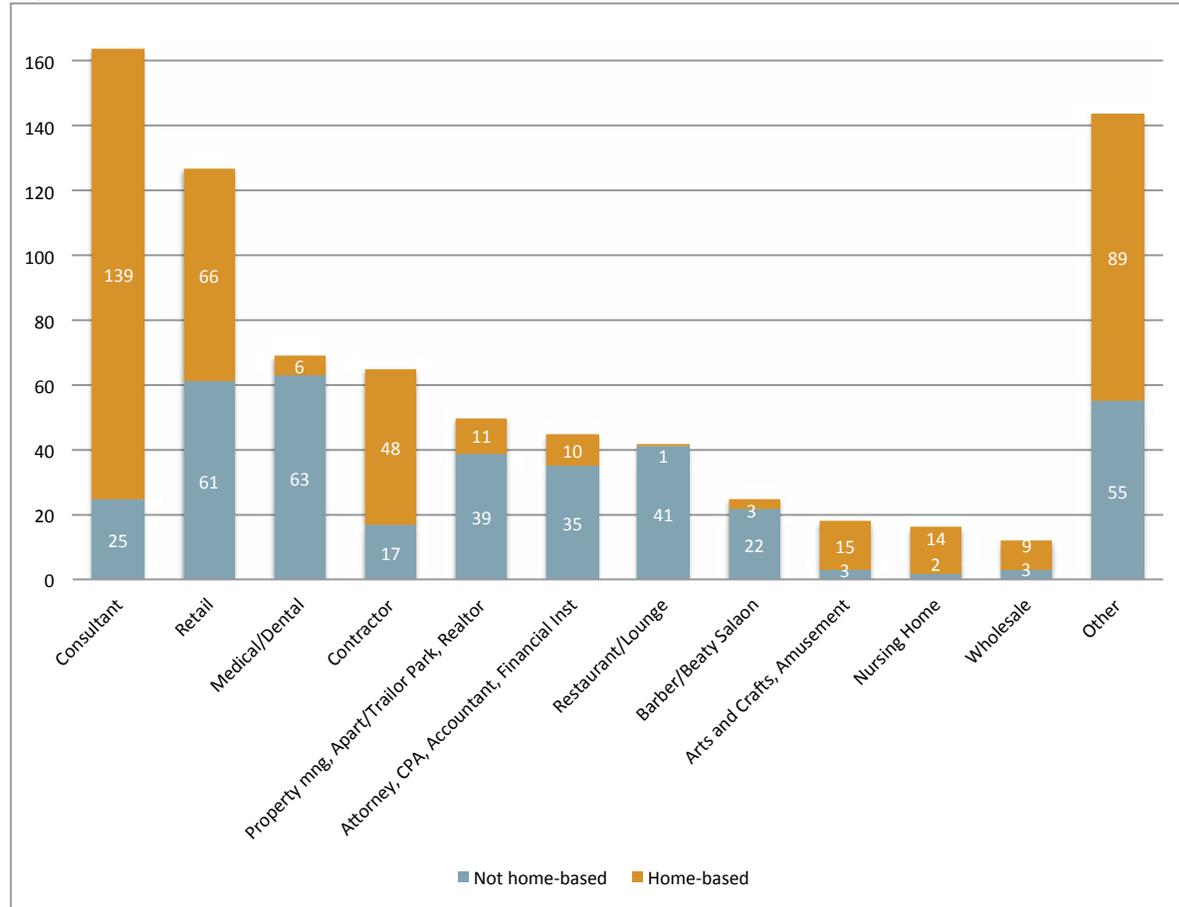
The consultant team has interviewed members of the business community in West Linn, and a few interviewees reported that West Linn has a high number of individuals working from their home. In an effort to find data to support the statement, ECONorthwest summarized business



data. All businesses operating in West Linn are required to obtain a business license from the City. City staff cautioned that not all home-based businesses obtain the license, and the data probably under-state the number of home-based businesses.

Figure 25 shows business license data for West Linn in 2013. It is divided between home-based and non-home based businesses. Just over half of the businesses located in West Linn are home-based businesses. Consultants, retailers and contractors are three of the four most common types of businesses and a majority of those businesses are home-based.

**Figure 25. West Linn Business License Data, 2013**



Source: City of West Linn

There is evidence of home-based professionals in West Linn. The business license data show there are at least over 250 individuals employed in their homes. These individuals present an opportunity for a specific type of office space, where home-based workers can share meeting space and equipment.

Executive office space, which provides small spaces with shared conference and production facilities, provides a model. Another, more contemporary model, is coworking. Coworking involves shared office space, but independent activity within that space. The users of the spaces



do not work for the same employer, but the space provides a space for interaction and synergies between independent contractors.

#### 4.4 Hotel and meeting space

There is no hotel in West Linn at this time. The primary demand for hotel space in a suburban community stems from individuals visiting residents of West Linn. For example, a family gathering that stretches the ability of the host family to provide sufficient guest space. In the absence of a hotel in West Linn, the guest has to find a hotel room further afield.

In and immediately near the City of West Linn, there are three City-owned venues and a private golf club that can accommodate events such as weddings and large parties.

- McLean House. The City-owned historic home and gardens lies just outside the primary study area. It can accommodate parties up to 100 people.
- Sunset Fire Hall. The two-story facility offers a kitchen, meeting room, and ballroom for up to 100 people.
- Adult Community Center. The facility offers a kitchen, multi-purpose rooms for meetings or receptions,
- Oregon Golf Club. The private club offers a large outdoor Event Pavilion that can accommodate large events.

Based on our preliminary assessment, there is demand for a hotel facility with large meeting space capacity. We recommend that ECONorthwest conduct further research into occupancy rates for nearby hotels and meeting spaces as the planning process moves forward.

The study area offers an appealing location for a hotel with conference capacity. A site along the Willamette River would not only offer river views to the east, but it would be visible from Interstate 205. Strategic siting of such a facility could take advantage of proximity to the freeway, while minimizing the negative attributes associated with the freeway (i.e., noise).





# MEMORANDUM

**To:** Mark Hinshaw, LMN

**From:** Christopher Yake, Tomoko DeLaTorre & Kate Drennan, Nelson Nygaard

**Date:** March 20, 2014

**Subject:** Arch Bridge and Bolton Town Center Plan – Existing Transportation Conditions and Opportunities

## PURPOSE OF THIS MEMO

The intent of this memo is to provide an overview existing conditions across all modes of transportation within the Arch Bridge and Bolton Town Center study area located at the southeastern edge of the City of West Linn. The study area is the focus of targeted growth and investment as part of Metro’s 2040 Growth Plan. To help advance these aspirations in alignment with the City of West Linn’s own vision, the memo frames opportunities for further exploration in enhancing the multimodal mobility and accessibility within the study area.

## EXISTING CONDITIONS

### Overview

The study area is located within the larger Bolton Town Center as currently mapped in Metro’s 2040 Growth Plan. Furthermore, Hwy 43 is designated as a Corridor. For these 2040 designations, Metro and its partners have assigned desired transportation characteristics to guide land use, planning and development.

Corridors are intended to feature high-quality pedestrian environments, convenient access to transit and moderate to higher densities. Town Centers are intended to provide local retail and services with compact development, served by transit. In each designation, development patterns should encourage walking, biking, and transit use an attractive alternative to driving alone. The City of West Linn has taken steps toward implementing this vision through drafting the Highway 43 Concept Plan that addresses the needs of all users. Additionally, the 2008 Transportation System Plan identified issues of pedestrian and bicycle connectivity between activity centers and prioritized improvement projects to improve multimodal travel throughout the city. Investing in



Figure 1: Study Area



infrastructure improvements for all modes will help West Linn capitalize on existing assets to meet the goals and visions of the community and region.

## VEHICULAR CONDITIONS

### Traffic Volumes & Delay

Despite relatively high levels of traffic moving through and around the study area (see Figure 2: Weekday Average Traffic Volumes), vehicle movement and delay are generally acceptable. Projected traffic levels on Hwy 43 meets standards for level of service (LOS), a measure of effectiveness for intersection operations measured through vehicle delay during peak periods. Whereas LOS ratings of A, B, C represent traffic flows without significant delays, LOS D and E are approaching less acceptable levels of congestion with LOS F exhibiting vehicle delays over 80 seconds per vehicle. While through movements in the area have acceptable levels of delay (LOS B -D), left turn movements experienced greater delay earning LOS E and F ratings. While the City allows a minimum of LOS E, intersections performing at LOS F should be studied to determine if traffic signals or other intersection control devices are warranted to aid in left turns. Additionally, practicing access management by installing medians and limiting some left turns can help reduce delay.



Figure 2: Weekday Average Traffic Volumes



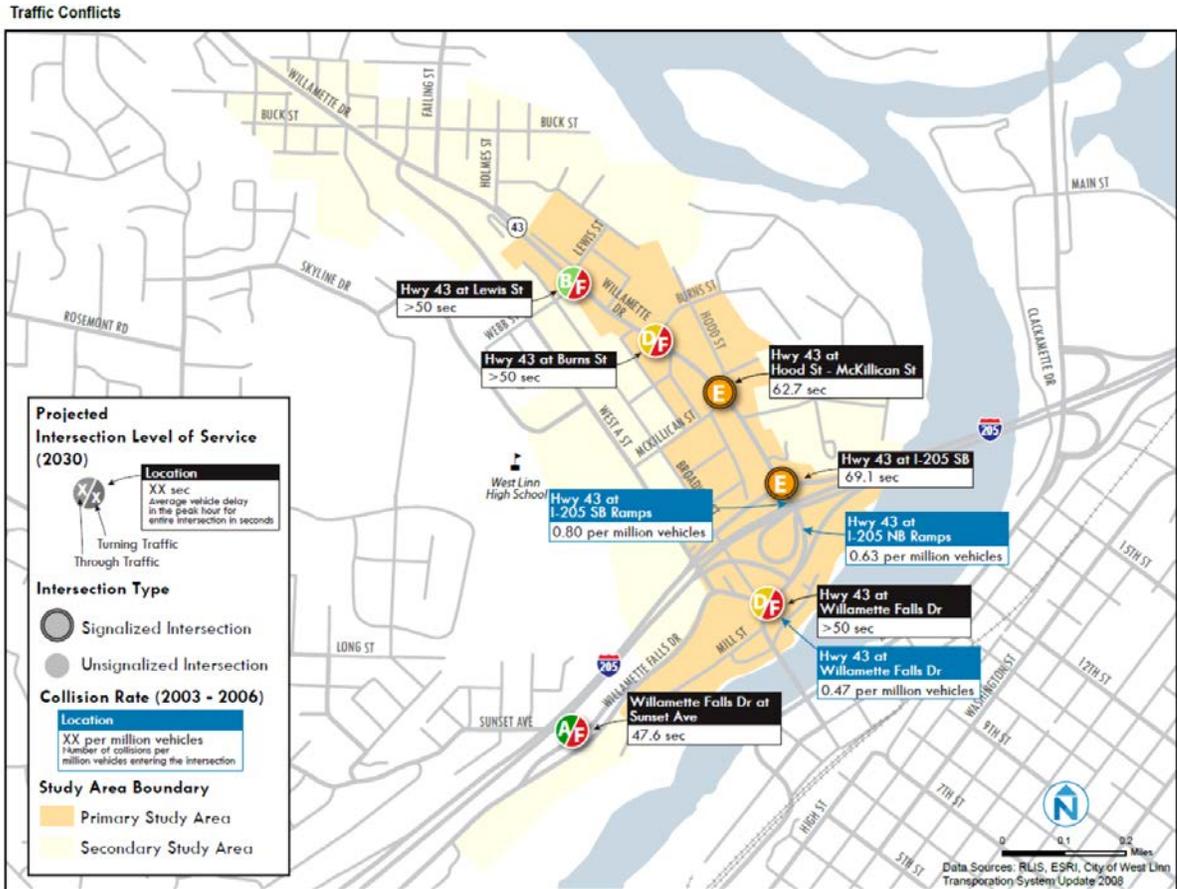


Figure 3 Vehicle Delay & Intersection Level of Service (LOS)

### Vehicle Collisions

Within the study area, all the intersections exhibit low vehicle collision rates as measured by collisions per million vehicles entering an intersection. Generally speaking, rates exceeding 1.0 collision/ million vehicles may warrant study for potential safety enhancements. The highest rate in the study area was at the Hwy 43 and I-205 southbound ramp, with a rate of .80/million, still below the threshold for further study.

### Opportunities

In summary, the study area accommodates a significant amount of traffic in a generally efficient fashion. With the exception of a select number of left-turning movements, the intersections all perform at acceptable levels without unreasonable levels of delay. Lower collision rates also suggest that there are no pressing needs for safety enhancements. The primary opportunities for vehicular improvements in the study area are related to allocation of existing facilities and ROW.



In each case, stakeholders have suggested that there are redundant facilities that may be better optimized.

Based on input from ODOT, there is a potential opportunity to revisit the two existing northbound on-ramps accessing I-205. The on-ramp used by southbound bound travelers on Hwy 43 use a cloverleaf approach which utilizes a large amount of ROW at the gateway to the study area. ODOT has indicated a willingness to reduce the footprint of their facility by removing or redesigning a portion of the cloverleaf. Although access issues would prevent the land from being reclaimed for development, it could provide an opportunity for an attractive stormwater facility and gateway treatment. Furthermore, it has been suggested that the placement of cloverleaf's ramp signal does not allow motorists adequate time to safely merge onto I-205 before the acceleration lane ends. Further discussion with ODOT should explore the potential for increasing the space for acceleration. The other northbound on-ramp, used by vehicles traveling northbound on Hwy 43, merges traffic onto I-205 at the same spot the merge lane becomes an exit only lane for OR 99E. This contributes to an unsafe weave as merging vehicles negotiate vehicles changing lanes to prepare to exit. Exploring the potential closure of this on-ramp could help address this unsafe merge, and reduce its visual and noise impact within West Bridge Park.

Two other potential redundant facilities in the study area are the overpass bridges over I-205. Whereas the West "A" bridge provides direct access to West Linn High School and ultimately meets up with Willamette Dr, the Broadway St overpass appears to serve limited traffic and terminates at a dead end to the north. The latter, currently classified as a Neighborhood Route could be re-imagined as a pedestrian and bicycle only bridge, creating a safe and comfortable crossing of I-205 for non-auto users.



Arch Bridge and Bolton Town Center Existing Transportation Conditions  
City of West Linn

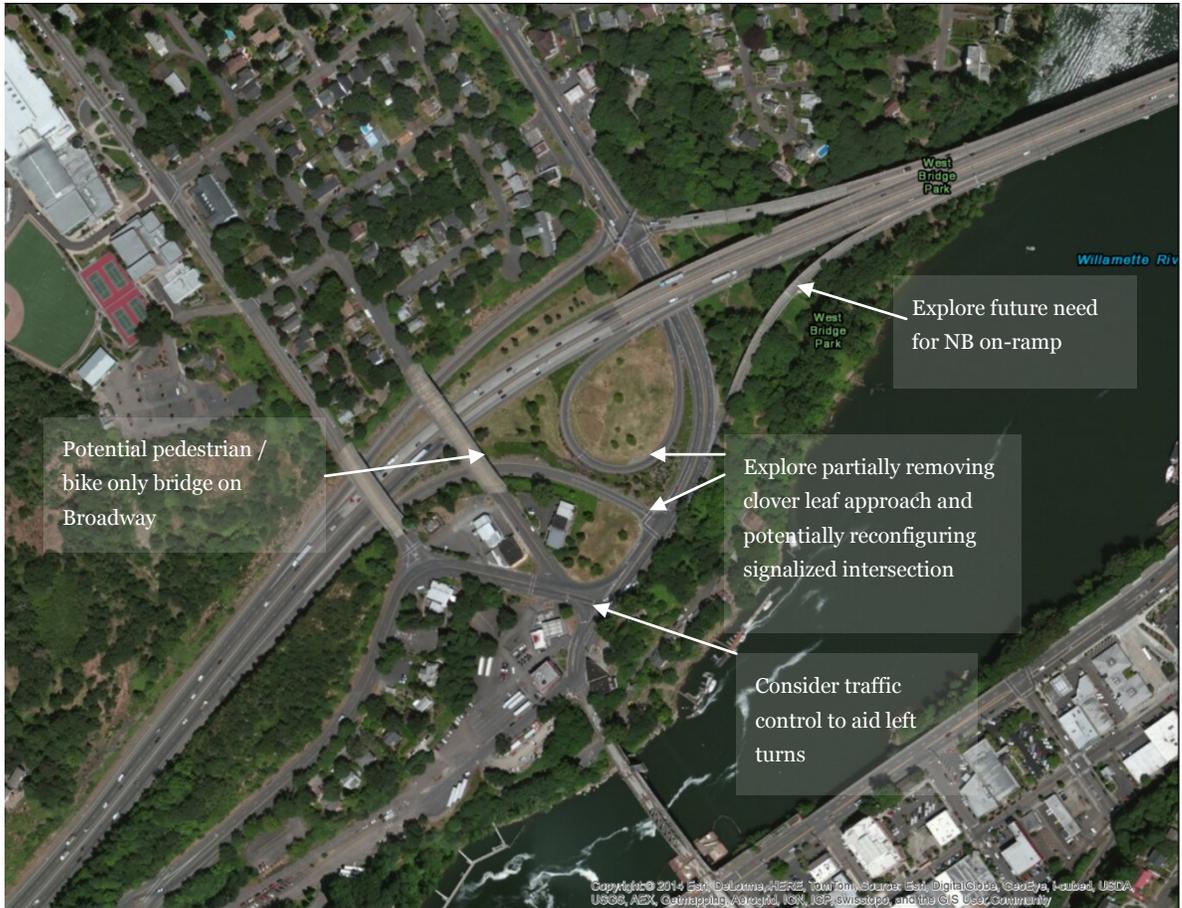


Figure 3 Vehicle Opportunities



## PEDESTRIAN CONDITIONS

### Existing Conditions

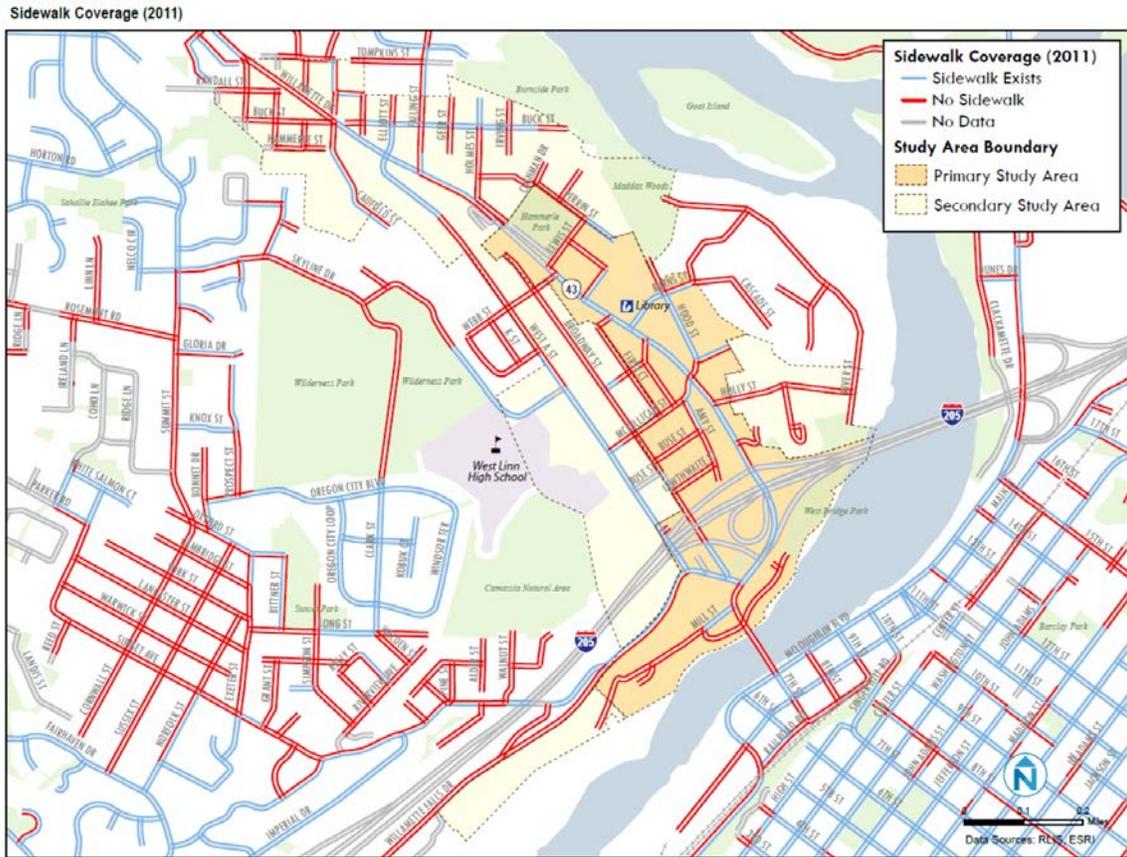


Figure 4 Sidewalk Conditions

The City of West Linn has highlighted pedestrian connectivity as a top priority, stating that “The City will ensure that walkways and related pedestrian improvements (e.g. crosswalks) are constructed on all identified network roadways, either as separate projects or integrated with other roadway-related improvements.”<sup>1</sup> While newer streets have good coverage, with sidewalks on both sides of the street, older neighborhoods such as Bolton have less consistent pedestrian infrastructure. Figure 4 demonstrates that a significant portion of the primary study area lacks sidewalks on both sides of street, which may discourage walking. While Hwy 43 has good sidewalk coverage, reaching these sidewalks from surrounding neighborhoods could be a challenge. Crossings on Hwy 43 are also widely spaced for pedestrians with approximately a quarter mile between crossings at Holmes Street, Garden Street, and the SB I-205 off-ramp. In nearly every case, streets with sidewalks are often narrow; with little space to walk side by side, and do not feature landscaping strips to act as a buffer between pedestrians and traffic.

<sup>1</sup> TSP Project Goals and Objectives, West Linn Transportation System Plan, 2008



## Opportunities

The pedestrian experience network could be improved through a focus on sidewalk infill along Hwy 43 and primary east-west local streets connecting the neighborhoods to the highway. Streets near activity centers (parks, shopping) and those which access transit stops on Willamette Drive should be given the highest priority. Additionally, more frequent pedestrian access paths such as short stairwells could shorten trip lengths where topography has led to developments not at street level, or roadways with greater length but gentler slope.



Figure 5a & 6b Pedestrian paths and stairwells increase access and shorten trips where topography plays a role

The pedestrian network could be further enhanced through constructing more frequent crosswalks along Hwy 43, and enhanced crossings at high volume conflict points, such as the NB onramp onto I-205. In the case of the latter, a discontinuation of the on-ramp and consolidation of northbound access to I-205 would remove this conflict point for pedestrians and bicycles accessing the Town Center.



Figure 7 More frequent and visible pedestrian crossing could enhance safety and comfort



## BICYCLE CONDITIONS

### Existing Conditions

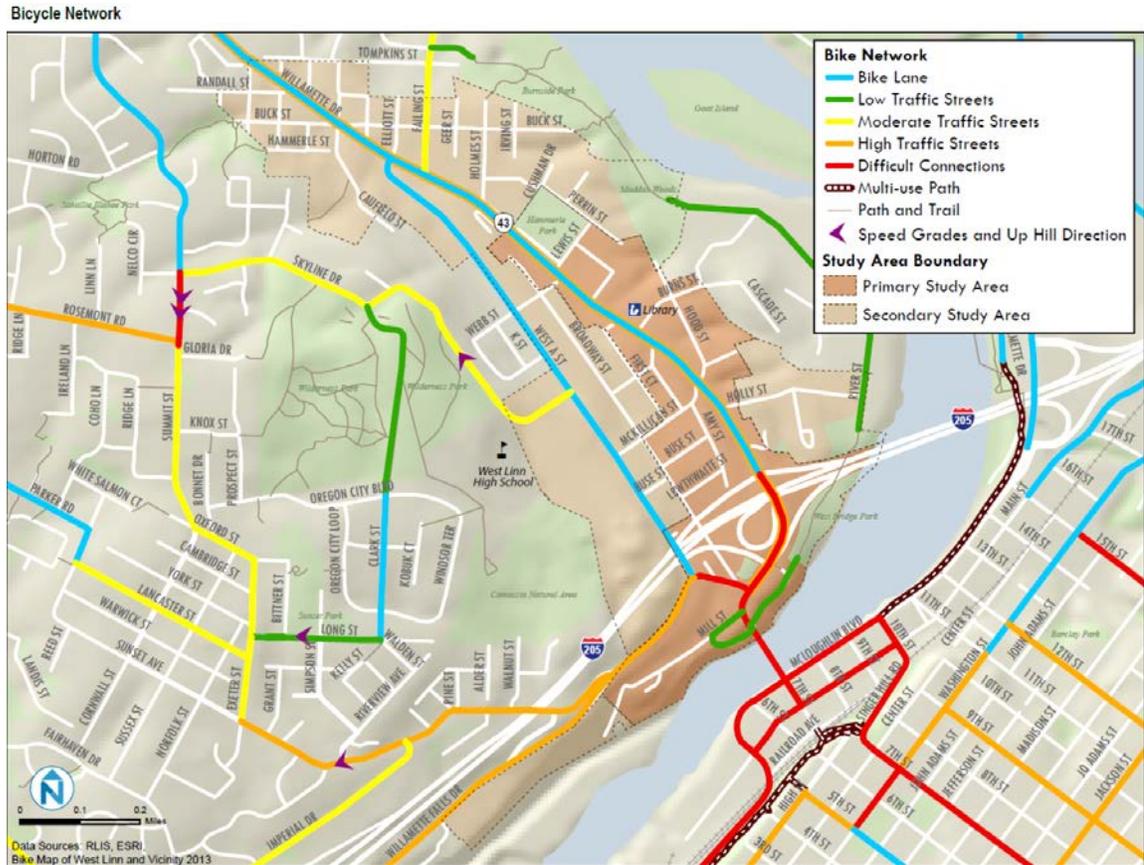


Figure 8 Existing Bike Network

Conditions for bicyclists vary across the study area. The steep slopes and hard edges such as the river and I-205 can make connectivity a challenge. Additionally, while Hwy 43 and West “A” Street have bike lanes, on-street parking can infringe on the space and higher traffic volumes and speeds can make the roads intimidating for less experienced cyclists. Other important road connections, such as Willamette Falls Drive and the Arch Bridge have no separated bicycle lanes and in many cases, little shoulder despite being the only option for cyclists traveling to Oregon City and the Willamette neighborhoods. Upon entering the study area using these routes, there is limited way-finding information for cyclists, making it difficult to navigate the confluence of roads and the I-205 interchange.





Figure 9 Narrow travel lanes leads to bicyclists using the sidewalk while crossing the bridge despite sharrow markings (especially in the northbound direction given the slope). This results in potential conflicts with pedestrians.



Figure 10 Lack of bike lanes or adequate shoulder on primary routes reduces options for bicyclists uncomfortable riding in mixed traffic

## Opportunities

Both the City and Metro have expressed a strong interest in investing in higher quality bicycling facilities, especially along OR 43/ Willamette Drive. The Hwy 43 Concept Plan, a project funded through a TGM grant, involving the City of West Linn, Metro, TriMet and ODOT, recommended a raised bike lane to increase separation from travel lanes. The concept is depicted in Figure 11. These create a sense of safety for the cyclists, but preserve flexibility by being mountable for buses, trucks, and emergency vehicles. A lower cost, near-term option would be to widen the existing bicycle lanes along segments where the existing ROW permits.



**Arch Bridge and Bolton Town Center Existing Transportation Conditions**  
City of West Linn



Figure 11 Example of raised bike facility<sup>2</sup>

A second key opportunity is to enhance wayfinding and connections to the Arch Bridge, by addressing the existing difficult connections for cyclists. Targeting underutilized, existing infrastructure for bicyclists and pedestrians is one strategy to enhance connectivity and comfort. As discussed previously, the Broadway Street overpass is redundant to the West A Street Bridge, and could be retrofitted as pedestrian/bicycle-only facility to create a comfortable crossing of I-205 and a more direct approach to Hwy 43 and the Arch Bridge itself.



Figure 12: The Broadway Street overpass has potential as a bicycle / pedestrian-only facility

<sup>2</sup> Hwy 43 Concept Plan, 2008



## TRANSIT CONDITIONS

### Existing Conditions

Weekday Average Daily Boarding and Alighting (2011)

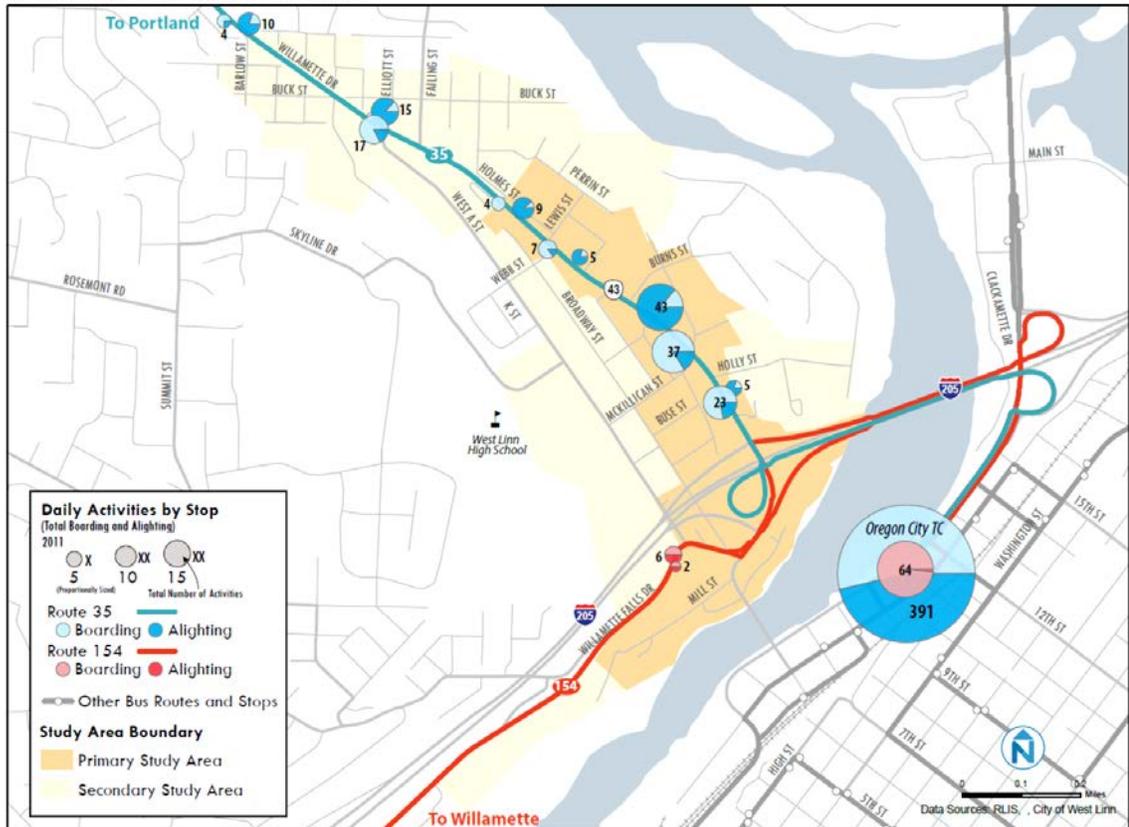


Figure 13 Transit Service in Study Area

There are two transit lines currently serving the study area. Route 35 connects West Linn to Lake Oswego and downtown Portland by serving Hwy 43. Although it does not qualify as TriMet’s frequent service (15 minutes or better every weekday), it provides reasonable service for a local route, averaging 20-30 minutes headways. The line averages 25 boarding rides and hour, with the Oregon City Transit Center experiencing the most activity, and the stop serving West Linn Central Village (anchored by Market of Choice) experiencing the highest boarding and alighting along Hwy 43. Route 154 travels from the Oregon City Transit Center across the river and along Willamette Falls Drive to serve the Willamette neighborhood. The route feature one hour headways, and averages only 9 boarding rides per hour.





Figure 14 Transit stops lack amenities

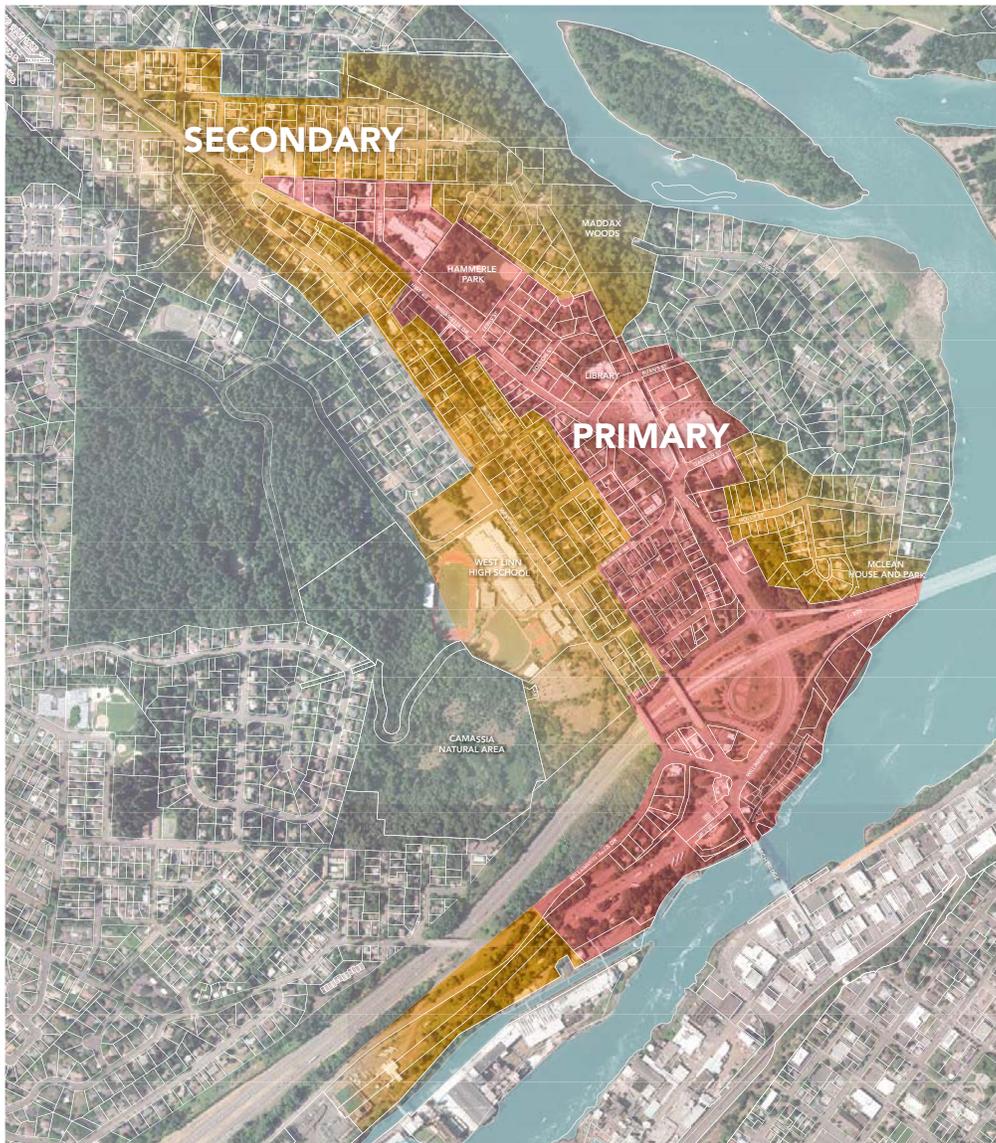
## Opportunities

The study area's modest levels of transit ridership can be attributed to low levels of density and non-transit supportive land uses. As a result, transit waiting times are relatively long and stops lack passenger amenities such as benches, shelters, and real time route information. Given TriMet's ridership thresholds for passenger amenities and frequencies, conditions are not expected to improve for the transit user until additional activity attracts more riders. To this end, the Arch Bridge and Bolton Town Center Plan provides an opportunity to increase densities in the study area through strategic infill and redevelopment. Furthermore, a more robust mix of uses (retail, services, employment) will help attract and generate ridership throughout the course of the day, thereby increasing ridership during off-peak hours.

The City of West Linn has already sought to enhance the transit user experience by funding improvements at TriMet stops. Until land uses changes and ridership increases, the City should continue to invest in similar enhancements at strategic stops near activity centers. Additionally, the City should invest in "Safe Routes to Transit" projects accessing higher ridership stops. These could include enhanced pedestrian crossings, sidewalk infill and improved street lighting.



# URBAN DESIGN AND DEVELOPMENT POTENTIAL



## STUDY AREA

The Primary Study Area encompasses properties and streets that hold the greatest possibility for creating a town center over time. The Primary Study area is focused along Highway 43, as it has served as the signature access street in this area of West Linn. Considerable public and private investments have already been made in this area, including a recent expansion of the West Linn Central Village Shopping Center. The Primary Study area contains 120 acres of land area.

The Secondary Study includes adjacent parts of the community that would be most affected by development of a town center. It also contains

important public facilities, such as schools and parks, that are currently not well connected to the town center and should provide attractive reasons for people to both develop within the town center as well as to visit and live there.

The Primary Study Area is divided by the I-205 freeway, which presents some challenges with how to create a unified town center. This will place a burden on the streetscape elements and signage to carry the weight of projecting a cohesive identity. Developable area in southern portion of the Primary Study area is limited by the access ramps associated with the freeway as well as the various roads that intersect at odd angles. This convergence of streets also presents a confusing sense of entry for people crossing the Arch Bridge.

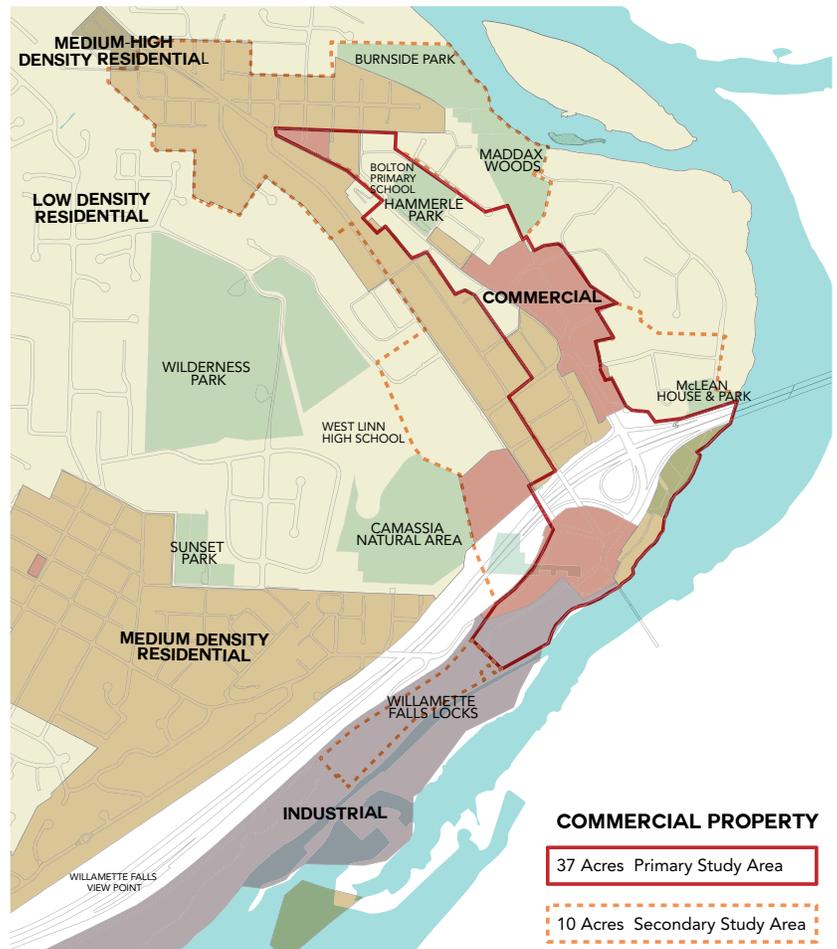


# LAND USE

The town center area contains a mix of commercial uses and largely lower density residential uses. The commercial uses are fragmented into several locations. The largest portion is principally occupied by the West Linn Central Village shopping center, north of I-205. This center was recently renovated and expanded. Its collection of shops, services and restaurants is anchored by a supermarket. There are only very limited sites in this area for new development. The post office may be a candidate for redevelopment in the future if the US Postal Service contracts its operations (a service center could still remain). North of the shopping center, in proximity to Hammerle Park, there might be some opportunities for sensitive infill development that fits the existing scale, such as cottage housing. At the far north end, the former fire station could in the future be renovated for community purposes or it could be a site for new development that includes housing and community meeting spaces.

Between the shopping center and the freeway, there are two service stations that could be redevelopment sites in the future. Over time with increased environmental clean-up standards, many older gas stations are being replaced with other forms of development. It could reasonably be expected that one or both of the service stations along Willamette Drive would be eventually replaced with multi-story development. This would enhance the sense of connection between parts of the town center and such development could serve as a distinctive gateway. It should also be noted that three parks anchor the north end of the Primary Study Area – Hammerle, Maddax Woods and Burnside. West Bridge Park anchors the south end. These serve to stabilize the area and contribute to its attraction to people who want close proximity to recreation and natural areas. The continued presence of Bolton primary School also offers an educational institution that is often missing from other town centers.

South of I-205, the commercially zoned area is occupied by another service station, several older buildings containing apartments, a couple of

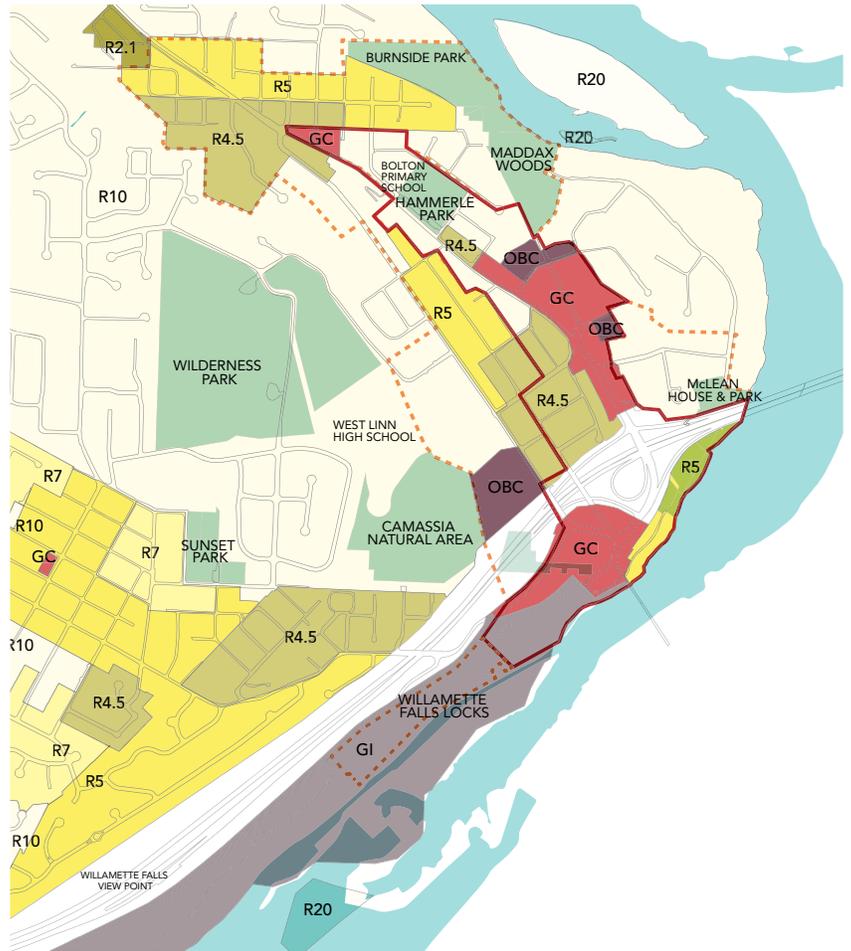


commercial structures, and a building that was once city hall but is now used by the police department. The latter building will become available for other uses once the new Police Station in the Willamette area is completed.

There is some potential for adding to commercially zoned property in this area. The West Linn Paper Company owns property that it now uses for access and staging of trucks. The Mill owners are examining new access routes to property. This would allow for new development that could include housing, hotel and retail uses.

The other area that could have potential in the future is the State-owned right-of-way that is now occupied by on/off ramps. If these were reconfigured to consume less land, some of this area could be made available for development. The combination of these parcels over the long term, combined with Mill properties in the shorter term, holds the greatest prospect for developing a town center in this area.





## ZONING

The Primary Study Area contains a number of different zoning districts. Several single family residential districts, including R10, R5 and R4.5 are adjacent to the commercial designation of General Commercial (GC). There are also three areas zoned for Office Business Center (OBC). The latter two districts offer the greatest potential for creating a town center.

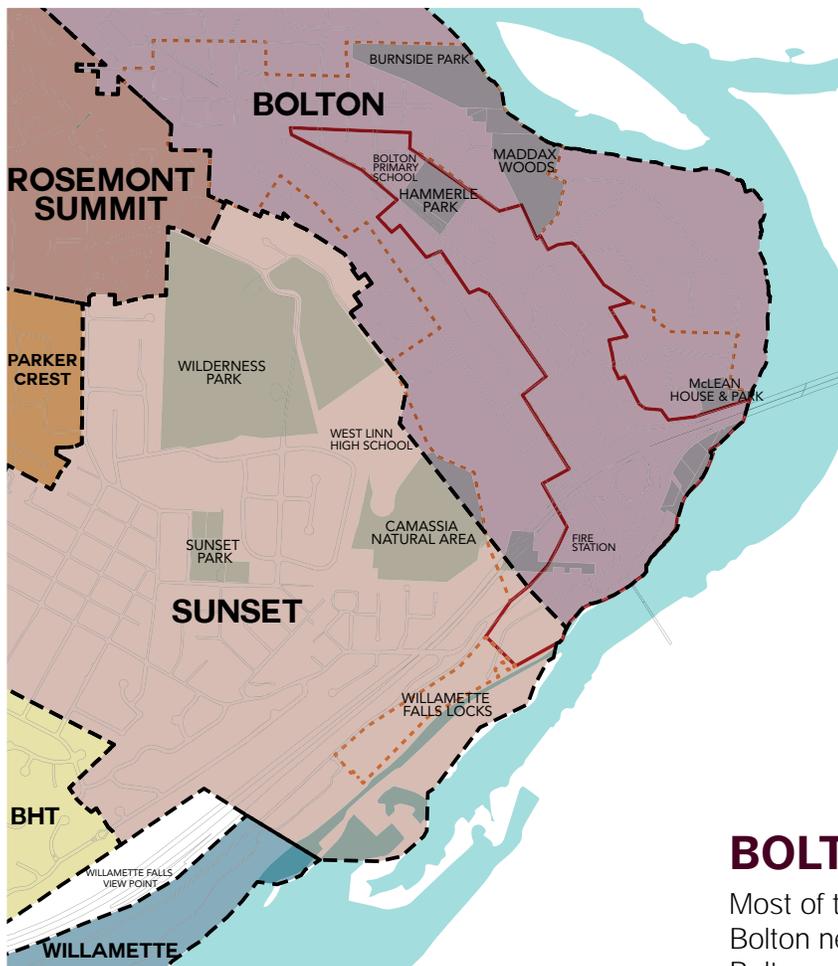
However, there are some aspects of these zones that could limit redevelopment. The GC zone has a height limit of 45' feet or 3 ½ stories. (The height limit is one story and ten feet lower within 50 feet of residential districts.) Typically, mixed use development in emerging urban centers is at least four stories, as a higher yield from dwellings on the upper floors is necessary to make development feasible. Two stories of units are typically insufficient to accomplish this. Another limiting factor is the 50% maximum lot coverage. The challenge of this regulation can dissuade potential developers since it involves a limited yield on the investment. Finally, housing is allowed only above the first floor. This assumes that all mixed use development will be "vertical" in the arrangement of uses. There might well be designs that involve horizontal mixed use,

such as commercial fronting on a street with housing behind and a courtyard in between. This standard also assumes that there is sufficient demand for commercial space in all instances; this can inadvertently discourage some developers from even considering projects, as the demand for commercial space is far less than it was prior to the Recession.

For the most part, standards for the OBC zone are similar to those for GC. Consequently, some regulations serve to discourage residential development.

Most cities that are determined to create a unique town center do not rely upon zoning districts applicable in other parts of the city. It is useful to have a special "Town Center" district that can reflect a clear vision of mixing uses, encouraging intensity and perhaps somewhat greater height, lower parking ratios, and the need for pedestrian orientation, connections and public spaces. This does not necessarily mean a one-size-fits-all approach; these standards can be tailored to fit different areas of the town center.





## BOLTON NEIGHBORHOOD PLAN

Most of the Primary Study Area falls within the Bolton neighborhood. In 2006, the City adopted the Bolton neighborhood Plan as part of the citywide Comprehensive Plan. The directions in this plan, which involved considerable participation by residents of the neighborhood, addressed many issues that are still salient today. They provide a good underpinning for development of a town center plan.

In summary, highlights include:

- Restore the historic heart of West Linn near the river and the locks.
- Enhance the safety and appearance of major streets and intersections for people on foot and on bicycles.
- Reconfigure the freeway interchange of I-205 and Highway 43.
- Encourage redevelopment of the area between the northwest end of the Arch Bridge and I-205
- Respect the scale of established residential areas.
- Enhance landscaping and public spaces.
- Develop a trail along the river.
- Maintain community-serving uses.



# DEVELOPMENT PATTERN

The map below displays the array of buildings arranged on the landscape. The predominant pattern is comprised of free-standing, houses with small footprints, reflecting the long-standing role of West Linn within the region of supplying homes to families. Exceptions to this are the high school, the Bolton Primary School, the new buildings that are part of the Bolton Village shopping center, and the West Linn Paper Mill, which is just outside the boundary of the primary study area.

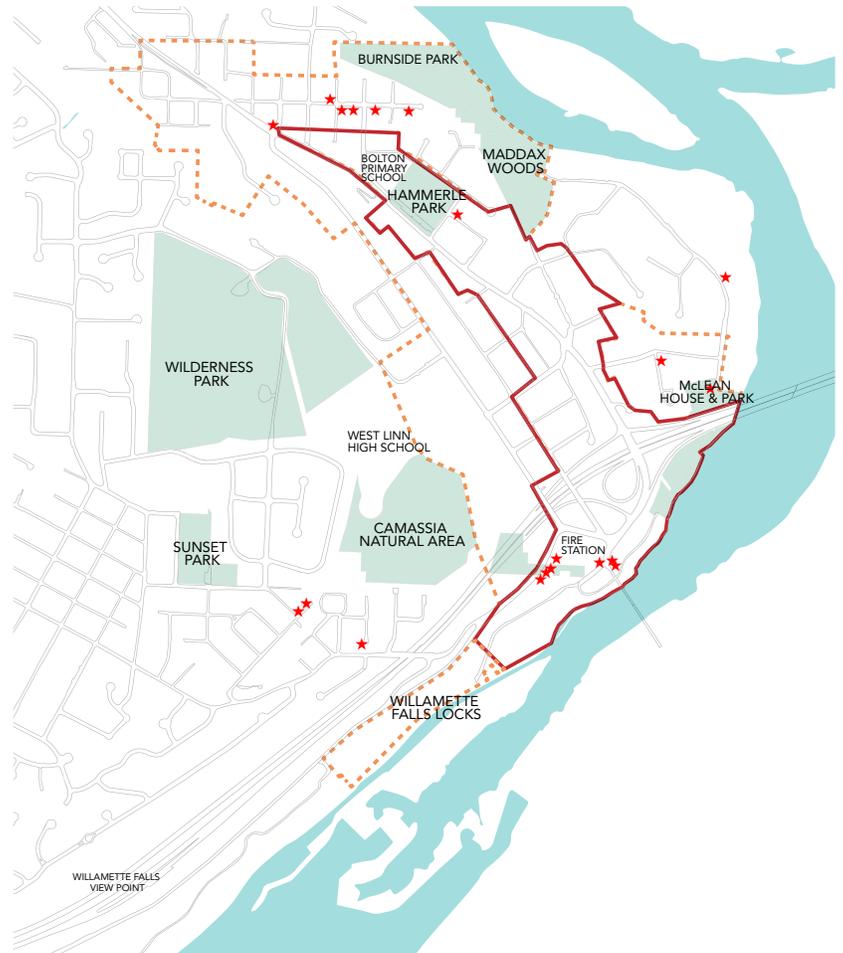
The map also shows the part of the community that was torn apart by the freeway and its ramps. The result was very little of the original town center was kept intact; most of it was cleared away for right-of-way. The gap between remaining pieces and the signature feature of the community – the Willamette River – has been both a physical and psychological barrier. The town seems disconnected from the unique ecology and visual drama of the river. Nonetheless, the potential exists to mend the break and create a greater continuity between the disparate parts.

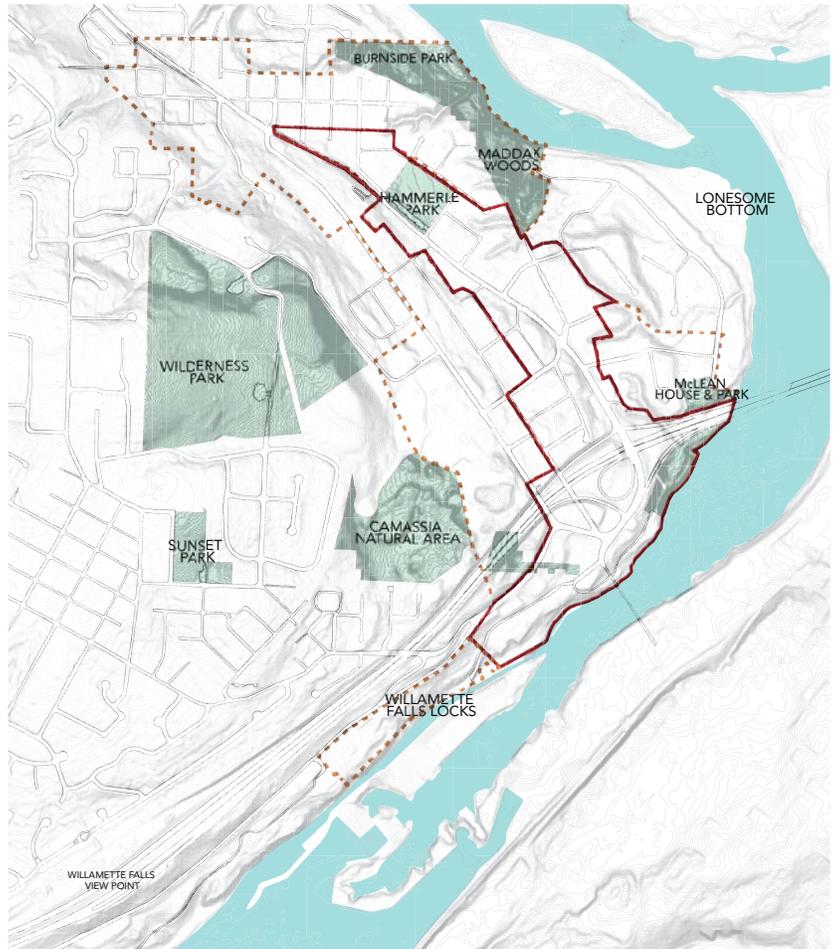


## LANDMARKS

Because the study area represents the original settlement of West Linn, it contains a number of structures that are historically significant. These include the former city hall and two buildings near the Arch Bridge. The commercial building across the street from the new fire station at the north end is another landmark structure. There is also a row of Victorian era houses on the hillside next to Willamette Falls Drive. There is also a house next to Hammerle Park. The McLean House is just outside the Primary Study area, but it is unquestionably an important community resource for events and meetings.

These structures contribute to the identity of the place. Along with the Mill, they reflect the deep roots of the community as part of the early settlement of the area. For a town center, they can serve as reference points and markers. New development should recognize their importance and role in creating an authentic place with a rich heritage.





## TOPOGRAPHY

The Primary Study area consists of a complex topography of slopes and narrow benches within a rolling landscape that descends dramatically down to the river. Most streets and many neighborhoods are built on sloping terrain. Steep bluffs flank the river. Properties that are relatively flat are on one side or the other of Willamette Drive, but only rarely on both sides. This presents difficulties for both development potential as well as access to properties for both vehicles and pedestrians.

There is a narrow band of a buildable land along Territorial Drive, but despite a number of lots there, development opportunities in that location are constrained by slope. Drawn a regional scale, flood plain maps suggest some quite stringent limitations for this area, but these may be able to be adjusted based on the particular characteristics of individual sites. The current parking lot and truck staging area for the mill on Mill Street is level enough to allow this area to more easily accommodate initial development.

The slopes in this area could even work favorably with “tuck-under” parking. Longer term prospects for expanding a town center would require opening up more land for possible development as a result of consolidating ramps associated with the freeway.

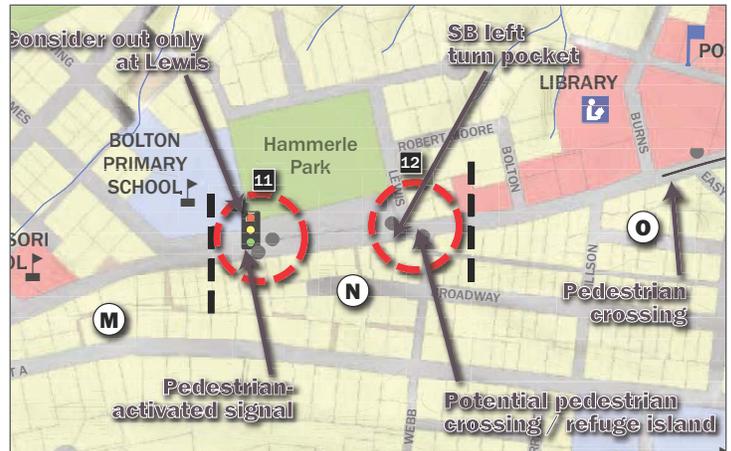
One of the unique potentials associated with topographic change is the segment of Broadway that passes over I-205 and descends down to Willamette Falls Drive and eventually to the Arch Bridge. Despite its name, Broadway doesn’t serve as a major street and the crossing of the freeway duplicates West A Street a block to the west. Portions of Broadway, including the overpass might be re-purposed to provide a safer connection for people walking and bicycling between portions of the town center. It could still allow for limited vehicular movement, but with added bike lanes and enhanced sidewalks. This could also be a visually interesting feature that people would see when arriving via the Arch Bridge.



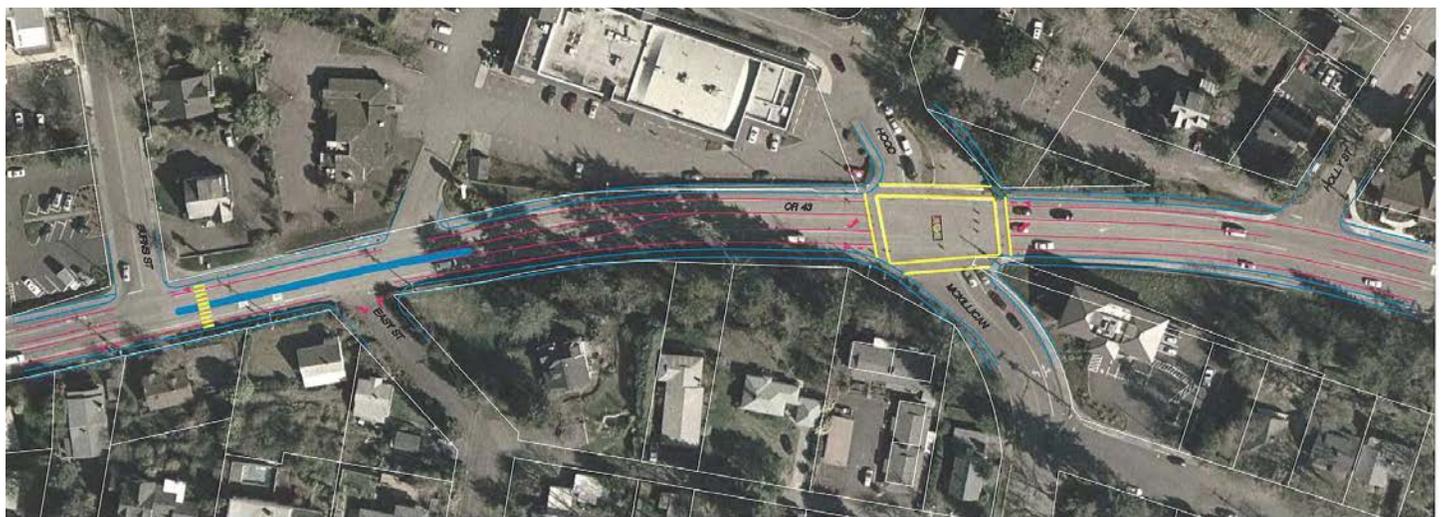
# HIGHWAY 43 CONCEPTUAL DESIGN PLAN

The Conceptual Design Plan for Highway 43, completed in 2008, offers a number of interesting ideas for transforming the roadway into a corridor that is both more accommodating to circulation and presents a “boulevard”-like gateway for the town center. Major features include a planted median that provides a safe haven for people crossing the street. This alone could alter the character in a dramatic way, as well as slow down traffic as it flows through the town center. Raised bike lanes are also called for. This is logical since Willamette Drive is a relatively level connection to destinations both to the north and to the south, including Oregon City and the former Blue Heron mill site that is to be repurposed.

The concepts in the plan could be further embellished by streetscape elements such as lighting and special crosswalk paving. The right-of-way of 60 feet should be able to accommodate a median that could be interrupted occasionally for a left turn pocket. There should also be room for street trees planted in planting pockets with ADA-appropriate grates. This would continue to provide for vehicular movement, but significantly upgrade the corridor for other users. The median could also incorporate seasonal planting at key locations to enhance the gateway effect.

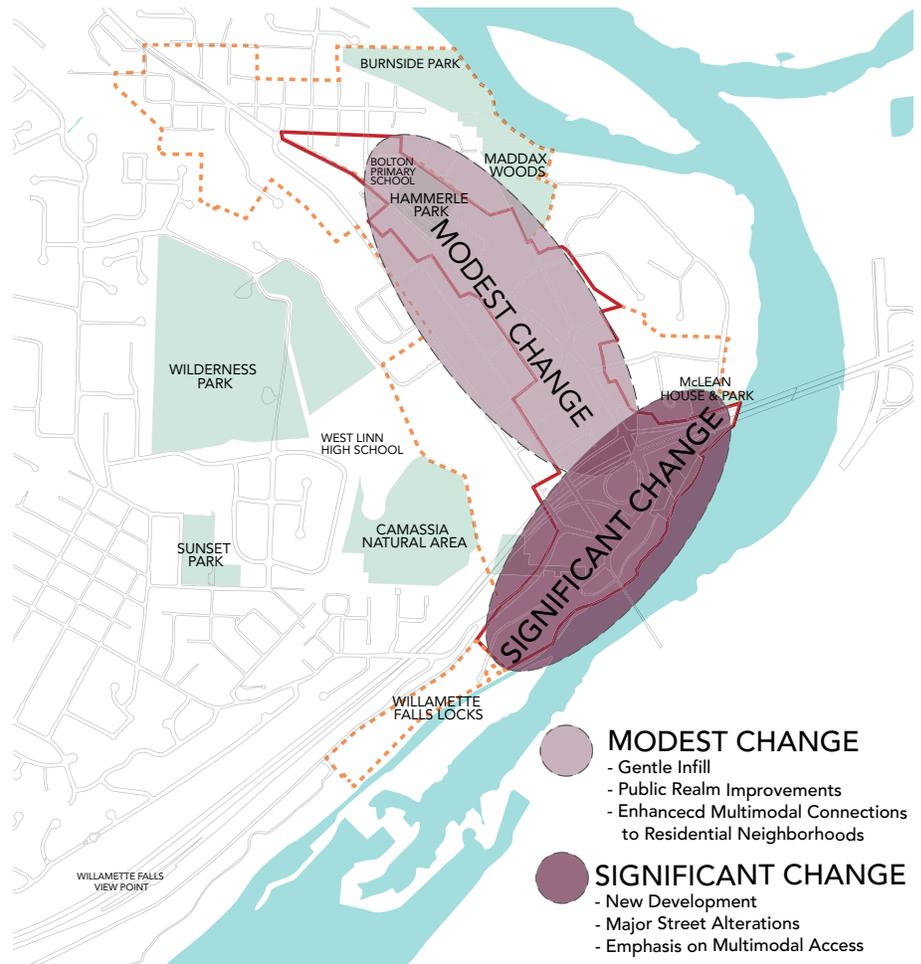


sidewalk	* raised bikeway	travel lane	* median/ ped refuge	travel lane	* raised bikeway	sidewalk
7'	6'	12'	4'- 6' median	12'	6'	7'
7'			6 - 8- striping			7'
pedestrian zone			travel zone		pedestrian zone	



ORE 43 CONCEPTUAL DESIGN PLAN





## POTENTIAL FOR CHANGE

Given the constraints of recent redevelopment, limited available properties, and close proximity to established single family area, the portion of the town center north of I-205 does not lend itself to major change -- certainly not in the next 20 years. Nonetheless, this area could still see some changes. These could include improvement to streets and sidewalks, most particularly Willamette Drive (Highway 43), enhancement to parks, some "gentle" infill such as cottage housing or ADU's, and better connections to and through adjacent neighborhoods. There are some residential streets where it would be relatively easy to accommodate bicycle lanes, for example. There are a few places where more substantial renovations or redevelopment could occur, such as the post office, the old fire station, undeveloped properties along Burns Street, and the two gasoline stations. Even without major changes, this part of the town center could be significantly enhanced.

South of I-205, the prospect for change is comparatively greater. Initially, this might be focused on the area near the entrance to the Mill, where a large surface lot could be redeveloped into a mixture of uses. The tangle of street intersections could be simplified and improved as part of a gateway experience. Over a longer period of time and assuming the freeway ramps could be reconfigured, other parcels could see major infill or renovation. Some portions of this area might be considered for greater intensity, given the lack of proximity to established neighborhoods.



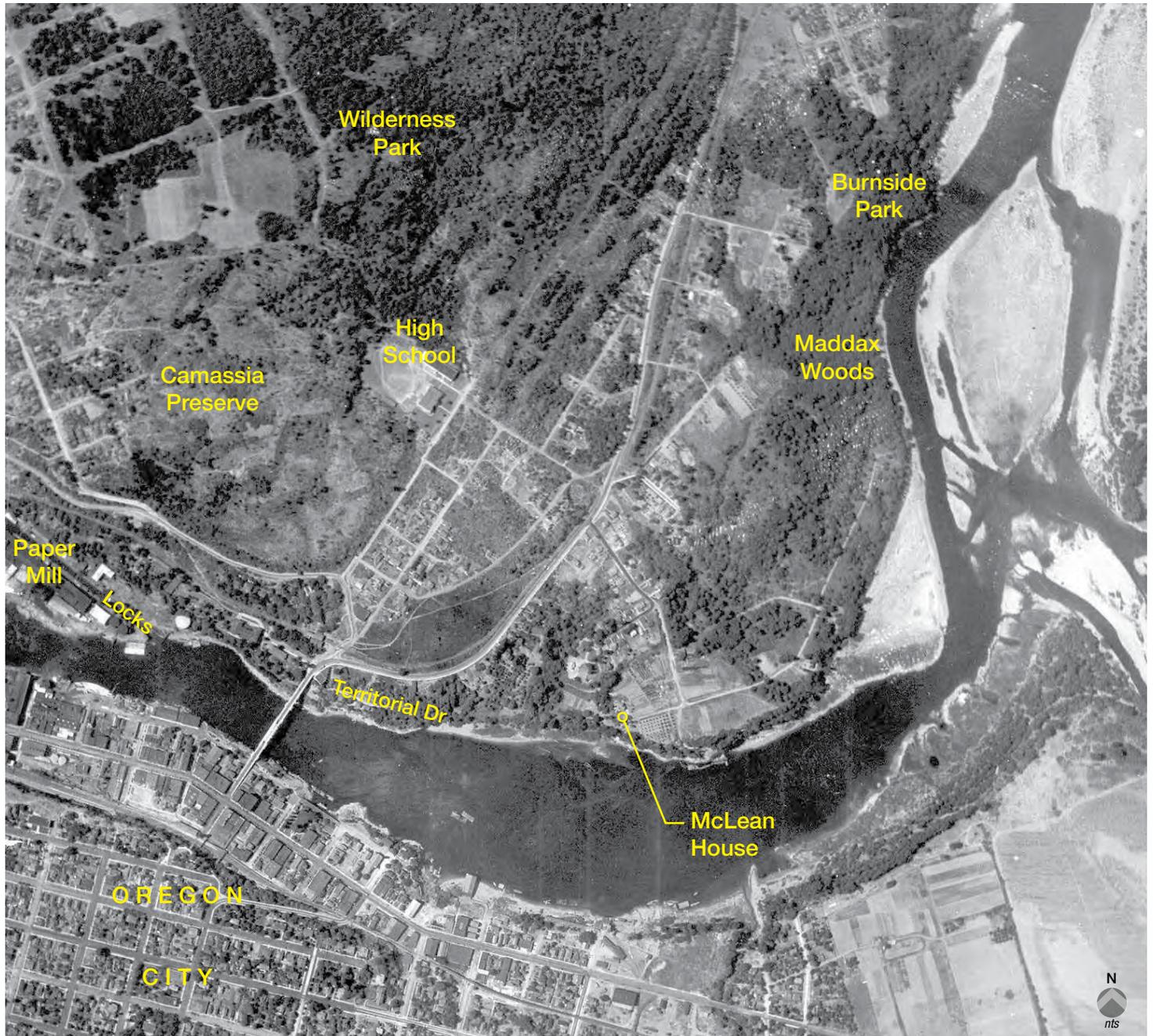


Arch Bridge & Bolton  
Town Center  
**Existing Conditions:**  
**TRAILS**

# INTRODUCTION

The Willamette riverfront in West Linn has incredible potential to become a focus of the community. To date, development in the Arch Bridge/Bolton Town Center area has not fully embraced the river, partially due to steep topography between Highway 43 and the Willamette. There is a unique opportunity that the presence of the river and Willamette Falls provides for West Linn and the region. Determining better access both visually and physically to the river will help to energize redevelopment and encourage a new sense of identification for West Linn as a riverfront city.

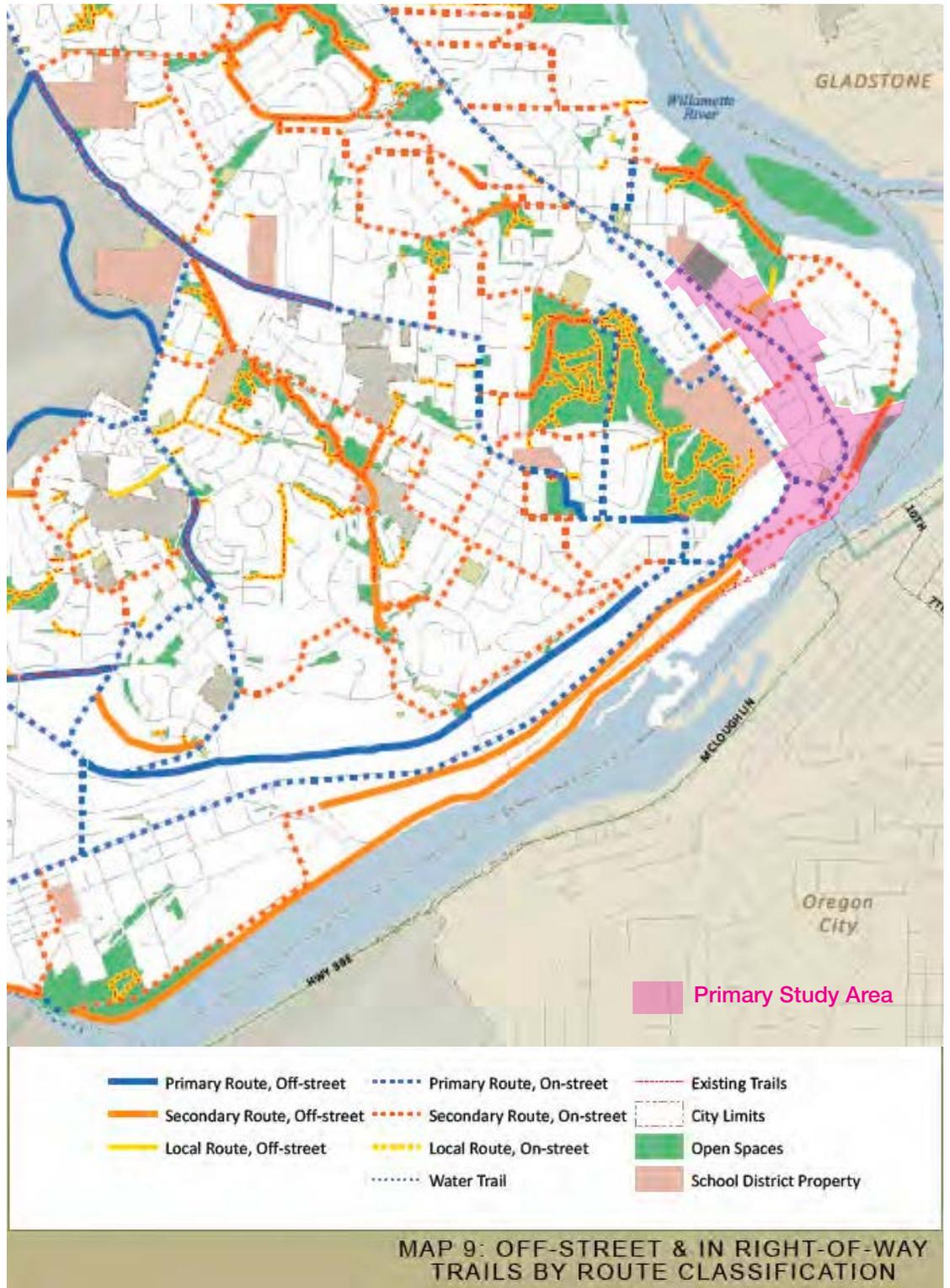
This focus may also greatly increase the desirability of mixed use development in the Arch Bridge area and enhance its potential as an important gateway to the community and linkage between West Linn and Oregon City. A linear connection between the mouth of the Tualatin and open spaces such as West Bridge Park also offers a compelling opportunity for a waterfront destination similar to those found in other Willamette River communities. The following pages summarize existing trails and riverfront access conditions in the Arch Bridge/Bolton Town Center study area.



Historic aerial photo (c 1935), with key future open spaces noted.

# TRAILS MASTER PLAN

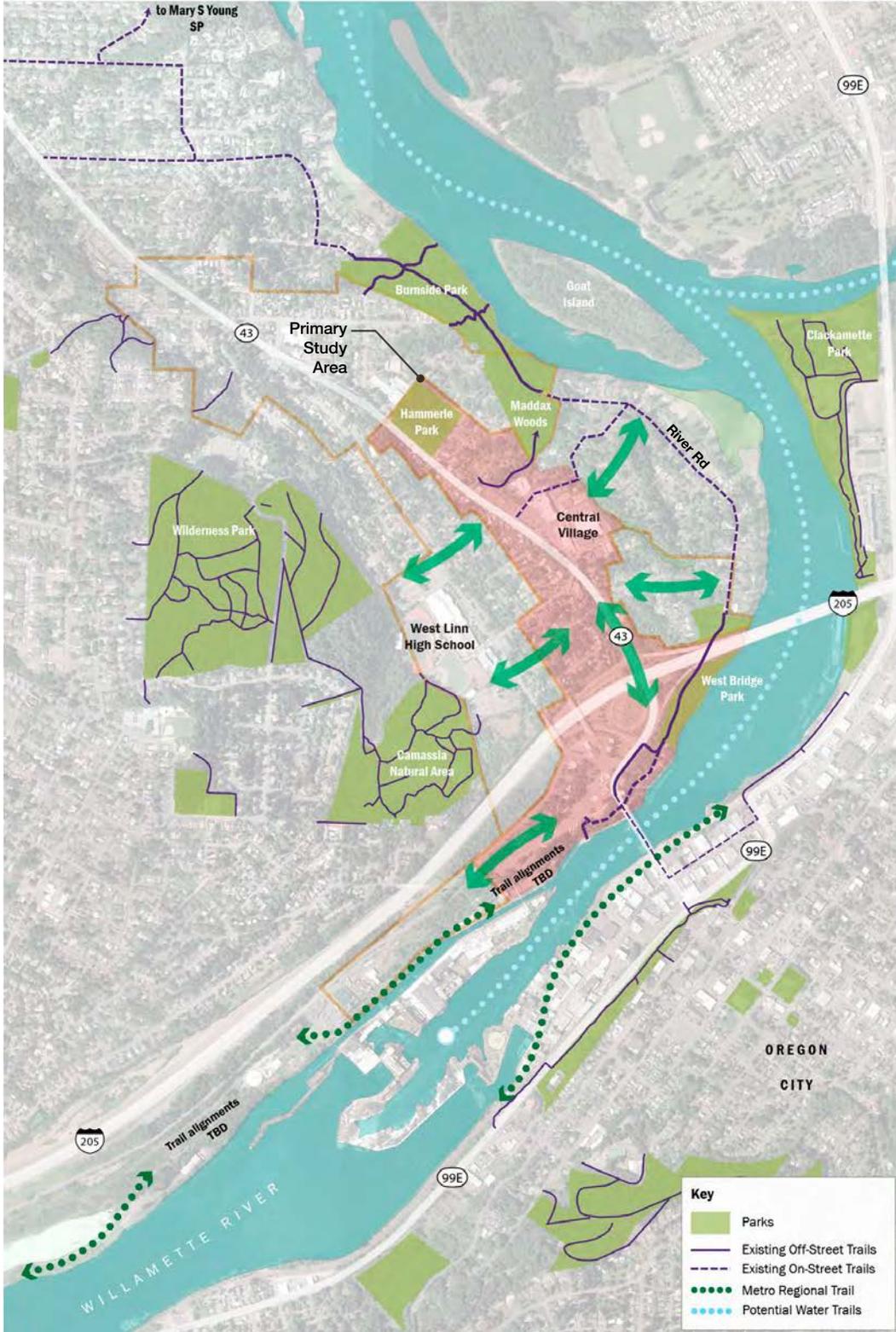
The plan below summarizes the off-street and on-street trails and paths identified in West Linn's recently-adopted West Linn Trails Plan: A 50-year Vision for the Future (2013). The concept of a continuous trail along or close to the riverfront using both existing parks and roads is depicted, with two options for the longest undeveloped portion of this conceptual connection, between Arch Bridge and Willamete Park.



# TRAILS FRAMEWORK

This diagram shows key trails from the City's 2013 Trails Plan map, adding conceptual regional trails defined by Metro as well as potential regional water trails, which could include landings in West Linn riverfront parks. The connection south to Willamette Park is a key regional goal. Green arrows symbolize 'desire lines' of connections between the riverfront and the Central Village, as well as from Wilderness Park and the High School to Central Village and Hwy 43. Ideal linear linkages between Arch Bridge and the Central Village and northern portion of the Town Center are also displayed.

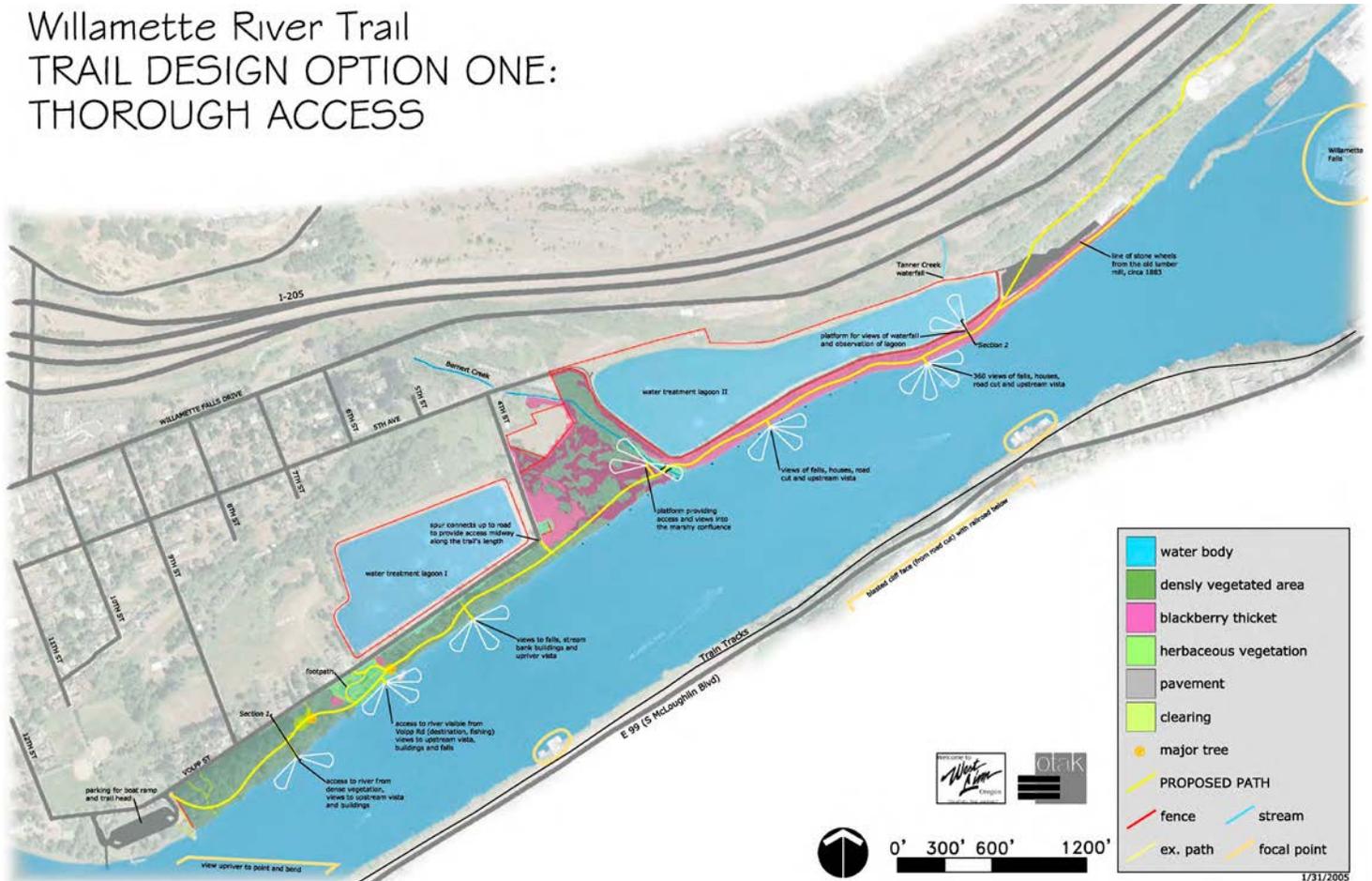
Central Village offers an opportunity for incremental infill and enhancement to create a truly walkable and vibrant town center. "Connective tissue" in the form of good public spaces and pedestrian connections is needed to fully link schools, parks, civic uses and gathering places.



# WILLAMETTE PARK CONNECTION

As depicted in the 2013 West Linn Trails Plan: A 50-year Vision for the Future, a connection south from Willamette Falls to Willamette Park is both a city and a regional objective. The preferred trail alignment will be determined in a separate planning process.

## Willamette River Trail TRAIL DESIGN OPTION ONE: THOROUGH ACCESS



The plan above was prepared in 2005 to study trail connection options north of Willamette Park. West Linn Parks & Recreation has conducted a pre-application meeting for the trail but detailed design is not yet underway.



The dock at Willamette Park affords a view downriver to the Falls and Oregon City as well as the riverbank north of the park.



Volpp Street, between the wastewater ponds and the river, offers a low-speed option for bike and pedestrian access north of Willamette Park.

# WEST LINN PAPER CO AREA

The existing trail through West Bridge Park is a popular amenity that brings pedestrians to the Arch Bridge and can become a trail of regional significance if connected south to the mouth of the Tualatin River. In the short term, the form of the trail will likely be subject to adjacent conditions. It will probably continue to follow roadways such as Territorial Drive and River Road in some places and wind through the woods in others as it does under the Arch Bridge. The esplanade should evolve over time, eventually becoming a regional destination for active recreation and heritage tourism, interconnected with regional trails on both sides of the Willamette River.



Parking lot and storage area at entrance to West Linn Paper Co



Fishing dock on the Willamette, accessed off Territorial Drive

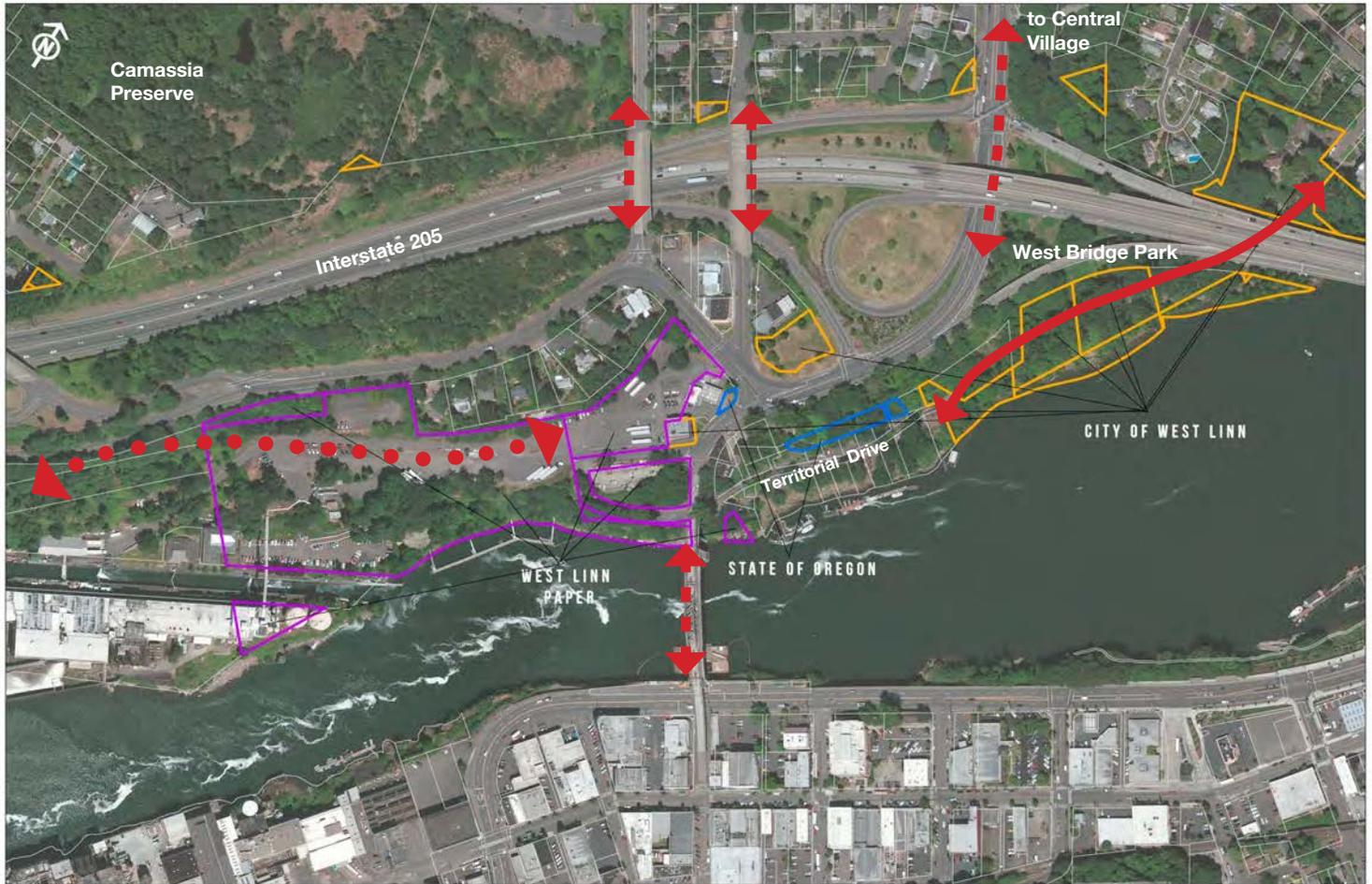


Steps to Highway 43



Territorial Drive is a hidden gem underneath the bridge. It terminates at West Bridge Park and serves as a walking route from the park to Arch Bridge.

# ARCH BRIDGE CONTEXT



The above diagram summarizes existing and potential connections in the Arch Bridge area, as well as the key property owned by the City (shown in orange), ODOT (blue) and West Linn Paper Company (purple).

-  **Conceptual Trail**
-  **Existing Trail**
-  **Potential on-street connection**

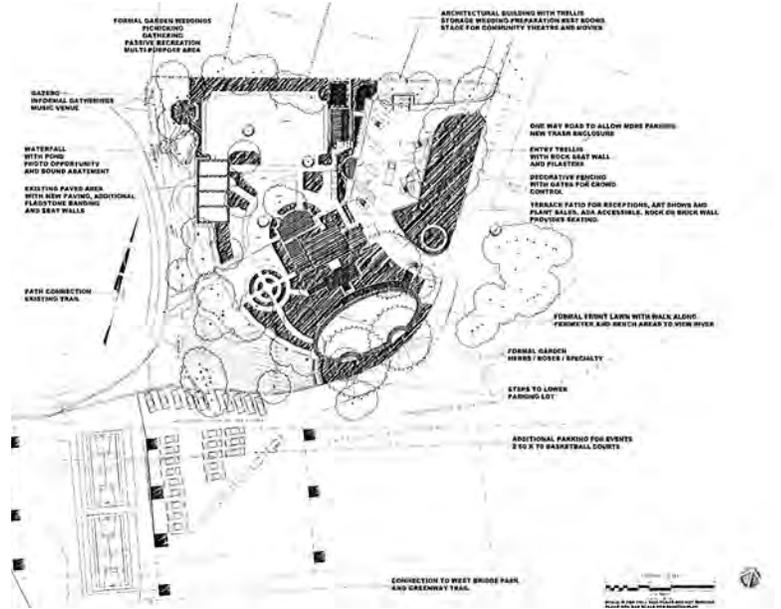


Walking across the bridge into the Arch Bridge regional center, on to the Central Village should be a seamless, attractive, safe and convenient pedestrian experience.



South entrance to West Bridge Park, along Territorial Drive

# WEST BRIDGE PARK and MCLEAN HOUSE



Plan (2005) for McLean House shows landscape improvements and potential use of part of West Bridge Park for extra event parking.



West Bridge Park, under I-205, has a network of informal paths. McLean Creek runs through the park.



McLean House is a City property, with a Friends group active in stewardship of the property.



River Road is a quiet residential street and popular with recreational walkers linking a route between West Bridge Park and Maddax Woods.



Informal dirt paths connect West Bridge Park with Hwy 43 and a small parking lot, offering a steep linkage from the Town Center to the riverfront.

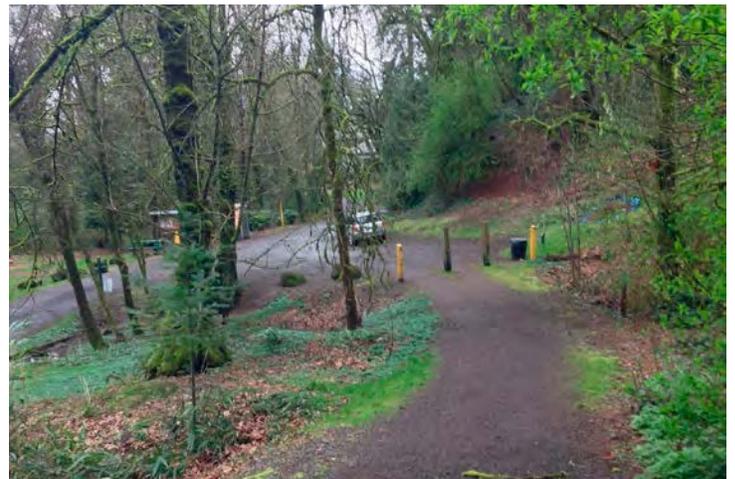
# MADDAX WOODS & BURNSIDE PARK



2005 Master Plan for Maddax Woods Park



Burnside Park path is wide enough for shared bicycle and ped use. Narrower hiking paths extend down from city streets to the west, including Holmes and Buck Streets.



South entrance to Maddax Woods features a small parking area and a pocket park/gathering space next to a potential historic interpretive site where the Maddax family once built fishing boats.



View down Edgewater Court. The entrance to Burnside Park at the end of the street is not evident from Failing Street, but new City signs should improve this.



City trail signs in Burnside Park--these will be added outside the park to enhance wayfinding for the larger community.